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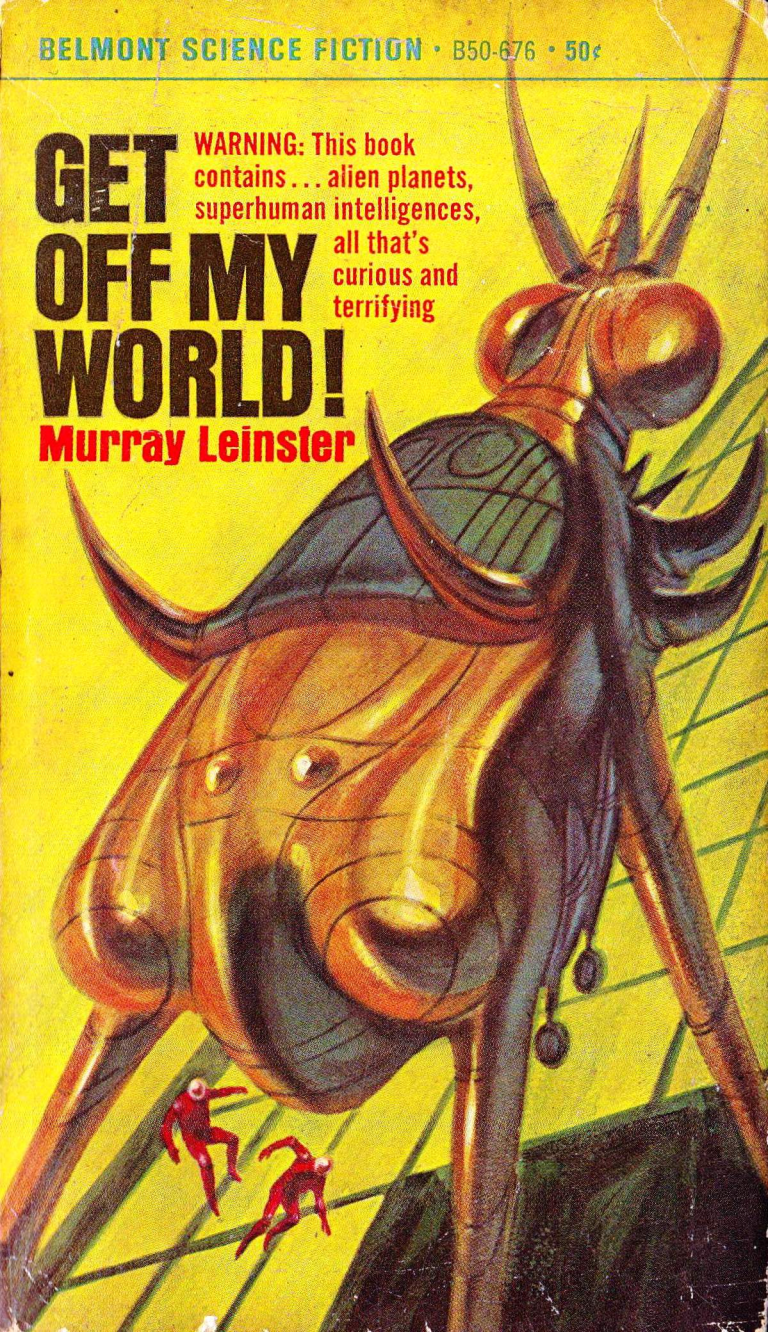

THE CREATURE burst into a headlong rush toward them. It scuttled frenziedly, made a leap, turned over as it soared and landed on its back two feet from Jerry, and then it wildly gestured with its trunk.

Astonished, Jerry bent down, scratched its stomach and watched it wriggle ecstatically.

Borden said slowly, "Something on this planet tried to burn us down with a heat ray not half an hour ago. We land—and this happens. What sort of a place is this, anyhow?"

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Murray Leinster

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GET OFF MY WORLD!

I

"The exploring ship Franklin *made its first landing on a remarkable wide beach on the western coast of Chios, the largest land mass on Thalassia. Using the longest axis of the continent as a base, and the pointed end as seen from space as O°, this beach bears 246° from the median point of the base line. . . . The* Franklin *later berthed inland some four miles 360° from Firing Plaza One on the chart. There is a pleasant savannah here, with a stream of water apparently safe for drinking . . ."*

Astrographic Bureau Publication 11297, Appendix to Space Pilot Vol. 460, Pp. 58-59.

IT WAS NOT plausible that Brett Carstairs should find a picture of a girl, to all appearances human, in millenia-old ruins on a planet some hundreds of light years from Earth. But the whole affair was unlikely, beginning with the report of the exploring ship which caused the Thalassia-Asprasia Expedition in the first place. If it hadn't been for photographs and the ceramic artifacts, nobody would have believed that report. It simply was not credible that another intelligent race should ever have existed in the galaxy. In two centuries of exploration, no hint of extraterrestrial reasoning beings had been found before. But the exploration ship's narrative didn't stop at one impossibility

about the twin worlds Thalassia and Aspasia, revolving perpetually about each other as they trailed the satellite sun Rubra on its course. The report wasn't content to claim one intelligent race to have existed. It claimed two. And it offered evidence that some thousands of years before they had fought each other bitterly and mercilessly, and that they had exterminated each other in an interplanetary war which lasted only days or even hours—which was hard to believe.

But the picture of the girl was more impossible than anything else. Brett didn't believe it, even when he held it in his hand. He didn't dare mention it until the thing was all over.

He didn't find it at the actual beginning, of course. There were preliminaries. The Thalassia-Aspasia Expedition worked under handicaps. It was based on the exploring ship's report and had to be organized by the Records Division of the Astrographic Survey—which never has any money to spare—and there had to be much skimping in every way and only volunteers could be afforded for the job. Even a ship couldn't be hired for it. The general public was much more excited about the colonization of nearby planetary systems than in research on a planet that wouldn't be needed for colonization in a thousand years. So the Expedition was very small—no more than a dozen members altogether—and it would be landed on Thalassia from an Ecology Bureau ship and left there. It would probably be called for in six months or so. Probably. Even then, what it found out might not matter to anybody else.

Brett joined up because it was his only chance for adventure and because his hobby warranted his inclusion in the staff. He could drive a flier of course—everybody could—but he'd specialized in paleotechnology, the study of ancient industrial processes. If there really had been an intelligent race or races out in space, he could make better guesses than most at how the alien machinery worked and how its factories produced. But his personal reason for going was an odd, anticipatory feeling of excitement at the idea of being left with a small group of human beings on a planet where not even the skies were familiar, from which Sol itself was invisible, and where they would be more ter-

ribly alone in a waste of emptiness than any similar group had ever been before.*

That excitement lasted during the long journey in overdrive and during the almost-as-long approach to planetary landing distance after the Ecology Bureau ship was back in normal space in the Elektra system. When it went into atmosphere on Thalassia and its repulsors droned above the illimitable waters of Thalassia's ocean, Brett watched with fascinated eyes. Waves of this ocean had a twenty thousand mile reach in which to build up to mountainous heights. At this season of the twin planets' year, they had the equivalent of trade winds to urge them on. When they reached the shores of Chios, the planet's only continent, the waves were three hundred feet high, and they seemed to fling spray and spume almost out to space itself. Brett watched the swirling maelstroms and dramatic tumult of the struggle between sea and land. He remembered that at the very edge of the wave-washed area there were to be found the only moving living things on the continent. They were marine forms like crabs, which scuttled out of the water to forage and darted back to the monstrously tumultuous coastal foam.

Watching from the Ecology ship, Brett heard the report that the radar beacon on Chios wasn't working, and he watched as the ship found Firing Plaza Number One and the ruined refugee-settlement nearby, and hovered there to make quite sure of its position before it descended gently at the landing place the exploring ship had advised for later visitors.

It was a pleasant savannah, and the stream ran as clear as crystal. But the Ecology Bureau ship had been grudgingly loaned, and it had urgent business elsewhere. Its cargo ports opened and the Expedition's supplies went out to ground in a swiftly flowing stream. They piled up mountainously, so it seemed, and at that they weren't too complete. The biggest crates were two atmosphere fliers and a short range rocket. The fuel for the rocket made a bigger heap than all the rest of the equipment together. There were plastic tarpaulins to cover everything. There were houses

* Note: The survival of the crew of the exploring ship *Durwent* on Lundstrom IV for some years after their shipwreck was not known at this time.

to be unfolded and braced back—but at least they weren't inflatable shelters!—and there was a spare beacon. But there wasn't much else but food. The unloading took less than two hours.

Then the skipper of the Ecology Bureau ship asked politely if there were anything else. Minutes later the cargo ports closed and the personnel lock shut, and the ship's repulsors began to drone. It heaved up slowly until it was a few thousand feet up and then went into interplanetary drive and plummeted toward the sky. It would come back in six months, most likely, or another ship would come in its stead. And the Expedition would have to be ready to leave.

That was when Brett Carstairs realized the silence on Thalassia. The Expedition's members set to work to make camp. There was a breeze and the vegetation was reasonably familiar in smell, at least—chlorophyl and its associated compounds are found on the oxygen planets of all sol-type stars—and the tree leaves rustled naturally enough. The small stream at the landing place made pleasant liquid sounds. But that was all. No insect stirred or whirred or stridulated. No bird sang. No squirrel barked. No reasonable facsimile of any noise made by any living creature came to the ears of the Thalassia-Aspasia Expedition. The only noises were the voices of the Expedition members themselves, and the bumpings they made with the boxes and crates, and the breeze and the dull booming of the mountainous surf to the westward. Brett caught himself listening uneasily.

"I didn't realize," he said ruefully to Kent, on the other end of a crate that would be a chair presently, "that it was going to sound so lonely."

"It's been lonely here for a good many thousand years," said Kent phlegmatically, "since the race on this planet and the characters on the other one killed each other off."

He put down his end of the crate. He and Brett opened it. They began to assemble the furnishings of the Expedition's housing. All about them was jungle. The clearing in which they worked had a ground cover like ivy running on the ground. It was broad-leaved instead of narrow-leaved as grasses are, and Brett had a feeling that there should be crawling things under it.

But there weren't. The report of the exploring ship was explicit. There had been a very high civilization here, once. And another on the from-here-invisible twin planet Aspasia. Some eight thousand years ago they'd fought each other terribly across the half million miles of space that separated them. Fission bombs with cobalt cases poisoned the air of Thalassia, at the same time that fusion bombs from Thalassia blasted the oasis cities of its twin world to lakes of molten glass. There wasn't a single, air-breathing creature left alive on Thalassia. Not any more.

The air was clean of radioactivity now, to be sure. Carbon-14 and Cobalt-60 determinations timed the deadly war at very close to eight thousand years before. Now there was vegetation and the ocean swarmed with marine organisms from plankton to fish. But there was no moving creature left on the land of the nearly Earth-sized world.

Brett labored on. The atmosphere on Thalassia was depressing. It was a dead world despite its forests and jungles. Everything that had wings or a throat—even teeth to bite or stings to sting with—had died milennia ago with the doomed creatures whose friable skeletons the exploring ship had found about the firing plaza. They'd died of the bombs from the other planet, which was forever invisible from here. They'd been murdered. Butchered. The forests had no purpose with no animals to live in them. There was a feeling of grief in the air, as if even the trees mourned.

Brett wanted to go over to the firing plaza and see where at least there had been living things, even if the only sure knowledge about them was that they had died in the act of firing giant rockets to avenge the extermination of their race. When they died, Thalassia was already a charnel house. Now—

There was quiet. A terrible quiet. The Expedition members braced their houses, moved the laboratory equipment inside, uncrated their fliers and tied them down, ran their power lines, dug their refrigeration pits, put in sanitary equipment and set their water recovery plant to work. It was safer to condense water from the air than to use the local water supplies which might still carry undesirable trace elements. Brett began to worry that it would be too late to go to the firing plaza before dark. Then he remembered. He looked up at the sky. It was mostly blue, but

it was speckled. There was a dull red pinpoint of light near the horizon. That wasn't Elecktra, the sun and center of gravity of this system. It was Rubra, the red dwarf, the satellite sun the size of Earth's Jupiter, which shared an orbit with the twin planets. They were in Trojan relationship to it, sixty degrees behind as it sped sullenly about its primary. Elecktra itself was not visible. But there was no night.

Off to what ought to be the west there was a spotty bright luminosity in the sky. It was the star cluster Fanis Venitici, on whose fringe this solar system lay. The multiple suns of the cluster swarmed so closely and shone so brightly at the cluster's heart that even thirty light years away they gave Thalassia more light than its own and proper sun.

There would be no night on Thalassia.

Brett had known it, of course, but nevertheless he was relieved. A dead planet is gloomy enough in the daytime, with all its vegetation grieving that it has no purpose. At night it would be intolerable. Even in the daytime it would be hard to keep one's mind busy.

Brett worked at it. He had driven pegs and was tying down the tarpaulin over a mound of crates when he saw the heap of dirt. It did not have any ground cover plants on it. It was piled up. It had been rained on, but it was freshly dug. Brett pounded two more pegs and double-knotted the ropes that would hold the tarpaulin in any wind. Then he jumped. Kent, by that time, was pounding in more pegs on the other side of the pile of stores.

Brett stared at the piled-up dirt. It was surprisingly Earthlike. The top of the ground was dark humus from rotted vegetation, and six or eight inches down it turned to clay, very much like a freshly dug hole on Earth. But there shouldn't be any freshly dug hole on Thalassia! Nothing lived here! Nothing!

But there was a freshly dug hole in the ground, with clay on top of the thrown out humus.

Brett stopped driving pegs and went to make sure. He stared down. He felt himself growing queasy—sickish—and pale. There were scraps of human-made paper at the bottom of the hole. There were traces of the rotted debris any group of humans will discard, but which humans auto-

matically put out of sight before they leave any stopping place. This savannah had been the berthing place of the exploring ship *Franklin*. This was where the explorers had buried their trash. Something had dug it up.

More, something had very carefully sorted it out, as human scientists sort out the rubbish heaps—the kitchen middens—of a forgotten culture to find out what made it tick.

Something had carefully examined an exploring ship's kitchen midden to find out what sort of beings human beings might be. Men from Earth wouldn't have needed to do that. They knew.

Something intelligent and curious, but not from Earth, had wanted to know about men, on a planet where there had been nothing even breathing, much less intelligent, for eight millenia. But something had been alive on the dead planet Thalassia. It had wanted to know about the men who'd camped here from the exploring ship two years before.

Brett was pale when he called Kent to look. Kent looked phlegmatically down into the hole and said:

"That's the *Franklin's* garbage pit. Why'd they dig it up again?"

Brett said:

"They didn't. Somebody not on the *Franklin* dug it up. Lately. It's been rained on, but nothing's grown over it. In two years it would have been washed flat and covered over. This was dug long after the *Franklin* left. Lately. Probably within days. Just before we arrived."

He shouted, and the trees nearby echoed back his voice with a hair-raising resonance. Halliday, the official head of the Expedition, came fretfully to see what was the matter. Brett showed him. Halliday stared blankly for a second. He even began to frown because Brett had called him for nothing. But then the breath went out of him with a curious whooshing sound. His face went quite gray.

"And the ship's gone!" he said irritably. "It can't take word back! There is life here after all! Intelligent life! We're at its mercy!"

Which was absolutely true. Because Thalassia was dead, and below-the-horizon Aspasia with it. There could be no animals to hunt or need defense from: no birds or small

creatures to collect. This was strictly an archaeological expedition to work on two worlds which had committed suicide together. So there were no defense weapons in the Expedition's equipment. Heat guns, yes. They were handy for lighting fires. There were some explosives for shifting rock. But there were no more weapons capable of defending men against really dangerous creatures than a man will take on a camping trip in a national park on Earth. And the Expedition could not communicate with other humans for at least six months. They were hundreds of light years from help.

Brett said slowly:

"On the ship, just before we landed, I heard it said that the radar-beacon on the ground here wasn't working. I think, sir, we'd better go over to the firing plaza and find out the worst."

They went to the firing plaza. There had been a beacon there, left to notify Earth ships where the first exploring ship had landed. It would also notify any other intelligent race which dealt in such things as radar. There were a dozen men who went uneasily to see if anything had happened to make their landing unfortunate. They were defenseless, and more isolated from their kind than any humans had ever been before.

There was no sound anywhere save the wind in the trees. No bird song. No insect cry. Nothing but the ominous dull booming of the gigantic surf to the west. The ship that had brought them was long since in overdrive and unreachable by any means until it came back to normal space again.

They found where the beacon had been. It was gone. It had been a complex mechanism, powered by a pinch of atomic pile residue. It should have sent out its signal, on a standard frequency, for years to come. It had been mounted on a solid concrete pillar, according to custom.

The concrete pillar was there, but the radar beacon was not. It had been cut from its anchorage with something like a torch which cut the metal smoothly. There was as yet no oxidation on the severed surfaces.

The first landing plaque had been removed from the same column. It was the plaque which recited that the exploring ship *Franklin* had made a first landing on this

planet on such and such a day and year, Earth Calendar. Close by the column there was a rocket blast crater in the ground—a small one, perhaps six or seven feet across. It was fresh. A rocket had landed here and removed the man-made objects after studying a human refuse pit. Within days. Certainly within weeks.

It had left something of its own behind, though. There was a metal tripod set up on the ground. It was about man-height high, with a box at its top shaped like an inverted cone. There were round holes on four sides of the box. It was not placed on any foundation—simply set up on the ground for some temporary purpose. And left behind.

Kent, his face blankly curious, moved to approach it.

"Hold up!" said Brett, very pale. "That could be a thing to collect specimens!"

Kent stopped. Halliday, the Expedition head, turned his face to Brett.

"Specimens?"

"Us," said Brett harshly. "We set traps to collect specimens for study when we're making an ecology study of a planet! It would be logical for something intelligent to want to see specimens of the creatures that make garbage pits and radar beacons and landing plaques!"

There was a long pause. Then Halliday said in a flat voice:

"Yes. There are eyes in the thing, too. Or lenses. It could be a collection trap. Or it could be transmitting pictures of us to somewhere, on a frequency our ship wasn't set to detect. We will—go back to the camp and think it over."

He moved to go back, and the others with him. The alien tripod glittered in the peculiar dead-white light which did not come from the sun. Brett stared at it as he moved to follow the others. This was a singularly unsatisfactory state of affairs. Humans do not like to feel defenseless. Brett hated the tripod he was afraid for anybody to touch. He did not even feel that his specialty of paleotechnology qualified him to guess what it was. It could be a trap, or a beacon, or a transmitter. It could be anything.

His foot caught in something as he moved away from

it. His heart jumped into his throat. It could be a trip wire. . .

But it wasn't. It was a tiny golden chain, very humanlike in manufacture. It had broken. Brett picked it up very cautiously. A locket started to slither off. He picked that up, too. It had the feel of a human artifact. It was. It had been made by hand.

There was a picture of a girl in it, under a protecting sheet of plastic. She was a human girl, though her costume was like none that Brett had ever seen or heard of. The picture was black-and-white—an ancient process—but it was unfaded, which meant that it had been made recently.

This, of course, was starkly impossible. One does not find a picture of a human girl in the ruins of an eight-thousand-year-old culture, on a planet hundreds of light years from Earth. Not a picture in an antiquated medium, long forgotten, and with a background neither this planet nor of Earth. It was so completely impossible that Brett knew he wouldn't dare show it to any of his companions. They wouldn't believe he'd found it. It couldn't be!

2

". . . The Elektran solar system displays certain anomalies, not only in the existence of a satellite sun Rubra, no larger than a gas-giant planet . . . (but in) the twin worlds Thalassia and Aspasia, each nearly seven thousand miles in diameter, which revolve about each other at a distance of only 250,000 miles. Tidal strains have long since ended their diurnal rotation and they turn the same faces toward each other during their period of revolution of not quite twenty-five days. This nearness and the development of intelligent races on both planets led to the development of inter-planetary communication between them some

time between 7000 and 11,000 years ago. The tragic results of this communication . . .

Astrographic Bureau Publication 11297, Appendix to Space Pilot Vol. 460, Sector XXXIV. P. 56.

A TRENCHING machine with its buckets removed went toiling painfully up to the alien tripod some six hours later. It was under remote control. It skirted the elongated opening of a concrete tunnel, made by the long dead six-fingered race of which the exploration ship had found skeletal remains. There were thirty or more of those tunnels, which of course no member of the Expedition had yet entered. But the *Franklin's* report said that they had been launching tubes for giant rockets. The rockets had gone roaring out over the ocean, rising steadily, until they swept round the curve of the planet to blast across space and loose destruction upon the sister world Aspasia. The firing plaza took its name from these tunnels. The refugee settlement—still-roofed houses of lignin plastic—had obviously been the shelter in which the dying, despairing Thalassians lived while they took their revenge for the destruction of their race.

The trench-digger ground and rumbled and blundered on its way. Once a side tread slipped and it stalled in a thicket of trees it could not push down. It backed out and went bumbling on toward the bright new metal of the tripod.

Back at the camp, the vision screen which showed what the trenching machine saw pictured the firing plaza as looking like an abandoned area of Earth, with long slanting shadows and stark contrasts of illumination.

The robot machine went on. It was taller than a man, and its outline from the front was not dissimilar. It approached the glistening three-legged object with the inverted cane on top. At the camp, the members of the Expedition watched the screen. Brett Carstairs felt acutely uncomfortable. He'd been suspicious because his training in technical processes naturally made him suspect ancient psychological processes in all unfamiliar objects. But of

course the tripod could be completely harmless and incapable of doing damage—

It wasn't.

The trenching machine drew nearer. Twenty yards. Ten. Five yards. Ten feet, and the round holes in the conical box looked more than ever like eyes. The trenching machine bumped the tripod. The tripod toppled over.

Back at the camp, there was a flash of light and the members of the Expedition looked at a blistered, blackened, peeling screen. The sound of the detonation came seconds later, and it was like a blow in the chest. At the same instant the ground bucked violently. There was a light brighter than the sun.

There was simply no virtue in running away. Brett said numbly to himself, though he didn't hear the words as formed:

"Atomic explosion. We're dead, now."

He got up stiffly from his seat. He went outside the hut. He looked toward the firing plaza two miles away. There was a hill between, but he saw a gigantic smoke ring spinning toward the sky. There was a horrible, incandescent, two-branched fountain in the air. Flame poured up and poured up and poured up skyward, while Brett did not realize that he was deafened and hardly perceived the incredible roar.

Others came out of the hut. Belmont, the nuclear man of the Expedition, very absurdly carried something from his laboratory, at which he looked intently without raising his eyes to the sky. Halliday looked at the fountain of flame with an expression of embittered indignation. Jannings, the meteorologist, stared and stared and then ridiculously wetted his finger and held it up, his air one of complete absorption.

One flame suddenly began to diminish. It failed rapidly in intensity. In seconds it had lessened to a mere glow to be seen over the hillcrest between. The other flame burned more and more luridly—and abruptly stopped. But the rising smoke ring still hurtled upward, expanding as it rose. It was ten thousand feet up. Fifteen thousand. Jannings watched it with his head thrown back and his wetted finger still absurdly held aloft. His lips moved, but Brett did not hear anything at all.

People did unreasonable things. Brett saw the Expedition's official flier pilot very solemnly take a cigarette from his pocket and very solemnly tap it against the back of his hand and put it in his mouth and puff on it. He very carefully blew a smoke ring of his own, staring blankly where the fountains of flame had risen. There was steam rising there now.

Then Jannings' voice came, very faintly, like a remembered sound rather than like an actual noise.

"There's a wind from the ocean," said Jannings thinly. "It's blowing the atom cloud inland. There's a wind from the ocean. It's blowing the atom cloud inland. There's a wind from the ocean—"

He repeated the words over and over, like an automaton. His voice grew stronger as Johnny's hearing came back. And suddenly, it seemed, they were all released from a sort of hypnosis of shock, and Belmont looked up from his radiation counter and said in a sort of mild astonishment:

"Ten more seconds and we'd have had a burning exposure!"

Then a babbling of voices. There was a crazy confusion all around. Voices cried, "We've got to move camp!" Voices asked imploringly, "Are we burned? Are we burned?" Then Halliday displayed unsuspected leadership and bellowed at them in a shaking voice and took matters in hand.

The first requisite was information. But an even greater need was action. It is not healthy to camp within two miles of a recent atomic explosion site. Wind blowing from it to one's camp will hardly be salubrious. Halliday crackled orders. While Brett helped loose one of the two fliers from its tie-down ropes, Halliday had other men dragging out emergency rations and canteens and the rolled-up inflatable shelters that could be used to live in. As he snapped instructions, Halliday interjected odd fragments of thought as if everything that came into his head also came out of his mouth.

The flier took off vertically and swept toward the ocean, on shouted last minute instructions from Belmont to stay upwind. Halliday stopped his stream of feverish instruction as Brett came back from the takeoff spot.

"Good work, Carstairs!" said Halliday. His thinning white hair blew erratically about his head. "Your suspi-

cions made that tripod go off with us two miles away instead of right on top of it."

Brett wetted his lips. He'd had time to begin to feel shaky, now, but the churning up of all his emotions somehow made his mind work feverishly. He said abruptly:

"The tripod didn't explode. There were three things going off. One atomic explosion and two fizz-offs. Where the bomb went off there couldn't have been anything left behind to make those flames!" Brett heard himself saying: "The firing plaza was booby-trapped!"

Halliday had opened his mouth to shout an order, but he stopped short.

"Wha-a-a-at?"

"There were three bombs," said Brett shakily, "and only one went off properly. The two fizz-offs—they didn't make critical mass fast enough. Their active material vaporized instead of detonating. At a guess, they were too old to work right."

"Too old—"

Brett made a helpless gesture.

"I know it sounds crazy! But new bombs should blow! And there was a war on this planet once. The people died. But they were getting even while they died. Wouldn't it be reasonable that if they knew they were going to be wiped out, by radiation that poisoned the air they breathed but which would die out in time, wouldn't it be reasonable that they should set booby-traps to kill their enemies if any of them lived and their descendants came here later?"

The flier, circling two thousand feet up and to windward of the atom column, came streaking down toward the Expedition's camp. Halliday opened his mouth, closed it, and came to a rational decision.

"That will have to be discussed later. You fly? Take the second flier and scout a camping place not less than fifty miles up the coast. Pick a place that should not have any artifacts about. Then come back. We will shift camp to avoid possible radiation in case the wind changes. We don't know whether it will or not, but we have to be out of range in any event."

He made a pushing motion at Brett and turned back to the work at hand. Brett went to the second flier and loosened it.

He was aloft before the first flier had landed, and he headed north. An idea occurred to him, and he dropped lower. The planet Thalassia might be dead, but something other than men from Earth had been here very recently. Flying high would make him invisible to eyes on the ground, but would make him visible indeed to detection radar. If there were intelligent creatures on Thalassia now, they would take precautions against unexpected encounters with other creatures who dug garbage pits and set up radar beacons and first landing plaques. Very probably the tripod had been a device to give notice if these strange creatures returned. So it would be wise to fly low.

He flew slowly—slowly enough to estimate distance and examine the shoreline. It was incredible. There were places where highlands ended abruptly at the shore. At those places mountainous masses of spray and foam shot upward where the breakers struck. There was one place where the beach matched the human exploring ship's first beach touching. There was shining sand and boulders for a full mile inland. The breakers themselves rolled in like rows of skyscrapers and crashed with even more catastrophic sounds. On Earth, in the South Pacific, winds could blow completely around the Antarctic continent and build up waves with seventy foot crests. But Thalassia was all ocean save for the one continent and a few dependent, nearby islands. Trade winds blowing would have a twenty-thousand-mile reach in which to make these waves. The gravity here, too, was a little less than on Earth. They should be monstrous!

So Brett Carstairs flew at five hundred feet above the ground, a mile inshore from the breaker line, and saw waves not less than three hundred feet high and often higher come roaring in toward him, and he saw them fling spume in masses higher than he flew. Sometimes he thought he saw living things in the water, but he was not sure. Once he did see a stranded sea monster, frayed and tattered by corruption, but that was not his present business.

Just at the distance Halliday had named, he found a running stream winding down into the ocean, only to be lost in its surf. He followed it inland for some miles. He saw an adequate place of refuge for the Expedition. He landed. He made sure. The river was fresh and ran a

hundred yards wide between steep cliffs, yet there was some clear ground and at least one spot where giant trees almost met above the water. The Expedition would be undetectable from the air, under the shelter of an overhanging shelf. Its fliers could be hidden under the leafy screen. It would do.

It was on the way back that it occurred to Brett that the ship which would come to pick up the Expedition six months from now would not know where to look for it. And—it would be highly vulnerable to whatever had placed that metal tripod on the firing plaza.

Then he thought to wonder what would happen if a ship landed on a firing plaza. Or in the ruins of a city. The exploring ship had not spotted any cities undestroyed by bombs. But just suppose . . .

He landed, feeling an extremely queasy sensation at the pit of his stomach. When he saw the pictures of the plaza as it looked now, he was even less comfortable. The entire group of ancient rocket launching tunnels had been nearly two miles in extent. There was a half-mile crater where an atom bomb had gone off underground. It was a cleanly blasted hollow, lined with glass. It was nowhere near the spot where the tripod had been. There were two other incandescent holes, gaping wide and still pouring out clouds of steam. They were irregularly shaped and twenty feet or more across. There had been other bombs underground at those places, too, but instead of blasting in the millionth of a second they had gone off slowly, disintegrating in seconds and vaporizing most of their own material before it could disintegrate. The critical mass hadn't been achieved quickly enough to blow them. It was exactly the kind of failure that could be expected of a brilliantly designed booby-trap that happened not to be sprung for some thousands of years. The location of these bombs, also, had no relationship to the position of the tripod.

The blast had not been the tripod, but bombs buried by the long-exterminated inhabitants of Thalassia, to destroy any creature landing on their world after its air was sweet and clean again.

Brett reported his choice of a new camping place. He found his guesses about the booby-trapping of the plaza

accepted as verified. They were. But Halliday said querilously:

"What the devil was the tripod?"

"It could have been a beacon," said Brett, "with variations. The exploring ship set up a beacon to guide Earth ships to its landing place, so they wouldn't need to repeat all the work it had done. But suppose—well—people not from Earth wanted to find out if all the Thalassians were really dead? There was a beacon. Life had been around, recently. They might have dozens of these tripods at different places. Anything alive would go up to them and examine them. The eyes might modify the signal they sent. Anything intelligent and alive would be reported, either by a change in the tripod's signal, or by the fact that its signal stopped."

Brett had worked out the notion during his flight to the north and back. Halliday blinked. He turned and barked at somebody. Emergency equipment was being loaded into both fliers. He turned back to Brett:

"What set off the booby trap?"

"The toppling of the tripod, most likely," suggested Brett. "It would be sending a tight beam straight up. When it fell over, it would send that beam at the ground. High frequency surges would be induced. They could set off an electronic trigger that was designed to blow the bombs when a ship landed nearby. The creatures who were wiped out might want to kill their enemies whenever they turned up, even after thousands of years."

Then Halliday said in a flat voice:

"But something did land! It took the human beacon, and set up the tripod, and we saw its rocket crater where it took off."

"It wasn't big," said Brett. "If the Thalassians were unpleasant enough, they might scheme so a scout ship could land and take off unharmed, but a passenger liner bringing colonists would be wiped out."

Halliday nodded sourly.

"A nice thought! If you're right, then that tripod might have been set up by the creatures the Thalassians set their booby-traps for! And if Aspasians are beginning to explore this planet again, they'll take us for Thalassians! They'll try to murder us." Then he said bitterly: "How

can we do our work if bloodthirsty creatures are trying to hunt us down and kill us? How can we do our work?"

Brett offered no ideas. He helped load his flier, conferred briefly with the pilot of the other, and they took off together. He led the way to the campsite he'd chosen. He left his load and two passengers. The other flier did the same. They went back. Fifty miles along the coast. They loaded up. They returned. They went back again. Nobody thought of relaxing. At the new campsite a biologist was at work on nearby fruits, and someone was fishing. Fish, too, would be tested for edibility. Brett flew and flew and flew. One trip after another. The two fliers ferried supplies in quantity. Equipment was another matter. Once the route was established, the work grew tedious. Half an hour to load up. Ten minutes to fly fifty miles. Half an hour to unload.

Because there was no night, exhaustion came upon Brett before he realized it. He had no time to examine the handmade golden locket in detail. He had it tucked carefully away and he almost resented it because it was so simply and starkly impossible. The girl was pretty enough. But she could not exist! And there was something more urgent on hand than speculations upon the reality of the impossible. The Expedition had to survive. Brett wearily applied his mind to make that practical.

But weariness hit him suddenly. He nearly flubbed a landing on the river, at last. Halliday snapped at him:

"We can't move everything, Carstairs, but it is urgent that we get all possible supplies to this new site. You must be more careful!"

Brett said tiredly:

"It might be a good idea to leave behind as much as we can."

"What?" fumed Halliday. "Leave supplies we need?"

Brett yawned uncontrollably.

"Whoever or whatever left the tripod," he said drearily, "will probably go back when it—they—find it has stopped reporting. There'll be a bomb crater and the fizz off holes. If we've left a lot of stuff, houses and all the rest, they may think we simply went to the firing plaza to look at their tripod and didn't come back. Because the bomb blew. That might be useful to us."

Halliday fumed again.

"You irritate me," he said peevishly. "I should think of such things, not you! But it is sound thinking. Go get some rest!"

Brett got out of the flier. He stumbled up to the encampment under its shelf of stone. He heard the sound of chopping. There were cave mouths here, but the caves were shallow. Somebody was hacking at the back wall of one of them. It was a wall—an artificial wall. After eight thousand years it was not a solid barrier, and it had been hastily constructed. It was Kent who was hacking at the tiers of stones.

"Looks like a sealed-up cave," he told Brett phlegmatically. "It could be anything—even a place where Thalassians tried to seal themselves in with air-renewal apparatus to last out the time the air was poisoned. It wouldn't work, of course. The air could've been deadly for five or fifty or five hundred years, depending on the amount of radioactivity in it. But if there's any size to this, it might make a good shelter for us, and we ought to find some stuff in it."

Johnny nodded sleepily. He thought to look at his wrist chronometer. It was some thirty-eight hours since the Expedition's landing. He'd worked steadily for all that length of time.

Kent's pick went through the wall. Nothing in particular happened. Kent pulled rocks away. Crumbled mortar came with them. He enlarged the hole in a matter-of-fact fashion. Presently it was of a size to permit easy entrance. No particular smell came out. The inside air was cooler. That was all. Kent went and got a handlight. He cast its fierce glare inside. He nodded his head, put down the light, and went away.

Brett picked up the light and threw it through the opening. He saw shining wet walls, and stalactites and stalagmites. There was an artificial curved ramp leading away somewhere between a pair of limestone cave formations. There was a curious small heap on the artificially flattened floor. He focused the light on it.

Bones. They looked human. They were cemented to the floor by an aeons-old layer of glistening, almost transparent mineral.

Brett entered, blinking. The skeletons were well-enough preserved to be tragic, but he remembered that the ancient race had had six fingers and other not-quite-usual features. He looked. Yes. The interior of this place was squared and leveled. It had been worked into shape. There was a tunnel leading off to the left and he glanced in. A low-ceiling room, crowded with objects in rows. Machines. More skeletons. He stood rocking on his feet with weariness. He thought: *"Now we'll know something about a civilization that was killed while our ancestors were still hunting mammoths."* He should have been excited, but somehow he wasn't. Then he realized why.

The objects so neatly arranged in rows were not machines. They had been, but they weren't any longer. They were heaps of rust. Swollen, nodular distorted heaps of oxide of iron and copper and—yes—even aluminum. They were old! They were mineralized. But they had been mineralized after they had been destroyed.

He heard voices. Kent was bringing the rest of the Expedition inside. Lights flickered and flashed. He heard shoutings, Men crowded past the compartment he stared at, exclaimed exultantly, and went on. Voices echoed eerily. The mood of the Expedition was the excited rejoicing of children with a newly discovered playground. But what they were exploring was a tomb. Here despairing six-fingered creatures had walled themselves in from the light and air of their own world to try to outlive its poisoning. They had expected perhaps a thousand years of entombment. But it was forever.

Brett was too tired for any emotional reaction. He found himself mumbling:

"They forgot that there's always some water in caves. Water makes them. And water seeping down would be radioactive. So they died."

He made his way heavily back toward the opening Kent had made. He went to the outer cave, where there were sleeping bags. Halliday met him. Halliday carried more handlights.

"Ah, Constable!" he said exuberantly. "You picked a lucky place! When I learned the firing plaza had been booby trapped I was really in despair! I thought any other site would be booby trapped too. I thought we might be un-

able to work at all! But here we've got a bolt hole they tried to make use of! Artifacts! Skeletons! We can get a marvelous picture of their civilization under stress! Marvelous!"

He bobbed into the hole in the wall and was gone.

Brett found a sleeping bag and crawled into it. He went to sleep. It seemed to him that around him as he slept there were excited ejaculations and much scurrying about. The members of the Expedition were scientists come to examine a dead civilization. It had seemed that they would have nothing to examine and would soon be dead themselves. Now they had work to do, even in hiding. They rejoiced.

But some time during his slumber, Brett dreamed. In his dream has saw the girl of the impossible handmade golden locket. He did not know where he was, but she looked at him. And her eyes grew wide and horrified. She screamed, and figures came running from somewhere. At sight of Brett they howled with fury and drew strange weapons and came rushing to kill him.

3

". . . On the hemisphere facing Aspasia, Thalassia's twin planet, there is but one rocky island not constantly swept by the ocean's giant swells. Evidences of former occupation exist here, but the island has been wave-swept in what must have been enormously violent storms, and only excavations for what may have been an observatory and military base remain. . . ."

Astrographic Survey Publication 11297. Appendix to Space Pilot Vol. 460, Sector XXXIV. P. 71.

THE CONTENTS of the cave were of interest to the biologist, the archeologists, the camera specialist, the specimen-preservation member of the Expedition's staff, the palaeontologist, the historian, to Halliday, Belmont, Janney—to

everyone in fact, but Brett. They would have been of interest to him too, if it had happened that the cave were dry. But there was no single metal object not corroded out of all imaginable resemblance to its original form. The relatively few ceramic remains he could identify as having been made by injection-moulding and fired within their moulds. That meant a remarkably high state of civilization. But there was no object suitable for his examination as a technological object. The restoration specialist began the extremely tedious process of redisplacement on them. With suitable precautions, a heap of rust can electrolytically be restored to its original condition of solidity and form—if the rust has not been disturbed. But it is an excruciatingly slow affair.

Brett had no proper function in the cavern underground.

He helped set up a sky-scanner outside. It would detect a repulsor field, meaning a human ship maneuvering in atmosphere. He helped set up an automatic signaling device to be triggered by the detection of such a field. It would instantly transmit to the Earthship a warning of danger and the need for caution, and then shut off. If any space vessel came into Thalassia's atmosphere using an Earth type drive, this combination of instruments would warn both ship and Expedition. After due assurance that each was what it claimed to be, they could get together, the Expedition could reembark, and everybody could get away from Thalassia. Then further action would be taken by the Earth government. This was Halliday's decision, and it was reasonable enough.

But after this prosaic matter was settled, Brett fidgeted. The other members of the Expedition were happy. The cave had been a sealed in life lock, in which Thalassians had hoped to survive their planet's doom. They succeeded in leaving only innumerable objects and items informative to Earth scientists. There were the skeletons of more than three hundred of the six-fingered, six-toed bipeds for study. Either their air renewers had failed them, or radioactivity came down to the cave in the ground water. The cave was of great extent. It went deep into the hillside for more than half a mile, and many possible extensions had been sealed off, at that. All its new occupants, save Brett, exulted over the scientific material to be worked with. He brooded.

Generators came from the first campsite, power lines ran into the cave, and the due examination of the ancient civilization of Thalassia began, though the investigators were in hiding even as they worked. Other city sites or possible unbombed settlements would have been ruled out anyhow, now, with knowledge of the Thalassian tendency toward booby-traps. But this site seemed safe enough. The creatures who occupied this expected to live, unlike those at the firing plaza. But as a general thing. Thalassian sites would have to be regarded with suspicion. The ancient dead had made no distinction in their enmity for the enemies who had destroyed them, and possible innocent explorers.

But Brett brooded unhappily over the locket, since he had no chance to be useful at the moment. He told himself very carefully that the locket had been dropped by somebody on the exploring ship *Franklin,* and he'd happened to find it. The background might be Alpha Centaurus or Rigel. But he didn't believe it.

The happy labor of the Expedition went on. Brett explored the cave again. Naturally. He checked the redisplacement boxes, set up around the artifacts he could tell something about in the course of several months of restoration. He looked at the skeletons. Halliday was zestfully at work on a modeled restoration of a Thalassian as he looked in life, based on the measurements of a skull. As Halliday modeled it, the Thalassian looked remarkably human.

"But," said Brett, "aren't you inclined to model the creature rather too much in our own image?"

Halliday was the Expedition's sculptor as well as its head. He frowned.

"You are very annoying, Carstairs!" he said dourly. "They were humanoid. Save for a rather prognathus jaw and this difference—here—in the occiput, this could be a human skull! Oh, the sutures are different, too, but—"

Then he fumed.

"You have made me realize that there is no reason for my having assumed a human ear shape," he snapped. "You irritate me! Go somewhere! Do something! You disagree with me too often, and too often I suspect that you are right! Contrive some project of your own, and let me make my own mistakes!"

Brett said slowly, because he had thought something out very carefully but still wasn't confident of his reasoning.

"I'd like to take a look at Aspasia. Not by rocket," he added painstakingly. "They would be looking for trouble! But the pilot book says there's one island on the other hemisphere. I'd like to see if there's another tripod set up on that. If I could record its signal where nobody's been near it, we might be able to forge it for the firing plaza site. Simply to avoid attracting—ah—unfavorable attention."

This was not all the truth. He was thinking again of the girl in the locket. But that was entirely too preposterous to mention. Halliday blinked at him, his hands covered with clay from his modeling. Then he added:

"I authorize that," he said, "yes. But I make one stipulation. You will arrange to detect radar on your flier, and if a radar does play on you, you will make sure you do not lead any—ah—creatures back here to us."

Brett agreed, wryly. He was a little relieved. But he asked:

"Are you worried, too, that whoever took the beacon at the firing plaza might want to take a human space ship to examine in the same way? To study it and perhaps duplicate it in quantity?"

Halliday sputtered.

"Of course I'm worried!" he said angrily. "If I could prevent a ship from coming here to pick us up I would—and remain here for always. It would be my duty! If there is an intelligent race which does not know of humanity's existence—we do not want it to learn from a shattered space ship! We would not want them to know our interstellar drive! Certainly not if humanity were not aware that they had learned! But you, Carstairs, annoy me by thinking of the things that would keep me awake nights if there were nights here!"

Brett nodded thoughtfully. He'd been considering the fix the Expedition was in from many different angles. It was possible to acquire cold chills down one's spine, any time, simply by imagining what might happen if an inimical race of intelligent creatures became possessed of an Earth interstellar ship and was able to fathom its workings. If Earth were unwarned, its first inkling of danger could be

an attack as murderous as had been made on Thalassia—and on Aspasia, too,

Something had to be done to find out the actual extent of the danger. Brett had ideas of less than total fatality. But he needed to make sure.

He took three twenty-four-hour periods to get ready for the journey he was to make. The flier, of course, could stay aloft almost indefinitely. With the slightly lesser gravity of Thalassia, it could carry a heavier load, too.

He made one low level flight back to the original camp. The geiger counter reading of radiation was a bare two points above normal for this world. He got some special equipment—taking care to leave the camp looking as if its owners had simply walked over to the firing plaza and had not come back. He worked. Then he consulted Janney about probable meterological conditions.

He took off and flew a thousand miles along the coastline in what would be the radar shadow of the seacoast waves. After that he struck out across the ocean. The flier was a standard Earth type utility job, capable of speeds up to six hundred miles an hour, but cruising under three hundred. For work on the continent of Chios, Brett would not have worried about fuel. But according to the exploration ship report, he had a long, long journey before him.

He flew and flew and flew. It was very tedious, and it did not help that he was staking his life on a guess he was by no means sure about. He watched the flier on automatic control for four hours running. It did not change course by the fraction of a degree, nor change altitude by as much as fifty feet. In the end he went uneasily to sleep.

When he woke, the look of things had changed. The ocean had been deep, deep blue and the light came only from the speckled brightness in the sky which was the heart of the Canis Venitici star cluster. Now those stars had been left below the horizon behind him, though there were still speckles in the heavens. Rising, however, there was Elektra. It seemed exactly the size of Sol as seen from Earth, and its brightness was diminished just enough so he could bear to look at it directly. Warmth came from it. It was markedly yellower than Brett's home sun. And the ocean below him had become an astonishing hue which was still blue, but verged upon purple.

These, though, were items he noticed later.

He saw Aspasia, already above the horizon.

It was monstrous in size. It was nearly four times the diameter of the moon as seen from Earth, and it filled sixteen times as much of the sky. It covered a larger space than Brett's fist held before him. It was the size of a ship's vision-port looked at five feet away. It seemed to crowd the heavens. It seemed plunging terribly toward Thalassia. It was like a gigantic missile falling, seeming forever about to crush the planet above which Brett's small flier flew.

He stared at it for a long time before he could be quite reasonable about it. If he'd watched it rising as the flier made its way around Thalassia's curve—gigantic even then, filling a quarter of a quadrant of the world's edge—its present appearance might have been less of a shock. But he had slept until it was a fourth of the way up toward the zenith.

He saw it as sandy-colored, with mottled patches which he knew were deserts and precipitous mountain ranges. There were tiny blue pittings here and there, many of them. They would be the enormous blue-glass lakes the exploring ship had reported and believed to be the sites of once existent cities, melted to glassy liquid by fusion bombs from Thalassia in the long ago atomic war. They were solidified now. Brett saw some areas which might be merely semiarid plains. There were a few noticeable veinings which had olive-colored borders. They were Aspasia's few and narrow seas. They were mere channels.

Seen with the naked eye, Thalassia' sere and battered sister planet seemed very suitably named. It looked as the courtesan Aspasia might have looked when old and all her beauty gone, made grotesque by the bedizenments which once would have seemed so charming.

Brett Carstairs stared up at the world whose inhabitants had wiped out the race native to this and had in turn—so it appeared—been exterminated by the dying Thalassians as their cities became charnel houses and their continent a tomb.

As he stared, something said, *"Beep"* in the flier's cabin. He jumped, and his heart climbed to his throat. He stared at the dial of his recently contrived radar detector. The needle flickered wildly, but settled nowhere at all. Brett

nodded subduely to himself. Anybody who was curious about men, and carried away their radar beacon and first landing plaque, and dug up a refuse pit to examine their kitchen midden—such a creature would want warning of a possible encounter. And such a warning had just been secured. That single startled chirp had been a radar impulse touching the flier. Things did not look good.

The flier went on and on over the wind-purple sea. Brett scanned the ocean. A monstrous swell, far away, broke in a smother of white foam. Some subsea mountain almost reached the surface. The giant ocean waves broke upon it, as they do on shallows and fishing banks on Earth. Here there was half a square mile of white.

The white was assurance that the flier was on course, but the radar chirp was even more important. It was ominous because it was solitary, though only a paleotechnologist would have realized it. Radar is an ancient device, of course. A modern radar brings back to a space ship an amount of detailed information which is really astonishing. But it does it with different impulses of different wave form and frequency. To Brett's knowledge, not since the last war on Earth had any radar shut itself off when it contacted an object. It was a spotting device which did not betray its position to the thing it spotted.

Brett felt those unhappy cold prickles which are the signs of danger realized. Any rational man feels them. Only, a resolute man grows angry and becomes reckless because he is ashamed of being apprehensive.

Brett did.

He scowled and placed a reproduction of an ancient weapon handy. He had not the materials for a modern blaster, of course. But he'd gone back to the first camp and taken a drum of rocket fuel, and labored at the improvization of an antique open breech gun. He made shells for it of plastic. The heavy rocket fuel would give mass to the missiles. He'd made what used to be called a bazooka. He drove the flier on.

The tip of an island rose above the horizon. Slowly, almost imperceptibly, it rose and grew. It was a group of rocky needles rising from the sea. It was the one island in a hemisphere of ocean. The outer needles or rock were monstrous monoliths against which the giant sea swells

crashed. There were single columns, hundreds of yards thick and hundreds of yards high, about and over which the spume flew wildly. There were surging maelstroms among those outer rocks. Wild swirlings, incredible violence, unpredictable floods raged in the channels between them. Had this been on Earth—but there were no such waves on Earth—the air about the island would have been a cloud of sea birds. But no life showed here. Naturally!

The island appeared very close, and Brett's throat tended to become dry. There had been a single radar pulse, so there must be living creatures here. To them he would represent the most instructive of victims or most deadly of menaces.

There was a snapping sound. There was a hole in the flier's cabin above his head. There were streaks of white vapor shooting on before him. There were more snappings, unspeakably venomous.

His hands broke the paralysis of shock. He dived. As he plunged toward the monstrous swells he craned his neck to see up and behind. He saw a winged thing plunging from the air above. A rocket. A small one. Its blast would be just about right to have made the small crater beside the now-demolished tripod where Firing Plaza One had been. Perhaps it was the rocket that had landed there to examine the beacon established by the *Franklin,* when that exploring ship made the first landing on this world. Perhaps it carried away the human device and the landing plaque, with what information it could gather from a refuse pit.

But now it dived furiously after him. There were flickering sparks. Streaks of vapor shot past him, and he felt the blank astonishment of a man backward in time. He'd been ashamed to contrive so primitive a weapon as a bazooka. But the pilot of the rocket was firing a machine gun, with tracer bullets to help his marksmanship!

Brett made his dive steeper. The rocket pulled out, feeling sure he was headed for a crash. It circled vengefully overhead. Its wings were small. It could not fly except at high speed.

Brett landed. The splash was satisfyingly violent, but it was actually a splendid landing in the very trough between two monstrous seas a hundred yards tall. It seemed that he had wrecked his flier in a moving, glassy-walled cañon of

surging solidity. To the rocket, it should seem a certainty.

Brett waited to see what the rocket would do.

It circled and circled. It needed information about creatures like Brett. If there were any craft available that could land and salvage Brett's flier, they should risk anything to learn something of his race and kind.

But nothing happened. The rocket dived back toward the island. It sank low. It vanished.

Brett waited. His mouth was dry. He made fresh plans. He had been detected bumbling steadily across the ocean at a stodgy three hundred miles an hour. He had made no maneuvers of evasion when the rocket dived on him from overhead. It had been Brett's absorption that allowed it, but the rocket could not be sure. The seeming crash into the sea —the whole appearance was of something which could not maneuver, in the charge of someone without skill. If they could come after him they wouldn't expect resourcefulness. He could take off at will, and straight up. He could streak at twice the speed they knew of along between the rolling swells. He could fly like a gull between the wave crests, unreachable by missile-weapons and probably even more modern ones. He had a good chance to get away if only the occupants of the island did not have many small fliers capable of hunting him at higher speed and with greater agility than he could summon.

Floating with seeming sogginess on the water, the flier rose and rose and rose. It reached a wave crest, and Brett saw the island again. It loomed high, now. He saw large sentinel columns of stone nearer than the island's main mass. He saw the purplish seas go surging in between those columns, tilting up and foaming terribly about them, but with a tumult of water in the center remaining unbroken until farther on.

The wave crest passed, and the flier descended into the trough again. There was an enormously long wait before he was lifted up once more. He took a bearing then.

Again in the trough he used the flier's drive to move him so his craft would be in a position to be tossed chiplike between the monstrous obstacles. When the island was hidden again, he used the drive a second time. A third.

Then the topmost peak of the island remained in sight even in the waves' troughs. Brett let the flier drift aimlessly.

It was carried toward the island by the swells and by the wind. He heard the roaring of the surf, such surf as only remote islands near Antarctica experience back at home. The booming became thunderous. It became intolerable. It became a cannonade of sound that human ears could not endure. And therefore it dulled because of its deafening volume.

The rocky sentinels loomed high. They were a little less than a mile apart, but the surf and acres of foam about their bases make the gap seem narrow indeed. The flier floated in seeming helplessness toward that opening.

Brett felt that acute shame which comes to a man because his body tenses and his throat dries up and his heart beats fast and his breath grows short. But his flier bobbed like a bit of flotsam on waves as high as most skyscrapers and whose troughs were deep as minor canyons. Above him loomed wave-torn, stratified rocky pillars, dripping floods of seawater, surrounded by whirlpools.

The flier went through between them. On beyond there were sheer cliffs against which the seas broke in frightful, explosive impacts with such a fury of foam and spray that the imagination was overwhelmed. Brett licked his lips. But he watched.

Then a current behind the northern column swung the flier about. Brett was, for a moment, in the lee of that huge buttress. The swells lessened. There was a vast, slow-moving eddy here. There was what could have been called a harbor, save that no imaginable ship could shelter in it. The flier, whirling slowly as it drifted, moved toward a more sheltered spot. The more sheltered spot still. Brett continued to watch. There were creatures here. They would want to know what queer sort of being disputed the possession of Thalassia with them . . .

He saw a movement among the rocks. Specks stirred, climbing swiftly down toward him. They seemed to slide down swiftly fastened cords from one shelf of stone to another. They were coming to try to keep the flier from shattering before they could examine it, since it incredibly had survived this far.

Brett got his primitive weapon ready. The efforts of the creatures would be improvisation, of course. Nobody would normally use the sea on Thalassia! So nobody would

have prepared a salvage operation such as these creatures meant to attempt.

An outward-jutting mass of stone formed a roof above the water where the flier drifted for a space, and the climbing creatures were out of sight. Brett could not make out what they were. But he reminded himself that like Halliday he had a tendency to see everything from an anthropocentric viewpoint. He tended to interpret moving creatures with human beings and Earth animals as references.

The current was very slow, here. The surgings of the water were less. The flier floated under an overhang so close that Brett feared it would be crushed. But then he came out. There was flat stone ahead, awash, wave-washed by trivial swells. The figures he had seen were almost at it. One did reach it and ran frantically in knee deep water to try to salvage, to grasp, at the very least and worst to see clearly inside the flier and observe its pilot.

Brett caught his breath. He did not believe it.

He stared into the face of a girl to all appearances human. She wore close-fitting garments of what looked like yellow silk, with brief drapings that had concealed the humanness of her form.

She looked at him. Her eyes widened with purest horror. Her expression was that of one who regards a frightful monster. She screamed—though Brett's still-numbed ears heard it as only a thin, high-pitched cry—and she thrust back from the flier she had seemed so anxious to reach. Other figures, also human in appearances, came running as they dropped down cords from the cliff.

At sight of Brett they howled with fury. They plunged toward him, dragging out strange weapons with which to destroy him.

Brett shot up from the heaving water at full acceleration, emergency lift, reckless of the fuel cost and with his face dead white and dazed.

He had a picture of that girl in his pocket.

4

". . . The arid utterly monotonous desolation of Aspasia seems to negate at once any idea of surviving inhabitants, though the possibility cannot be entirely ruled out. The Franklin *cruised over all probable areas without making contact with intelligent life forms. Yet civilization did exist here. Highways still in good repair remain. It seems likely, however, that its former culture was developed in oases in its deserts, in concentrated population centers. The previously mentioned lakes of blue glass may be considered to cover the sites of such oases, melted down by fusion bombs from Thalassia . . . After this disaster it would be expected that any survivors would live only in caves or other inconspicuous places, and would hand down legends of destruction coming from the sky. The* Franklin, *indeed, could have been hidden from . . .*

Astrographic Bureau Publication 11297, Appendix to Space Pilot Vol. 460, Sector XXXIV. Page 61.

BRETT descended from a rainstorm to the small river before the camp cave. He'd been in the cloudbank for a period that had no particular meaning because there was never any real night on Thalassia, and he came down in a downpour that was like the heavens opening, except that he'd been up where it started. He got the flier under the overhanging trees a mile downstream from the cave, lifted it to the river bank, tied it securely and walked through the more-than-tropical downpour to where the camp had been set up.

Kent peered at him phlegmatically over a barricade of stones. He put away a heat gun.

"Oh," he said calmly. "It's you. Halliday was talking about you yesterday."

Brett rummaged for dry clothing. He toweled and shifted to other garments. He asked over his shoulder:

"Everything all right?"

"This cave was booby-trapped too," said Kent. "We should have been blown to hell when I broke down that stone wall." He paused and added. "We weren't."

"Odd," said Brett, with irony. "Halliday's in the cave?"

He was. Brett went in through the opening Kent had made. The interior was brightly lighted now. It was illuminated as effectively and as thoroughly as a museum on Earth. Cables ran along the passageways. Just inside the first entrance generators hummed. It was remarkable how the members of the Expedition had made a researcher's dream of this camp site. All archeologists have dreamed of finding an ancient city intact and of making their camp among the objects of their study. All have had wistful fantasies of laboratory facilities at the very spots where their study material exists.

Here there was exactly that atmosphere. The doubtless irregular original cave system had been worked over by the Thalassians who tried to make it a refuge for the ages. The walls and ceilings were sound. The passageways were neatly chiseled. The larger chambers were cleared of lime formations and the walls made smooth. The debris from such workings had been used for fills. It was startling to find a perfect small city underground. Hundreds of human beings could have lived here. There were open spaces hundreds of feet across. There were halls with sixty-foot ceilings. There were even small cubicles as if for families. With bright lights and ample space and the remains of ancient occupation right at hand, this was close to an archeologist's dream of paradise.

But without any inconsistency at all, it was also a charnel house. The air was sweet and clean, now, but manlike creatures had died by hundreds when the radioactive poison reached them even here. Seeping, lime-burdened water oozed everywhere. The smooth flat floors were covered with a glistening incrustation with minor ripples frozen

upon it. The walls reflected light like glass. Nothing that had been part of the civilization of Thalassia remained intact. There were mounds on the floors, now covered with the glassy calcium-carbonate coating, or completely impregnated with it. Sometimes brightly glazed bones appeared among these mounds. Sometimes there were the brightly colored rusted tints of metal objects long since vanished. Sometimes there was no clue at all to what the vanished objects had been.

There had been no such water seepage when the cave was occupied, of course. Cracks in the stone may have come from earthquakes—or Thalassia-quakes—during the ages since the time of death. Certainly the lime incrustation preserved everything, but only after it had been destroyed by time.

Halliday was seated by a desk which once had been packing cases. He had half a dozen ceramic objects on the desk, used as paperweights against air currents which did not exist underground. He was writing exuberantly when Brett came in.

Halliday beamed.

"Ah, Carstairs!" he said happily. "You are our lucky member! We do our work under absolutely perfect conditions, and it is your doing even if it was an accident. There are accident prone individuals, and they are Jonas on an expedition like this! But you are a favorable-coincidence-prone! I congratulate you!"

Brett sat down on a box which served well enough as a seat.

"I hear this cave was booby-trapped too."

"Yes," agreed Halliday blandly. "We smelled smoke. It was disturbing. We traced it, and there was a bomb made ready to bring down the cave about our ears. But the chemical explosive intended to bring the priming bomb slugs to critical mass had deteriorated. Unstable compounds, you know. It merely smouldered, instead of blowing us up. The Thalassians were not a forgiving type! They meant that if they couldn't live on this planet, nobody else should!"

Brett said grimly:

"The Aspasians aren't a forgiving type either. I think it's certain the other recent visitors are Aspasians. I found

a base on the other side of the world. It would be logical for them to make a base there. Nobody else."

Halliday's eyebrows almost met in the center of his forehead.

"No! What are they like?"

"Technology about late twentieth century, apparently," said Brett. "But I'm not sure. They've rockets, chemical explosive, missile weapons, artificial fabrics and know electronics fairly well. They have good radars. Their females have high social standing,—they adventure and take risks as the men."

"Evidently the base was not occupied," said Halliday briskly. "In any case, we have our work—and plenty to work with! This was really an incredible, find, Carstairs! I've completed the restoration of a skull, by the way, to the way the Thalassians must have looked in life. I'll show you."

He swung about to a shelf behind him and lifted down what appeared to be a portrait bust. He put it proudly on his desk.

"They had six fingers," he observed zestfully," and were quite stocky of build. But they were bipeds, a little shorter than we are, they wore clothing . . ."

Brett looked. He said wryly:

"You've made the ears pointed. They were like ours. And prognathus jaw or no prognathus jaw, we'd pass for them."

"How do you know?" demanded Halliday.

"An Aspasian girl saw me," said Brett unhappily. "And she screamed."

He carefully related the affair of the island. Halliday protested:

"But the exploring ship saw no sign of life on Aspasia!"

"Maybe they hid," said Brett tiredly. "Maybe they thought the *Franklin* was a Thalassian ship, built by some who'd managed to live through, as they did. Maybe for that exact reason they came over to Thalassia to fight it out here: to end the danger to their race forever. It looks like that. I thought they'd be even more anxious to track me home than to kill me, so I found a storm cloud and stayed in it till it came ashore, and I came down to camp here with the rain."

Halliday winced. But then he said hopefully:

"Very wise! Very! But we are very well hidden, and this is a very large world. And we've not much to fear from creatures with no more than a twentieth century technology."

"Unless," said Brett, "they've got twentieth century desperation. I suspect they are desperate. I think they're ready to fight to the last creature among them to kill every one of us. I think they'll hunt us as we'd hunt the devil himself —which is what they think we are!"

There was a shouting at the entrance to the cave. It was Kent's voice. Among the echoes, the words were indistinct, but Brett thought he might have called something about a rocket. He shouted again. Halliday got up and walked briskly toward the sound.

The floor of the cave bounced violently. The lights went out. There was a crash like the end of the world, which lasted for a long half minute. In the cave, things fell. Walls creaked. Sections of roof plunged down with thunderous impacts.

Then Kent's voice sounded in the abysmal blackness.

"I heard a rocket blast in the rain. I yelled. Then the bomb went off." His voice, usually toneless, quavered a little. Then he got it under control. "It was downstream, about where we keep the fliers, around the curve in the river bank. Lucky there is high ground between. But I saw the light. Atom bomb." Then he added calmly, "The shelf of rock fell down. We're buried in here."

Halliday rose to the emergency in his own manner.

"Somebody bring handlights and a counter," he snapped. "See if anyone's hurt!" Then he said irritably, "If they're Aspasians, they used cobalt bombs once. I hope they haven't used one now!"

But they had. Handlights came from the place where the supplies were piled. The spreading shelf outside the camp, which had sheltered the cave entrance like a remarkably deep portico, had cracked from the ground shock and its outer edge tilted down into the water of the river. There was a rill which ran underneath it from its upper edge, and ran out again down below. A geiger counter showed radioactivity. Not much yet, but some screens between the

counters and the water identified the radioactive material. Cobalt-60.

Halliday's voice cracked with exasperation. A cobalt-based bomb had been dropped within a mile of the cave entrance. Obviously, Brett's idea of hiding in a storm-cloud hadn't been good enough. When he landed, a bomb dropped. It indicated much better than twentieth century technique. It even looked as if it hadn't been intended to shoot him down when he approached the island, but only to scare him back home. But when he'd seemed to crash they tried to learn something from the wreck. Yet they'd been pleased when he got away. This was the result.

"We seal up the cave entrance," snapped Halliday angrily. "We cannot go outside! But there is air within which will not be contaminated immediately. We will think it over."

Brett helped shovel wet earth to fill the solitary entrance to the cavern with an airtight plug. He raged to himself at the disaster he'd brought on the expedition. He'd been sure that he'd evaded all possible trailing. There had been no radar! Could they have trailed him with infrared? It was late twentieth century too. There was no way to frustrate that sort of trailing . . .

The Expedition was doomed. Much worse, in six months a ship would come from Earth for its members. That ship would not expect attack. It would be an easy target for the creatures whose ancestors had destroyed all air-breathing life on his planet, and whose descendants were bent upon extermination of the Expedition. They'd smash the Earth-ship. They'd study it. They'd make a fleet of interstellar ships themselves. And, having fought one interplanetary war, they would never risk war against a warned adversary. They'd strike with absolute ruthlessness and ferocity at any other race that could endanger them . . .

When there was a completely adequate seal filling the cave entrance, Brett reflected with a sort of sickish cynicism that history assuredly repeated itself upon Thalassia. Eight thousand years ago, humanoid creatures had sealed themselves in this same cavern, hopelessly wanting to secure life for their descendants. They'd failed, and their bones lay all about its corridors. Now a dozen humans had sealed them-

selves in, making the same foredoomed gestures. But they'd have no descendants to try to avenge with booby-traps.

He leaned against a passage wall. That girl would rejoice fiercely if she knew. Maybe she'd been in the rocket that had dropped the bomb. Whatever her ancestry, she came from Aspasia and she had imbibed hatred of Thalassia with her mother's milk. Thalassians, for that matter, set booby-traps to implement their hatred even after their deaths. The two races had the unforgivable to avenge—near extermination and eons of hiding in the one case. Extinction in the other. There was no way to parley, to explain. There was no way to do anything but die.

Because, of course, outside this sealed cave the rain poured down, washing the deadly radioactives of this last bomb down into the earth itself. Already, to take two breaths aboveground was to die. But presently deadly ground water would come down to this ancient shelter and this cave would again become a lethal chamber.

But it was a large one. After a little, Brett went heavily to the futile conference Halliday was holding. The cave lights were still out, and only handlights illuminated the scene. Halliday gesticulated, his thinning white hair stirring as he moved.

"Where's your floor plan, Morton?" he cried angrily. "The floor plan of the entire cavern! You should have brought it! This is irritating enough, without members of the Expedition acting like helpless school girls! Go get it! Janney! What is the weather outside?" He raised his hand peevishly. "I know it is raining! What is the wind-direction and speed?"

Janney said heavily:

"The wind's onshore. Naturally! I told you yesterday that a trade wind blows! Of course in a rainstorm it loses force. It probably blows fifteen miles an hour, with gusts up to thirty or more."

Halliday clapped his hands sharply:

"Understand, everyone! We cannot stay here. We cannot go out of the ordinary exit. We have to find a new exit, or make one. I believe the rock-strata slant down toward the coast. Am I right, Simpson? Yes! It is probable that some of the sealed-off branches of this cave system may reach the surface—or near it—upwind of the bomb crater. They

would have been sealed off because they communicated with the air. The seals are to be broken and radioactivity checked in the air coming in . . ."

Kent spoke, phlegmatic as always:

"Make up packs to carry?"

"Naturally!" snapped Halliday. "This is a most irritating occurrence! We had a perfect site for examination with all conveniences. Now it must be abandoned and it will not be possible to examine it again for years! Everyone should carry his written notes, but artifacts will have to be left behind to leave room for food. It is infuriating!"

He fumed, but Brett found himself admiring Halliday.

The dark and echoing caverns resounded to strange noises, after that. The strangeness was largely due to the blackness which is not normal anywhere on Thalassia. Men examined carefully drawn maps, and found sealing-off walls which blocked extensions of the cave system. All limestone caverns are somewhat similar. One passage might have been blocked off because of a pothole leading to the surface. Another because of an underground stream which would bring radioactivity in its waters. The geiger counters gave grim news as one after another of the seals were broken. There had probably been only one rocket at a time trailing Brett's flier, from so great an altitude that he could not detect it. A rocket has not an indefinite flying life. There must have been a relay system to keep on Brett's track. But there'd been a cobalt-based bomb handy to drop when he went to ground. It would normally have made a continuous lethal fallout over a strip of ground many miles long. In a rainstorm like this, the fallout should be shorter, but vastly more intense.

It was. Air coming in the pierced walls that closed off unknown winding passages showed an intensity of radiation that made Belmont whistle softly.

"Right now," he told Brett, "the air outside is just about as breathable as so much straight chlorine. It wouldn't be as painful to the lungs, but the results would be identical."

Brett helped close up another small opening with mud. Twelve men from Earth, hundreds of light-years from home, were sealed in a cave that had been a tomb for eight thousand years. Unknown stars made speckles of light in the thin blue sky above the rainclouds. At one place a

nearby star cluster made a mottled illumination brighter than the local sun. They were on a world of water with but a single continent of land and that was empty of moving life. There was life only in that hopeless cavern underground—and high in the air overhead, hovering until more hovering things should come to drop more death.

Beyond the atmosphere there was nothing at all. From a sufficient distance the globe which was Thalassia could be seen to be distorted, bulging noticeably toward its similarly deformed twin world Aspasia, only a quarter million miles away. They revolved about each other in implacable enmity, turning always the same faces toward each other.

A long, long way away there was the yellow sun Elektra, spinning in space, less bright than Sol but nearly as large. Nearer, and rolling sullenly about its primary was the red dwarf satellite-star Rubra. The twin worlds followed it perpetually in its orbit in the Trojan position. From space the dark carbon clouds could be seen upon its surface, forming in perpetual storms through which the fiery red of hell flame could be seen. Further out were more planets, Lucifer and Titan and Argos, giant gas worlds where life had never been. And spinning brilliantly in the glare of Elektra, close in toward it, blazed the little planet Melissa on its erratically inclined orbit, circling Elektra in a year of less than a dozen weeks.

But there was not quite a sameness and a staleness in all the happenings of empty space. Where the twin planets spun about each other there was motion. It was tiny by comparison with the vastness all about. But from the seared and sandy surface of Aspasia small white threads appeared. They stretched toward Thalassia across the gulf. There were many of those threads. They were rocket trails.

The enmity between the planets had not ended. A war fleet roared toward the world that robot rockets had killed before. Life had been found on it again. That life must be destroyed.

The strange, incurious stars watched without emotion.

5

"On Thalassia plants no longer seek to attract insects by bright colors or scent or nectar, because there are no insects. Plants which depended upon insects for fertilization have become extinct. Berry-bearing and fruit-bearing trees no longer compete for the carrying of their seeds by offering fragrance or taste. There are no birds. Even species which formerly found it advantageous to grow thorns for the discouragement of herbivorous animals no longer find the practice serviceable. . . . The flowers have lost their scent and the fruit its savor and even the thorns their sharpness, because there are no animals to take notice . . ."

Astrographic Bureau Publication 11297, Appendix to Space Pilot Vol. 460, Sector XXXIV, Page 75.

THE SOUND of the surf gave them hope—that and the geiger counter readings. They climbed and crawled and wormed their way through channels and around glistening-wet bulges of stone. They had ropes around their waists like mountain-climbers, so that no one would fall alone into the sometimes gaping depths they encountered. Once Brett, in the lead, crawled upon his belly for more than a hundred feet with rock touching his back all the way. He could not have done it but for the assurance of the rope that he could be pulled back. Once they had to use a small charge of explosive to break down a mass of calcite which barred the way. They spent hours in the journey. But they went on because to stop or turn backward was to die. And for the last half hour they did have the encouragement of the thunderous sound of surf.

Then they came out quite undramatically from a hole in which there were many brushwood sticks, in the space between the roots of a giant tree. They heard the surf clearly, then. They had crawled more than five miles underground, and were almost at the edge of the beach when they reached the open air.

The jungle which here crowded the shoreline was saturated, but the rain had stopped. They moved in the direction that by convention was called south. A magnetic compass pointed somewhere, and steadily, but it bore no relationship to any astronomical phenomenon and they could not take it seriously. When they moved south, they moved along the shoreline toward their first camp and the shattered Firing Plaza Number One. It was not an especially sensible direction to choose, but they happened to have come out on that side of the river which ran before their late cavern. They needed to get away from there. It was doubtful whether it would be wise to wade a stream that ran through cobalt-contaminated ground.

"If I read our enemies right, now," said Brett grimly to Halliday, "after underestimating them before, they'll blast all the area around my landing place as soon as they can get bombs here. But it's been a long time already."

Then he considered, and said more grimly still:

"I imagine that I had a rocket with a bomb on board, trailing me all the time, all the way back from the island. The rocket changed from time to time, but always there was a bomb ready. Yet after I did land, the pilot had to putter around in the rainstorm a while before he could find out just where to drop the bomb in order to have it land accurately without endangering his own craft. If they went to all that trouble to track me home, they'll really go to town on the place I landed! Right?"

Halliday was hiking, with all the others after him, to get away from the neighborhood of the camp. Well away.

"They'll bomb the surface of the ground," added Brett, "to knock in any caves or other installations we may hide in. Then I think they'll use some waterburst bombs to make sure that everything dies—nothing being supposed to be alive—in the biggest area they can imagine us as being in. It sounds extreme, but I think they'll do it. They mean business!"

Halliday nodded and continued to hike. Janney, behind him, said:

"There's no day and no night, and the trades blow all the time. But the trades should pick up a little after Elektra rises. More heat. If they want maximum spread of their radioactives, they'll wait for that. They ought to think us pretty well smashed."

"We will move slanting inland," said Halliday, irritably. "There are mountains. There could be updrafts on the slopes to carry even atomic fallout over our heads."

Brett said no more. They toiled through the forest. There were places where the underbrush was thick, and they moved at a snail's pace or worse. But there were other places where gigantic solemn treetrunks rose from shadows so deep that there was heavy twilight and no undergrowth at all. The rain had ended so recently that all trees still dripped. But there was one variety of tree which seemed somehow to gather up water in its broad leaves as if they were cups, then released it all at once. Brett never knew the mechanism, but there were times when water plunged down in coherent masses of gallons. When such a mass of water hit a man, it could knock him down. Sometimes it did. At all times the ground in such shadowed places was practically mud, which clung to their feet and made walking heavy.

Brett found Kent struggling along beside him, phlegmatic as always. Brett said dispassionately:

"If they land and try to track us down on foot they'll have an easy job of it! Look at the trail we're leaving! If they have dogs, we'll be finished! They'll find us!"

Kent's features lighted up. Brett had never seen him so animated before.

"Dog," said Kent pleasedly, "that's something I know something about! Look here! You say it's desert on Aspasia where these creatures after us come from?"

"That's right," said Brett.

"Then they'll have dogs or something similar!" said Kent in happy authority. "That I know about! You take a savage who hunts with weapons—he'll have to start as a hunter to get the idea of weapons with tools coming later. When he lives in a jungle, he lives by stalking. A dog's no good for stalking! You can't train an animal to keep quiet

while his prey blunders nearer and nearer and then changes his mind and walks away. A dog's for open-country hunting. You see? He's to run ahead and bring the hunted creature to bay, and dance about him, barking, until the man comes up and kills the beast. Where you find open country you find dogs. Deserts, too! The Arabs used to have wonderful dogs! So the creatures of Aspasia would need dogs before they got civilized, and they'd keep them after. We did!"

Brett went through a pool of water. Everybody had to wade through that pool.

"Suppose the Aspasians run faster than their—ah—dogs?" he asked drily, though he knew better. He was not able to believe that the girl he'd seen on the island, and whose picture was in his pocket, was an Aspasian. The evidence was past questioning, but he couldn't accept it. "Suppose they could run as fast as their prey?"

"Then they'd never get civilized," said Kent promptly, beaming, "Nobody gets civilized unless he gains by it. Unless he needs to! If our ancestors had been able to run down the creatures they hunted, they'd never have bothered with more than clubs. We'd be trotting after rabbits back on Earth, you and I, instead of being here. Eh?"

"I never thought—" Brett stopped.

The ground quivered underfoot. A distinct, unsettled quivering. A tree branch snapped somewhere and came crashing to the ground. The marching party of twelve men stopped and listened. Long seconds later the sound came. It was a crashing, horrific roar. The leaves quivered overhead and a shower of water fell down from among the boughs.

"A bomb," acknowledged Halliday, looking up from his wrist chronometer. "But well away." He added firmly, "A solid ground burst. They will bracket their first bomb crater on all sides. Then they'll drench the area with radioactives from sea water. We will go on."

He led on. Brett trudged after him. Half an hour later there was another bomb. The delay was almost proof that Halliday had been right about the solid ground aspect. A bomb to be aimed for a particular spot had to wait for the radiation cloud from a previous bomb to clear away, so it could be aimed.

Four times, as they struggled through the forest, they

heard the detonations. If some Thalassian hideaway had brought survivors through the years of poisoned atmosphere, and if descendants of its original occupants had at long last come out to the light of day—why—that bombing should end any chance of further emergings. If in addition an area miles wide and deep were made uninhabitable by spray—then all danger of the return of the life to Thalassia at that place would become unthinkable.

The men marched on. Hours passed. They began to lag and stumble when they reached the foothills inland. There Halliday allowed a halt. They had come fifteen miles, nearly, from the place where the cave branch ended. They were worn out.

"But we do not know," said Halliday precisely, "what our enemies' plan will be. I expect the cobalt contamination of a considerable area. It has not happened yet. But we must go on."

Yet he allowed a rest. Brett regarded the packs each man had made up from himself. There were oddities. Belmont carried four geiger counters and their power packs. The packs were negligible in weight, but the utility of geiger counters to fugitives on Thalassia was debatable. Janney had his thermometers and his barograph—Brett saw him winding it—besides a heavy notebook and his food. Another pack included two cameras and an absurd load of film. There was a neat assortment of insulated wire strapped to another pack still, and a tiny pick and whisk for uncovering archeological specimens . . . Every man in the Expedition had brought along something representative of his specialty. But Brett doubted that there was a saw or an axe or a good-sized knife in the company.

He himself was carrying his reproduction of an ancient bazooka, and his pockets were stuffed with the one-inch plastic rocket shells he'd made for it to fire. Since there were no living animals on the planet, and their enemies were armed with atomic bombs, he was no more rational than the rest.

After a time, Brett moved up to where Halliday sat limply on the ground. Halliday was probably the oldest man of the dozen, but he had forced the pace until even the younger men were weary.

"I still feel disgraced," said Johnny, "but I wanted to ask you something."

Halliday said sharply:

"I authorized your journey to the island, and I told you that I considered the manner of your return quite sound. If there was a mistake—and there was!—I share in it. But what do you want to ask?"

Brett hesitated, and shrugged.

"I suppose it is, whither are we drifting? We've got six months to wait before a ship comes for us. When it comes, it will probably be attacked, and we've no way to warn it. We haven't more than a ghost of a chance of living six months, for that matter. I'd just like to know if you have any plans for our survival and ultimate rescue."

Halliday sputtered. Then he said, in irritation:

"Carstairs, there is a time to act and a time to plan! At the moment, we need to act simply to gain time to plan! I have no plans for survival for the moment. I do not have plans as yet for contact with the rescue ship when it comes. But I have months in which to think them out! I shall deal with it in due order of importance. The essential thing at this moment is to get out of the area those Aspasians are going to drench with sea spray! We have, to be precise, to get them off our tails so we can take measures for the future!"

Brett smiled warmly at the older man. Halliday was bluffing, but it was a good bluff. Brett liked it. He said:

"I was just talking to Kent. Putting myself in the enemy's place."

Halliday's eyebrows rose.

"Well?"

"If Earth's old civilization had been smashed from a planet as—say—Thalassia," said Brett, "and we'd managed, we thought, to wipe out the Thalassians: and we'd built up our culture again but were still scared of them, so we made a journey across space to make sure . . . If we found creatures on the planet that we thought were our old enemies, we'd do exactly what the Aspasians have done. We'd hate them like the devil! After we'd trailed one home and bombed him, we'd drench the place with radioactive sea spray. But just to make sure, we'd do one thing more."

Halliday said irritably:

"Come to the point! What would we do?"

"We'd send home for dogs," said Brett. "And we'd go around the outside of the area we'd made deadly, and make sure that our enemies hadn't come out on foot. We'd know they hadn't flown out. But the dogs would tell us if they'd walked out."

Halliday stared. Then he groaned.

"Carstairs! You drive me mad! You think of things! There is no reason to suspect the Aspasians of having dogs! But it is so infernally possible that they have! It would be like them to poison the air of a world, and then go home and play happily with pet animals! Of course!"

Brett said hurriedly:

"The only thing is that since Aspasia is mostly desert, it's not likely they'd have much experience of following a scent that was faulted by running water."

"Go away!" snapped Halliday. "And don't come talking to me unless you think of something else."

In ten minutes more he rose and summoned the party to further journeying. The pause had seemed to stiffen unaccustomed muscles, but they started off. In twenty minutes they came to a small stream. Halliday faced back.

"We walk in this brook," he said peevishly, "in case we will be trailed with scent-trailing animals from Aspasia. No one is to put foot on dry land under any circumstances!"

He led the way downstream. Two miles, and the brook was joined by a slightly larger one. Halliday turned and traced it back toward its source. He was followed by the line of burdened, weary figures, splashing in his wake.

An hour later the ground trembled underfoot. They were well up in the hills, then. They looked. An enormous column of darkness still uncoiled toward the sky. It was very far away. It spread to the familiar mushroom shape as they stared. It would be thirty thousand feet high, on this planet of less-than-Earth gravity. Its stalk was sturdy and thick. It was a water burst bomb. Janney glanced at his wrist. He'd been right. Elektra would be rising.

Halliday went on. And on. And on. The ground shook again. Later it shook still and again and again. There was a wall of gruesome darkness against the sky. It loomed many times higher than mountains. They were looking at the row

of dark though unsubstantial giants when a seventh column arose.

They went on. They climbed and waded and climbed. They came to a narrow pass between two mountain flanks. A stream gushed out of the mountainside and fell forty feet and then came splashing down among stones.

It wasn't the end of their watery highway. There was a pool below it. There were two streams flowing from the pool. They had followed one up to this spot. Now they followed the other down to the other side of the mountains.

But the atomic cloud was moving inland. They looked up behind them, and looming far above the range they had crossed there was the misty forefront of the cloud of death. It was composed of water vapor lifted up for miles and blown to droplets and those blown to smaller ones until it was the thinnest of fogs. But deadly.

Halliday stared pugnaciously up at it. Then he chuckled.

"Gentlemen," he said with a jerky gesture, "there is an omen if you happen to be superstitious. I advise it in this case for the pleasure it brings. Elektra must be above the horizon, though we cannot see it for this next range of hills. But its light strikes the atom cloud. And—do you not see a rainbow?"

It was not a very good rainbow, but it was there. It was strong in the red, and lurid in the yellow, but the blue was deficient. Still, it was a rainbow.

When they halted for the equivalent of a night's rest, Halliday called Brett to hm with a crook of his finger.

"Yes?" said Brett.

"I appoint you," said Halliday firmly, "to work out a plan. You irritate me. You think of things. Now I assign you a thing to think of!"

"I'll try," said Brett. "What is it?"

Halliday puffed a little. He was not a young man. He was exhausted. But his manner was dour and irritable as always.

"I think we are clear for the moment," he said peevishly. "If that atomic cloud will only settle over the trail we left, so that no misbegotten Aspasian can take any equivalent of a dog and find our footprints before we began walking in stream beds—If that happens, they will believe us dead."

"They should," agreed Brett.

"But," rasped Halliday, "it will not follow that they will think they have killed all Thalassians—such as they think us—in killing us few. They will hunt this continent over. They must be firmly convinced that we are devils and resolved that none of us must stay alive. They hate us as we hate the devil!"

"It looks like it," admitted Brett. "After all, they've only seen one man—me."

"Yes," snapped Halliday. "There is only one answer. Put your mind on it. Find some way to make friends with them!"

6

". . . The continent Chios is . . . the only considerable land mass on the planet. It is thickly covered with vegetation, and its former inhabitants must have had cultivated crops and very probably a dense population. However, its constant daylight negates the idea of the introduction of Earth plants, and the poor flavor and indifferent quality of such edible plants as are known makes subsistence on its native products a far from attractive prospect. In case of emergency, nourishment will be found . . .

Astrographic Bureau Publication 11297. Appendix to Space Pilot, Vol. 460. Sector XXXIV. P. 80.

THERE WAS no night or day upon Thalassia. In theory, at this particular part of its year the sun Elektra rose from somewhere along its southeastern horizon and for not quite one hundred and fifty hours crept upward in the eastern sky, and then for the same length of time descended slowly toward the northeast. As it set, the star cluster Canis Venitici rose in the southwest and rose for a similar num-

ber of hours and declined for the same to the northwest. At other seasons these directions were reversed, and there was also a time when the sun rose due south and set due north. Then there were eclipses. All of which resulted from the fact that Thalassia and Aspasia revolved about each other once in twenty-five days (Earth measurement) with their common axis in the plane of the ecliptic, and had no diurnal rotation at all. But the important thing was that Thalassia had no clear-cut day and night.

Wherefore time passed confusingly. The twelve who had come to study the fallen civilization of the planet had become fugitives, without hope. They had no shelter, only such food supplies as nourished without satisfying them, and no prospects of any improvement.

They did know of some few coarse fruits which could be eaten, and there were half a dozen varieties of fresh water fish that were not unwholesome. The absence of fruit-eating birds or animals had resulted in eight thousand years of lack of natural selection and had produced part of this situation. The fresh water fish were mostly recent adaptations of marine forms which had moved into the ecological niches left when the brooks and rivers of Chios ran deadly poison down to the sea. Eating grew monotonous for the twelve who hid.

There was no alternation of day and night. It seemed to Brett that their purposeless migration went on for years. They marched until they were tired, and lay down and slept, and got up and marched again until they were tired. They grew whiskery and unkempt, they loathed the food they had to eat, and all ideas of time lapsed in the unending day.

Objectively, they crossed a wide valley and came to an inland mountain chain, and followed that southward. Nothing of any consequence happened at any time. Once they saw a spot where an obvious bomb crater had been blasted into the side of a mountain. It made a gigantic scar which even eight thousand years had not healed over. But that discovery, like all others, had no meaning.

Then, one day—one march—one period in which they were all awake—they came to a broad valley which would surely have made a perfect location for a city. And it had been. The center was gone, blasted flat and covered with

jungle. But about the edges of the obliterated blast area there were crumbling structures of stone. There were tumbling walls, and terraces distorted by tree roots, and other matters of that kind. The Thalassia-Aspasia Expedition could not resist the lure of it. They carefully did not talk about the complete hopelessness of their position, but here were ruined artifacts and structures, and they yearned over them.

They stopped to dig, and poke, and pry, and measure, and zestfully to dispute with each other over the meaning of this architectural feature and that. It was not a reasonable thing to do, but there was no purpose in being reasonable.

Brett Carstairs could not join them. He could deduce the technical processes of former years, but there was nothing for him to work on. He tended to brood over the futility of all things. He brooded also over the danger to humankind if the ship that would come presently for the Expedition were smashed by the crew that had driven the Expedition into the wilds. And there was the girl. Her existence was patently impossible, and definitely undeniable. She must be fiercely rejoicing in the conviction that he had been killed. And Brett looked at her picture and did *not* rejoice.

They hadn't seen a living thing since leaving the coastline. They never should, unless they were discovered. Then they might see the Aspasians who would destroy them. But Brett brooded, while the rest of the Expedition climbed and crawled and zestfully investigated the ruins of a shattered suburb of an obliterated city of Thalassia.

The second day of that pastime, they saw a ship of the enemy. It was a new type ship, and it was evidently hunting for signs of living things to be killed. It was not a rocket, this time. Rockets move fast, but in atmosphere they are not economical of fuel, and on Thalassia all fuel had to be brought across space. So this was a new type ship.

Brett discovered it as he sat drearily brooding and wondering how on Thalassia Halliday could imagine making friends with creatures who considered them devils out of hell, or worse, who must be killed at any cost. The ship came into sight above the mountains.

It was melon-shaped, with pointed ends. Its round sides

glinted silver. It moved very deliberately indeed, almost hovering. There were ports along its bottom, but not elsewhere. It moved by occasional jettings of rocket fuel from astern.

Brett called sharply, and men passed the word. Within seconds the personnel of the Expedition were invisible, hiding behind bushes and trees. Brett slipped down to join them where they stared at the vessel hungrily. They were a disreputable crew, now. Nobody shaved. They did not look like a scientific group. Not at all.

"It's a space ship all right," said Kent phlegmatically. "But is it ours? Is there an Earth type like that?"

Halliday snapped:

"Human spacecraft aren't streamlined. No sense in streamlining for emptiness. That's an Aspasian ship. Hunting us!"

Something teasing and vague and annoying tickled the back of Brett's mind. He knew something, but he didn't know what it was.

"Now why," asked Janney, "does it use rockets? Rockets won't move a mass like that! It must be two hundred feet long! Thousands of tons!"

The rockets of the ship flared again. Brett saw a long cord dangling from its forward end. Why should a space ship have a cord dangling from its bow? It moved visibly faster when its rockets did fire. No rocket could visibly stir a mass of thousands of tons, such as a two hundred foot space ship. No such small rockets as this, anyhow! The ship approached the mountains.

Its bow suddenly whipped around all of ten degrees, and then slowly swung back. Then Brett noticed that the ship was not moving along the line of its own axis. It did not progress precisely where it pointed. It also moved a trifle sidewise, as if something pushed laterally against it while it forged ahead. Which was impossible in a space ship weighing thousands of tons. . . .

Then the fact clicked in Brett's mind. He cried out.

"They are twentieth century technologists! That's no space ship. That's a dirigible!"

Halliday blinked. Brett's words almost tumbled over each other:

"It's a balloon, Halliday! It's a bag filled with helium,

and pushed by a rocket! An old, forgotten way of traveling by air! It was in use for less than half a century! They don't need motors to stay aloft! They float! The Aspasians have sent for them because they don't have fliers! They use these dirigible balloons at home, and rockets for space travel! Now they need to make an exhaustive hunt, they sent for these! I have lived to see the day when a balloon was used again . . ."

Things fitted together with precision. Aspasia was a desert planet. Fliers would never be developed in a desert area, of course. Their motors would be unreliable, at first, and over desert a failed motor would mean a dead passenger. But balloons would float on, even if their motors failed, until some inhabited area was reached. Of course! On Aspasia fliers would never get through their primitive stage. Balloons would be preferred, not because they could be carried closer to perfection, but because they were safer while still very far from it! Of course! To make a painstaking, inch-by-inch search of a continent, the Aspasians would import these balloons, and they would be effective.

The silvery, melon-shaped object rose and fell in a wind gust past a mountain peak. The rockets jetted furiously and it climbed against the wind and went over the mountains and away. Brett racked his brains for details of this forgotten mode of transportation.

Next mealtime his idea came to him. The food was even less appetizing than usual. There would be food in that dirigible balloon. It would be the only palatable foodstuff in hundreds of miles.

He led Halliday aside.

"I propose a gamble," he told the Expedition's leader. "It could get us all killed. Or it could get us something we could probably eat. Or—it might be a way to make friends. Do you want to take a chance?"

"Probably," said Halliday, frowning. "What is the idea?"

Halliday was emaciated, now. The food and the journeying on foot had not been good for him. But he was still the leader.

"The firing plaza was booby-trapped," said Brett persuasively, "and the cave. So this city's probably booby-trapped too! Now, if we can only make sure . . ."

It was a hairbrained scheme. It was not at all the sort of project that would be authorized in a sombre policy conference before an expedition set out from Earth. One had to be desperate and half-starved and practically without hope in order to conceive of it. But Brett made it sound remarkably plausible. At that, however, Halliday pointed out that it might not work but simply lead to an unbearable concentration of search just where they were.

But he approved it.

So Belmont abandoned archeology and went over the center of the city with his geiger counters. The man who'd brought insulated wire with him, because he wanted to, made investigations. Eventually he contrived an induction balance. With that and knowledge learned from the booby-trap in the cavern which had not gone off, he determined facts about arrangements under the ground that had not been disturbed for many centuries. There were four bombs underground. It should be possible to set them off . . .

The Expedition became feverishly busy up on a mountainside. The electronicist constructed an object of wire strung on sticks cut from small trees with pocket knives. He proudly detailed the mathematical principles involved in the reflection of a tight beam of high frequency electricity. A communications man magnificently took a handlight—brought nobody knew why through the perpetual day of Thalassia—and used stray objects from the pockets of the others to make a generator of microwaves out of iron particles in vegetable oil. It strongly resembled the apparatus with which Hertz first demonstrated the existence of electromagnetic radiation, in the nineteenth century. The handlamp battery, of course, would give some hundreds of watts power for a few seconds only.

Then the Thalassia-Aspasia Expedition devoted itself to the project of building the largest possible stock of dry branches and brushwood. Twelve men worked at it for three days. They planned, indeed, as if for a forest fire.

When the time came, Brett set light to the key area and made for the mountainside. He was halfway there before the brush fuse burned to produce an appreciable quantity of smoke. Then it abruptly began to pour out thick, curling masses of brown vapor which was not supposed to rise from

the surface of Thalassia, because there should be nobody living there.

When he reached the ledge on the mountainside where the Expedition waited, the whiskery and disreputable-seeming characters were fairly dancing with excitement. But for a long, long time nothing happened. Smoke rose up in a column toward the sky. It was visible for a very great distance indeed. But nobody came. For two hours.

Then Halliday fairly squealed in agitation:

"There's a ship!" he cried. "They saw it! It's coming!"

From far over the mountains a ship was coming with jets of rocket fumes behind it. It bounced in the wind currents of the mountains. It came nearer, and nearer and nearer. It arrived at a point five miles from the brushwood fire. It swept around to see it from upwind, nearer where the Expedition hopped and squirmed in its agitation. It was four miles from the mountain flank and still coming. It was midway between the Expedition and the blaze which now covered half a square mile of jungle.

"Try Booby-trap One," commanded Brett eagerly. "If it misses try the rest in turn! And don't look—"

The members of the Expedition sank down behind sheltering boulders. Brett, himself, ducked to where he was sheltered from direct sight of the booby-trap area, but where he could still see the bobbing airship. Brett shielded his eyes with his hands against possible flashing of light.

The electronicist at the tight beam projector ducked his head and stabbed twin wires together. There was a sharp, harsh, buzzing sound. Down in the valley where the induction balance had said a bomb lay buried, a beam of high frequency radio waves hit hard. They were very much like the waves a tripod beacon had given off at Firing Plaza One. They induced high frequency currents underground.

There was the fierce bright light of the dawn of time, with all the cosmos turned incandescent for an instant. The ground rose up and bumped Brett fiercely. Then there was a sound as of doomsday, and rocks and pebbles rolled and clattered down the mountain flank.

Brett saw the shock wave of the explosion hit the dirigible. It was not a sound wave, but an expanding sphere of pure compression. He saw the silvery, seemingly solid

metal but actual cloth bag dent in, exactly as if pushed inward by a giant thumb.

Then the balloon popped like a rubber toy.

The atom bomb cloud rose and rose to the high heavens. It formed a mushroom shape. But the tradewinds blew over the mountain tops as over Thalassia's sea. The cloud curled and curved, and lightnings flashed and thunder rolled in it. But it would go away inland, too.

The Thalassia-Aspasia Expedition plunged down the mountainside in a yelling small horde before the balloon had reached the ground. It was a remarkable descent for the balloon, at that. Its bag had been burst in a single monstrous rip, but it did not crash headlong. As the whole object plummeted, the bag material caught in the stiffening framework inside its former hull. It acted, though inadequately, to check the fall. The balloon reeled and swayed because of that parachuting action, and it crashed into the branches of a great tree, and after a fashion skidded out of them, then landed in a tangle of splintering brace members on the ground.

Brett lost sight of it as he plunged down with the reproduction of an antique bazooka in his hand. He used the bazooka as a staff, in his haste. Then he ran, and so did all the others until, panting, they came in sight of the debris.

But they saw something more than debris. There was the brightly clad figure of one of the ship's crew on the ground. Another figure worked furiously, not at the spilled-out body but at something caught in the splintered framework. It came clear. It was a ball of considerable size. It loosened and came free as if it had been designed to be dropped. The straining figure pushed it fiercely until it was near the prone figure on the ground. Then the laboring stopped, and that crew member stared desperately at the sky, and then fiercely all around.

Halliday groaned between pantings.

"An atomic bomb!" he gasped. "They'll set it off—to take us with them—"

Brett raged. Then he heard his own voice shouting:

"Spread out, everbody! Show yourselves but don't go closer!"

The figure heard his shout. It whirled upon him. It saw

him and his companions. But they stayed behind. Brett would have shouted again, but that his breath had left him.

He walked on, swallowing, his reproduction of an ancient bazooka dangling in his hand. The figure by the object that must be a bomb—was a girl. It was the girl whose picture he had in his pocket, or at the least her identical twin. She regarded him with a terrible fierceness.

Brett walked forward, trying to get his breath back and his mind straight. He'd thought of food, but now he thought of something else. The figure on the ground stirred feebly. It turned its head. It was a man. Human. Bearded. Bearded! This particular situation was agonizing. In inherited, acquired, instinctive, legendary, and religious hatred of all things Thalassian—because of what Thalassia had done to her world aeons since—this girl was hungrily ready to set off that atom bomb. She would die in its flame, but so would Brett. At the moment, the other eleven members of the Thalassia-Aspasia Expedition might not. She waited in a terrible impatience for them to come closer.

Brett stopped. She moved toward the bomb, turning only to regard him with eyes that seemed to flame. She reached out her hand.

And Johnny did the only possible, the only obvious and inevitable thing. She was about to detonate the atomic bomb that had been the ship's sole armament. Because in so doing she would surely kill one individual she considered a Thalassian. Her own life was a cheap price to pay for that achievement, and she might bag the others too. She moved to detonate the bomb.

Brett blew it up.

His action was instinct, but also it was sound sense. Because an atomic bomb contains remarkably little explosive. It is different from all other bombs in that what explosive it contains exists only to move slugs of fissionable material into a critical mass which then detonates. There is no atomic explosive unless there is a critical mass. Until it is actually fired, an atomic bomb is a rather delicate piece of mechanism only.

Brett's bazooka-shell hit the case. The rocket fuel in the shell blew. It smashed in the case. It jammed the delicate mechanism. The actual explosive in the bomb flared smokily, but it was not even enough to singe the girl be-

side it. Brett plunged forward and grabbed her before she could take any further measures.

There was great confusion, then Kent came to Brett and said phlegmatically:

"That whiskered man's got a broken leg. Better set it, eh?"

"I would," agreed Brett. He stared at the girl, both of whose wrists he held firmly. She returned his gaze with eyes which had ceased to burn as flames, and now were filled with an absolute, stunned astonishment.

Halliday came up a little later.

"Carstairs!" he said irritably. "That man with a beard —He is a man, isn't he?"

"I hope so!" said Brett with deep earnestness.

He continued to look at the girl. She opened her mouth to catch her breath in purest bewilderment.

"He's been pulling our beards!" said Halliday angrily. "He seemed astonished when we set his leg. He almost fainted when he counted our fingers. I can see that! We've got five fingers and the Thalassians had six. But why the devil should he want to pull beards? Every one of us, separately! He can't seem to get over the fact that we have five fingers and grow whiskers! He's got a beard!"

"Maybe," said Brett, "the Thalassians didn't have beards. Which may be why he wears one. Maybe—I'll see."

Gently and respectfully but very firmly, he lifted the girl's right hand to his chin. She had already stared at his fingers. Now she grabbed at his beard. Johnny's beard was no more than half an inch long but she pulled it. Hard.

She called in an excited, agitated voice to the bearded man whose leg was now in splints. Then she addressed Brett, pouring out a flood of unintelligible phrases. Halliday looked on with a cynical relief.

"She seems now," he observed, "to be neither notably ferocious nor remarkably afraid. I suspect that if you turn her loose she will probably signal for help. I only hope she'll explain that we aren't Thalassians and that we have five fingers and pullable beards! I'd never have guessed that the way to make friends with these people was shoot at an atom bomb and let my fingers be counted and my whiskers pulled!"

"Yes," said Johnny absorbedly. He loosened his grip on the girl's wrists. She looked at him with bright, still-surprised eyes. She looked pleased, too.

"Carstairs!" fumed Halliday. "See if you can ask her how the hell human beings got out here—were here when back home they were hunting mammoths—if she's human—talk to her and find out what we've got to know or go crazy! They can't come from Earth! Where did they come from?"

"I'm—getting ready to ask now," said Brett.

He fumbled in his pocket and found the locket he'd picked up on Firing Plaza One. He handed it to the girl. She exclaimed, and called something to the bearded man. He grunted, staring at the hands and beards of the members of the Expedition and plainly making painful but drastic readjustments of all his previous opinions. The girl looked back at Brett, expectant. He beamed suddenly. She smiled back.

He tapped himself on the chest.

"Brett," he said.

She cocked her head on one side, puzzled. Then she brightened. She tapped him on the chest.

"Br-r-rette!" she said happily.

Communication between theoretically intelligent beings of two different star systems had begun.

WHITE SPOT

1

THE PLANET did not look promising, but they had no choice. When a ship's drive blows between star systems, it has to be fixed. If metal parts must be recast and machined, and burned-out wiring has to be pieced together and insulated by hand, the job takes literally months. And if, then, getting home is a matter of more months of journeying with a drive that still limps, while coughing and cutting off for seconds or until it is tinkered with—why, the traveler has to find some way to renew his food supply.

It is for such occasions that the Interstellar Code requires all ships to carry an emergency kit with seeds and agricultural directions.

The *Danaë,* therefore, limped to the nearest Soltype star to hunt for a planet on which to plant some crops. There was Borden and his wife, Ellen. There was Sattell, whom they would be glad to part with when they got home. There was Jerry, who was diffident enough to be tolerable in spite of his lack of years. They were all at the forward vision port when they approached the only possible planet.

"It's fifty million miles out," Borden said. "A bit on the hot side. But the sun is smaller than Sol, so it may not be too bad. At least there are polar caps—small ones."

"No seas," Sattell said. "Pretty barren."

The others said nothing. It did not look at all encouraging.

The *Danaë* went in on a spiral descending orbit. Borden looked for other planets. He found a gas giant with a high

speed rotation. It was flattened, oblate. He checked it with the two polar caps on the nearer world and said worriedly:

"If the ecliptic's where I think it is, there'll be no seasons to speak of. I was hoping this planet was near its equinox, because the icecaps are so nearly the same size."

Ellen said absorbedly, "I think I see a tinge of olive green around that icecap. The smaller one."

"Probably vegetation," agreed her husband. "But I don't see any more. The place does look to be mostly desert."

They went in closer, circling as they headed for atmosphere.

Then Jerry said diffidently: "Could that be ice, there?"

There was a white spot in the middle of the sandy-colored northern hemisphere. It was the size of a pin head to the naked eye. Borden swung a telescope on it. They were nearly above the point now, where day turned into night.

The sunlight fell upon the white spot at a flat angle. If the whiteness were perpetual snow on the tops of mountains, the mountains should cast shadows. But Borden could not make out shadows near the white. Automatically he snapped the telecamera before he gave up the effort to understand the white spot.

"I doubt it's snow," he said. "I don't know what it is."

"Surely you can make a guess!" said Sattell, with that elaborate courtesy which was getting on everyone's nerves.

"I can't," Borden said briefly.

The ship moved to the dark side of the planet, and presently plunged into its shadow.

They went on, watching for lights. There were none. When they came out to sunlight again, they had descended a long way during their time in the planet's night.

They could see that the surface of the planet was pure tumbled sand dunes with occasional showings of stone. They were three-quarters of the way around when they saw the white spot again. This time they were no more than four or five hundred miles high. They could tell its size.

It was all of three hundred miles long, north and south, and from fifty to seventy-five miles wide. There were thin hairlines running from it, remarkably straight on the whole, to the north and south. They were very, very fine lines. The patch was still white. As they came to be in line between

it and the sun, their shadow would have passed almost over it.

The white spot changed abruptly. One instant it was white, the next, a patch of it had turned silver. That silvery appearance spread out and out in a swift rippling motion. The patch became silver all over its entire surface.

Then it turned to flame.

There was a screaming of alarm gongs. The emergency feedback screens went on and everything went black outside. The lights in the ship dimmed down to mere dull red glows.

There was silence.

The ports showed blackness. The drive, of course, ceased to operate. The ship had sealed itself in a shell of screening, through which nothing at all could penetrate, but which drew upon the ship's power tanks for as much energy as it neutralized outside. And the drain was so great that the interior lights were dim red spots and not lights at all.

For five heartbeats the blackness persisted while the four in the ship stayed frozen.

The feedback screen cut off. Again they saw the planet below. The white patch once more was white, instead of flame. But as they looked, the silvery look spread out all over it in glittering ripples, and they seemed to look into the heart of a sun's ravening furnaces before the feedback screen came into existence for their defense. The ports were blacked out again.

The ship hurtled on toward emptiness. It was blind. It was helpless.

Borden moved an emergency light to shine on the output meter. The needle was fast against the pin. The feedback screen was not only drawing maximum safe power. It was working on an effective short circuit of the ship's entire power supply. Busbars carrying that current would be heating up. They would melt at any instant.

Borden's fingers moved swiftly. He set up a shunt for on-switch operation of the feedback field.

He threw the last cross-over tumbler and waited, with sweat beading his forehead. Something had flung a beam of pure heat energy at the *Danaë*. It should have volatized the small spacecraft immediately, but it had been left on for four seconds.

When it ended, the feedback screen cut off too. Then the *Danaë* had been detected a second time and the planetary weapon used again. Now, with the feedback field on switch instead of relay, *if* the heat ray turned off again the feedback field wouldn't, and the *Danaë* should be indetectable to anything but a permeability probe. The spaceship would seem to have been destroyed, if the heat-beam went off before the ship's power failed.

It did. A relay clicked somewhere, cutting a current flow of some tens of thousands of amperes. The lights inside the ship flashed to full brightness. Borden's eyes flicked to the power meters. The operational power tank meter read zero. The emergency reserve power tank meter showed a reading that made fresh sweat come out on Borden's face.

But the ports stayed black. Absolutely any form of energy striking the feedback field outside would be neutralized. No light would be reflected. Any detector field would be exactly canceled, as if nothing whatever existed where the *Danaë* hurtled onward some few hundred miles above the planet's surface.

The *Danaë,* at the moment, was in the position of having made a hole about itself to crawl into. But it couldn't use its drive. It couldn't see out. It was hiding in blackness of its own creation, like a cuttlefish in its own ink.

"Dee," Ellen Borden asked her husband in a shaky voice, "what happened?"

"Something threw a heat ray at us," said Borden. He mopped his forehead. "We should have exploded to incandescent gas. But our feedback field stopped it. The heat ray cut off when we should have been destroyed—and so did our field, so there we were again! And so we got a second beaming. But now we aren't. At least we appear not to be. So we can live until we crash."

Sattell said in a suddenly high-pitched voice, "How long will that be?"

"I don't know the gravity," Borden told him. "But it does take time to fall four hundred miles. We have some velocity, too. It's under orbital speed but it'll help. I'm going to figure something out."

He swung in the control chair and hit keys on the computer. The size of the white spot. It had all turned silvery, then all of it had flamed. Why? The amount of power in the

heat ray—a rough guess. Nobody could have figures on what a ship's tanks would yield on short circuit, but the field had had to neutralize some hundreds of megawatts of pure heat.

The amount of overlap—the size of the heat ray itself—was another guess and a wild one. And why had all of the white spot spat flame? Every bit of it? Three hundred miles by an average of sixty. . . . Even at low power—

The computer clicked.

"Sun power," Borden said grimly, after a moment. "That figures out just about right. Not more than a kilowatt to the square yard, but eighteen thousand square miles has plenty of square yards! We've been on the receiving end of a sun mirror heat ray, and if it had been accurately figured we'd have fried." Then he said, "But a sun mirror doesn't work at night!"

He punched keys again. Presently he looked at his wrist chronometer. He waited.

"We're falling!" Sattell cried shrilly. "Do something!"

"Forty seconds more," said Borden. "I'm gambling your life, Sattell, but I'm gambling Ellen's and mine too, not to mention Jerry's. Calm down."

His eyes turned to the meter that showed the feedback field drain. It was drawing precisely the amount of power needed to cancel out the sunlight falling on it, as well as the starlight, and the light reflected from the day side of the world below them. That drain was less than it had been. They were crossing the planet's terminator—the line dividing the light side from the dark side—as they plunged toward the sandy deserts.

The drain dropped abruptly. They had moved into the planet's shadow. Into night.

Instantly, Borden flicked off the feedback field. His eyes darted to the nearest object radar dial. They were still sixty miles high, but falling at a tremendous speed. Borden's hands moved quickly over the controls. Lift. Full atmosphere drive on a new course.

"We won't crash," he said evenly, "unless we're shot at with something that works in the dark. But that sun mirror business is odd. There's only a certain size of sun mirror that's economical. When they get too big there are better weapons for the money. That one was big! So maybe it's

the best weapon this planet has. In which case we'll be nearest safety at one of the icecaps. Sun mirrors will be handicapped in polar regions!"

"They—tried to kill us!" Sattell panted suddenly. "They don't like strangers! They fired on us without warning! We can't land on this planet! We've got to go on!"

"If you want to know," Borden told him, "we haven't any fuel to go on with. And we happen to be short of food. And did you remember—"

The ship's drive cut off. It had been burnt out and repaired by hand, with inevitable drawbacks. Since the repair, it had run steadily for as long as three days at a time. But also it had stopped four times in one hour, and it had needed tinkering with three times in one day.

It ought to be overhauled. For now it had cut off, and they were forty miles high. If it came on again they would live; if it didn't, they wouldn't.

After six spine-chilling seconds the drive came on again. Ten minutes later it went off for two seconds. Half an hour later it made that ominous hiccoughing which presaged immediate and final failure. But it didn't fail.

It was not pleasant to be so close to a planet they could not afford to leave, with a drive that threatened to give up the ghost at any instant, and with something on the planet which had used a sun mirror beam to try to volatilize the *Danaë* without parley. Apparently the four in the small ship had the choice of dying on this planet or not too far away in space.

They needed food, and they needed fuel. Above all, if the planet was inhabited, they needed friendship, and they weren't likely to get it.

They were only ten miles high when signs of dawn appeared ahead. Of course, if they happened to be moving with the planet's rotation, they'd be moving into sunset from the night. They didn't know. Not yet. But there were gray clouds ahead, to the right and below.

A little later they were five miles high and the clouds were still below. There was twilight ahead. At two miles altitude the drive hesitated for a moment, and caught again after all four in the control room had stopped breathing.

Red sunlight appeared before the ship in a spreading,

sprawling thin line. At five thousand feet the ship had slowed to a bare crawl—a few hundred miles an hour.

And the dawn came up like thunder.

2

TO THE left and behind was desert, stretching away in the dawnlight, in every conceivable shade of tawny yellow and red, with blue shadows behind the hummocks in the sand, and with an utterly cloudless sky overhead. To the right and ahead was an area of straggling, stunted vegetation beneath rose-tinted cloud masses with the dazzling white of snow against the horizon. There were other clouds above the snow.

The drive burbled erratically. The ship dropped like a stone. Then the drive flickered on, and off, and on and off again so that ship's whole fabric shook.

Borden threw the drive off and on again and the induction surge of current cleared whatever was wrong for a moment. They felt the ship fighting wind pressure that was trying to turn it end over end. Then it steadied, and nothing happened—and still nothing happened.

The crash came violently. Ellen was flung against Borden and held fast to him. Jerry collapsed to the floor. Sattell went reeling and banged against the end wall of the control room.

There was stillness.

Borden stared at the screens, then got up painfully and went to a port. The ship had landed in soil which seemed to be essentially sand. It had splashed the soil aside in coming to ground. But it was not desert sand. There was moisture here. Beyond the impact area a straggling ground cover grew. It looked like grass, but it was not.

Nearby was one greenish object which looked like a cactus without its spines. It had a silky covering like down. A little farther on Borden could see three or four things quite like stunted, barkless trees.

The ground was gently rolling. In the distance the growing light showed a whiteish haze, and clouds in the sky. All shadows were long and stretched-out. This was not far from the icecap. Indeed, it appeared that snow was nearby. But from the port on the opposite side of the ship the beginning of the planetary desert could be seen.

"We're down," said Borden with relief. "Now we've got to find out if anybody saw us land, and if so, whether they'll insist on killing us or whether we can make friends."

Sattell said, "You've got to arm me, Borden! You can't leave me unarmed on a hostile planet!"

"I'd like to have four weapons ready instead of three, though if we have to fight a whole planet even four won't be much good. But I can't risk letting you have anything dangerous in your hands," Borden said.

Sattell ground his teeth.

Jerry said apologetically, "Shall I test the air, sir?"

Borden nodded. He regarded Sattell with a weary, worried frown, while Jerry readied the test. The situation was bad, but Sattell was troublesome too.

Two months ago, while the drive was still in process of repair, Borden had heard a strangled cry from Ellen. He found her struggling to scream as she fought Sattell.

Borden's appearance had ended the struggle, of course. Sattell had been confined to his bunk for two weeks before he was able to move about again. But Borden hadn't been able to kill an unconscious man then, and he couldn't kill Sattell in cold blood now. But Sattell could kill anybody. And he would, if he got the chance.

"It's the devil, Sattell," Borden said somberly. "If I didn't think you were a rat I could make a bargain to forget what's happened until we get the ship safely home. But I don't think you'd keep a bargain."

Sattell snarled at him and turned away. Jerry looked up from the tiny air-testing cabinet. He'd drawn in a sample of outer air and a silent discharge had turned its oxygen to ozone, which a reagent absorbed. A hot silver wire stayed bright, and so proved the absence of chlorine or sulphur, CO_2 tested negligible, and hot magnesium took up nitrogen. The remnant of the sample did not react with reagent after reagent, so it had to be noble gases.

"It seems all right, sir," said Jerry. "If I may, I'll go in the airlock and take a direct sniff. May I, sir?"

"Unless Sattell wants to volunteer," Borden observed. "I would think better of you, Sattell, if you volunteered for first landing."

Sattell laughed shrilly. "Oh, yes! I'll walk out on a hostile planet, and let you take off and leave me! Even if you can't leave the planet, you can come down ten thousand miles away. You'd like to do that, too!"

"Meaning," Borden said, "that *you* would . . . All right, Jerry. Go ahead."

"Yes, sir." Jerry went out. They heard the inner airlock door open.

Borden said heavily, "It would be sensible to lock you up while we're aground, Sattell. I can't leave the ship with you inside and free. You've already said what you'd do if you could—take off and maroon us."

Jerry's voice came from the airlock through a speaker.

"Mr. Borden, sir, the air's wonderful! You don't realize what canned air is like until you breathe fresh again. Wonderful, sir! I'm going out."

Borden nodded to Ellen. She moved over to watch through a port as Jerry made the first landing on this unnamed planet of an unnamed sun. She could see the straggling ground-cover vegetation, and the thing that looked like a cactus except that it wasn't, and the trees. She saw Jerry step to the ground and look about, breathing deeply.

Behind her, Borden said bitterly.

"We were blasted at without challenge. But it was with a sun mirror that was not too efficient. The local race may not have any other power than sunlight. If so, they won't be up here by the icecap! If we weren't spotted by radar as we landed, we may make good repairs, raise food, and get back to space without our presence being known—because they should think they had wiped us out."

Ellen gasped suddenly from the port: "Dee! Natives! They've seen Jerry! They're coming close!"

Borden moved quickly to look over her shoulder. Sattell took a second port. They stared out at the strange world about the *Danaë*.

Jerry had kicked a hole in the sod and picked up a bit of it to examine closely. And, not sixty yards from him,

three creatures were regarding him with intense curiosity.

They were furry bipeds. They stood as erect as penguins, not bending forward in the least. They had enormously long arms which almost reached to the ground beside them. From what should have been their chins, single tentacles drooped—like the trunk of an elephant, except that it was beneath the mouth opening instead of above it. They stared at Jerry with manifest mounting excitement, making gestures to each other with their trunks and arms.

Borden moved to warn Jerry through the outside speaker. But Jerry looked up directly at the creatures. He spoke to them quietly.

At the sound of his voice their manner changed. Borden thought irrelevantly of the way a dog flattens his ears when his master speaks to him. But these creatures flattened all their fur. Jerry spoke again. He waved his hand. He glanced at the *Danaë's* port and nodded reassuringly.

The three creatures moved hesitantly toward him. Two of them stopped some forty yards distant. One came on. Suddenly it wriggled with an odd effect of embarrassment. The flattening of its fur became more noticeable.

A fourth creature of the same kind came loping over a rise in the ground. It used its long arms to balance itself as an ape might do, but an ape does not run upright. This creature did. It saw Jerry and stopped short, staring.

The creature which had advanced toward Jerry appeared to be more and more embarrassed. Jerry moved to meet it. When he was ten feet away the creature lay down on the ground and rolled over on its back. It waved its trunk wildly, as if supplicating approval.

Jerry bent over and scratched the furry body as if he knew exactly what it wanted. The two others who had been its companions loped forward, plunged to the ground, rolled over on their backs and waved their trunks as wildly as the first. Jerry scratched them.

The fourth creature, which had stared wide-eyed, suddenly waved its arms and burst into a headlong rush. Its haste seemed frantic. It scuttled frenziedly, made a leap, turned over as it soared, landed on its back two yards from Jerry and slid to his feet.

When Jerry scratched it, it wriggled ecstatically. Its trunk waved as though it were experiencing infinite bliss.

Borden said slowly, "Something on this planet tried to burn us down with a heat ray not half an hour ago. We land —and this happens! What sort of place is this, anyhow?"

3

IT WAS a queer place, they soon learned. The climate was cool, but pleasant. There were no radio waves beneath a readily detectable ionosphere. Yet apparatus over an area three hundred miles by an average sixty—the white spot—had responded in seconds; in parts of seconds.

Which meant electric control. Which implied radio. But there were no radio waves, which should have been proof that there was no civilization on this planet capable of doing what certainly had been done. Which was nonsense.

On the fourth day after landing there had been no alarm, but there was a good-sized group of furry bipeds always waiting hopefully about the *Danaë* for one of the humans to come out and scratch them. All but Sattell. When he came out of the *Danaë,* the bipeds moved away. They would not go near him.

"I am not comfortable," Borden said to Jerry. "Something drained power from us. Enough to run the ship for two years was drained out in eight seconds! But we land, and the only inhabitants are your fine furry friends whose one purpose in life seems to be to get scratched. They act more like pets than wild animals, and sometimes more like people than pets. But if they're pets, did their masters try to kill us? What does go on on this planet, anyhow?"

Jerry said modestly, "I'm beginning to understand the furry creatures a little, sir. They're remarkably intelligent, for animals. They want me to go somewhere with them. I'd like to. Is it all right?"

Borden said, "If you think it's safe. Ellen has the planting well under way, and the fuel synthesizer is working after a fashion, although I'd a lot rather have it working near the equator. I'm getting along fairly well with rebuilding our

drive, but there's a long job ahead. If other planetary inhabitants don't find us and kill us, we're all right. Go along if you like, within reason. But I wish you could take Sattell with you."

That couldn't be done. The two-legged creatures hung about the ship wearing an air of happy anticipation when all the humans were inside, and flopping eagerly on their backs to be scratched, when they came out. But when Sattell tried to approach one of the creatures, they fled as if in terror. Not one had ever been knowingly within a hundred yards of him—and he hated them.

When Jerry first reported that they had some sort of language and could exchange simple facts—he didn't know whether they could exchange ideas or not—Sattell savagely insisted that those who knew of the existence of the ship should be killed, and any others who discovered it also killed. The idea would be to keep the news of the *Danaë's* landing from reaching whatever other race might inhabit the white spot of the heat ray.

But there were always some of the furry ones around. Sometimes more, sometimes less. Maybe only the same ones came to the ship. Maybe they went away and others took their places. Neither Borden nor Jerry was sure, but both demurred at killing. Besides, the news had already gone as far as such creatures were likely to take it before Sattell proposed to wipe them out.

Sattell raged when he was overruled. He was overruled on most things because he couldn't be trusted. Borden wouldn't let him work on the drive. He might try to make sure that if he didn't get back to Earth, nobody else should, either.

Ellen took the dibble stick and the seed capsules and planted the crop that might supply them with food. Each seed was enclosed in a gelatine capsule with a bit of fertilizer and a spore culture of terrestrial soil microörganisms. Planted, by the time moisture reached the seed there was a bed of Earth's own microscopic soil flora around the seed to help it grow.

But Sattell couldn't be trusted to plant seed, either, if the others would benefit.

He couldn't even be allowed to work the fuel synthesizer. In that apparatus plain water entered a force field in which

H^1 and H^2 simply could not exist as molecules or ions. So the atoms frantically absorbed heat energy from their surroundings to make pseudo valence bonds and develop giant hydrogen molecules which could only be written down as being of molecular weight.

The fuel synthesizer was set up a good half-mile from the space ship and was developing a small icecap of its own. But it would be a long time before there was drive fuel to refill the ship's tanks. Sattell might sabotage that.

So he had to be treated as the pampered guest of those who believed implicitly in his will to murder them. All arms were safely locked away. Even the airlock fastening had to be dismantled, so he couldn't lock everybody else out of the ship.

And Borden and Ellen and Jerry went armed, and had nerve-wrackingly to be on guard at all times. But it would have been ridiculous to confine Sattell so he had the status of a nonworking guest because he was a potential murderer.

There was not much for Jerry to do either, except hold conferences with his admirers. On the fifth twenty-hour day after the *Danaë's* landing, Jerry set off with an excited mob of furry, trunk-waving friends. He carried a walkie-talkie, depending on the absence of radio waves from the planet's atmosphere to make its use safe.

Two hours after he had headed north toward the ice, Borden and Ellen came back from an inspection tour of the crops and fuel synthesizer, and found that Sattell had disappeared, too. He'd taken all the food he could conveniently carry from their depressingly short supply.

Borden swore bitterly. Sattell underfoot was a nuisance and a menace. But Sattell at large might be more, and worse. There was no glamor in being castaway on this alien world, such as is shown in visi-screen plays. The *Danaë* was a small utility ship, suitable for small expeditions for scientific purposes, or for the staking out of private planetary estates—a common practice, these days—and the servicing of such establishments.

Her eighty-foot length now rested slightly askew in the pit her landing had made. About her was arctic flora, and the thick fur of the bipeds suggested that they were arctic animals themselves. But here close to the icecap was the

only place on this planet where a man might hope to survive. It was madness for Sattell to leave the ship.

"It doesn't make sense!" Borden said. "What has he to gain? He was afraid we'd go off and maroon him. We can't do that with crops going, the synthesizer working, and the drive pulled down. So what can he gain by running off?"

Ellen said uneasily, "Jerry's armed. And he won't be suspecting anything."

Borden scowled. "Get out the talkie and warn him. If Sattell surprises Jerry and gets his blaster, he might bushwhack us!"

Ellen brought out the talkie. She turned it on and said crisply: "Jerry, Sattell's disappeared. Come in please."

Jerry did not answer. Borden paced up and down, frowning and thinking of ever more disastrous possibilities.

"Bring the talkie into the ship," he said presently. "We'll hook it to an outside aerial. Jerry won't be traveling with his turned on. But he's bound to call us eventually."

He took the talkie from her, carried it inside the ship, and plugged it in there. In minutes a speaker in the control room was emitting the nondescript hissing which was the random electronic noises made by metal objects nearby. The ship itself, for one.

"I'm going to look in Sattell's cabin," said Borden grimly.

That was drastic action. On a space journey privacy is at once so difficult and so essential that nobody on a space expedition ever enters another's private cabin. To look in Sattell's cabin was a great violation of normal rules of conduct. But it had to be done now.

Borden went in the cabin and through Sattell's possessions. He came out looking sick.

"I found something," he told Ellen. "When we were coming in I looked at that white spot through a telescope. I didn't see anything worth noting, but I snapped the telecamera out of pure habit. Then I forgot it. But Sattell didn't. He made this."

He showed her a photographic print. Sattell had made it from the infra red image on the full color photograph. It was an enlargement, showing more detail than Borden had seen with the naked eye. There were shadows on this print, the shadows of structures. There were buildings rising from the white. There were towers. There was a city on the white

spot from which a heat ray had been projected at the *Danaë* out in space!

Quite as important, the threadlike lines they had noticed were here plainly highways leading away from it. One led north, judging directions from the shadows. It reached toward the polar icecap near which the small space ship was grounded.

"If Sattell really expects us to kill him," said Borden, "he could have headed for that highway. He might expect to make a deal with our enemies by selling us out. Even if they killed him out of hand, the fact that he was an alien would make them hunt for us. So he could figure that he might make friends, but even if he didn't he would be sure to ruin us. A win for him either way."

Ellen paled a little. "And the drive's pulled down and Jerry's gone."

"So there's nothing to do but wait and see," said Borden.

He tried to work on the space drive. All its parts were spread out on the drive room floor. When they'd repaired it before, it had been so thoroughly fused that a part looked good even if repaired to the accuracy of a bent wax candle straightened out by hand.

Now the repairs looked very bad. It seemed incredible that anything so clumsily made should have worked. But Borden couldn't keep his mind on it.

"Just on the off chance, Ellen," he said abruptly, "you will not leave the ship by yourself. We'd better replace the lock door fastening, too. If we do have visitors from the city on the white spot, that won't stop them. But it might keep them from taking us offguard."

He opened the thief-proof locker where an essential part of the lock catch had been stored, to protect it from Sattell. It had a combination fastening, intended merely to prevent pilfering when the ship was in a space port.

Borden reached in. Then he went completely and terribly white.

"He's got the star charts and the log! He got in here somehow!"

This was the ultimate in disaster. Because space is trackless. At fifty light years from Earth the Milky Way is still plain, of course, but the constellations have ceased to be. At a hundred light years one is lost. At a thousand light

years— and the *Danaë* had passed that point months ago— a ship in space is in much the position of a canary whose universe has consisted of a cage in a single room, and has escaped out a window into the wide, wide world.

A space ship has to keep an infinitely precise log of bearings run and distances traveled in all three dimensions. It must make photographic star charts. And the accuracy of all its records must be perfect if it is to find the place it left nearly enough for the stars to become familiar again so it can locate the Solar System—barely four light hours in span.

"I think I made a serious mistake," Borden said quietly, "when I didn't kill Sattell!"

To find a spot four light years across in a galaxy a hundred thousand light years wide would be difficult enough with good maps. With no maps, they could spend the rest of their lives wandering hopelessly among the stars, of which not one in ten thousand had yet been named by men, landing on planets not one in a hundred thousand of which had known human footsteps. And they might search for months or years upon a planet where there was a human colony, and never discover its location.

Borden clenched and unclenched his hands. Sattell had been foisted upon him as a crew member while the *Danaë* was being fitted out for space. Borden was filled with a deadly cold fury in which regret for his own past forbearance was his principal emotion.

"Since he's taken the log and charts," he told Ellen icily, "he means either to bargain with us or to destroy us. And if I know Sattell, it's six of one and half a dozen of the other!"

It would be. Sattell now had the power of life and death over Borden and Ellen and Jerry. He would not trade that power for anything less. In fact, he would not dare yield it at all, because he was so sure he would be killed himself if he did. The only bargain he could conceivably make would be one in which they surrendered themselves to him absolutely, armed him and disarmed themselves, and threw themselves on Sattell's mercy. And Sattell had little mercy.

"You might try calling Jerry again," said Borden "Once we've warned him, we can try to track Sattell by his footprints. His shoes have heels, and the ground is soft."

Ellen picked up the walkie-talkie microphone again.

"Jerry, Sattell's disappeared. Come in, please. . . . Jerry, Sattell's disappeared. Come in, please . . ."

Her voice went on and on. Borden went grimly over the ship, looking for signs of what else Sattell might have busied himself with in the past twenty-four hours. He had believed that Sattell, being in the same boat with the rest of them—in the same space ship, anyhow—would automatically have thought of the group. No sane man did think of anything but cooperation with his companions in disaster.

But there exists a kind of human being, he knew, which may be a mutant, which makes a career of the gratification of all emotions, impulses, momentary desires. Which knows no purpose save personal satisfaction, and simply does not think like nonmutant human beings.

There were all too many specimens of this type among humans. Some ordinarily masked themselves, but if Sattell ever had, he now had been unmasked.

4

ELLEN CALLED and called. Her voice grew weary and her shoulders drooped hopelessly as hours passed without reply.

Borden found where Sattell had crossed the wires so that if the ship took off and went out into space, the control board would show all air vents as safely sealed. But there would remain a small, steady drain of leakage of the ship's air stores.

He also found a small alteration of the water recovery system. They would have run out of water on the way home. He found a cunning circuit arranged so that if the ship rose on interplanetary drive and set out on even a hopeless search for home, the instant it went into overdrive its power tanks would fuse and short, and it would be left driveless and powerless, to crash or drift helplessly until its occupants died or went mad of despair.

Borden came back to the control room with his face set in savage lines.

"We didn't watch him," he said bitterly, "so he took advantage. Right now he's gloating, sure we have to accept any terms he demands, for the use of the log and maps to get home. And he's gloating because he'll have his revenge if we refuse, and if we do make a bargain he'll tell us how many ways we'd have died if we had not made it. We've got to check every device and every piece of equipment in the ship before we can lift off this planet—even after we've got fuel!"

He looked out a port. The shadows were long and slanting. It was twilight. Night was near.

Ellen said drearily into the talkie:

"Jerry, Sattell has vanished. Please come in! . . . Jerry, Sattell has vanished. Please come in!"

Far away, a tiny figure appeared in the half light. It came hastening toward the *Danaë*. It was one of the furry bipeds, probably one of those that had accompanied Jerry. It came through the dusk at an agitated lope, using its long, furry arms to balance itself. It made an agitated leap at sight of the space ship and rushed onward more frantically than before.

"Look!" cried Borden. "That looks like a messenger!"

He went out the airlock door, his hand on the weapon in his holster.

The biped bounced at sight of him. Its fur flattened, but it came on at a tearing rush. It leaped and slid and came to rest before him, its trunk waving wildly. He bent to scratch it, according to the custom that had become established in the past four days. But it did not wait. It stood up, making excited chirping noise and gesturing wildly. It made grimaces, in the falling light.

Then Borden noticed blood on its fur. . . .

An hour later an almost unbearable bright light appeared in the distance, moving toward the *Danaë*. Jerry had carried a handflash, of course, but nothing equal to this. Judging by the wavering of the light, it was mounted on a vehicle of some sort.

Ellen's voice said wearily for the thousandth time:

"Jerry, Sattell's vanished. Come in, please."

"You can stop that, Ellen," Borden told her. "The call's answered. It looks as if the real natives of this planet are coming to call."

He shrugged and turned to the furry creature which now was inside the ship. He'd bandaged its wound—a clean deep puncture in the flesh of its arm. He led it to the airlock.

"Get going," he said curtly. "Your masters are coming. They won't like it that you've made friends with us. Scat!"

But the creature only blinked at the approaching light while its fur flattened. It went bouncing out and toward the swaying, lurching approaching light, racing joyfully to meet it.

Borden stared. Then he saw that other figures were about the approaching light beam—other furry, dancing, leaping creatures. They ran and gesticulated happily about the advancing vehicle.

It didn't make sense. But nothing did make sense on this planet!

Borden waited in the airlock, with Ellen behind him and a blaster in his hand. In the darkness the vehicle came lurching onward with surprising quiet. Its light swayed, and it had moved as if to turn, when Borden threw on the outside lights.

A semicircle of the sparse green vegetation sprang into brilliance. Borden and his wife were relatively in shadow. They could see the vehicle clearly.

It was nearly thirty feet long and rolled on two curious devices which were not caterpillar treads, but not exactly wheels, either. A loping, wildly excited horde of bipeds—including the one Borden had bandaged—surrounded it, making way for it but escorting it in wild enthusiasm.

The thing was caked with dirt. It was not merely dusty. It was packed with dried clay, as if it had been buried and only recently exhumed. A round blister at the front which might be plastic had been partly cleared of dirt, but there were still areas in which clay clung and made it opaque.

It curved about and swung parallel to the ship. It stopped within twenty feet of the airlock. Then an oval window—which looked as if somebody had scratched caked clay off it with a stick—turned endwise, quite impossibly, and became a door. The door slid aside. The interior of the vehicle was dark.

Borden held his blaster ready. He wouldn't shoot first, but there *had* been a heat ray flung at the *Danaë*! . . .

And Jerry got out of the incredible vehicle and stood blinking embarrassedly in the light from the outerlock glare lamps.

Borden snapped, "Who's with you?"

"Why, nobody," said Jerry. "I tried to tell you by talkie, but it wouldn't work. I'm afraid Sattell did something to it before I left. It's dead."

"What's that thing?" demanded Borden. "That—that wagon?"

"It's a ground car, sir," Jerry said uncomfortably. "There are thirty or forty of them in a sort of valley about ten miles away. This one was half-buried in mud, and the others are the same or worse. The—er—creatures—took me there and dug this out for me. They apparently wanted us to have it."

"And it runs!" said Borden. There was again no sense to anything. A ground car buried in mud should not run when excavated.

"Yes, sir," said Jerry. "They dug it out for me, and I got in it and found the skeletons and the weapons."

Ellen said, "Skeletons?"

Borden said, "Weapons!"

"Yes, sir. I tried to ask you for advice over the talkie, and like I said, it wouldn't work, so I fiddled around a bit and the car showed signs of life, and I found out how to run it. So I brought it back. The weapons work too, sir. You point them at something and push a knob and they—well, they're pretty deadly."

Borden said flatly, "Sattell's ducked out. With the log and star maps and food. One of the creatures just came in wounded. I thought Sattell had planned to ambush you and get your blaster. If he did trail you—"

Jerry blinked, "I didn't see a sign of him. Just a moment, sir."

He turned to his furry companions. Flushing a little, he pulled something out of his pocket and hung it onto his chin. It was a sock—one of his socks—partly filled with clay.

Borden was still unable to find any two things happening on this planet which added together to make sense. The

sight of Jerry fastening a clay-filled sock to his chin seemed slightly more insane than anything else that had happened.

"I've found out how they talk, sir," Jerry said shyly. "It's a sort of sign language with their hands and trunk, and they make noises for inflections and tenses, sir. And emotional overtones. I'm not too good yet, but—"

The scene before the lock door was unique. The clay-caked, thirty-foot vehicle looked more like a land yacht than a ground car. It was made of a golden metal. Two dozen or more of the furry bipeds were regarding Jerry as he made gestures and every so often stopped to adjust the position of his artificial trunk. When he made sounds at them, their fur flattened. When he adjusted his sock trunk, although it far from resembled their own, they seemed entranced. When he finished, the creature with the bandaged arm made elaborate gesticulations accompanied by chirping sounds. Even Borden, now that he had the key, gathered a dim idea of what the biped was trying to say.

"He says, sir," reported Jerry, sweating, "that a stick came through the air and stuck in his arm. He pulled it out and ran away. He kept on running. Then he saw this ship, ran to it, and you bandaged his arm for him."

Borden snapped, "An arrow! Sattell's made a bow and arrow. He sabotaged your talkie so you couldn't be warned about him, and he probably hoped to trail you and kill you with an arrow, so he could take your blaster and come back and kill us! Maybe he was just practicing when he hit this poor creature. Anyhow, he seems to be trying everything all at once, to destroy us." He added sharply, "But weapons! Jerry, from what you say there'll be more weapons in those other wagons! If he finds them, and he probably will, since he was trailing you—"

Jerry said, "I worried about that, sir. So I got the creatures to dig down to the doors of all the wagons in sight. I thought we'd better have the weapons safe before—er—Sattell tried to help us find out about the vehicles. I've got all the weapons right here. But there weren't weapons in all the wagons. In most of them there were just skeletons."

Borden was again reminded of the great number of things which did not fit together into any coherent picture. He said impatiently:

"Then Sattell won't get the weapons. But what's this

you keep on saying about skeletons? Did you bring any of them?"

Jerry said, "I left those in here undisturbed. If you'll take the weapons as I hand them out, you can look them over. They're just as I first saw them."

He reached inside the vehicle, passed out objects midway between rifles and blasters in size. They were surprisingly light. They could have been aluminum, except that they were the color of gold or copper. There were three armsful of them.

Ellen took them inside and came back.

"Now I'll look at those skeletons," said Borden.

He took Jerry's hand flash and climbed inside. Jerry said apologetically to Ellen:

"I got so excited about what I found that I forgot about eating. Do you think I could fix something?"

"I'll do it for you, Jerry," said Ellen.

5

SHE TOOK him inside. Sattell had carried away about most of the food in the current-use freezer, and the storage lockers were nearly empty, but she prepared an ample meal for him. She couldn't even guess at the significance of what he'd found, but she knew there was meaning to it if only it could be found.

Jerry was eating contentedly and telling Ellen about his journey with the furry bipeds when Borden came in. He went to a tool locker, got out a small torch, and went out again.

Considerably later the outer lock door clanked. Then Borden came back into the cabin where Jerry was still talking with his mouth full.

"I'm beginning to get an idea of what's happened on this planet," Borden said grimly. "Jerry, was there any sign of a highway where you found this bunch of wagons?"

Jerry considered: "The front part of this one," he offered

finally, "was buried deeper than the back. It went into a sort of hill. And under the wheels there was flat stone. It could have been a highway, buried under the mud that partly covered up what you call the wagons, sir."

Borden nodded. "I've brazed the steering tiller of that wagon so it can't be steered," he observed. "And I've replaced the lock fastener so Sattell can't break into the ship. We can sleep tonight. Tomorrow we'll go over to those wagons and disable them all. And then, in this wagon you brought, we'll hunt Sattell down. I have an idea he'd better not have a wagon of his own. It might not be good for us."

Jerry asked rather breathlessly, "What did you think of the skeletons, sir? I left them exactly as they were." He hesitated. "I thought they were a lot like human skeletons. Is that right?"

"Quite right," agreed Borden. "There is an extra rib on each side, and three fewer vertebrae, and their joints were a little different, but they were people, as I interpret the word. Were there skeletons in all the wagons you entered?"

"Yes, sir."

Ellen said impatiently, "What did you find out, Dee?"

"I guessed," Borden told her. "But I'd bet on my guesses. For one thing, the group in this vehicle was a family. One was taller and stockier than the others. I could be wrong, but I think it was the male—the father. There is a slightly smaller, slightly slenderer skeleton there, too. It has jewelry on it. And there are two smaller skeletons." He took a deep breath. "The small skeletons were laid out neatly, comfortably. The next to largest skeleton was with them. The stocky skeleton . . . He'd killed himself, Jerry?"

"The weapons make holes like that, sir," said Jerry. "I tried one on the ground. Even in the ground cars where there were no weapons, one skeleton was always like that, with a hole in the skull."

"Yes," said Borden. "They must have loaned the weapons to each other for that purpose."

Ellen protested: "But Dee! What *was* it?"

"I've a pretty complete guess," Borden said evenly. "It includes Jerry's furry friends. They act like domestic animals, like pets with an inbred, passionate desire to be approved of by—people. Dogs are like that. You agree, Jerry?"

"Oh, yes, sir!"

"If a party of human beings, in flight from something dreadful, had come to some place in the arctic, on Earth, where they couldn't go any farther, where the wives and families they had with them had no chance of survival because of the thing from which they fled, what would they do?"

Jerry said awkwardly, "If I may say so, sir, it does look just like that!"

Borden went on without apparent emotion, "The men of those families would know there was no escape. The odds are that they'd put their family dogs out of the ground cars, because they might live. But if the situation was absolutely hopeless they might not want their families to suffer—what they'd first tried to escape. So the children would die painlessly. So would the women and then the men would kill themselves. Possibly, anyhow. Or they might go back and fight. Here, it seems, they killed themselves."

Ellen protested, "But what could be so hopeless? If the pets survived—"

"My guess doesn't run to what they fled from, Ellen. But I think it's the white spot that flung that heat ray at us. And I think that after all the people in the ground cars were dead, winter came, and covered up the vehicles with snow. Spring came, and floods washed mud along the highway and partly covered up the cars with mud. That went on for years and years and years. The pets that had been put out of the cars did survive. They were probably arctic animals to begin with, judging by their fur. And they have a language of sorts. They yearned for their masters. That was instinct. But they told their children—pups, what have you—about the masters they had lost. And one day a space ship came bumbling down out of the sky and landed with a crash—and Jerry got out of it. And he was like their masters. So they have adopted us as their masters. And so—that's my guess. All of it."

"Dee!" cried Ellen softly. "How terrible!"

"You think, sir," asked Jerry, "that they were running away from something on the white spot?"

"*We* did," said Borden. "We had to. Maybe they had to, too."

"But what do you think it is?"

"That," Borden told him," is something I hope we don't have to find out. Right now I suggest that we get some sleep."

And presently there was silence inside the *Danaë,* while the night grew deeper and darker outside.

There was no moon on this planet, but there were many stars in the sky. In the starlight the furry bipeds waited patiently about the hull for dawn when the humans would come out again. Some of them slept. Some sat erect, blinking meditatively. One or two walked about from time to time.

Occasionally one or more seemed to think there was a sound somewhere. They would look intently in the suspected direction until assured there was nothing amiss. They were much like dogs back on Earth, waiting hopefully for their masters to get up and be ready to pay attention to them again.

Hours later, the sky to the east paled. There was a chill mist to the northward, toward the polar cap. The ground in that direction glistened with the wet of condensation when the sky grew brighter. But here, so near the desert which save for the white spot covered the planet from pole to pole, there was no such excess of moisture. The ground here was damp because of seepage.

In a little while an eerie half-light spread over this curious world. The furry creatures sat up and scratched themselves luxuriously, and stretched in human fashion. Some of them scuffled amiably, tumbling over and over each other as if to warm themselves by exercise.

A little longer, and the sun rose. And shortly after that there were clankings when Borden unfastened the airlock and came out. Immediately he was the center of a throng of the bipeds, lying flat on their backs with their stubby trunks waving urgently in the air, waiting to be scratched.

He scratched them gravely, one by one. Then Jerry came out and the process had to be repeated. The sun was low, and Jerry's shadow was thirty feet long on the sparsely covered ground.

Relieved of the biped's attentions, Borden moved off to one side. He had one of the stubby, golden-colored light metal weapons in his hand. He examined it carefully, again.

There was a sort of stock, and a barrel three inches in diameter with an extremely tiny opening at its end. There was a round knob on one side. Borden unscrewed the knob a little, pointed the weapon carefully away from the *Danaë* and the furry creatures, and shifted the knob.

There was no noise. But what seemed to be a rod of flame shot out of the tiny muzzle. Where it touched the ground there was a burst of steam and flame and smoke from the scorched vegetation.

Borden turned it off quickly and aimed at a greater distance. He could not discover any limit to its range, in which respect it was a better weapon than the blaster of human manufacture he wore at his hip. It would be decidedly undesirable for Sattell to get hold of a weapon like this!

He went into the ship and when he came out again Ellen was with him. They put the golden metal weapons in the ground car. They brought out food. Ellen looked uneasily in the back, where she had heard there were skeletons, but they were gone. A mound of loosened soil nearby told where Borden had buried them, together.

"All set, Jerry?" asked Borden. "I've locked the ship so Sattell can't get in. As I told you, we're going to disable those other wagons and track down Sattell. If we can capture him reasonably intact, we'll put a cardiograph on him and ask him loaded questions about the ship's log and star maps. His pulse should change enough to enable us to track it down. But first we wreck those wagons!"

Jerry made gestures to his furry friends. They gesticulated back extravagantly. He climbed in the vehicle. Borden freed its tiller and Jerry drove.

For people effectively shipwrecked on an inimical planet and with no real hope of ever returning to their home, it was hardly appropriate that they got absorbed in the operation of a local vehicle. But this vehicle, large and roomy, was not a ground car so much as it was a land cruiser. It ran with astonishing smoothness, considering that it lacked pneumatic tires. And though from the ouside it seemed to lurch and sway as it covered the rough ground, inside the lurchings were not felt at all.

The bipeds ran and skipped and loped beside it. Jerry

picked up a little speed. They strained themselves to keep up.

Jerry had said ten miles. Actually, the distance was nearer twelve. There was snow in patches here and there. The air grew misty. Through the mist the edge of the icecap could be seen, a wall of opaque white some sixty or seventy feet high at its rounded melting edge, and rising to greater thickness beyond. And they came to a small running stream some four or five feet wide. The first running water they had seen on this planet.

And there were the clustered vehicles, about forty of them lined up as if on a highway which had come to an end in an ice barrier now melted away.

The vehicles were partly or wholly covered with waterborne clay which had been laid upon them by just such meltings of the icecap. They ran on into a small hillock which had formed since they had come to a stop at this place. Some were merely hummocks of clay-covered metal, barely showing above the ground. Some were what could be called only hub deep in the clay. But it was being buried in the clay which had preserved them.

"You see, sir," Jerry explained, "I got the creatures to help me dig down to the doors, so I got into all that show. For weapons."

But Borden did not compliment him, though a compliment was due. Instead, Borden said in a toneless voice:

"I also see that Sattell has been here. He must have trailed you. He saw where you had driven one vehicle away. So he dug out the tracks of another one—there!—and tried it. And it worked. Sattell is gone."

It was true. Jerry, stricken, drove over to the new deep gouges in the earth which showed plainly where a way had been dug to take out another gold metal vehicle on its wheel-like treads, and that it had been backed from where it had been almost buried.

Bones on the ground showed where Sattell had savagely flung the pitiful relics of the original owners of the car. The prints of his boots were plain in the loosened dirt.

"We've got to chase him?" Ellen asked apprehensively.

"He has the star maps and the log," Borden said tonelessly. "Or else he knows where he hid them."

"But where would he go?" persisted Ellen.

"He knows we're after him," said Borden. "He knows we're armed, and I doubt that he is, except for his bow and arrow. Where would he go for help, except to the place where we have enemies?"

The track of the other vehicle was clear. There had been no feet heavier than those of Jerry's biped friends on any of this ground for many, many years. There was a deep furrow where the other ground car, the one Sattell had taken, had rolled away.

Jerry put on speed.

Borden said, "I'll watch how you drive this thing, Jerry, and relieve you presently. Sattell can't drive night and day. We can. And there's a long way to go. We'll catch him!"

But Sattell had a head start. Five miles from the beginning of the chase, the track they followed swung to the right and down a rolling hillside. They followed. And a seamless highway built of stone, patently artificial, came out of the hillside and stretched away across country.

It was forty feet wide. And here, in some dust that had drifted across it at some spots, they saw the trail of Sattell's car. At other places, even for most of the way, the winds had kept the roadway clear.

Jerry increased his speed. Borden thought to look at the road behind them.

Ellen, understanding, said, "No, the poor creatures couldn't keep up. They were running after us as if their hearts were breaking, but they couldn't make it."

Ten miles farther on, the highway was overwhelmed by wind-drifted sand. The trail of Sattell's fleeing car went up over the sand dune. They went after it. Half a mile farther, the highway was clear again. It swung south, headed out across the desert.

They did not catch sight of Sattell or his car.

For a stretch of twenty-five miles the arrow straight road was raised above the average level of the sands, and it was windswept. Then it went into a low range of rust-colored hills. Here they saw signs again of Sattell's passing. The streaked, rounded furrow of his vehicle's peculiar tread in windblown sand across the road.

On the far side of the hills they thought they had overtaken him when they saw the glint of golden metal a little off the highway.

They stopped. Borden and Jerry approached the spot, weapons ready. It was a ground car, past question, one like their own, but it had not been newly wrecked. That disaster had happened generations ago. The car had literally been pulled in half. It had been gripped by something unthinkably powerful and wrenched in two. The metal, strained and stretched before it broke, showed what had happened.

There were bones nearby. Not skeletons. Bones. Individual bones. Not gnawed. Not broken. Simply separated by feet and yards of space.

6

SOME ten miles farther on they came to the first of the forts, a great, towering structure of rocks piled together across the road. It was a parapet sixty feet high, enclosing a square of space. In sheltered places among the rocks there was a vast amount of soot as if flames had burned here fiercely. But there was no charcoal. Here, too, were innumerable bones. There would have been thousands of skeletons in this walled area if they had been put together. But they were separate. Every bone, no matter how small, had been completely separated from every other bone.

They could be identified, however. These were the bones of people like those who once had owned this golden metal vehicle. They had died here by thousands. Weapons, bent and ruined, proved that they had died fighting. After death, each body had been exhaustively disjointed and the separate bones scattered utterly without system. And the victors had apparently done nothing else.

Borden knitted his brows as the ground car went on, having perilously skirted around the walls. Jerry seemed to feel that he had wasted time looking. He tried a higher rate of speed. The car yielded it without effort. There seemed to be no limit to the speed at which these remarkable vehicles could travel without vibration or swaying or jolting.

That first fort was perhaps fifty miles behind when Bor-

den's expression changed from harried bewilderment to shock. He stared ahead as the vehicle sped along the geometrically linear highway, windswept and free of dust as it was.

He said slowly, "That's right, Jerry. Make as much speed as you can. When you're tired, I'll drive. We've got to catch Sattell before he reaches that white spot. It's possible that more than our lives depend on it. . . ."

They did not catch Sattell, though they drove night and day. Their speed varied from fifteen miles an hour when they crawled over occasionally drifted sand dunes which swallowed the highway, to two hundred miles an hour or better. Borden estimated grimly that they averaged more than a thousand miles per twenty-hour day.

Sattell couldn't have kept that up, so they must have passed him, probably as he slept in some hiding place off a rocky spot in the highway where there would be no trail to guide them to him. But of course the wind might have erased his trail anywhere.

Ellen tried to rest or doze in the back while Jerry or Borden drove on, one resting while the other drove. But after the first day the actual overtaking of Sattell plainly was not Borden's purpose. It was clear that he meant to get ahead of Sattell, to reach the white spot first.

On the second day of their journeying they found a second fort. This also was a structure across the highway, defended from attack in the direction for which they were headed. It had been more carefully built than the other one. This had been more constructed of squared stones, lifted into position by construction engines whose sand-eroded carcasses were still in place.

There also were larger instruments of warfare here, worn away by centuries of exposure to blowing sand. The fort itself had many times been filled with sand and emptied again by the wind. Only under archways were there any signs of soot, as if flames had burned terribly here. Some land cruisers such as the one in which they rode had been destroyed like the one they had seen at the first fort—pulled apart.

Like the other fort this one had not been demolished after its capture. Not even the cranes and weapons had been seized. But the defenders had been completely dismember-

ed. No two bones were ever attached to each other. Rarely had one been broken. None had been gnawed. Some were sand-worn, but each was complete and entirely separate.

And tens of thousands—not merely thousands—had died here. Their bones proved it.

Ellen watched Borden's face as they drove through this fortress.

"Do you know what happened, Dee?" she asked.

"I think so," he said coldly.

"The white spot? It looks as if they had been fighting something that came from there."

"They were," said Borden. "And I don't want Sattell to encounter the thing they were fighting. He knows too much."

She studied his expression. She knew that they were making the top possible speed toward that same white spot from which a heat ray had been thrown at them. He hadn't explained. Jerry was too diffident to ask. Ellen was not, but something occurred to her suddenly.

"You said, the 'thing'!" she said, startled. "Not creatures or people or anything like that! You said the thing!"

He grimaced, but did not answer her. Instead, he said, "I'll take the tiller, Jerry. We've still got the talkie that Sattell sabotaged, haven't we?"

Jerry nodded and shifted the tiller to him. They'd discovered that the steering gear could be shifted from side to side of the front of the vehicle, so that it could be driven from either the right or left side. On a planet without cities but with highways running thousands of miles to the polar icecaps, long distance driving would be the norm. Conveniences for that purpose would be logical. Drivers could relieve each other without difficulty.

"Look it over," commanded Borden. "The logical way to sabotage a talkie would be to throw its capacitances out of balance. No visible sign of damage, but I couldn't find a band it wasn't tuned to. See if that was the trick."

Jerry busied himself as Borden drove on. Here the highway wound through great hills, the color of iron rust and carved by wind and sand into incredibly grotesque shapes. A long trail of swirling dust arose behind the racing cruiser.

Borden said abruptly, "I've been thinking. Check me, will you two? First, I think the people who made this vehicle

were much like us. The skeletons proved that. They had families and pets and they made cars like this to travel long distances on highways they'd built from pole to pole. This car uses normal electric power, and its power source is good! So they should have had radio frequency apparatus as well as power. But no radio frequency is being used on this planet. The race that built this car, then, has either changed its culture entirely, or been wiped out."

Jerry said blankly, "You mean, the people in the white spot—"

"Are not, and were not the race that built the roads and made this machine," said Borden. "In fact, we've passed two forts where people like us died by tens of thousands, fighting against something from the white spot. They had long range weapons, but at the end they were fighting with fire. You saw the soot! It was as if they burned oil by thousands of gallons to hold back something their long range weapons couldn't stop. Fire is a short-range weapon, though a sun mirror need not be. But nothing stopped this enemy. Vehicles like this were pulled right in half. That doesn't suggest people. It suggests a thing—something so gigantic and horribly strong that needle beams of flame couldn't stop it, and against which flame seemed a logical weapon to use. It must have been gigantic, because it could pull a land car apart endwise."

Ellen waited. Jerry knitted his brows. "I'm afraid," Jerry said, "I can't think of anything that would be that big and . . . I just can't think what they could have been fighting."

"Think of what it wanted," Borden said drily. "It killed the population, wiped them out. Back on Earth, a long, long time ago, Ghenghis Khan led the Mongols to destroy Kharesmia. His soldiers looted the cities. They carried away all the wealth. They murdered the people. Plains were white with the skeletons of the folk they murdered. Do you notice a difference here?"

Jerry said irrelevantly, "You were right about the talkie, sir. Somebody's thrown it all out of tuning. I'll have to match it with the other to make use of it." Then he said painstakingly, "The difference between what you mentioned and the conquerors of the forts is that the loot was left in the forts. Engines and weapons and so on weren't bother-

ed." Then he said in sudden surprise, "But the people weren't left as skeletons! They were all scattered!"

Jerry raised startled eyes from the talkie on which he was working. And suddenly he froze. Borden braked, stopped the car. They had come to a place where shattered ground cars were on the highway, on the sides of the road, everywhere. Here the road ran between monstrous steep-sided hills.

Borden started the car again and drove carefully around half of a vehicle which lay on the highway. Weapons had been mounted in it for shooting through the blister that was like the blister through which he looked in their car.

"There was a battle here, too," he said. "They fought with cars here. Maybe a delaying action to gain time to build the fort we just left. There are bones in these cars, too."

"But what were they fighting, Dee?" Ellen demanded again, uneasily.

Borden drove carefully past the scene of ancient battle —and defeat. He did not answer.

After a time Ellen said, more uneasily still, "Do you mean that whatever they fought against was—going to eat them? It wanted their—bodies?"

"So far as we can tell," said Borden, "it took nothing else. Didn't even want their bones."

He drove on and on. He didn't elaborate. There was no need. A creature which consumed its victims without crushing them or biting them or destroying the structure of their bones! It must simply envelop them. Like an amoeba. A creature which discarded the inedible parts of its prey in separate fragments, without order of position, without selection. That also must be like an amoeba which simply extrudes inedibles through its skin. Ellen swallowed suddenly and her eyes looked haunted.

"Something like a living jelly, Dee," she said slowly. "It would flow along a highway. If you shot it with a needle ray, it wouldn't stop because it would use the burned parts of its own body as food. You'd think of burning oil as a way to fight it. You'd try to make forts it couldn't climb over. Where would such a thing come from, Dee?"

Borden said drily, "From space. Maybe as a spore of

its own deadly race. Or it might be intelligent enough for space-travel. It should be! It knew enough to make a sun mirror of itself to destroy us! It also knew enough to make itself into straining cables to pull ground cars like this apart to get at the people inside."

Ellen shuddered. "But that must be wrong, Dee! A creature like that would cover a whole planet! It would consume every living thing and become itself the planet's surface or its skin."

"But this planet is mostly desert," Borden reminded her. "It may be that there was just one oasis on which a civilization started. Sun power was all it had. It would make use of that. It would find the icecaps at its poles, and build highways to them to haul water to extend itself. Its people would delight in such strangeness as running streams, like the one we saw. If something hellish came out of space, landed, and attacked that oasis, the thing would follow the survivors of its first attacks along the highways by which they retreated. When they built forts, they would congregate in numbers it could not resist attacking. And—"

Jerry glanced up. His face was white, and he looked sick.

"I recall, sir," he murmured, "that you said Sattell knew too much. I believe you guess the 'thing' you are talking about absorbed the knowledge of the people it consumed. Is that right? And if it should absorb more from Sattell, and through him know about us—"

"My guess," said Borden, "is that it knew we were in a space ship. In one there are always relays working, machines running, things happening—as is always the case where there are humans. Where there are living beings. Such happenings can be detected. I also believe this 'thing' can tell when it can reach the living, and when it can't. When it can reach them, it undoubtedly moves to devour them. When it can't it tries to destroy them—as it tried with us. That may be because of its own intelligence, or it may be because of the knowledge gained through what it has consumed.

"That's why I don't intend to let Sattell be consumed by it! He knows how the *Danaë's* drive works and how it should be repaired. He knows how to read the log and

the maps he stole. Just as a precaution, I'm not going to let that 'thing' in the white spot gain the knowledge that there is a planet called Earth with life all over it, on every continent, and in the deeps of the seas. *If* the 'thing' in the white spot were to find out that there is such a place, and *if* it is intelligent enough to wipe out a civilized race on this planet, it might be tempted to take to space again. Or at least to send, say, part of itself!"

7

ABRUPTLY the wind-carved, rust-colored hills came to an end. The highway curved slightly and reached out toward the horizon. But the horizon was not, now, a mere unending expanse of dunes and desert.

A bare few miles distant, the desert was white. There were no dunes. A vast, vast flat mass of nothing-in-particular, not even raising the level of the ground, reached away and away to this world's edge. It looked remarkably like a space on which a light snowfall had descended, shining in the sunlight until melting should come. The towers of the city in the midst of it also were shimmering white.

But it all was not a completely quiescent whiteness. There were ripplings in it. A pinnacle rose abruptly, and Borden backed the vehicle fiercely as the pinnacle formed a cuplike end of gigantic size, and the interior of that cup turned silvery.

The rust-colored hills blotted out just as a beam of purest flame licked from it to the spot where the ground car had been the moment before. Rocks split and crackled in the heat.

The beam faded. The light vanished.

"So," said Borden matter-of-factly, continuing what he had been saying, as if there had been no interruption, "as long as Sattell is at large, why, we have to kill that 'thing.'

I think I know how to do it. With a little overload, I believe that walkie-talkie will do the trick. You see, the 'thing' is terrifically vulnerable, now. It has conquered this planet. It was irresistible. Nothing could stand against it. So it will be easy to kill."

But in that opinion, Borden was mistaken. Living creatures moving toward the white spot should have had no reason to be suspicious. Traveling at high speed along the highway, they should have continued at high speed to the very border of the white spot, at least. More probably they should have entered the white-covered area filled with a mild curiosity as to what made it so white. And of course the white spot—the horror, the protean protoplasm of which it was composed—would have engulfed them. But the car stopped. And the white spot *was* intelligent.

Twenty minutes after the first crackling impact of a heat beam in the valley, Borden was out of the ground car and moving carefully to peer around a rocky column at the white spot.

Its appearance had changed. There was a rise in the ground level at the edge of the white spot now. The stuff which was the creature itself—which Ellen had aptly called a living jelly—had flowed from other places to form a hillock there. Borden regarded it with suspicion. Obviously, it could send out pseudopods. Amoebae can do that, and he had just seen this thing form a sun ray projector of itself.

But Borden was not aware of the possibilities of a really protean substance to take any form it desires.

He saw the pseudopod start out. He was astounded. It did not thrust out. The hillock, the raised-up ground level, suddenly sped out along the highway with an incredible swiftness. He regarded it with a shock that was almost paralyzing.

But not quite. He fled to the car, leaped into it, and sent it racing down the highway at the topmost speed he could coax from it. His face was gray and sweating. His hands shook.

Ellen gasped, "What, Dee? What's happened?"

"The beast," said Borden in an icy voice. "It's after us."

Ellen stared back. And she saw the tip-end of the white spot's pseudopod as it came racing into the end of the valley through which the highway ran. It was a fifty-foot, shapeless blob of glistening, translucent horror. And it did not thrust out from the parent body. It laid down a carpet of its own substance over which its fifty-foot mass slid swiftly.

An exact, if unimpressive, analogy would be a cake of wet soap, or a mass of grease, sliding over a space it lubricated with its own substance as it flowed, leaving a contact with its starting point as a thin film behind. Or it could be likened to a roll of carpet, speeding forward as it unrolled.

A hillock of glistening jelly, the height of a five-story building, plunged into the valley at forty miles an hour or better. By sheer momentum it flowed up the mountainside, curved, and came sliding back to the highway and on again after the ground car.

But the car was in retreat at over a hundred miles an hour. It reached a hundred and fifty miles an hour. Two hundred.

Borden stopped it five miles down the highway and wiped his forehead.

"Now," he said grimly, "I see why ordinary weapons didn't work against it. The thing is protean, not amoeboid. It isn't only senseless jelly. It has brains!"

He considered, frowning darkly. Then he turned the ground car off the road. He drove it around a dune, and another. It became suddenly possible to see across the desert toward the white mass at the horizon.

There was a ribbon, a road, a highway of whiteness leading toward the city. The five-story-high mass of stuff that had come sweeping toward the car had traveled along the highway, carpeting the rocky surface with its own substance. Now there were new masses of loathesome whiteness surging along the living road. There were billows, surgings, undulations. It was building up for a fresh and irresistible surge.

Across the desert a new pseudopod, a new extension of the white organism, moved with purposeful swiftness. It was somehow like a narrow line of whitecaps moving impossibly over aridness.

"It knows we stopped," Borden said. "It won't attack. It'll act as if baffled—until there's a fresh mass of it behind us. Then it will drive together and catch us in between. Jerry, are you set to try the talkie stuff?"

"Pretty well," sighed Jerry.

The car crawled back to the highway. The waiting mass of jellylike monster was larger. It grew larger every instant, as fresh waves of its protaean substance arrived through the throbbing of the pseudopod back to the oasis.

"Turn on the walkie-talkie," commanded Borden.

Jerry, white and shaken, threw the switch. An invisible beam of microwaves sped down the valley behind the halted car. It reached the blob of jelly which now was as large as when it had started from the parent mass. The jelly quivered violently. Then it was still.

"Turn it off," ordered Borden. "Why didn't that work?"

Jerry turned off the microwave beam. The jelly quivered once more. Borden, watching with keen eyes, said:

"On again."

The pile of jelly quivered a third time, but less violently. The first impact of the microwave beam had bothered it, but it had been able to adjust almost instantly. It perceived the microwaves. That much was certain. But it could adjust to them.

Borden said furiously, "The thing can learn! It can think. It is smart as the devil! But if I am right, what it wants more than anything else is not to do anything. It has to be awake, when we are near. It can't help itself, but it wants to sleep. We and our microwaves are like mosquitos buzzing around a man's head. I thought they—"

He stopped short, but after a moment laughed unpleasantly.

"I get it. When it learns a pattern it can disregard it. Living things always act without pattern. So it can't disregard them. But it could disregard an unmodulated beam. Let's see what a modulated one will do. Jerry, the microphone."

When the talkie went on and its beam of microwaves hit the monstrous, featureless thing, it did not even quiver. Then Borden said into the microphone:

" 'Mary had a little lamb. Its fleece was white as snow. And everywhere that Mary went—'."

The monstrous mass of ghastly jelly plunged toward him.

Ellen shot the ground car away. Borden's throat contracted. When his voice stopped, the frenzied movement of the horror ceased. It stood trembling in a gigantic, glistening heap. It seemed to wait. Borden considered grimly.

"It could make a sun mirror now," he decided, "but not a very big one. We'd run away. It doesn't want to chase us away until that other arm of stuff gets behind us. If we run, it will follow. It could follow the original inhabitants of this planet for thousands of miles. Doubtless it would follow us as far.

"And there's always Sattell. We've got to kill it. How? I thought a walkie-talkie beam would irritate it. It can adjust to it. Then I thought a modulated wave—voice-modulated—would exhaust it. But no. We need something new, right now!"

There was silence. Then Ellen said uneasily:

"Maybe this idea isn't sensible, but could it be that the walkie-talkie beam just wasn't strong enough? It was too much like—like tickling it, arousing its appetite. Maybe if the beam were powerful enough it would be like paralysis."

Borden did not even answer. He hauled at the objects that had been found to be the covers to the power leads of the vehicle. He and Jerry worked feverishly, without words. Then Borden stood up.

"This time we are really risking everything," he said grimly. "The full power of the car's power source goes into the beam. If a walkie-talkie beam was appetizing, this ought to curl its hair. Switch, Jerry! Microphone on!"

8

SOME hundreds of kilowatts of power in modulated wave form would go out now into the body of a creature whose

normal sensory reception centers would be accustomed to handling minute fractions of one watt. The talkie could handle the power, of course. With cold-emission oscillators, there was no danger of burning out a wave-generating unit.

" '—the lamb was sure to go,' " said Borden.

The two-mile distant mass of horrid jelly began to quiver uncontrollably. But without any purpose at all. Borden said with a terrible satisfaction:

" 'It followed her to school one day, which was against the rule. It made the children laugh and play to see the lamb at school.' "

The shapeless mass of living stuff made tortured upheavals. It flung up spires of glistening stuff. It writhed. It contorted. It flung itself crazily against the hillsides.

" 'Twas brillig,' " said Borden, " 'and the slithy toves, did gyre and gymbal in the wabe. All mimsy were the borogroves, and the mome raths outgrabe.' "

The jelly fled. It flowed back upon the carpet of its own substance on which it had been able to move with such ghastly speed. It flowed down from a mound to a flattened thickening of the pseudopod which had thrown itself at the car.

That pseudopod flowed away upon itself. It fled. It raced frantically to be gone from a beam of microwaves whose pattern was not fixed, which varied unpredictably from instant to instant as sound waves changed it from something the white spot being could disregard to something which did not promise food, and which could not be ignored.

The white spot creature was tormented. Its instincts said that what was not patterned was life. Its intelligence said that this was not life—not life in quantity proportional to the stimulus, it yielded, anyhow. The modulated microwaves impressed its consciousness as a steam whistle at his ear impresses a man. The sensation was intolerable. It was maddening.

In less than an hour, Borden had returned to the end of the valley and was beaming microwaves at the white spot across the few miles of desert in between. He was beginning to be weary now, and his memory for recitative verse was running thin.

"Take over and keep talking, Ellen," he said into the microphone. He handed it to her.

Ellen said steadily, "I don't know how this is doing what it does, but—'My name is John Wellington Wells, I'm a dealer in magic and spells, in hexes and curses and ever-filled purses and witches and crickets and elves.' I've got this wrong somehow, Dee, but tell me what it is and I'll try to keep on."

Borden said, "I'd rather not tell you. It would overhear. I think, though, that it's moving away. The white stuff is drawing back!"

And it was true. The whiteness which had been beyond the desert was withdrawing. The pseudopod—a misnomer, because in this case the word should have been something else—the extension which had come to destroy the humans had long since withdrawn. The formless ground-covering was gathering itself into a mass, and that mass was moving away.

There was a dark space visible. It was ground—humus, oasis soil—which had been covered by the unspeakable organism which centuries since had conquered this planet.

"I'd chase it," Borden said somberly, "only I'm not sure it couldn't get itself together and make a sun mirror. We'll wait till nightfall."

"But what are we doing to it?" demanded Ellen.

Jerry was at the microphone now, going through the *Sonnets From the Portuguese,* while the living jelly at the edge of the world quivered and fled in shaking revulsion.

"The thing's alive," said Borden. "And it can't help receiving all sorts of impressions. Like any other organism, it learns to disregard any impression it receives that it can anticipate or classify. We don't hear a clock ticking. If we live near a noisy street, we don't hear traffic. But we wake if a door squeaks. That—white spot can disregard the electric waves of lightning. It can disregard sunshine. But it can't disregard things it can't fit into a pattern. It has to pay attention. And I'm giving it the kind of unpatterned signals that normally mean living things. Continuous, nonrepeat patterns of stimulation. And—they're too strong for the devilish thing."

Ellen said doubtfully, "Too strong?"

"You touch people to call their attention. If you touch

them too hard, it isn't a touch but a blow, and you can knock them down. That's what I'm giving this thing. It has the quality of a signal the spot can't ignore, and the force of a blow. It should have the psychological effect of thousands of bells of intolerable volume—only worse. But we've got to keep on with the stimulus. And we mustn't repeat, or it might be able to get used to the pattern."

"I'll talk to it in French," said Ellen. "But it doesn't seem to me that a walkie-talkie could be too strong for—"

"It's hooked to the car's power system," Borden told her. "Jerry set it up and connected it just before he began to recite poetry. There are several kilowatts of radiation going to the thing now, and all of it is attention-holding radiation."

When night fell and the use of a sun mirror was patently impossible, Borden moved on the highway toward what had been the white spot. The walkie-talkie sent on its waves ahead.

Ellen recited, *"La fourmi et la cigale"* from second-year French. Borden was more or less ready to take on from there with what he remembered of Shakespeare.

They reached the end of the desert and all about them there was the moist ground of the oasis which once had been the center of a civilization. Presently they moved into the deserted, emptied buildings of a city.

Borden said, "This civilization will be worth studying!"

They went on and on and on, talking endlessly, and driving the entity which had conquered a planet by painstakingly recalled sections of Mother Goose, and by haphazard recollections of ancient history, the mythology of ancient Greece and Rome, and the care and feeding of domestic cats.

When dawn came, Borden was speaking rather hoarsely into the microphone, and the creature was plainly in sight before them. It writhed and struggled spasmodically. It flung masses of itself insanely about. It knitted itself into intricate spires and pinnacles, with far-flung bridges, which shuddered and dissolved.

The sun rose, and the thing should have been able to destroy them. But it could not. It still writhed. It still

shuddered. It twisted in monstrous, weary, lunatic gyrations. Ellen regarded it with eyes of loathing.

"It acts like it's gone mad," she said in revulsion.

"It may have," said Borden. "It's certainly exhausted. But we're getting pretty tired, too." He said into the microphone. "You probably don't understand this that I'm saying, any more then you understand any of the rest. But you had this coming to you."

He handed the microphone to Jerry, who had suddenly remembered an oration, *Spartacus to the Gladiators.* Jerry began to recite it.

But the writhings of the mountainous mass of jelly became more terribly weary, more quiveringly effortful. There came a time when it quivered only very, very faintly. Those quiverings ceased.

"I think it's dead, sir," said Jerry.

Borden snapped off the walkie-talkie. He snapped it on again. The horrible, half cubic mile of jelly did not flinch.

Borden said drily, "Abracadabra, hocus pocus, e pluribus unum."

There was no sign of life in the thing. He watched grimly for any sign of returning activity. By noon, though, it could be seen that the ghastly mass of once-living substance was changing. It was liquefying. There were rills of an unpleasant fluid forming on its glossy flanks, to run down and flow and flow away into the desert to be dried up.

"I don't think we'll want to be around for the next few weeks," Borden said heavily. "We'll go back and fix up the ship."

Then Ellen mentioned Sattell's name for the first time in days.

"How about Sattell?"

"We outran him on the way here," Borden said moodily. "But I think he'll come on. He'll want to find out if we're dead. Not knowing what the thing—the white spot—was, I think he'll figure that either we'll be sent back with help, or killed. If he gets to where he can see the white spot, and we haven't started back with friends, he'll be sure we're dead. Then he'll go back and start to fix up the ship himself. I think we'll meet him on the way."

And they did. The second day out from what was now

an oasis instead of a white spot, they saw Sattell's car headed in their direction as a moving gleam of golden reflected sunlight.

Jerry ran their car off the road to a hiding-place behind a dune. He and Borden took posts behind the sand dune's tip. Sattell came racing at a hundred and fifty miles an hour, raising a long plume of sand dust behind him.

Borden and Jerry fired together—two thin pencil rods of flame from the golden-metal weapons. Sattell's ground car ran past them, crossing the highway just a foot from the rock. The treads of the car disintegrated. The car sped on, slid, and rolled clumsily, three separate times. Then it stopped.

The oval side window turned and Sattell came crawling out. He had a golden-metal weapon now. He must have searched feverishly in the shambles of one of the two forts to find a weapon that still would operate. He swung it frenziedly in their direction. He ran toward them, screaming hate. He stumbled.

His weapon was firing, but the fire was short. He fell on it. Into its flame.

And the ship's log and the star maps were in the ground car Borden and Jerry had disabled.

It was more than a month later when the *Danaë,* completely overhauled and refueled, and with the product of Ellen's agriculture stored carefully away, hovered cautiously over what had been the white spot. At last they descended into the central square of the city that once had been the center of a civilization.

The three of them spent a day examining that city. They found things they could not understand, and things at which they smiled, and things that were quite marvelous. Every civilization makes some discoveries that others miss, and misses that others take for granted. There would be useful items in this civilization, when humans landed here and examined the remains.

"I think," Ellen said, to Borden, "that you mean to come back."

Borden nodded, frowning a little.

"No rational natives," he said, "and eighteen thousand

square miles of oasis. It would make a rather wonderful place in which to live—with that city and that civilization to study. Will you mind?"

Ellen laughed. She held out her hand. There were capsules in it.

"I've been planting more seeds," she said, "so there'll be Earth-type vegetation here when we get back."

"And Jerry?"

Jerry said bashfully, "There's a girl . . . If I can organize a group to make a settlement here, I think I'll be back."

"Then we'll be back," said Borden. "And next time we'll bring some of our furry friends down from the ice-cap and really find out what it means to settle down and live here."

And then the *Danaë* climbed for the stars and started back home.

PLANET OF SAND

1

THERE WAS bright, pitiless light in the prison corridor of the *Stallifer*. There was the hum of the air renewal system. Once in every so often there was a cushioned thud as some item of the space ship's machinery operated a relay somewhere. But it is very tedious to be in a confinement cell. Stan Huckley—lieutenant, j.g., Space Guard, under charges and restraint—found it rather more than tedious. He should have been upheld, perhaps, by the fact that he was innocent of the charges made against him by Rob Torren, formerly his immediate superior officer. But the feeling of innocence did not help. He sat in his cell, holding himself still with a grim resolution. But a deep, a savage, a corrosive anger grew and grew and grew within him. It had been growing in just this manner for weeks.

The *Stallifer* bored on through space. From her ports the cosmos was not that hostile, immobile curtain of unwinking stars the early interstellar travelers knew. At twelve hundred light-speeds with the Bowdoin-Hall field collapsing forty times per second for velocity control, the stars moved visibly. Forty glimpses of the galaxy about the ship in every second made it seem that the universe were always in view. And the stars moved. The nearest ones moved swiftly and the farther ones more slowly, but all moved. From force of habit the motion gave the feeling of perspective, so that the stars appeared to be distributed in three dimensions. From the ship they seemed very small,

like fireflies. All the cosmos seemed small and almost cosy. The Rim itself appeared no more than a few miles away. The *Stallifer* headed for Earth and Rhesi II. She had been days upon her journey; she had come a distance which it would stagger the imagination to compute.

In his cell, though, Stan Buckley could see only four walls. There was no variation of light; no sign of morning or night or afternoon. At intervals, a guard brought him food. That was all—except that his deep and fierce and terrible anger grew until it seemed that he would go mad with it.

He had no idea of the hour or the day when, quite suddenly, the pitiless light in the corridor dimmed. Then the door he had not seen since his entrance into the prison corridor clanked open. Footsteps came toward the cell. It was not the guard who fed him. He knew that much. It was a variation of routine, which should not have varied until his arrival on Earth.

He sat still, his hands clenched. A figure loomed outside the cell door. He looked up coldly. Then fury so great as almost to be frenzy filled him. Rob Torren looked in at him.

There was silence. Stan Buckley's muscles tensed until it seemed that the bones of his body creaked. Then Rob Torren said caustically:

"It's lucky there are bars, or there'd be no chance to talk! Either you'd kill me and be beamed for murder, or I'd kill you and Esther would think me a murderer. I've come to get you out of this if you'll accept my terms."

Stan Buckley made an inarticulate, growling noise.

"Oh, surely!" said Rob Torren. "I denounced you, and I'm the witness against you. At your trial, I'll be believed and you won't. You'll be broken and disgraced. Even Esther wouldn't marry you under such circumstances. Or maybe," he added sardonically, "maybe you wouldn't let her."

Stan Buckley licked his lips. He longed so terribly to get his hands about his enemy's throat that he could hardly hear the other's words.

"The trouble is," said Rob Torren, "that she probably wouldn't marry me either, if you were disgraced by my

means. So I offer a bargain. I'll help you to escape—I've got it all arranged—on your word of honor to fight me. A duel. To the death."

His eyes were cold. His tone was cold. His manner was almost contemptuous. Stan Buckley said hoarsely:

"I'll fight you anywhere, under any conditions!"

"The conditions," Rob Torren told him coldly," are that I will help you to escape. You will then write a letter to Esther, saying that I did so and outlining the conditions of the duel as we agree upon them. I will, in turn, write a letter to the Space Guard brass, withdrawing my charges against you. We will fight. The survivor will destroy his own letter and make use of the other. Do you agree to that?"

"I'll agree to anything," said Stan Buckley fiercely," that will get my hands about your throat!"

Rob Torren shrugged.

"I've turned off the guard photocells," he said shortly. "I've a key for your cell. I'm going to let you out. I can't afford to kill you except under the conditions I named or I'll have no chance to win Esther. If you kill me under any other conditions, you'll simply be beamed as a murderer." He paused, and said shortly, "And I have to come and fight you because a letter from you admitting that I've behaved honorably is the only possible thing that would satisfy Esther. You give your word to wait until you've escaped and I come for you before you try to kill me?"

Stan Buckley hesitated a long, long time. Then he said in a thick voice:

"I give my word."

Without hesitation, Rob Torren put a key in the cell door and turned it. He stood aside. Stan Buckley walked out, his hands clenched. Torren closed the door and relocked it. He turned his back and walked down the corridor. He opened the door at its end. Again he stood aside. Stan Buckley went through. Torren closed the door, took a bit of cloth from his pocket, wiped off the key, hung it up again on a tiny hook, with the same bit of cloth threw a switch, and put the cloth back in his pocket.

"The photocells are back on," he said in a dry voice. "They say you're still in your cell. When the guard con-

tradicts them, you'll seem to have vanished into thin air."

"I'm doing this," said Stan hoarsely, "to get a chance to kill you. Of course I've no real chance to escape!"

That was obvious. The *Stallifer* was deep in the void of interstellar space. She traveled at twelve hundred times the speed of light. Escape from the ship itself was absurd. And concealment past discovery when the ship docked was preposterous.

"That remains to be seen," said Torren coldly. "Come this way."

Down a hallway. He slipped into a narrow doorway, invisible unless one looked. Stan followed. He found himself in that narrow, compartmented space between the ship's inner and outer skins. A door, another compartment; another door. Then a tiny airlock—used for the egress or a single man to inspect or repair such exterior apparatus as the scanners for the ship's vision screens. There was a heap of assorted apparatus beside the airlock door.

"I prepared for this," said Torren curtly. "There's a spacesuit. Put it on. Here's a meteor miner's space skid. There are supplies. I brought this stuff as luggage, in watertight cases. I'll fill the cases with my bath water and get off the ship with the same weight of luggage I had when I came on. That's my coverup."

"And I?" asked Stan harshly.

"You'll take this chrono. It's synchronized with the ship's navigating clock. At two-two even you push off from the outside of the ship. The drive field fluctuates. When it collapses, you'll be outside it. When it expands—"

Stan Buckley raised his eyebrows. This was clever! The Bowdoin-Hall field which permits of faster than speed of light travel is like a pulsating bubble expanding and contracting at rates ranging from hundreds of thousands of times per second to the forty per second of deep space speed. When the field is expanding, and bars of an artificial allotrope of carbon are acted upon by electrostatic forces in a certain particular fashion, a ship and all its contents accelerate at a rate so great that it simply has no meaning. As the field contracts, a ship decelerates again. That is the theory, at any rate. There is no proof in sensations or instrument readings that such is the case. But velocity is

inversely proportional to the speed of the field's pulsations, and only in deep space does a ship dare slow the pulsations too greatly, for fear of complications.

A man in a spacesuit could detach himself from a space ship traveling by the Bowdoin-Hall field, though. He could float free at the instant of the field's collapse, and be left behind when it expanded again. But he would be left alone in illimitable emptiness.

"You'll straddle the space skid," said Torren shortly. "It's full-powered—good for some millions of miles. At two-two exactly the *Stallifer* will be as close to Khor Alpha as it will go. Khor Alpha's a dwarf white star that's used as a course marker. It has one planet that the directories say has a breathable atmosphere, and list as a possible landing refuge, but which they also say is unexamined. You'll make for that planet and land. You'll make for that planet and wait for me. I'll come!"

Stan Buckley said in soft ferocity:

"I hope so!"

Torren's rage flared.

"Do you think I'm not as anxious to kill you as you are to kill me?"

For an instant the two tensed, as if for a struggle to the death there between the two skins of the space ship. Then Torren turned away.

"Get in your suit," he said curtly. "I'll get a private flier and come after you as soon as the hearing about your disappearance is over. Push off at two-two even. Make it exact!"

He went angrily away, and Stan Buckley stared after him, hating him, and then grimly turned to the apparatus on an untidy heap beside the airlock door.

Five minutes later he opened the outer door of the lock. He was clad in space armor and carried with him a small pack of supplies—the standard abandon ship kit—and the little space drive unit. The unit was one of those space skids used by meteor miners—merely a shaft which contained the drive and power unit, a seat, and a crossshaft by which it was steered. It was absurdly like a hobby-horse for a man in a spacesuit, and it was totally unsuitable for interplanetary work because it consumed too much power

when fighting gravity. For Stan, though, starting in mid-space with only one landing to make, it should be adequate.

He locked the chrono where he could see it on the steering bar. He strapped the supply kit in place. He closed the airlock door very softly, he waited, clinging to the outer skin of the ship with magnetic shoes.

The cosmos seemed very small and quite improbable. The specks of light which were suns seemed to crawl here and there. Because of their motion it was impossible to think of them as gigantic, revening balls of unquenchable fire. They moved! To all appearances, the *Stallifer* flowed onward in a cosmos perhaps a dozen miles in diameter, in which many varicolored fireflies moved with vast deliberations.

The hand of the chrono moved, and moved, and moved. At two-two exactly, Stan pressed the drive stud. At one instant he and his improbable space steed rested firmly against a thousand-foot hill of glistening chrome steel. The waverings of the Bowdoin-Hall field were imperceptible. The cosmos was small and limited and the *Stallifer* was huge. Then the skid's drive came on. It shot away from the hull—and the ship vanished as utterly as a blown out candle flame. The universe was so vast as to produce a cringing sensation in the man who straddled an absurd small device in such emptiness, with one cold white sun—barely near enough to show a disk—and innumerable remote and indifferent stars on every hand.

On the instant the ship's field contracted and left him outside, Stan had lost the incredible velocity the field imparts. In the infinitesimal fraction of a second required for the field to finish its contraction after leaving him, the ship had traveled literally thousands of miles. In the slightly greater fraction of a second required for it to expand again, it had moved on some millions of miles. By the time Stan's mind had actually grasped the fact that he was alone in space, the ship from which he had separated himself was probably fifty of sixty millions of miles away.

He was absolutely secure against recapture, of course. If his escape went unnoticed for even half a minute, it would take all the ships of all the Space-Guard a thousand years to search the volume of space in whiich one small space-

suited figure might be found. It was unlikely that his escape would be noticed for hours.

He was very terribly alone. A dwarf white sun glowed palely, many, many millions of miles away. Stars gazed at him incuriously, separated by light centuries of space.

He started the minute gyroscopes that enabled him to steer the skid. He started in toward the sun. He had a planet to find and land on. Of course, Rob Torren could simply have contrived his escape to emptiness so that he might die and shrivel in the void, and never, never, never through all eternity be found again. But somehow, Stan had a vast faith in the hatred which existed between the two of them.

2

IT WAS TWO days later when he approached the solitary planet of Khor Alpha. The air in his spacesuit had acquired that deadly staleness which is proof that good air is more than merely a mixture of oxygen and nitrogen. He felt sluggish discomfort which comes of bottled, repurified breathing mixture. As the disk of the planet grew large, he saw little or nothing to make him feel more cheerful. The planet rotated as he drew near, and it seemed to be absolutely featureless. The terminator—the shadow line as sunlight encroached on the planet's night side—was a perfect line. There were, then, no mountains. There were no clouds. There seemed to be no vegetation. There was, though, a tiny polar icecap—so small that at first he did not discover it. It was not even a dazzling white, but a mere whitishness where a polar cap should be, as if it were hoar frost instead of ice.

He went slanting down to match the planet's ground speed in his approach. Astride the tiny space skid, he looked rather like an improbable witch astride an incredible broomstick. And he was very, very tired.

Coming up in a straight line, half the planet's disk was night. Half the day side was hidden by the planet's bulge.

He actually saw no more than a quarter of the surface at this near approach, and that without magnification. Any large features would have been spotted from far away, but he had given up hope of any variation from monotony when —just as he was about to enter the atmosphere—one dark patch in the planet's uniformly dazzling white surface appeared at the very edge of day. It was at the very border of the dawn belt. He could only be sure of its existence, and that it had sharp, specifically straight edges. He saw rectangular extensions from the main mass of it. Then he hit atmosphere, and the thin stuff thrust at him violently because of his velocity, and he blinked and automatically turned his head aside, so that he did not see the dark patch again before his descent put it below the horizon.

Even so near, no features, no natural formations appeared. There was only a vast brightness below him. He could make no guess as to his height nor—after he had slowed until the wind against his body was not detectable through the spacesuit—of his speed with relation to the ground. It was extraordinary. It occurred to him to drop something to get some idea, even if a vague one, of his altitude above the ground.

He did, an oil soaked rag from the tool kit. It went fluttering down and down—and abruptly vanished, relatively a short distance below him. It had not landed. It had been blotted out.

Tired as he was, it took him minutes to think of turning on the suit microphone which would enable him to hear sounds in this extraordinary world. But when he flicked the switch he heard a dull, droning, moaning noise which was unmistakable. Wind. Below him there was a sandstorm. He was riding just above its upper surface. He could not see the actual ground because there was an opaque wall of sand between. There might be five hundred feet between him and solidity, or five thousand, or there might be no actual solid, immovable ground at all. In any case, he could not possibly land.

He rose again and headed for the dark area he had noted. But a space skid is not intended for use in atmosphere. Its power is great, to be sure, when its power unit is filled. But Stan had come a very long way indeed since his departure from the *Stallifer*. And his drive had blown a fuse, once,

which cost him power. Unquestionably, the blown fuse had been caused by the impinging of a Bowdoin-Hall field upon the skid. Some other space ship that the *Stallifer,* using Khor Alpha as a course guide, had flashed past the one planet system at many hundred times the speed of light. The pulsations of its drive field had struck the skid and drained its drive of power, and unquestionably had registered the surge. But it was not likely that it would be linked with Stan's disappearance. The other ship might be headed for a star system which was light centuries from Earth, and a minute—relatively minute—joggle of its meters would not be a cause for comment. The real seriousness of the affair was that the skid had drained power before its fuse blew.

That property of a Bowdoin-Hall field, incidentally—its trick of draining power from any drive unit in its range—is the reason that hampers its use save in deep space. Liners have to be elaborately equipped with fuses lest in shorting each other's drive they wreck their own. In interplanetary work, fuses are not even practical because they might be blown a hundred times in a single voyage. Within solar systems high frequency pulsations are used, so that no short can last more than the hundred-thousandth of a second, in which not even allotropic graphite can be ruined.

Stan, then, was desperately short of power and had to use it in a gravitational field which was prodigally wasteful of it. He had to rise high above the sandstorm before he saw the black area again at the planet's very rim. He headed for it in the straightest of straight lines. As he drove, the power gauge needle flickered steadily over toward zero. A meteor miner does not often use as much as one earth gravity acceleration, and Stan had to use that much merely to stay aloft. The black area, too, was all of a hundred-odd miles away, and after some millions of miles of space travel, the skid was hard put to make it.

He dived for the black thing as it drew near, and on his approach it appeared simply impossible. It was a maze, a grid, of rectangular girders upholding a seemingly infinite number of monstrous dead-black slabs. There was a single layer of those slabs, supported by innumerable spiderly slender columns. Here, in the dawnbelt, there was no wind and Stan could see clearly. Sloping down, he saw that ten-

foot columns of some dark metal rose straight and uncompromising from a floor of sand to the height of three hundred feet or more. At their top was the grid and the slabs, forming a roof some thirty stories above the ground. There were no underfloors, no crossways, no structural features of any sort between the sand from which the columns rose and that queer and discontinuous roof.

Stan landed on the ground at the structure's edge. He could see streaks and bars of sky between the slabs. He looked down utterly empty aisles between the corridors and saw nothing but the columns and the roof until the shafts merged in the distance. There was utter stillness here. The sand was untroubled and undisturbed. If the structure were a shelter, it sheltered nothing. Yet it stretched for at least a hundred miles in at least one direction, as he had seen from aloft. As nearly as he could tell, there was no reason for its existence and no purpose it could serve. Yet it was not the abandoned skeleton of something no longer used. It was plainly in perfect repair. The streaks of sky to be seen between its sections were invariably exact in size and alignment. They were absolutely uniform. There was no delapidation and no defect anywhere. The whole structure was certainly artificial and certainly purposeful, and it implied enormous resources of civilization. But there was no sign of its makers, and Stan could not even guess at the reason for its construction.

But he was too worn out to guess. On board the *Stallifer*, he'd been so sick with rage that he could not rest. On the space skid, riding in an enormous loneliness about a dwarf sun whose single planet had never been examined by men, he had to be alert. He had to find the system's one planet, and then he had to make a landing with practically no instruments. When he landed at the base of the huge grid, he examined his surroundings wearily, but with the cautious suspicion needful on an unknown world. Then he made the sort of camp the situation seemed to call for. He clamped the space skid and his supplies to his spacesuit belt, lay down hard by one of the columns, and incontinently fell asleep.

He was wakened by a horrific roaring in his earphones. He lay still for one instant. When he tried to stir, it was only with enormous difficulty that he could move his arms and

legs. He felt as if he were gripped by quicksand. Then suddenly, he was wide awake. He fought himself free of clinging incumbrances. He had been half-buried in sand. He was in the center of a roaring swirling sand devil which broke upon the nearby column and built up mounds of sand and snatched them away again, and flung great masses crazily in every direction.

As the enigmatic structure had moved out of the dawn belt into the morning, howling winds had risen. All the fury of a tornado, all the stifling deadliness of a sandstorm, beat upon the base of the grid. And from what Stan had seen when he first tried to land, this was evidently the normal daily weather of this world. If this were a sample merely of morning winds, by mid-day existence should be impossible. Stan looked at the chrono. He had slept less than three hours. He made a loop of line from the abandon ship kit and got it about the nearest pillar. He drew himself to that tall column. He tried to find a lee side, but there was none. The wind direction changed continually. He debated struggling further under the shelter of the monstrous roof. He stared up, estimatingly—

He saw slabs tilt. In a giant section whose limits he could not determine, he saw the rectangular sections of the roof revolve in strict unison. From a position parallel to the ground, they turned until the light of the sky shone down unhindered. Vast masses of sand descended—deposited on the slabs by the wind, and now dumped down about the columns' bases. Then wind struck anew with a concentrated virulence, and the space between the columns became filled with a whirling giant eddy that blotted out everything. It was a monster whirlwind that spun crazily in its place for minutes, and then roared out to the open again. In its violence it picked Stan up bodily, with the skid and abandon ship kit still clamped to his spacesuit. But for the rope about the column he would have been swept away and tossed insanely into the smother of sand that reached to the horizon.

After a long time, he managed to take up some of the slack of the rope; to bind himself and his possessions more closely to the column which rose into the smother overhead. Later still, he was able to take up more. In an hour, he was bound tightly to the pillar and was no longer flung to and fro

by the wind. Then he dozed off again. It was uneasy slumber. It gave him little rest. Once a swirling sand devil gouged away the sand beneath him so that he and his gear hung an unguessable distance above solidity, perhaps no more than a yard or so, but perhaps much more. Later he woke to find the sand piling up swiftly about him, so that he had to loosen his rope and climb wearily as tons of fine, abrasive stuff—it would have been strangling had he needed to breathe it direct—were flung upon him. But he did sleep from time to time.

Then night fell. The winds died down from hurricane intensity to no more than gale force. Then to mere frantic gusts. Then—the sun had set on the farther side of the huge structure to which he had tied himself—then there was a period when a fine whitish mist seemed to obscure all the stars. It gradually faded, and he realized that it contained particles of so fine a dust that it hung in the air long after the heavier stuff had settled.

He released himself from the rope about the pillar. He stood, a tiny figure beside the gargantual columns of black metal which rose toward the stars. The stars themselves shone down brightly, brittly, through utterly clear air. There were no traces of cloud formation following the storm of the day. It was obvious that this was actually the normal weather of this planet. By day, horrific winds and hurricanes. By night, a vast stillness. The small size and indistinctness of the icecap he had seen was assurance that there was nowhere on the planet any sizable body of water to moderate the weather. With such storms, inhabitants were unthinkable. Life of any sort was out of the question. But if there were anything certain in the cosmos, it was that the structure at whose base he stood was artificial!

He flicked on his suit radio. Static only. Sand particles in dry air, clashing against each other, would develop changes to produce just the monstrous hissing sounds his earphones gave off. He flicked off the radio and opened his face plate. Cold dry air filled his lungs.

There were no inhabitants. There could not be any. But there was this colossal artifact of unguessable purpose. There was no life on this planet, but early during today's storm—and he suspected at other times when he could neither see nor hear—huge areas of the roof plates had

turned together to dump down their accumulated loads of sand. As he breathed in the first breaths of cold air, he heard a roaring somewhere within the forest of pillars. At a guess, it was another dumping of sand from the roof. It stopped. Another roaring, somewhere else. Yet another. Section by section, area by area, the sand that had piled on the roof at the top of the iron columns was dumped down between the columns' bases.

Stan flicked on the tiny instrument lights and looked at the motor of the space skid. The needle was against the pin at zero. He considered, and shrugged. Rob Torren would come presently to fight him to the death. But it would take the *Stallifer* ten days or longer to reach Earth, then three or four days for the microscopic examination of every part of the vast ship in grim search for him. Then there'd be an inquiry. It might last a week or two weeks or longer. The finding would be given after deliberation which might produce still another delay of a week or even a month. Rob Torren would not be free to leave Earth before then. And then it would take him days to obtain a space yacht and—because a yacht would be slower than the *Stallifer*—two weeks or so to get back here. Three months in all perhaps. Stan's food wouldn't last that long. His water supply wouldn't last nearly as long at that. If he could get up to the icecap there would be water, and on the edge of the ice he could plant some of the painstakingly developed artificial plants whose seeds were part of every abandon ship kit. They could live and produce food under almost any set of planetary conditions. But he couldn't reach the polar cap without power the skid didn't have.

He straddled the little device. He pointed it upward. He rose sluggishly. The absurd little vehicle wabbled crazily. Up, and up, and up toward the uncaring stars. The high thin columns of steel seemed to keep pace with him. The roof of this preposterous shed loomed slowly nearer, but the power of the skid was almost gone. He was ten feet below the crest when diminishing power no longer gave thrust enough to rise. He would hover here for seconds, and then drift back down again to the sand, for good.

He flung his kit of food. Upward. It sailed over the sharp edge of the roof and landed there. The skid was

thrust down by the force of the throw, but it had less weight to lift. It bounced upward, soared above the roof, and just as its thrust dwindled again, Stan landed it.

He found—nothing.

To be exact, he found the columns were joined by massive girders of steel fastening them in a colossal open grid. Upon those girders which ran in a line due north and south—reckoning the place of sunset to be west—huge flat plates of metal were slung, having bearings which permitted them to be rotated at the will of whatever unthinkable constructor had devised them. There were small bulges which might contain motors for the turning. There was absolutely nothing but the framework and the plates and the sand some three hundred feet below. There was no indication of the purpose of the plates or the girders or the whole construction. There was no sign of any person or creature using or operating the slabs. It appeared that the grid was simply a monotonous, featureless, insanely tedious construction which it would have taxed the resources of Earth to build—it stretched far, far beyond the horizon—but did nothing and had no purpose save to gather sand on its upper surfaces and from time to time dump that sand down to the ground. It did not make sense.

Stan had a more immediate problem than the purpose of the grid, though. He was three hundred feet above ground. He was short of food and hopelessly short of water. When day come again, this place would be the center of a hurricane of blown sand. On the ground, lashed to a metal column, he had been badly buffeted about even in his spacesuit. Up here the wind would be much stronger. It was not likely that any possible lashings would hold him against such a storm. He could probably get back to the ground, of course, but there seemed no particular point to it.

As he debated, there came a thin, shrill whistling overhead. It came from the far south, and passed overhead, descending, and—going down in pitch—it died away to the northward. The lowering of its pitch indicated that it was slowing. The sound was remarkably like that of a small spacecraft entering atmosphere incompletely under

control, which was unthinkable, of course, on the solitary unnamed planet of Khor Alpha. Stan felt very, very lonely on a huge plate of iron thirty stories above the ground, on an alien planet under unfriendly stars, and with this crytpic engineering monstrosity breaking away to sheer desert on one side and entending uncounted miles in all others. He flicked on his suit radio, without hope.

There came the loud, hissing static. Then under and through it came the humming carrier wave of a low power transmitter sending on emergency power.

"Help call! Help call! Space yacht *Erebus* grounded on planet of Khor Alpha, main drive burned out, landed in darkness, outside conditions unknown. If anyone hears, p-please answer! M-my landing drive smashed when I hit ground, too! Help call! Help call! Space yacht *Erebus* grounded on planet of Khor Alpha, main drive burned out, landed in darkness—"

Stan Buckley had no power. He could not move from this spot. The *Erebus* had grounded somewhere in the desert which covered all the planet but this one structure. When dawn came, the sandstorm would begin again. With its main drive burned out, its landing drive smashed—when the morrow's storms began it would be strange indeed if the whirlwinds did not scoop away sand from about the one solid object they'd encounter, so that the little craft would topple down and down and ultimately be covered over; buried under perhaps hundreds of feet of smothering stuff.

He knew the *Erebus*. Of course. It belonged to Esther Hume. The voice from it was Esther's, the girl he was to have married, if Rob Torron hadn't made charges disgracing him utterly. Tomorrow she would be buried alive in the helpless little yacht, while he was unable to lift a finger to her aid.

3

HE WAS TALKING to her desperately when there was a vast, labored tumult to the west. It was the product of ten thousand creakings. He turned, and in the starlight he saw great flat plates—they were fifty feet by a hundred and more—turning slowly. An area a mile square changed its appearance. Each of the flat plates in a hundred rows of fifty plates had turned sidewise, to dump its load of settled sand. A square mile of plates turned edges to the sky, and turned back again. Creakings and groanings filled the air, together with the soft roaring noise of the falling sand. A pause. Another great section of a mile each way performed the same senseless motion. Pure desperation made Stan say sharply;

"Esther! Cut off for half an hour! I'll call back! I see the slimmest possible chance, and I've got to take it! Half an hour, understand?"

He heard her unsteady assent. He scrambled fiercely to the nearest of the huge plates. It was, of course, insane to think of such a thing. The plates had no purpose save to gather loads of sand and then to turn and dump them. But there were swellings at one end of each plate—where the girders to which they clung united to form this preposterous elevated grid. Those swellings might be motors. He dragged a small cutting torch from the tool kit. He snapped its end. A tiny, savage, blue-white flame appeared in mid-air half an inch from the torch's metal tip.

He turned that flame upon the rounded swelling at the end of a monster slab. Something made the slabs turn. By reason, it should be a motor. The swellings might be housing for motors. He made a cut across such a swelling. At the first touch of the flame something smoked luridly and frizzled before the metal grew white-hot and flowed aside before the flame. There had been a coating on the

iron. Even as he cut, Stan realized that the columns and the plates were merely iron. But the sandblast of the daily storms should erode the thickest of iron away in a matter of weeks, at most. So the grid was coated with a tough, elastic stuff—a plastic of some sort—which was not abraded by the wind. It did not scratch because it was not hard. It yielded, and bounced sand particles away instead of resisting them. It would outwear iron, in the daily sandblast, by a million times, on the principle by which land vehicles on Earth use rubber tires instead of metal for greater wear.

He cut away a flap of metal from the swelling. He tossed it away with his space-gloved hands. His suit flash illuminated the hollow within. There was a motor inside, and it was remarkably familiar, though not a motor such as men made for the purpose of turning things. There was a shaft. There were four slabs of something that looked like graphite, rounded to fit the shaft. That was all. No coils. No armature. No signs of magnets. Man use this same principle, but for a vastly different purpose. Men used the reactive thrust of allotropic graphite against an electric current in their space ships. The Bowdoin-Hall field made such a thrust incredibly efficient, and it was such graphite slabs that drove the *Stallifer*—though these were monsters weighing a quarter of a ton apiece, impossible for the skid to lift. Insulated cables led to the slabs in wholly familiar fashion. The four cables joined to two and vanished in the seemingly solid girders which formed all the monster grid.

Almost without hope, Stan slashed through two cables with his torch. He dragged out the recharging cable of the skid. He clipped the two ends to the two cut cables. They sparked! Then he stared. The meter of the skid showed current flowing into its power bank. An amazing amount of current. In minutes, the power storage needle stirred from its pin. In a quarter of an hour it showed half charge. Then a creaking began all around.

Stan leaped back to one of the cross girders just as all the plates in an area a mile square about him began to turn. All but the one whose motor housing he had cut through. All the other plates turned so that their edges

pointed to the stars. The sand piled on them by the day storm poured down into the abyss beneath. Only the plate whose motor housing Stan had cut remained unmoving. Sparks suddenly spat in the metal hollow, as if greater voltage had been applied to stir the unmoving slab. A flaring, lurid, blue-white are burned inside the hollow. Then it cut off.

All the gigantic plates which had turned their edges skyward went creaking loudly back to their normal position, their flat sides turned to the stars. Nothing more happened. Nothing at all.

In another ten minutes, the skid's meter showed that its power bank was fully charged. Stan, with plenty to think about, straddled the little object and went soaring northward like a witch on a broom, sending a call on his suit radio before him.

"Coming, Esther! Give me a directional and let's make it fast! We've got a lot to do before daylight!"

He had traveled probably fifty miles before her signal came in. Then there was a frantically anxious time until he found the small helpless space yacht, tumbled on the desert sand, with Esther peering hopefully out of the airlock as he swooped down to a clumsy landing. She was warned and ready. There was no hope of repairing the drive. A burned out drive to operate in a Bowdoin-Hall field calls for bars of allotropic graphite,—graphite in a peculiar energy state as different from ordinary graphite as carbon diamond is from carbon coal. There were probably monster bars of just such stuff in the giant gird's motors, but the skid could not handle them. For tonight, certainly repair was out of the question. Esther had hooked up a tiny, low power signaling device which gave out a chirping wave every five seconds. She wore a spacesuit, had two abandon ship kits, and all the water that could be carried.

The skid took off again. It was not designed to work in a planet's gravitational field. It used too much power, and it wobbled erratically, thus for sheer safety Stan climbed high. With closed face plates the space suited figures seemed to soar amid the stars. They could speak only by radio, near as they were.

"Wh-where are we going, Stan?"

"Icecap," said Stan briefly. "North pole. There's water there,—or hoar frost, anyhow. The day storms won't be so bad—if there are storms at all. In the tropics on this planet the normal weather is a typhoon-driven sandstorm. We'll settle down in the polar area and wait for Rob Torren to come for us. It may be three months or more."

"Rob Torren—"

"He helped me escape," said Stan briefly. "Tell you later. Watch ahead."

He'd had no time for emotional thinking since his landing, and particularly since the landing of the little space yacht now sealed up and abandoned to be buried under the desert sand. But he knew how Esther came to be here. She'd had news of the charges Rob Torren had brought against him. She hadn't believed them. Not knowing of his embarcation for Earth for courtmartial,—the logical thing would have been a trial at advanced base—she'd set out desperately to assure him of her faith. She couldn't get a liner direct, so she'd left alone in her little space yacht. In a sense, it should have been safe enough. Craft equipped with Bowdoin-Hall drive were all quite capable of interstellar flight. Power was certainly no problem any more, and with extra capacitors to permit low frequency pulsations of the drive field, and mapped dwarf white stars as course markers, navigation should be simple enough. The journey, as such, was possibly rash but it was not foolhardy. Only—she hadn't fused her drive when she changed its pulsation frequency. When she was driving past Khor Alpha, her Bowdoin-Hall field had struck the space skid on which Stan was trying to make this planet, and the field had drained his power. The short circuit blew the skid's fuse, but it burned out the yacht's more delicate drive. Specifically, it overloaded and ruined the allotropic carbon blocks which made the drive work. Esther's predicament was caused not only by her solicitude for Stan, but by the drive of the skid on which he'd escaped from the *Stallifer.*

He blamed himself. Bitterly, but even more he blamed Rob Torren. Hatred surged up in him again for the man who had promised to come here and fight him to the death. He said quietly:

"Rob's coming here after me. Talk about that later. He didn't guess this place would be without water and with daily hurricanes everywhere except—I hope!—the poles. He thought I'd be able to make out until he could come back. We've got to! Watch out ahead for the sunset line. We've got to follow it north until we hit the polar cap. With water and our kits we should be able to survive indefinitely."

The spacesuited figures were close together—in fact, in contact. But there was no feeling of touching each other through the insulating, almost inflexible armor of their suits. Sealed as they were in their helmets and communicating only by phone in the high stratasphere, neither could feel the situation suitable for romance. Esther was silent for a time. Then she said:

"You told me you were out of power—"

"I was," he told her. "I got some from the local inhabitants,—if they're local."

"What—"

He described the preposterous, meaningless structure on the desert. Thousands of square miles in extent. Cryptic and senseless and of unimaginable significance.

"Every slab has a motor to turn it. I cut into a housing and there was power there. I loaded up with it. I can't figure the thing out. There's nowhere that a civilized or any other race could live. There's nothing those slabs could be for!"

There was a thin line of sunlight far ahead. Traveling north, they drove through the night and overtook the day. They were very high indeed, now, beyond atmosphere and riding the absurd small skid that meteor miners use. They saw the dwarf white sun Khor Alpha. Its rays were very fierce. They passed over the dividing line between day and night, and far, far ahead they saw the hazy whitishness which was the polar cap of this planet.

It was half an hour before they landed, and when they touched ground they came simply to a place where wind blown sand ceased to be powdery and loose, and where there was plainly dampness underneath. The sun hung low indeed on the horizon. On the shadow side of sand hillocks there was hoar frost. All the moisture of the planet was deposited in the sand at its poles, and during

the long winter nights the sand was frozen so that even during the summer season unthinkable frigidity crept out into every shadow.

Stan nodded at a patch of frost on the darker side of a half-mile sand dune.

"Sleeping," he said dryly," will be done in spacesuits. This ground will be cold where the sun doesn't hit! Do you notice that there's no sign of anything growing anywhere? Not even moss?"

"It's too cold?"

"Hardly!" said Stan. "Mosses and lichens grow on Earth as far north as the ground ever thaws. And on every other planet I've ever visited. There'd be plants here if anywhere, because there's water here. There simply can't be any life on this planet. None at all!"

Then the absurdity of the statement struck him. There was that monstrous grid, made by intelligence of some sort and using vast resources. But—

"Darn!" said Stan. "How can there be life here? How can plants live in perpetual sandstorms? How can animals live without plants to break down minerals and make them into food? How can either plants or animals live without water? If there were life anywhere, it would have to be near water, which means here. And if there's none here there can't be any life at all—"

They reached the top of the dune. Esther caught her breath. She pointed.

There, reaching across the dampened sand, was a monstrous and a horrifying trail. Something had come from the zones where the sandstorms raged. It had passed this way, moving in one direction, and it had passed again, going back toward the stormy wastes. By the trail, it had ten or twelve or twenty legs, like some unthinkable centipede. The tracks of its separate sets of legs were separated by fifteen feet. Each footprint was two yards across.

4

FOR THREE days by the chrono on the space skid, the hard-white sun Khor Alpha circled the horizon without once setting. Which was natural, because this was one of the poles of Khor Alpha's only planet, and this was summer. In those three days Stan and Esther saw no living thing. No bird, beast, or insect; no plant, moss, or lichen. They had planted the seeds from their abandon ship kits, included in such kits because space castaways may have to expect to be isolated not for weeks or months, but perhaps for all their lives. The seeds would produce artificially developed plants with amazing powers of survival and adaptation and food production. On the fourth day—clock time—the first of the plants appeared above the bank of damp sand in which they had been placed. In seven days more there would be food from them. If one plant of the lot was allowed to drop its own seeds, in time there would be a small jungle of food plants on which they could live.

For the rest, they lived in a fashion lower than any savage of Earth. They had no shelter. There was no building material but sand. They slept in their spacesuits for warmth. They had no occupation save that of waiting for the plants to bear food, and after that of waiting for Rob Torren to come.

And when he came, the presence of Esther changed everything. When Torren arrived to fight a duel to the death with Stan, the stake was to have been ultimately Esther's hand. But if she were present, if she knew the true story of Torren's charges against Stan and their falsity, he could have no hope of winning her by Stan's death. He would have nothing to gain by a duel. But he would gain by the murder of one or both of them. Safety from the remotest chance of later exposure, at any rate, and revenge for the failure of his hopes. If he managed to kill

Stan by any means, fair or foul, Esther would be left wholly at his mercy.

So Stan brooded, hating Rob Torren with a desperate intensity surpassing even the hatred he'd felt on the *Stallifer.* A large part of his hatred was due to helplessness. There was no way to fight back. But he tried desperately to think of one.

On the fourth day he said abruptly:

"Let's take a trip, Esther."

She looked at him in mute inquiry.

"For power," he said, "and maybe something more. We might be able to find out something. If there are inhabitants on this planet, for instance. There can't be, but there's that beast—"

Esther nodded.

"Maybe it's somehow connected with whatever or whoever built that grid, that checkerboard arrangement I told you about. Something or somebody built that, but I can't believe anything can live in those sandstorms!" said Stan.

They'd followed the huge trail that had been visible on their first landing in the polar regions. The great, two-yard-across pads of the monster had made a clear trail for ten miles past the point of their discovery. At the end of the trail there was a great gap in a cliff of frozen sand. The thing seemed to have devoured tons of ice-impacted stuff. Then it had gone back into the swirling sandy wastes. It carried away with it cubic yards—perhaps twenty or thirty tons—of water-filled frozen sand.

But reason insisted that there could be no animal life on a planet without plants, and no plants on a desert which was the scene of daily typhoons, hourly hurricanes, and with no water anywhere upon it save at the poles. There was no vegetation there. A monster with dozens of six-foot feet, and able to consume tons of wetted sand for moisture, would need vast quantities of food for energy alone. It was unthinkable that food was to be found in the strangling depths of sandstorms.

"There's another thing," Stan added. "With power to spare I could fuse sand into something like a solid. Make a house, maybe, and chairs to sit on, instead of having to wear our spacesuits all the time. Maybe we could even heat the inside of a house!"

Esther smiled at him.

"Darling," she said wrily, "you've no idea how glad I'd be of a solid floor to walk on instead of sand and a chair to sit on, even if we didn't have a roof!"

They had been, in effect, in the position of earth castaways marooned on a sand cay which had not even seashells on it or fish around it. There was literally nothing they could do but talk.

"And," she added, "if we could make a tub to take a bath in—"

She brightened at the thought. Stan hadn't told her of his own reasons for having no hope. There was no point in causing her despair in advance.

"We'll see what we see," said Stan. "Climb aboard."

The space skid was barely five feet long. It had a steering bar and a thick body which contained its power storage unit and drive. There was the seat which one straddled, and the strap to hold its passenger. Two people riding it in bulky spacesuits was much like riding double on a bicycle, but Stan would not leave Esther alone. Not since they'd seen that horrifying trail!

They rose vertically and headed south in what was almost a rocket's trajectory. Stan, quite automatically, had noted the time of sunrise at the incredible structure beside which he'd landed. Later he'd noted as automatically the length of the planet's day. So to find his original landing place he had only to follow the dawn line across the planet's surface, with due regard for the time consumed in traveling.

They were still two hundred miles out in space when he sighted the grid. He slanted down to it. It was just emerging from the deep black shadow of night. He swooped to a landing on one of the hundred foot slabs of hinged metal three hundred feet above ground. It was clear of sand. It had been dumped.

Esther stared about her, amazed.

"But—people made this, Stan!" she insisted. "If we can get in touch with them—"

"You sit there," said Stan briefly. He pointed to an intersection of the crisscrossing girders. "It takes power to travel near a planet. My power bank is half drained already. I'd better fill it up again."

He got out his cutting torch. He turned it upon a motor

housing. The plastic coating frizzled and smoked. It peeled away. Metal flared white-hot and melted.

There was a monstrous creaking. All the plates in a square mile turned. Swiftly. Only a desperate leap saved Stan from a drop to the desert thirty stories below.

The great slabs pointed their edges to the sky. Stan waited. Esther said startledly.

"That was on purpose, Stan!"

"Hardly," said Stan. "They'll turn back in a minute."

But they did not turn back. They stayed tilted toward the dawning sky.

"You may be right, at that," said Stan shortly. "We'll see. I'll try another place."

Five minutes later they landed on a second huge slab of black metal, miles away. Without a word, Stan ensconced Esther on the small platform formed by crossing girders. He took out the torch again. The tiny, blue-white flame. Smoke at its first touch. Metal flowed—

With a vast cacchination of squeakings, a mile-square section shifted like the first . . .

"Something," said Stan grimly," doesn't want us to have power. Maybe they can stop us, and maybe not."

The swelling which was the motor housing was just within reach from the immovable girder crossing on which Esther waited. Stan reached out. The torch burned with quiet fierce flame. A great section of metal fell away, exposing a motor exactly like the one he'd examined—slabs of allotropic graphite and all. He thrust in and cut the cables. He reached in with the charging clips—

There was a crackling report in the space skid's body. Smoke came out.

Stan examined the damage with grimly set features.

"Blew another fuse," he said shortly. "We're licked. When I took power the first time, I temporarily ruined a motor. It's been found out. So the plates turned, today, to—scare me away, perhaps, as soon as I cut into another. When I didn't scare and severed the cables, high-voltage current was shot into the cables to kill me or ruin whatever I was using the power for. Whether there's life here or not, there's intelligence—and a very unpleasant kind, too!"

He re-fused the skid, scowling.

"No attempt to communicate with us!" he said savagely.

"They'd know somebody civilized cut into that motor housing! They'd know it was an emergency! You'd think—"

He stopped. A faint, faint humming sound became audible. It seemed to come from nowhere in particular—or from everywhere. It was not the formless humming of a rising wind, though the before-dawn twilight was already light and the sky was bright with approaching day. This sound was a humming punctuated by hurried, rhythmic clankings. It was oddly like the sound of cars traveling over an old-fashioned railway, one with unwelded rail joints. Esther jerked her head about.

"Stan! Look there!"

Something hurtled toward them in the gray dawn light. It was a machine. Even in the first instant of amazement, Stan could see what it was and what it was designed to do. It was a huge, bulbous platform above stiltlike legs. At the bottoms of the legs were wheels. The wheels ran on the cross girders as on a railroad track, and the body of the thing was upraised enough to ride well above the sidewise-tilted slabs. There were other wheels to be lowered for travel on the girders which supported the slabs. It was not a flying device, but a rolling one. It could travel in either of two directions at right angles to each other, and had been designed to run only on the great grid which ran beyond the horizon. It was undoubtedly a maintenance machine, designed to reach any spot where trouble developed, for the making of repairs, and it was of such weight that even the typhoonlike winds of a normal day on this world would not lift it from its place.

It came hurtling toward them at terrific speed. It would roll irresistably over anything on the girders which were its tracks.

"Get on!" snapped Stan. "Quick!"

Esther moved as swiftly as she could, but spacesuits are clumsy things. The little skid shot skyward only part of a second before the collossus ran furiously over the place where they had been. A hundred feet beyond, it braked and came to a seemingly enraged stop. It stood still as if watching the hovering, tiny skid with its two passengers.

"It looks disappointed," said Stan dourly. "I wonder if it wants to chase us?"

He sent the skid darting away. They landed. In seconds the vibration caused by the huge machine's motion began and grew loud. They saw it race into view. As it appeared, instantly a deafening clamor began. Slabs in all directions rose to their vertical position, so that the two humans could not dodge from one row of girders to another. Then with a roar and a rush the thing plunged toward them once more.

Again the skid took off. Again the huge machine overran the spot where they had been, then stopped short as if baffled. Stan sent his odd craft off at an angle. Instantly the gigantic thing was in motion, moving with lightning speed in one direction, stopping short to move on a new course at right angles to the first, and so progressing in zigzag but very swift pursuit.

"Won't you land and let me crush you, said the monster to us two," said Stan drily. "They won't let us have any more power, and we haven't any more to waste. But still—"

He listened to his suit radio, twisting the tuning dials as he sent the skid up in a spiral.

"I'm wondering," he observed, "if they're trying to tell us something by radio. And meanwhile I'd like a more comprehensive view of this damned checkerboard!"

A faint, faint, wavering whine came into the headphones.

"There's something," he commented. "Not a main communication wave, though. A stray harmonic, and of a power beam, I think. They must use plenty of short waves!"

But he was searching the deadly monotony of the grid below him as he spoke. Suddenly, he pointed. All the area below them to the horizon was filled with the geometric shapes of grid and squares. But one space was different from the rest. Four squares were thrown into one, there. As the skid dived for a nearer view, that one square was seen to be a deep, hollow shaft going down toward the very vitals of this world. As Stan looked, though, it filled swiftly with something rising from its depths. The lifting thing was a platform, and things moved about on it.

"That's that!" said Stan hardily.

He shot the skid away in level flight at topmost speed,

with the great rolling machine following helplessly and ragingly on its zigzag course below.

The horizon was bright, now, with the sunrise. As Stan lifted for the rocketlike trajectory that would take him back to the polar regions, the white sun came up fiercely. There was a narrow space on which the dawn rays smote so slantingly that the least inequality of level was marked by shadow. Gigantic sand dunes were outlined there. Beyond, where the winds began, there was only featureless swirling dust.

Stan was very silent all the way back. Only once he said shortly:

"Our power units will soak up a pretty big charge in a short time. We packed away some power before the fuse blew."

There was no comment for Esther to make. There was life on the planet. It was life which knew of their existence and presence—and had tried to kill them for the theft of some few megawatts of power. It would not be easy to make terms with the life which held other life so cheaply.

With the planet's only source of power now guarded, matters looked less bright than before. After they had reached the icecap, they slanted down out of airlessness to the spot which was their home because their seeds had been planted there. As they dived down for a landing, their real situation appeared.

There was a colossal object with many pairs of legs moving back and forth over the little space where their food plants sprouted. In days, those plants would have yielded food. They wouldn't yield food now.

Their garden was being trampled to nothingness by a multilegged machine of a size comparable to the other machine which had chased them on the grid. It was fifty feet high from ground to top, and had a round, tanklike body all of twenty feet in diameter. Round projections at one end looked like eyes. It moved on multiple legs which tramped in orderly confusion. It stamped the growing plants to pulped green stuff in the polar sand. It went over and over and over the place where the food necessary for the humans' survival had promised to grow. It stamped and stamped. It destroyed all hope of food. It destroyed all hope.

Because, as Stan drove the skid down to see the machine more closely, it stopped in its stamping. It swung about to face him, with a curiously unmachinelike ferocity. As Stan veered, it turned also. When he sped on over it and beyond, it wheeled and came galloping with surprising speed after him.

Then they saw another machine. Two more. Three. They saw dark specks here and there in the polar wastes, every one a machine like the one which had tramped their food supply out of existence. Every one changed course to parallel and approached the skid's line of travel. If they landed, the machines would close in.

There was only so much power. The skid could not stay indefinitely aloft. And anywhere that they landed—

5

BUT THEY did land. They had to. It was a thousand miles away, on the dark side of the planet, in a waste of sand which looked frozen in the starlight. The instant the skid touched ground, Stan made a warning gesture and reached over to turn off Esther's suit radio. He opened his own face plate and almost gasped at the chill of the midnight air. With no clouds or water vapor to hinder it, the heat stored up by day was radiated out to the awful chill of interstellar space at a rate which brought below zero temperatures within hours of sundown. At the winter pole of the planet, the air itself must come close to turning liquid from the cold. But here, and now, Stan nodded in his helmet as Esther opened her face plate.

"No radio," he told her. "They'll hardly be able to find us in several million square miles if we don't use radio. But now you get some sleep. We're going to have a busy time, presently!"

Esther hesitated, and said desperately:

"But—who are they? What are they? Why do they want to kill us?"

"They're the local citizens," said Stan. "I was wrong, There are inhabitants. I've no more idea what they may be like than you have. But I suspect they want to kill us simply because we're strangers."

"But how could an intelligent race develop on a planet like this?" demanded Esther unbelievingly. "How'd they stay alive while they were developing?"

Stan shrugged his shoulders.

"Once you admit that a thing is so," he said drily, "you can figure out how it happened. This sun is a dwarf white star. That means that once upon a time it exploded. It flared out into a nova. Maybe there were other planets nearer to it than this, and they volatilized when their sun blew up. Everything on this planet, certainly, was killed, and for a long, long time afterward it was surely uninhabitable by any standard. There's a dwarf star in the Crab Nebula which will melt iron four light hours away, and that was a nova twelve hundred years ago. It must have been bad on this planet for a long time indeed. I'm guessing that when the first explosion came the inner planets turned to gas and this one had all its seas and forests and all its atmosphere simply blasted away to nothingness. Everything living on its surface was killed. Even bacteria in the soil turned to steam and went off into space. That would account for the absolute absence of life here now."

"But—" said Esther.

"But," said Stan, "the people—call them people—who lived here were civilized even then. They knew what was coming. If they hadn't interstellar drive, flight would do them no good. They'd have nowhere to go. So maybe they stayed. Underground. Maybe they dug themselves caves and galleries five—ten—twenty miles down. Maybe some of those galleries collapsed when the blowup came, but some of the people survived. They'd stay underground for centuries. They'd have to! It might be fifty thousand years that they stayed underground, while Khor Alpha blazed less and less fiercely, and they waited until they could come up again. There was no air for a while up here. They had to fight to keep alive, down in the planet's vitals. They made a new civilization, surrounded by rock, with no more

thought of stars. They'd be hard put to it for power, too. They couldn't well use combustion, with a limited air supply. They probably learned to transform heat directly to power. You can take power—electricity—and make heat. Why not the other way about? For fifty thousand years and maybe more they had to live without even thinking of the surface of their world. But as the dwarf star cooled off, they needed its heat again."

He stopped. He seemed to listen intently. But there was no sound in the icy night. There were only bright, unwinking stars and an infinity of sand—and cold.

"So they dug up to the surface again," he went on. "Air had come back, molecule by molecule from empty space, drawn by the same gravitation that once had kept it from flying away. The fused-solid rock of the surface, baked by day and frozen by night, had cracked and broken down to powder. When air came again and winds blew, it was sand. The whole planet was desert. The people couldn't live on the surface again. They probably didn't want to. But they needed power. So they built that monster grid they're so jealous of."

"You mean," Esther demanded incredulously, "that's a generator?"

"A transformer," corrected Stan. "Solar heat to electricity. Back on earth the sun pours better than a kilowatt of energy on every square yard of Earth's surface in the tropics, over three million kilowatts to the square mile. This checkerboard arrangement is at least a hundred and fifty by two hundred miles. The power's greater here, but on earth that would mean ninety thousand million kilowatts. More than sixty thousand million horsepower, more than the whole Earth uses even now! If those big slabs convert solar radiation into power—and I charged up the skid from one of them—there's a reason for the checkerboard, and there's a reason for dumping the sand—it would hinder gathering power—and there was a reason for getting upset when somebody started to meddle with it. They're upset! They'll have the conservation of moisture down to a fine point, down below, but they made those leggy machines to haul more water from the poles. When they set them all to hunting us, they're very

much disturbed! But luckily they'd never have worked out anything to fly with, underground, and they're not likely to have done so since, considering the storms and all."

There was silence. Esther said slowly:

"It's—very plausible, Stan. I believe it. They'd have no idea of space travel, so they'd have no idea of other intelligent races, and actually they'd never think of castaways. They wouldn't understand, and they'd try to kill us to study the problem we presented. That's their idea, no doubt. They've all the resources of a civilization that's old and scientific. They'll apply them all to get us, and they won't even think of listening to us! Stan! What can we do?"

Stan said amusedly, there in the still, frigid night of an unnamed planet:

"Why—we'll do plenty! We're barbarians by comparison with them, Esther, and barbarians have equipment civilized men forget. All savages have spears, but a civilized man doesn't even always carry a pocket knife. If we can find the *Erebus,* we can probably defy this whole planet, until they put their minds to developing weapons. But right now you go to sleep. I'll watch."

Esther looked at him dubiously. Five days of sandstorms should have buried the little yacht irrecoverably.

"If it's findable," she said. Then she added wistfully, "But it would be nice to be on the *Erebus* again. It would feel so good to walk around without a spacesuit! And—" she added firmly; "after all, Stan, we are engaged! If you think I like trying to figure out some way of getting kissed through an opened face plate—!"

Stan said gruffly:

"Go to sleep!"

He paced up and down repeatedly. They were remarkably unlike castaways in the space tale tape-dramas. In those works of fiction, the hero is always remarkably ingenious. He contrives shelters from native growths on however alien a planet he and the heroine may have been marooned on; he is full of useful odd bits of information which enable him to surprise her with unexpected luxuries, and he is inspired when it comes to signaling devices. But in five days on this planet, Stan had been able to make no use of any natural growth because there wasn't any. He'd found no small luxuries for Esther because there was liter-

ally nothing about but sand. There was strikingly little use in a fund of odd bits of information when there was only desert to apply it to—desert and sandstorms. What he'd just told Esther was a guess; the best guess he could make, and a plausible one, but still a guess. The only new bit of information he'd picked up so far was the way the local inhabitants made electric motors.

He watched the chrono, and a good half-hour before night would strike the checkerboard grid he was verifying what few preparations he could make. A little later he waked Esther, just about twenty minutes before the sunset line would reach the grid, they soared upward to seek it. If Stan's plan didn't work, they'd die. He was going to gamble their lives and the last morsel of power the skid's power unit contained, on information gained in two peeps at slab motors on the grid, and the inference that all motors on this planet would be made on the same principle. Of course, as a subsidiary gamble, he had also to bet that he in an unarmed and wrecked space yacht could defy a civilization that had lived since before Khor Alpha was a dwarf star.

They soared out of atmosphere on a trajectory that saved power but was weirdly unlike an normal way of traveling from one spot on a planet's surface to another. Beneath them lay the vast expanse of the desert, all dense, velvety black except for one blindingly bright area at its Western rim. That bright area widened as they neared it, overtaking the day. Suddenly the rectangular edges of the grid shed appeared, breaking the sharp edge of dusk.

The *Erebus* had grounded roughly fifty miles northward from the planet's solitary structure. Stan turned on his suit radio and listened intently. There was no possible landmark. The dunes changed hourly during the day and on no two days were they ever the same. He skimmed the settling sand clouds of the dusk belt. Presently he was sure he had overshot his mark.

He circled. He circled again. He made a great logarithmic circle out from the point he considered most likely. The power meter showed the drain. He searched in the night, with no possible landmark. Sweat came out on his face.

Then he heard a tiny click. Sweat ran down his face. He worked desperately to localize the signal Esther had set to

working in the yacht before she left it. When at last he landed and was sure the *Erebus* was somewhere under the starlit sand about him, he looked at the power gauge and tensed his lips. He pressed his space helmet close to Esther's, until it touched. He spoke, and his voice carried by metallic conduction without the use of radio.

"We might make it if we try now. But we're going to need a lot of power at best. I'm going to gamble the local yokels can't trace a skid drive and wait for morning, to harness the whirlwinds to do our digging for us."

Her voice came faintly back to him by the same means of communication.

"All right, Stan."

She couldn't guess his intentions, of course. They were probably insane. He said urgently:

"Listen! The yacht's buried directly under us. Maybe ten feet, maybe fifty, maybe Heaven knows how deep! There's a bare chance that if we get to it we can do something, with what I know now about the machines in use here. It's the only chance I know, and it's not a good one. It's only fair to tell you—"

"I'll try anything," said her voice in his helmet, "with you."

He swallowed. Then he stayed awake and desperately alert, his suit microphones at their highest pitch of sensitivity, during the long and deadly monotonous hours of the night.

There was no alarm. When the sky grayed to the eastward, he showed her how he hoped to reach the yacht. The drive of the skid, of course, was not a pulsatory field such as even the smallest of space yachts used. It was more nearly an adaptation of a meteor repeller beam, a simple reactive thrust against an artificial mass field. It was the first type of electronic drive ever to lift a ship from earth. For takeoff and landing and purposes like meteor mining it is still better than the pulsating-field drive by which a ship travels in huge if unfelt leaps. But in atmosphere it does produce a tremendous back blast of repelled air. It is never used on atmosphere fliers for that very reason, but Stan proposed to make capital of its drawback for his purpose.

When he'd finished his explanation, Esther was more than a little pale, but she smiled gamely.

"All right, Stan. Go ahead!"

"We'll save power if we wait for the winds," he told her.

Already, though, breezes stirred across the dawn-lit sand. Already there were hot breezes. Already the fine, impalpable sand dust which settled last nightfall was rising in curious opaque clouds which billowed and curled and blotted out the horizon. But the grid was hidden anyhow by the bulge of the planet's surface.

Stan pointed the little skid downward in a hollow he scooped out with his space-gloved hands. He set the gyros running to keep it pointed toward the buried yacht. He had Esther climb up behind him. He lashed the two of them together, and strapped down to the skid. He waited.

In ten minutes after the first sand grains pelted on his armor, the sky was hidden by the finer dust. In twenty there were great gusts which could be felt even within the spacesuits. In half an hour a monster gale blew.

Stan turned on the space skid's drive. It thrust downward toward the sand and the buried yacht. It thrust upward against the air and pelting sand.

In three-quarters of an hour the sandstorm had reached frenzied violence, but the skid pushed down from within a little hollow. Its drive thrust up a spout of air. That spout drew sand grains with it. But it was needful to increase the power. After an hour a gigantic whirlwind swept around them. It tore at the two people and the tiny machine. It sucked up such a mass of powdery sand particles that its impact on the spacesuits was like a savage blow. Emptiness opened beneath the skid and sand went whirling up in a sand spout the exact equivalent of a water spout at sea. Stan and Esther and the skid itself would have been torn away by its violence but that the skid's drive was on full, now. The absurd little traveler thrust sturdily downward. When sand was drawn away by wind, it burrowed down eagerly to make the most of its gain.

Its back thrust kept a steady, cone-shaped pressure on the sand which would have poured in upon it. Stan and Esther were buried and uncovered and buried again, but the skid fought valorously. It strove to dig deeper and to

fling away the sand that would have hidden it from view. It remained, actually, at the bottom of a perpetually filling pit which it kept unfilled by a geyser of upflung sand from its drive.

In twenty minutes more another whirlwind touched the pit briefly. The skid—helped by the storm—dug deeper yet. There came other swirling maelstroms . . .

The nose of the skid touched solidly. It had burrowed down nearly fifty feet, with the aid of whirlwinds, and come to the yacht *Erebus*.

But it was another hour before accident and fierce efforts on Stan's part combined to let him reach the airlock door, and maneuver the skid to keep that doorway clear, and for Esther to climb in—followed by masses of slithering sand—and Stan after her.

Inside the buried yacht, Stan fumbled for lights. He made haste to turn off the signaling device that had led him back to it deep under the desert's surface. It was strangely and wonderfully still here, buried under thousands of tons of sand.

Esther slipped out of her spacesuit and smiled tremulously at Stan.

"Now—?"

"Now," said Stan," if you want to you can start cooking. We could do with a civilized meal. I'll see what I can do toward a slightly less uncertain way of life.

He went forward. The *Erebus* was a small yacht, to be sure. It was a bare sixty feet overall, and of course as a pleasurecraft it had no actual armament. But within two bulging blisters at the bow the meteor repellers were mounted. In flight, in space, they could make a two-way thrust against stray bits of celestial matter, so that if a meteor was tiny it was thrust aside, or if too large the *Erebus* swerved away. From within Stan changed the focus of the beams. They had been set to send out tiny artificial matter beams no larger than a rifle bore. At ten miles such a beam would be six inches across, and at forty a bare two feet. He adjusted both to a quickly widening cone and pointed one up, the other down. One would thrust violently against the sand under the yacht, and the other against the sand over it. The surface sand, at least,

could rise and be blown away. The sand below would support the yacht against further settling.

He went back to where Esther laid out dishes.

"I've started something," he told her. "One repeller beam points up to make the sand over our heads effectively lighter so it can be blown away more easily. The storm ought to burrow right down to us, with that much help. After we're uncovered, we may, just possibly, be able to work up to the surface. But after that we've got to do something else. The repellers aren't as powerful as a drive, and it's hardly likely we could lift out of gravity on them. Even if we did, we're a few light centuries from home. To fix our interstellar drive we need the help of our friends of the grid."

Esther paused to stare.

"But they'll try to kill us!" she protested. "They've tried hard! And if they find us we've no weapons at all, not even a hand blaster!"

"To the contrary," said Stan drily, "we've probably the most ghastly weapon anybody ever invented, only it won't work on any other planet than this."

Then he grinned at her. He was out of his spacesuit too, now. The food he'd asked her to prepare was out on the table, but he ignored it. He took one step toward her. And then there came a muffled sound, picked up by the outside hull microphones. It grew in volume. It became a roar. Then the yacht shifted position. Its nose tilted upward.

"The first step," said Stan, "is accomplished. I can't stop to dine. But—"

He kissed her hungrily. Five days—six, now—in spacesuits with the girl one hopes to marry has its drawbacks. An armored arm around the hulking shoulders of another suit of armor—even with a pretty girl inside it—is not satisfying. To hold hands with three-eight-inch space gloves is less than romantic. And to try to kiss a girl three-quarters buried in a space helmet leaves much to the imagination. Stan kissed her. It took another shifting movement of the yacht, which toppled them the length of the cabin, to make him stop.

Then he laughed and went to the control room.

Vision screens were useless, of course. The little ship

was still most of her length under sand, but the repellers' cones of thrust had dug a great pit down to her. Now Stan juggled the repellers to take fullest advantage of the storm. At times—with both beams pushing up—the ship was perceptibly lifted by up-rushing air. Stan could be prodigal with power, now. The skid was sharply limited in its storage of energy, but all the space between the two skins of the *Erebus* was a power bank. It could travel from one rim of the Galaxy to the other without exhausting its store. The upward lift of whirlwinds—once there were six within ten minutes—and the thrusts of the repellers gradually edged the *Erebus* to the surface.

Before nightfall, it no longer lay in a sand pit. It was only half-buried in sand. The winds died down to merely savage gales, at twilight, and then slowly diminished to more angry gusts. At long last there was calm and even the impalpable fine dust that settled last no longer floated in the air. The stars shone; Stan was ready.

He turned on the ship's communicator and sent a full power wave out into the night. He spoke. What he said would be unintelligible, of course, but he said sardonically to the empty desert under the stars:

"Yacht *Erebus* calling! Down on the desert, every drive smashed, and not so much as a hand blast on board for a weapon. Maybe you'd like to come and get us!"

Then—and only then—he went and ate the meal Esther had made ready.

It was half an hour before the microphones gave warning. Then they relayed clankings and poundings and thuddings on the sand. It was the sound of heavy machines marching toward the *Erebus*. Scores of them. The machines separated and encircled the disabled yacht, though they were invisible behind the dunes all about. Then, simultaneously, they closed in.

The landing beams of the *Erebus* flashed out. Light flickered in the chill darkness. The beams darted here and there.

Then the machines appeared. The scene was remarkable. Over the dunes marched gigantic metal monsters, many-legged, with bodies as great as the *Erebus* itself. Great bulges on their forward parts gave the look of eyes, as if these were huge insects marching to devour and de-

stroy. As the landing light beams flickered from one to another of them, huge metallic tusks appeared, and toothed jaws—used for excavation. They were not machines designed for war, but they were terrifying, and they could be terrible.

Esther's hand on Stan's shoulder trembled as the monsters closed in. Then Stan, in the unarmed and seemingly defenseless little space yacht, swung the meteor repeller controls and literally cut them to pieces.

6

"WE'RE BARBARIANS," said Stan, "compared to these folk. So we've an advantage. It's likely to be only temporary, though!"

He watched the carcasses of the great machines, flicking the landing light beams back and forth. They were tumbled terribly on the ground. Some were severed in two or three places, and their separate sections sprawled astonishedly on a dune side. One was split through lengthwise. Another had all of one set of legs cut off clean, and lay otherwise unharmed but utterly helpless.

Out of that incapacitated giant a smaller version of itself crawled. It was like a lifeboat. Stan watched. Other small versions of the great machines appeared. One made a dash at the *Erebus,* and he cut it savagely in two. There was no other attack. Instead, the smaller many-legged machines ran busily from one to another of the wrecks—seeming to gather up survivors—and then went racing away into the dark. Then there was stillness.

"They knew we saw them," said Stan grimly. "They knew we could smash them. They realized that I wouldn't unless they attacked again. I wonder what they think of us now?"

"What you did to them was—awful," said Esther. She shuddered. "I still don't know what it was. I never heard of any weapon like that!"

"It could only exist here," said Stan. He grimaced. "We've meteor repellers. They push away anything in their beam. I narrowed them to their smallest size and put full power into them. That was all."

"But meteor repellers don't cut!" protested Esther.

"These did," said Stan. "They were working through sand, just that. They pushed it. With a force of eighty tons in a half-inch beam. The sand that was in the beam was shot away with an acceleration of possibly fifty thousand gravities—and more sand kept falling into the beam. Each particle was traveling as fast as a meteor when it hit, over there. When it struck it simply flared to incandescent vapor. No atomic torch was ever hotter! And there was no end to the sand I threw. You might say I cut those machines up with a sandblast, but there was never such a sandblast as this! It took a barbarian—like me—to think of it."

He continued to watch the vision screens, filtered to view their surroundings by infrared and seeing nearly as brightly as if by day.

"Now," he added, "I need to go over to those machines and get some stuff I think they've got in them. That's what I provoked this attack for. But maybe the drivers are laying low to jump on me if I try it. I'll have to wait until nearly dawn. They won't risk waiting until almost time for the sandstorms! Not with fifty miles to travel back to the grid!"

He stayed on guard. Presently he yawned. He stood up and paced back and forth, glancing from time to time at the screen. After a long time Esther said:

"You didn't sleep last night, Stan. Could I watch for a while so you can rest?"

"Mmmmm. Yes. If anything stirs, wake me. But I don't look for action here. The real action will be back underground, where they'll put their best brains to devising weapons. They ought to make up some pretty devices, too, but if they haven't thought of such things for fifty thousand years or so it may take them a while to get started."

He went back into the cabin and threw himself down. Almost instantly he was asleep. Esther watched the vision plates dutifully. There was silence and stillness everywhere. After a long time she looked in on the sleeping Stan. A little later she looked in again, reached over, and touched

his hair gently. Later still she looked in yet again. She kissed him lightly—he did not wake—and went back to the control cabin, to watch the vision plates.

Nothing happened. Bright stars shone down on the night side of the desert world, and sandstorms raged and howled and blew frenziedly on the side under the dwarf white sun. But nothing happened in or near the *Erebus*.

Out in space, though, very many millions of miles away, a tiny mote winked into existence as if by magic, with the cutting off of its Bowdoin-Hall field drive. It hung seemingly motionless for a while, as if orienting itself. It seemed to locate what it sought, and vanished, but again winked into being a bare few thousand miles from the planet's surface. It did not disappear again. It drove down toward the half-obscured disk at the normal acceleration of a landing drive. Toward dawn it screamed down into atmosphere above the planet's surface. It drove on into the day, and into howling winds and far-flung sand. It rose swiftly, and went winging toward the summar polar cap. Khor Alpha's single planet had gone unvisited by men during two centuries of interstellar travel, but now there had been three separate visitations within ten days.

The last of the three visitors settled to ground where hoar frost partly whitened the desert's face. A full power carrier wave spread out from it. In the control room of the *Erebus* a speaker suddenly barked savagely:

"Stan Buckley! I'm here to kill you! Communicate!"

A pause, and the same savage words again:

"Stan Buckley! I'm here to kill you! Communicate!"

Esther gasped. She recognized the voice. Rob Torren. Back more than two months before Stan had expected him. The words did not make sense to her. Stan had tried to spare her despair by concealing the fact that Torren's return would be to kill him, under a compact which her presence here made void.

"Rob!" cried Esther softly into the transmitter. "Rob Torren. It's Esther calling! Esther Hume!"

An indescribable sound emitted from the speaker. With trembling hands she adjusted the vision receiver. She looked into the taut, drawn, raging features of Rob Torren. He stared at her out of the screen.

"Stan's asleep, Rob!" cried Esther eagerly. "He didn't

expect you back for a long time yet! You're wondering how I got here? Oh—"

Laughing a little, joyously, she told of her desperate voyage to be with Stan when he should be tried, and how her drive had been burned out by impinging on the drive of the space skid on which Stan had left the *Stallifer*. Of course she told of her subsequent meeting with Stan.

"There are inhabitants here," she finished eagerly, "and they've been trying to kill us. They attacked tonight and we fought them off. Stan has some hope, I think, of getting the material to repair our drive from the machines he wrecked."

She was all joy and relief at Torren's arrival. But his face was ravaged by conflicting emotions, all of them intense and all harrowing. He did not smile. His eyes seemed to burn. The strangeness of his look struck her, suddenly.

"But—what's the matter, Rob?" she asked. "You look so queer!" Then she added in abrupt, startled doubt. "And Rob! Why did you say you had come back to kill Stan? You were joking, weren't you?"

He raged at her instantly:

"He coached you, eh? To pretend you didn't know anything? Trying to make me take you both to safety on a promise of fighting me later? It won't work! I've a line on your wave and I'll be coming! I'll be coming fast! Maybe you've no weapons, but I have! I've a Space Guard one-man ship. I forced the *Stallifer* to dock at Lora Beta and put me ashore! I got this ship to hunt back for Stan, claiming his recapture as my responsibility! I did plan to have him write you a letter before I killed him, but since you know everything now—"

She saw the beginning of an infuriated movement. Then the screen went blank.

After a moment's frightened irresolution she went to Stan. She woke him, and after the first three words he was sternly alert. He listened, though—his hands clenched—until she was through.

"This sets things up nicely!" he said bitterly. "You didn't know about him, of course, but—our friends of the grid are concocting weapons to destroy us, and now he's streaking here along his locator line to blast us with everything a Space Guard ship can carry! He'll have long range stuff!

He can burn us to a crisp if we put a repeller beam on him! We can't sandblast him! We can't—"

He stopped, frowning.

"We don't know how far away he is," he snapped. "There's a margin of error in locators on a planet. It might take him just long enough to find us—"

He began to struggle swiftly into a spacesuit. Esther said quickly:

"Wherever you're going, I'm going too!"

"You're not!" he said harshly. "You'll go in the control room with your hands on the beam controls. If some of the local citizens are hiding in those wrecks, you'll smash them if they jump me! I haven't so much as a pocket knife! You've got to be my weapons while I dig into those wrecks!"

He went swiftly out the airlock with only a cutting torch in his hands. He fairly ran toward the debris of the attacking army of machines. He reached the first. It had been sliced longitudinally in half by a stream of sand particles traveling at fifty miles or better per second, in a stream of air of the same velocity. Nothing could have withstood such an attack. No material substance in the universe could have resisted it. Four-inch plates of steel and foot-thick girders had been cut through like so much dough, the severed edges turned not to liquid but to vapor by the deadly stream.

The whole mechanism of the machine was exposed. The great biting jaws, designed to tear away huge masses of intermingled sand and ice. The tusks to break loose sections for the jaws to handle. The tanks to contain the precious damp material. The machine had not been made for fighting, but it, alone, could have torn the *Erebus* to fragments. With an army of such machines—

Stan clambered into the neatly halved shell with his cutting torch. All about him were small devices; cryptic things; the strictly practical contrivances of a hundred thousand year old civilization. He itched to examine them, but he needed certain bars of allotropic graphite he suspected would be here. They were. The motors which ran the leg movements were motors like those which turned the great slabs. They consisted of slabs of graphite and the metal which slid past them. That was all. Only one special allotrope of graphite makes a motor of such simplicity. Only—

He burdened himself with black, flaky bars, cutting ruthlessly through machinery an engineer would have devoted months to study. He had an even dozen of the bars in his arms when a sudden blast rocked him. He whirled, and saw a small cloud of still incandescent vapor and something which was separating horribly into many steaming pieces. Other things seemed to leap to smother him under their weight. He could not see them save as vague shapes, but he knew they were there.

Another exploded as Esther, in the *Erebus* and watching with the infrared scanner, desperately used the weapon which had never existed before and could not be used anywhere save on this one planet.

Stan ran clumsily for the ship over the drifting, powdery sand. Inhumanly resolute unhuman things leaped after him. He saw the flares as Esther destroyed them. He knew that she was wide-eyed and trembling and sick with horror at what she had to do.

He stumbled into the airlock and dogged it shut behind him. Esther came running to greet him, not shaking and not trembling and not horrified, but with burning eyes and the fiery anger of a Valkyrie.

"They tried to kill you!" she cried fiercely. "They were hiding! They'd have murdered you—"

He put down his bars of allotropic graphite. He reached out to take her in his arms. But—

"Darn these spacesuits!" he said furiously. "You'll have to wait to be kissed until this job's finished!"

He tore up the flooring hatch above the little ship's drive. He jerked off the housing.

"Keep watch!" he called to the control room. "At least one of the machines must be waiting behind the dunes, hoping for a break!"

He worked with frantic haste, shedding his spacesuit by convulsive movements. This should have been the most finicky of fine fitting jobs. To repair a Bowdoin-Hall drive unit by replacing its graphite bars for maximum efficiency is a matter for micrometric precision. But efficiency was not what he wanted, now, but speed. The stolen bars almost fitted. They were vastly unlike the five hundred pound monsters for the grid slabs. They should at least move the ship, and if the ship could be moved—

He had two of them in place and six more to go when the speaker in the control room blared triumphantly.

"Stan Buckley! Tune in! I'm right above your ship! Tune in!"

Stan swore in a sick disgust. Two out of eight was not enough. He was helpless for lack, now, of time. The corrosive hatred that comes of helplessness filled him. He went into the control room and said drearily to Esther:

"Sorry, my dear. Another twenty minutes and you'd have been safe. I think we lose."

He kissed her, and with fury steadied fingers tuned in the communication plate. Rob Torren grinned furiously at him.

"I thought I'd let you know what's happening," said Torren in a voice that was furry with whipped-up rage. "I'm going to go back and report that you were killed resisting arrest. I'm going to melt down the yacht until it could never be identified as the *Erebus*—if anybody ever sees it again! And—maybe you'll enjoy knowing that I did the things I charged you with, and have the proceeds safely banked away! I faked the evidence that proved it on you. I hoped to have Esther, too, but she's spoiled that by trying to come and help you! Now—"

"Now," said Stan coldly, "you'll stand off a good twenty miles and beam us. You'll take no chances that we might be able to throw a handful of sand at you! You'll be so cautious that you won't even come close to see your success with your own eyes! You'll read it off on instruments! You're pretty much afraid of me!"

"Afraid?" raged Rob Torren. "You'll see!"

The communication screen went blank. Stan leaped to the meteor repeller controls and stared at the vertical vision plate which showed all the sky above.

"Not the shadow of a chance," he said coldly, "but a beam does make a little glow! If he misses us once—but he won't—maybe I can get in one blast . . ."

There was tense silence. Deadly silence. The screen overhead showed a multitude of cold, unwinking stars. One of them winked out and on again.

"I'll try—" began Stan.

Then the screen seemed to explode into light. Something

flared like a nova in the sky. Intolerable brilliance filled a quarter of the screen, and faded. Swiftly. It went out.

"Wh-what was that?" chattered Esther.

Stan drew a deep breath.

"That," he said softly, "I think it was sixty thousand million horsepower in a power beam. I think our friends the grid-makers have been working on armament to fight us with, and I think they've got something quite good! They don't like strangers. Torren was a stranger, and they got a shot at him, and they took it. Now they'll get set to come over here after us. If you'll excuse me, I'll go back to the drive."

He returned to the cabin where two out of a necessary eight graphite bars were in place. He worked. Fast. No man ever worked so fast or so fiercely or with such desperately steady hands. In twenty minutes he made the last, the final connection. Just as he dropped the hatch in place, Esther called anxiously:

"More machines coming, Stan! The microphones picked them up!"

"Coming!" he told her briskly. He went to the instrument board and threw switches here and there. "The normal thing," he said evenly, "would be to lift from the ground here, on landing drive, and go into field drive out of atmosphere. But we don't do it for two reasons. One is that we have no landing drive. The other is that at normal takeoff acceleration our friends of the grid would take a pot shot at us with the thing they used on Rob Torren. With sixty thousand million horsepower. So—here goes!"

He stabbed a simple push button.

With no perceptible interval and with no sensation of movement, the *Erebus* was out in deep space. The screens showed stars on every side—all the stars of the Galaxy. These were not the hostile, immobile, unfriendly stars the first voyagers of space had seen. With the Bowdoin-Hall field collapsing forty times a second, the stars moved visibly. The nearer ones moved more swiftly and the farther ones more slowly, but all moved. The cosmos seemed very small and almost cozy, and the stars mere fireflies and the Rim itself no more than a few miles away.

Stan watched. He said:

"We're not making much time. Not over six hundred lights, I'd say. But we'll get there."

"And—and when we do—"

"Hm," said Stan. "You can swear Torren said he'd committed the crimes he charged me with and faked the evidence against me. With that testimony, they'll examine the evidence as they do when there are no witnesses. It'll fall down. I'll be cleared."

"Stan!" said Esther indignantly. "I meant—"

"When I'm cleared," said Stan. "We'll get married."

"That," admitted Esther, "is what I had in mind."

He kissed her, and stood watching the moving cosmos critically.

"Our friends the grid-builders have gotten waked up now," he observed. "They know they're not the only intelligent race in the universe, and they may not like it. They're a fretful crew! But they'll have to be made friends with. And quick, or they might cause trouble. I think I'll apply to be assigned the task force that will undertake the job. It ought to be interesting! Not a dull moment!"

Esther scowled at him.

"Now," she protested, "you reduce me to being glad we're not making our proper speed! Because after you get back—"

"Listen, my dear," said Stan generously. "I'll promise to come home from time to time. And when I do I'll grab you like this, and kiss you like this—" There was an interlude. "And do you think you'll manage to survive!"

Esther gasped for breath. But she was smiling.

"I—I think I'll be able to stand it," she admitted.

"Good!" said Stan. "Now let's go have some breakfast!"

THE END

THE UNKNOWN

A planet that was literally bald, completely covered by sand and devoid of life... or so the stranded spaceman thought until he saw the huge menacing girders whose origin and purpose he could not begin to fathom.

THE UNEXPECTED

A gold locket containing a picture of a girl, found in millenia-old ruins on a planet some hundreds of light years from Earth—threatens the existence of the entire human race.

THE TERRIFYING

A lost space team lands on a deserted planet, entirely unprepared for the strange world's one citizen... a great white ameoboid monster, hiding in wait to wreak its fury on any intruders.

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