

# WONDER Stories

NEXT MONTH

## The Planet of Youth

by STANTON A. COBLENTZ

is a distinctly original story written in the realistic, satirical, and vivid style of that popular author. With the remembrance of the "Florida Boom" of 1925-26 fresh in our minds, we know how the human race swallows so easily the bait of perpetual health and great riches, thrown out by unscrupulous men. Suppose that a planet were discovered that yielded both of those sought-for things? What would happen on our poor little earth? The answer is given here with a surprising ending that will leave you breathless.

## Chicago, 2042 A. D.

by PAUL BOLTON

is this new author's answer to the challenge of the gangster. The author is a newspaper man and has been close to the rise of racketeering and what it signifies. What will happen if the racketeer remains unchallenged and digs his fingers deeper and deeper into our lives? If racketeering continues to grow and prosper WHAT WILL HAPPEN ONE HUNDRED YEARS HENCE? "Chicago, 2042 A.D." is the answer.

## Outcasts of Mars

by ARTHUR G. STANGLAND

carries on this versatile author's exciting stories of the far reaches of the solar system. Suppose a race of people were disinherited from their world and forced to seek refuge on another world? And suppose on that other world they were treated as outcasts and denied even a bare living? What would they do? Would they calmly accept it, or would an explosion occur that would reach across space to other worlds? Mr. Stangland's story gives one unusual possibility.

## The Death of Iron

by S. S. HELD

grows in power as we see the ravages of *siderosis* sweep across France. We have just begun to perceive what would occur to civilization should our metals fail us. Now M. Held with vivid strokes draws his pictures more and more and more finely. We see how the disease of metals effects all parts of the population, and the new civil wars that will arise for control of the decaying civilization. The story rises and rises in power as this installment sweeps along.

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### ON THE COVER THIS MONTH

we see another of Paul's scientific mysteries for our readers to puzzle out. Full directions for this contest, repeating that of the July issue, are found on Page 319. Again we offer a mental exercise and a test of imagination and scientific ingenuity to our readers with cash prizes as the reward.

Published by STELLAR PUBLISHING CORPORATION, H. GERNSBACK, Pres., S. GERNSBACK, Treas., I. S. MANHEIMER, Sec'y.  
Publication Office, 404 North Wesley Avenue, Mount Morris, Illinois. Editorial and General Offices, 96-98 Park Place, New York

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WONDER STORIES is published on the 3rd of the preceding month. 12 numbers per year, subscription price is \$2.50 a year in United States and its possessions. In foreign countries, \$3.00 a year. Single copies 25c.

Address all contributions for publication to Editor, WONDER STORIES, 96-98 Park Place, New York. Publishers are not responsible for lost MSS. Contributions cannot be returned unless authors remit full postage.

WONDER STORIES is for sale at principal newsstands in the United States and Canada.

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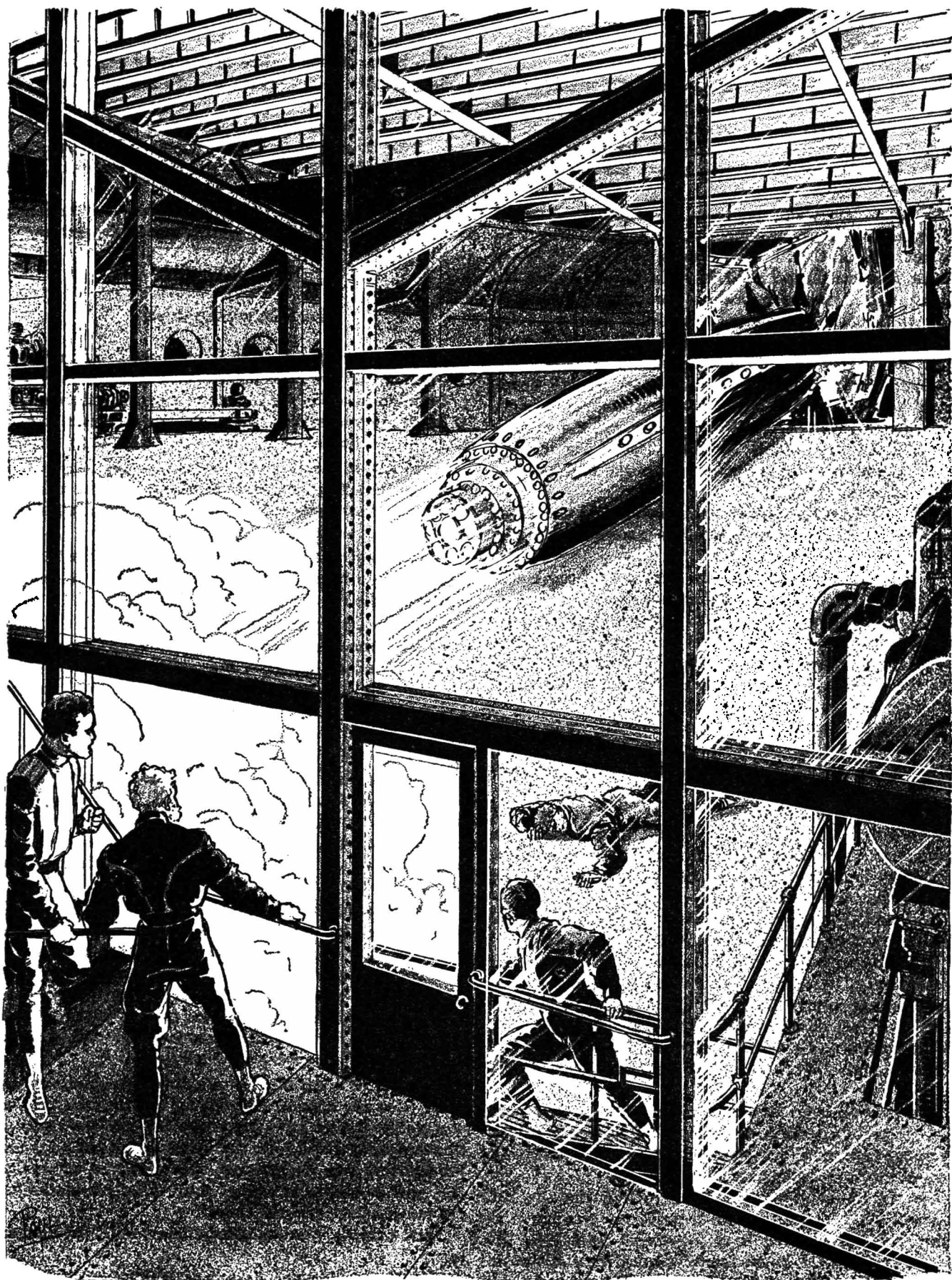
Chicago Advertising Representative—L. F. McClure, 737 North Michigan Ave.

Western Advertising Representative—Lloyd B. Chappell, 220 No. Catalina St., Los Angeles, Calif.

London Agent: Hachette & Cie.,  
3 La Belle Sauvage, Ludgate Hill, E. C. 4

Paris Agent: Hachette & Cie.,  
111 Rue Reaumur

Australian Agents: McGill's Agency,  
179 Elizabeth St., Melbourne



*(Illustration by Paul)*

The thick door clanged and rattled with a frightful din. The resulting roar expanded to a vast thunder that tore at their eardrums.

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# CROSSROADS OF SPACE

By ARTHUR G. STANGLAND

- A quick, impatient knock sounded on the door. "Enter!"

Captain Heath, in command of the new fueling "island," 88-X, located between Neptune and Pluto at the beginning of their forty years of approximate conjunction, sat before a table poring over stellar charts. A single, shaded desk lamp, the only illumination in the room, lighted up his strong masculine features in relief against the dark background beyond the light. He glanced up from a thick volume of tables, narrowing his shrewd grey eyes to squint into the darkness.

There was an air of excitement about the bronzed man coming into the room, a something that was not lost on the calm-faced captain.

"Captain, there's something wrong!" blurted Reynolds, without even acknowledging the greeting. "For the last several hours I've been trying to raise Capostran to send your message through. The ether is dead!"

Heath took his elbows off the table, and sat up straight in his chair, a slight frown of puzzlement crossing his face.

"Perhaps there's something wrong with our equipment," he began, though he knew it was almost superfluous to mention that. Reynolds could not be accused of half measures.

"No sir, I've checked over everything right up to the parabolic wave projector; and there's plenty of pep in the voice channel—the needle kicks over like the back thrust of a rocket. It's not the transmitter, sir. I tell you—there's something wrong with space!" Reynolds young blue eyes were snapping with suppressed emotion, as he looked down at the commander from his lanky height. Such a strange phenomenon put one in awesome apprehension of the mysteries of space.

But the inertia of Captain Heath's practical mind would not let him jump to fantastic conclusions too soon.

"When did you last contact anybody?" he asked.

"Thirty hours ago I spoke the *Plutonian* making for her home planet, sir. That was the last call, according to my automatic recorder. Mason and I have been repairing a motor since."

Heath was silent for a moment. Older men had held his job before him, but regardless of his comparative youth he had won his place among brilliant experts of cosmonautics through sheer ability. What he lacked in years he made up for in a wealth of experience.

"If you can't communicate with anybody, then what do you suppose has happened to the pilot-beams?" posed the captain. But Reynolds was quick to sense the growing

- Mr. Stangland's story gives us an insight into the great dramas that will take place in the vastness of interstellar space after its first conquest. This story pictures puny man against a background of strange almost devilish forces. Like microbes in an infinite world we see our space-men struggling to preserve man's right of space conquest.

We must admit that what we know of the forces operating in interstellar space is insignificant. We believe, true enough, that space is an almost perfect vacuum. But is it? And if it is not what dangers, impossible for us on earth to envision, may confront the first men to dare the unknown.

We must await the first Columbus of space for the answer. But Mr. Stangland gives us one unusual view of it.

---

concern in the captain's strong lean face in spite of his casual tone. Heath turned to a desk phone, pressing a button.

"Hello, that you, Rawlins? . . . Say, when did you check readings on the pilot-beams last? . . . Forty hours ago! . . . That's too long an interval . . . Yes, I know it's a reliable machine, but you should take a reading every thirty hours or so instead. Take a sight now on both beams—they'll be in vertical azimuth you know . . ." he turned to Reynolds.

"Wonder if that collier has left Capostran yet?" he pondered. "We need fuel now for our own rocket tubes, as well as for the service supply. Too bad you couldn't raise Neptune . . ." He broke off, turning to the phone. "Hello, Rawlins? . . ."

A peculiar premonition coursed through Reynolds' mind as he watched an unaccustomed paleness supplant the healthy glow in the captain's face. He heard the faint voice of Rawlins, the navigator, raised to an excited pitch. Heath replaced the phone deliberately, turning to the young engineer. "We're drifting off our dynamic position—10 degrees on the Pluto beam and 15 degrees on the Neptune beam. Reynolds, you're right—there's something wrong in space! Come on, we're going topside, and check Rawlins. I want you with me." And without even grabbing for his commander's cap, the captain left the cabin in a rush, followed by Reynolds.

Together they took the steps two at a time. The fueling "island," built in the shape of a huge disc with a solid block on top, was popularly known among space-

men as the "Pie Pan." A shelf flanked two sides of it, permitting the landing of ships to refuel on the direct run between Pluto and Neptune. Great airlocks swallowed them as they disappeared within. And above all protruded a small but massive quartzite cylindrical knob, giving an unobstructed view of the heavens.

Heath and Reynolds stepped out into the transparent cage that was filled with an intricate yet orderly mass of instruments, chief of which was a bright machined steelite cross much like an interferometer in the center of the room. Rawlins was peering into a small telescope on one of the arms of the cross.

"Well, what do you make of it?" asked Heath, stooping to look through the eyepiece that the navigator had relinquished. He focussed it on a tiny disc that was Neptune.

"I don't know what to think, sir, but I do know we're a million miles out of position, and still drifting—God knows where!" answered Rawlins gravely, his face a grim mask of tense lines.

Heath stood up and read the angle. Just as surely as if she had slipped some huge steel cables holding her midway between the two planets, the 88-X was roaming farther out afield with each spurt of her giant back-thrust rocket tubes. The radio pilot-beams from Pluto and Neptune automatically guiding her in space, were dead, no longer actuating the delicate tynes of the electric control slider that set off the rocket tubes to keep position.

● "For at least the last thirty hours this firing pattern has been maintained on the electric tynes, Rawlins, driving us off our point. You'll have to operate this typon by hand, and get the island back on position." Heath released the robot steersman from its locked position so that it swung free. He faced the two men, a sober expression in his grey eyes.

"I don't doubt that you two are quite aware of the fact that we are in great danger right now. If that collier doesn't arrive in several more days, we'll be out of fuel, and that means we'll start drifting around the sun in our own natural orbit. So, keep this to yourselves—no use in frightening the crew, and especially the Plutonian gang in the service shops; they're liable to lose their heads. There's hope the collier may find us by 'static conjecture,' after all, if we can get back on position."

Motioning Reynolds to follow him, Heath turned smartly on his heel, and left Rawlins, already setting up by hand a combination on the rocket firing control panel. Descending to the lower deck, the captain quizzed the engineer again.

"What do you suppose is causing this, Reynolds? Stellar radiation?"

For a moment Heath waited, watching the engineer's face. An odd look seemed to grow on it.

"Great rockets! Yes, captain, that's it, at least part of it. How idiotic of me not to think of that before!"

The two men headed for a cabin several doors down the corridor.

"What do you mean—that's part of it?" questioned Heath.

"Come in the radio room," suggested the engineer, opening his cabin door. Inside, he hastened to an ordinary phone used in radio-telephony. "Here, listen to the

ether for a moment. What do you get?"

After an interval of silence, Heath looked up sharply.

"Nothing but a lot of tiny little cracklings."

"That's just it—ionized gas!"

"What's stellar radiation got to do with gas in this instance?" asked Heath, perplexed.

"From the way reception sounds, captain, a very thin cloud of gas has drifted around us, perhaps an old comet—dead, or maybe a accumulation of rare gas from interstellar space. And cosmic rays, penetrating all space, have ionized this gas—that is have pulled electrons from the atoms. In other words, it's just a bunch of protons and electrons flying wild in space, colliding with one another, and making that noise you hear. It dampens all directional radio waves, just like a beacon trying to shine in a thick terrestrial fog."

"No wonder the 88-X wandered off her position!" ejaculated Heath, handing the phone back.

A knock on the door interrupted him.

"Enter!"

It was Mason, chief engineer in the service machine shops.

"Sorry to bother you, sir," he began, "but it's Baker again. He's caused me more trouble on the job and off than all the Plutonian devils could ever think of. He's raising a howl now below about the atmosphere on board. Wish you'd handle him."

"All right, Mason. You go ahead; I'll be down." Heath turned to Reynolds, as the other went out. "Reynolds, stick to your post here, and keep on trying to raise Neptune or the collier *en route*. This gas surrounding us may drift away again."

"Yes, sir, and if I don't locate them soon, Baker will have real cause to howl about the atmosphere on board," returned the engineer significantly.

Captain Heath started down the corridor, in his mind's eye visualizing an infinite number of tiny little vortices bumping into one another. Clever young fellow, Reynolds, to figure that out as the trouble. An admirable chap. Then his face sobered, as Baker's unpleasant, dark countenance came before him. That meant trouble, using his authority to the limit—probably threatening the man, and he hated that.

He'd rather leave the machine shops under Mason's direction. Things always went along smoothly until Baker started mischief. He'd be glad when the collier arrived, so he could send the man back. A ground-hog like him had no business in space. Some things on board one must tolerate at least for a little while.

He descended to the level of the shop floor by a short ramp, and passed through an airtight door. The huge machine shops, fully a thousand feet long and five hundred feet wide, were able to accommodate four space ships at once. The massive cradles in which the ships lay while being refueled and conditioned for flight, cut off his view of the opposite side of the shops, though he could hear loud voices, and recognized the boasting, bravado bass of Baker.

Passing between the cradles, he got his first sight of the disturbance through the ribs of the skeleton supports. Baker was in the middle of a group of black-skinned Plutonians gesticulating violently. As Heath neared them, the black gang fell away to leave Baker facing the captain belligerently.

"What's on your mind, Baker?" Heath asked quietly, wondering for the hundredth time how the man could breathe through such a crooked, flat nose.

● "The air on this 'Pan' is rotten!" returned Baker in a surly voice, "When we goin' to get some fresh stuff?"  
 "As soon as the *Antares* arrives. Why didn't you come to me with your complaint, instead of taking the shop crew away from their maintenance duties to tell them about it?" Heath gazed steadily into the little pig eyes of the bulky man.

Baker's shifty eyes strayed away and came back. He wetted his lips.

"I was aiming to do that, sir," he answered, beginning to back down.

"But you didn't quite get it, did you?" returned Heath sarcastically. Assuming a more threatening tone, he continued. Now get this, Baker, and get it the first time: any more of your trouble making, and in the 'suspension' room you go!"

Baker started visibly. No suspended animation for him! What if he never woke up? Half-dead for the rest of eternity!

"Now get along to your quarters where you belong off duty." The captain turned to the short-statured Plutonians. "And the rest of you get back to work!"

As Heath started for the ramp, his face took on a worried expression. If that collier didn't find them soon, Baker's outburst was just a small sample of what he would have to face. No use denying they were in a tight place. That put him in mind of Reynolds. He hurried to the upper deck.

"Pick up anything yet?" he inquired hopefully, entering the cabin.

Reynolds was standing in front of a tall panel, holding a phone to his ear and adjusting some tuning dials. He turned a hopeless face on the captain, and shook his head. "Not a thing yet, sir. I've called Capostran and the collier. Pluto doesn't answer either."

Heath swore softly to himself and took a turn or two up and down the room, while the engineer continued his efforts.

"No. 88X calling Capostran on 200 . . . No. 88-X calling Capostran on 200 . . . No. 88-X calling . . ."

The captain left the room with Reynolds' voice still droning in his ears. He decided to get some sleep and then relieve Rawlins in the pilot-beam cylinder. Another day or more and the atmosphere would be getting heavy and musty. It had been blown through the regenerators so much already that it was just about used up—unless they took the fresh store of oxygen tanks from the *B-4*, the emergency ship in the shops. That would be their last chance. What they would do after that, he left to the gods of chance.

It seemed to Heath that he had slept for a mere five minutes when a shrill buzz stabbed his subconscious through and through. In a startled daze he woke up, grabbing for the phone. Maybe Reynolds had picked up Neptune at last!"

"Hello!"

"Hello, Captain Heath?" queried the other voice, "This is Anderson. I've just checked our fuel supply in the tanks, and we've just got enough for another eighteen or twenty hours' operation. When's that collier coming, anyway? It's behind schedule now, isn't it? The atmosphere is beginning to be noticeable too."

Heath looked at a clock on the wall. He had slept for eight hours. For a moment he thought intensely, fiercely. Then—

"Anderson, close all fuel valves leading to the firing tubes!"

"But, sir, it's—"

"Do as I say. You'll receive further orders later!" And Heath hung up. His strong lean features had taken on a hard expression. There was only one thing to do now, and he was going to do it. Quickly, he dressed himself, and then went to Reynolds.

"This ionized gas seems to be getting worse, Captain," the engineer reported as soon as Heath entered. "Listen."

As he put the receiver to his ear, Heath knew immediately from the increased intensity of the crackling what the engineer meant. He turned to the younger man.

"Reynolds, you're going to take a trip. All our lives are in your hands, man. I'm sending you with a crew in

the *B-4* to get beyond this cloud of gas and contact the collier, if it's out there, or else Capostran. Now stay here till I come for you!"

Reynolds' tired eyes brightened. The *B-4* going out! It lent hope to his flagging spirits, after listening for hours to the mysterious crackling and sizzling of space. Heath disappeared out the door, and hurriedly made for the pilot deck. Rawlins met him on a lower deck.

"What's the matter with the firing tubes, Captain. I haven't been able to get any response out of them," exclaimed Rawlins, as soon as he spied Heath. "We're bucking a pretty strong ether drift, you know, and if we don't keep it up, we'll start to drift in toward the sun on a long spiral."

"Rawlins," began Heath, fixing the navigator with sombre eyes, "we're breathing our last. There's just enough fuel left to charge *B-4*'s tanks for a flight. I'm sending you in command of the ship. It's our final chance. I don't think there's enough fuel to maneuver this old 'Pie Pan' back into position. This ionized gas surrounding us is getting worse. The only thing we can do is get out beyond it so we can call the collier."

"But what about you, sir?" asked Rawlins. "We may not be able to find you again, if we get out into space some millions of miles. You can't last in this atmosphere for more than a few days. It's beginning to make us labor for breath now."

"You're the only one I can trust to do this job, Rawlins. We can't all go—there's not enough room on board or enough air. I've got to stay on here and watch things myself."

A something not expressible in words passed between the two men. Rawlins pressed his superior's hand hard.



Arthur G. Stangland

"All right, sir. We'll find that collier or come back and die with you!" It was just man to man in that intimate moment.

"I knew you'd justify my trust, Rawlins. Now get your instruments together. I'll have the ship ready in an hour for you. Reynolds is going too." And with that he left the navigator.

Below decks he entered the huge shops on the main level of the "island." He found Mason at the big regenerators.

"Mason, get your gang busy on the B-4. Swill out the exhaust tubes, and charge the tanks. I'm sending it out."

At the engineer's questioning protest, he continued. "Yes, I know the service reservoirs are empty. This fuel is coming from our own operating tanks."

## CHAPTER II

### Mutiny

Mason's brow clouded at that unusual order. Was the captain going mad? For a moment Heath regarded Mason's frank open face. No harm in telling the man. He had a right to know.

"Mason," he began, "the time has come for us to face the possibility of death, and we've got to do it like real men. We've drifted out of position, and our communication has been cut off with everything. We've got to send this ship out to get help."

"I see, sir," returned Mason simply. "I can have it ready inside of an hour."

"Good."

Heath left the engineer, and started down to the rocket tube rooms. These were below the shop deck, in a maze of criss-crossing reinforced steelite girders all arranged in an intricate pattern to stabilize the "island" structure. The massive tubes, five feet thick, were butted against the ends of giant "I" beams like the spokes of an artillery wheel.

Each backward thrust of the rockets were transmitted to the whole of the rigid under structure of the "Pan." A complicated installation of thick-walled bronze piping led to the explosion chamber of each exhaust tube, carrying the powerful liquid fuel that was sprayed in measured jets. The sensitive nerves of the constantly exploding rockets ran neatly along the beams and into the ends of the chambers through tight-jacketed insulators, carrying delicate little impulses from the electrical brain that controlled the giant tubes topside in the quartzite cylinder.

But now the huge flaming maws of the man-made space mammoth were silent. The heat still rising from the firing chambers was terrific in spite of the system for drawing the heat off to other parts of the "island." At the bottom of the descending ladder Heath waited on a platform for Anderson, coming toward him on a catwalk over the tubes. Other men, terrestrials, worked around the breeches of the tubes below, stripped to their waists and sweating freely. In as few words as possible, the captain explained their grave position to the perspiring men. Anderson, a veteran rocket engineer, wiped his dripping forehead, as if nothing were amiss. To him it was just one of those things that happen in the uncertainties of space life and had to be met.

"And, Anderson, when the black gang starts to pump

fuel, give them every bit of it. You'll have to switch over to the reserve batteries now for the power pumps. You're going on the trip as chief engineer. I'll send for you when things are ready."

"Aye, sir."

When Heath reached the service deck, the B-4 was in a cradle, and a gang of the ebon Plutonians were busily engaged in the sooty job of cleaning out the stern exhausts. A thick steel brush on the end of a revolving rod disappeared into the black tubes and was cutting loose all the crystallized material on the walls. A pneumatic hose was sucking all the accumulated dust into a bin. A dirty job, but very necessary for the efficiency of the jets.

The captain sought out Mason.

"As soon as you're ready with the ship, Mason, call me in my office. I'm going up there now."

"Yes, sir."

"By the way, have you told the Plutonians the reason for this trip?"

"They're a curious lot, sir, and pestered me with all kinds of questions when the 'back-thrusts' stopped working, and then you sending this ship out. Yep, I had to tell them."

"But they're not frightened, are they?"

"They don't seem to be, sir, but you can't tell much about those expressionless black devils, you know."

"Well, do what you can to keep their morale up, Mason." And Heath started up the ramp to the upper decks. He was proud of all his terrestrial crew. Thoroughbreds of Earth they were, incarcerating themselves in this space prison, making it possible for ships to make the two billion-mile trip without using too much valuable space for fuel. But the Plutonian crew on the service deck he distrusted in a crisis like this. Especially did he dislike their undependable native psychology. He would much rather have had a full terrestrial crew, but the Plutonian government had insisted, in its trade treaty, in providing part of the complement.

Heath stopped for a moment at Reynolds' cabin, standing in the doorway.

"Anything, Reynolds?" he asked, with waning hope.

"Nothing."

He continued on to his own cabin. Rawlins stood leaning over the chart table, manipulating dividers and protractor.

"Got everything, Rawlins?"

"Just laying out my course from here." And he indicated the chart on the table. Pointing to a tiny "x" on the new paper, he continued on. "This is our present position: 600,000 miles off point. But we've also got a definite resultant drift that I've checked closely so that we can find you when we come back." He raised his eyes for a moment.

There was a silence. When they came back! Heath's face tightened a little. What would Rawlins find when he came back? A death ship, likely. The navigator hastily dropped his eyes, and went on. "If the collier is in space at all it's logical to believe she continued on by probability coordinates after the pilot-beams failed. That's why I'll make for our theoretical position. Of course, there's a differential departure integration to take into consideration, making it a wild guess as to how close they'll come to it in their—"

● A shrill buzz cut him short. Heath picked up the phone quickly. Rawlins, busy with his navigation data for the moment, continued to study in silence. Suddenly, he glanced up at Heath's sharp voice. The captain's face had drawn itself into hard fighting lines. Something wrong! He slammed the phone down, yanking out a drawer from his desk.

"Come on, Rawlins, trouble on the service deck!" he exclaimed grimly, handing the navigator a double-charge automatic rocket gun. "That was Anderson. Says he heard a racket on the deck above, and before he could reach the top platform, the bulwark door leading to the deck was slammed in his face, and locked. Then they tried the other two companionways, and they were locked too. They're going to burn their way out."

By now, the two men were descending the ramp to the shop floor. Several cradles obscured their view of the B-4.

"Under them," muttered Heath. But just as they were starting to stoop under the big, bulging ribs, the Captain stopped, his eyes glued to a still form face downward on the deck. Mason! And with a bloody gash in the base of his skull!

A hard, flinty gleam shone in the captain's cold, gray eyes, as they rose to meet the shocked gaze of Rawlins. It had come at last. Plutonian mutiny!

Without a word, Heath continued on under the cradle, followed closely by Rawlins. At the other side both men came face to face with Baker, in command of the Plutonian crew, carrying provisions aboard the B-4. Immediately, the black men came crowding up to them. Heath brandished his automatic.

"Get back!" he barked out sternly.

Heath faced Baker squarely, though glancing quickly over the semi-circle of expressionless, black faces. It was a strange thing to see one white man among that planetary race inciting them against his own kind.

"Baker, who killed Mason?" the captain began ominously.

"I did!" the other shot back savagely, "What're you goin' to do about it?"

"Arrest you for murder and mutiny!"

"Not now, Mr. Captain. It's every man for himself. The old 'Pan' is drifting out to space, and with the air supply fouled we'll all be dying like cargo rats!" Baker swung his thick hairy arms in an expressive gesture.

Though their placid faces showed no expression, the light of fear burned in the black men's eyes, the fear of a suffocating death that Baker had so vividly pictured to them. Heath cursed them silently that the renegade could play upon their simple minds so easily. They had none of the finer senses of a white man's loyalty.

"Just what are you planning to do?"

"We're setting out for Pluto, and we're not lying about it like you was—sending the ship out to get help! Get help, like a ground-hog! Just an excuse to save your own yellow skin, and leave the rest of us here." Baker's little eyes glittered.

"You fool, do you think I'd send Rawlins in my place if I had intentions of escaping? It takes an expert to navigate space. The first thing you'll do is head straight for Pluto, instead of heading out at right angles to balance the ether drift we've been bucking," exclaimed Heath deprecatingly.

"Oh, no I won't. I've been in the control room of freighters before—"

Suddenly, a huge wrench came hurtling through the air, and before Heath could dodge, it struck him heavily in the right shoulder. Then the gang surged forward and over the two men in a black wave. Heath heard Rawlins' gun go off once and that was all. Something hard struck his head, and for a while everything was a confused mass of blurry details, though he was dimly aware of being on his feet again. Finally, his clearing senses began to bring vague warnings to his whirling brain, warnings that were associated with horror. He was lying on his back again. Baker's ugly, unshaven face was leering at him from above.

"Well, Heath, you won't have to worry about air now," the uncouth spaceman gloated, "because I'm going to put you in the same condition you threatened me with!"

● The "suspension room"! That's what that sickly sweet smell was, the gas that the subject was forced to breathe while the temperature of the room was slowly dropped to absolute zero, preserving the gas-saturated blood corpuscles of the body—suspended animation. Rarely used except in extreme cases, the suspension room removed unruly members of the crew from life temporarily so that they neither used up precious oxygen nor the limited food rations. Heath found his voice.

"You traitorous devil! It was a damned mistake I didn't sentence you to 'suspension' while I was at it."

"You don't seem to appreciate what I'm doing for you, man," Baker continued ironically, "you won't have to consider oxygen or food from now on. This foul air is bad enough now as it is. And then if someone finds this 'Pan' drifting around a couple of centuries from now you'll still be alive." He was busying himself about the valves of the mixing tank preparing the gas.

Heath tried to raise his head. Then his arms and legs. He was securely bound to the table. A groan sounded behind him. Rawlins voice. Of course, they would have him in here, too. He thought furiously in his helpless position. Suspended animation! Conscious sensations would recede from him. There would be no feeling of cold or warmth. But his mind would be aware of things around him. His eyes would see with a sort of helpless abstraction. It would be a living hell! Death would be more merciful. Suddenly, a hissing broke into his confusion of thoughts, a swift hissing that carried with it an insidious sweetness. It was getting colder too. The preserving process was beginning!

"Sweet dreams, Captain!" suggested Baker, backing out of the gasketed door.

Heath felt a horrible nausea at the pit of his stomach after a few thin wisps of the saccharized gas were drawn into his lungs. He struggled with his bonds, pulling and straining with a desperate fury. Damnation! His brain was blazing with the gas-saturated blood surging through it.

"Rawlins!" he shouted, twisting and squirming.

A feeble mumbling answered his call. Poor devil. Either knocked cold by the Plutonians or else going under the gas pretty quickly. Suddenly, Heath ceased his futile struggling. No use. It was only making him breathe deeper of the gas that was pouring into the chamber now. He lessened his rate of inhalation, and relaxed his tingling

legs. That much he could do to save himself from going under. But the cold! He shuddered involuntarily from it in spite of himself. If he breathed deeply of the gas, that sensation of cold would leave him. But it would also send him off into a timeless detached realm . . .

As he listened to the irritating hiss of the gas, sudden realization provoked him to a mad, unrestrained battle with his metal shackles in spite of his blazing brain that seemed to be filled with molten metal. Another strange, new hissing and buzzing was paralleling it, a sharper sound that came from beyond the door and under the deck. Anderson and his rocket tube crew!

Suddenly someone was yelling and shouting in an insane frenzy. The voice seemed to echo loudly in the room, and to Heath's half-numbed brain it was a strangely familiar one. Thin mists drifted away from his eyes, or was it gas? Somehow everything clarified, and he discovered in his returned consciousness that he was yelling and shouting madly at the top of his voice to the men below, burning their way through the heavy steel bulwark door leading into the corridor outside!

A solid, ringing clang burst out of the hallway, as something crashed to the floor. The buzzing stopped. Came the heavy clumping of many feet. A door swung wide. Figures were crowding into the room, milling about the valves. Hissing and rumbling of voices came to his ears in a hodge-podge of noise. Someone was lifting him off the table.

"Captain!" Somehow the voice was familiar. "How long you been in here? Can you stand up?" Then in a stupid way he knew—Anderson!

The man turned to the others. "Come on, men, get them out of here into the air—and lock that door. Got to keep this stuff in here!"

In the corridor Heath and Rawlins revived rapidly, breathing deeply of the fouling oxygen, and exhaling to rid their systems of the saccharized gas. As soon as he could stand, Heath started for the ascending stairs, quite unsteady on his feet.

"Help me, Anderson, we've got to get up on the service deck, and stop Baker. It's mutiny!"

The engineer caught his arm, and together, one helping the other, they raced up the steps followed by the rest of the rocket crew. At the top of the flight a great hissing of air reached them. Heath cried out in alarm.

"The ship's in the lock now. Hurry—cut out the radio controls on the pneumatic pumps, and lock the outer door of the lock. We've got 'em trapped!"

The *B-4* was nowhere in sight, and neither was the cradle she lay in. The lock cylinder nearest them was blowing air in a great noisy blast. An electric pump whirred at the side of it. Heath, his lean face quite pale, barked out his orders quickly, watching the big face dials stop their rapid dive. One of the men had cut off the motor. A quick yank and several platinum coils with delicate attached wiring were torn from powerful solenoids, operating the big switches that controlled the outside door of the lock. The *B-4* was trapped inside now, her crew unable to open the outer door of the lock by radio control.

Heath stood off from Anderson. "I'm all right now; I can walk alone."

He turned to a crew man. "Johnson, break out enough steelite stock handles for the men—they'll do for

clubs. We're going in there and get that gang!" The man hurried for the tool room.

"All right, ease the lock—prepare to open."

### CHAPTER III

#### The Menace of Space

● Suddenly a series of close-timed explosions sounded inside the big cylinder. The thick door vibrated sharply with the impacts.

"Look out—they're going to ram the outer door with the ship anyway!" Anderson grabbed Heath by an arm, and started for an ascending ramp as fast as he could go.

Suddenly the heavy, thick door clanged and rattled with a frightful din, as if fending the shock of a meteor swarm. The resulting roar expanded to a vast thunder in the big shop room. Heath felt the deck tremble. And then just as they were nearing the bulwark door, a sharp, stinging clap tore at their eardrums. It echoed back and forth in the big space of the shops and then died away to be followed by an awesome silence. Baker and his strange henchmen had blasted their way out!

Heath and Anderson hastened to the nearest port at the end of a corridor. Out there in space leaving a fiery tail behind her, fled the *B-4*, already growing smaller and smaller. Bits of the shattered outer door floated by the port. Both were silent, watching their lives die out slowly with the dimming of the ship's flaming exhausts. Reynolds came rushing down the corridor from a flight of stairs.

"What was that explosion I heard, Captain?"

Heath turned grave eyes on his radio engineer.

"Reynolds, I guess our names are going to be added to that growing list of mysterious space tragedies. Baker seized the *B-4* with the Plutonians, and is now heading for Pluto. Guess we've just about finished our space-time journey."

Reynolds burst out in profane unbelief, and then stared out the port where a tiny flame burned in the ebon skies. "Guess you're right. Sort of leaves us on the rim of things, doesn't it?" he said mirthlessly.

There was a silence. Heath looked over his men, mostly from the rocket rooms. They hadn't taken time to put on their jackets, and were still naked to the waist. Soot and sweat streaked their bodies and grimy faces. Some were quite young—their first time out, and he felt sorry for them. Too bad they had to die. But not a man whimpered. Every eye was on him. If there was a way out of the situation he'd find it. Only the trouble was, there didn't seem to be any way out!

"About the only thing we can do is keep a vigil at the radiophone, and hope that this damned gas drifts away," he offered.

Suddenly, a loud pop echoed in the shops and in the corridor.

"What's that—a meteor?" asked someone in a startled voice.

Everyone listened in an intense, nervous silence. Another sharp report followed.

"No . . . listen!" exclaimed Heath. A faint hissing reached their ears from the shops. "It's the air-lock. Must be leaking!"

A rising wind seemed to spring up about them, rushing



for the shops. It was like the brewing of a tornado, appearing suddenly from out of nowhere to whip at their clothes with savage, clutching fingers. The hissing quickly rose to a hollow roaring.

Madly the crew made a rush for the shops, stumbling over one another. And the air rushed with them, swirling into the shops and out of the lock, air that was precious, even though stale and dry. Another sharp report. It echoed above the howl of the growing wind storm. At the top of the ramp Heath fought to keep his footing on the deck. Wind! It was a gale! A gale that sought to lift the men from their feet, as they struggled against it. The air came rushing down the corridors from three decks to swirl crazily around in the cubby vestibule and then stream through the door into the shops like water through a venturi-meter.

"Got to close that shop door!" yelled the captain in Anderson's ear, while holding on to an overhead strut.

The engineer nodded his head. "Yeah, if we can keep it from slamming!" he bellowed back.

"We've got to, else we'll have to go up on the third deck and close the bulwark panel. That won't leave us much air then!"

Another pop came from the collapsing air-lock. The strain on it had been too much. Tremendous streams of flame from the exhausts of the *B-4*, forcing it inward, had weakened the radiant lock-bolts in their guides, and with the air pressure from within forcing it outward again, they had snapped one after the other with sharp reports.

As Heath made his precarious way to the door, fighting the wind to keep his feet, he got a full view of the air-lock out in the shops. Real fear seized him then. The big steelite lock was bending outward more each time a bolt was sheared off. It was slewed out of position in the gasket casement so that a large black hole appeared where the massive hinges had broken off. And through here the atmosphere of the entire "island" was racing. If the lock collapsed completely, it would snuff them out quickly. Even now death was stalking him. Heath and Anderson reached the bottom of the ramp safely. Several more men joined them. There was no more room for the rest in the small space.

"Now, I want you to hold on to me. Got to keep it from slamming!" yelled Heath, cupping his hands in a megaphone.

● He released the tie-back chain holding the door to the wall, and took a firm hold on the lever rail, lifting it up so that when it was closed he could shove the locking-bolts home. Anderson took a tight grip around his waist and the men behind did the same to the man in front, the last one holding fast to a stanchion. Slowly, carefully Heath started to let the door close. The men above, watching, saw his hands grip hard and then turn white when the air blast caught it. The men holding him gave a little. Could they hold it? Heath grunted with the effort.

God, it was pulling his arms from his shoulder sockets and cracking his elbow joints! But he'd hold fast! Anderson's wiry arms seemed to be biting into his waist like a cable loop. Suddenly, the smoothly pivoted lever in his hand slipped and swung down, shoving the lock-bolts out. Losing his grip in the momentary release of tension, Heath could feel the door being yanked inex-

orably out of his hands. It was going to slam! There! His frantically gripping hands slid off the bar. Immediately, the tornado of wind crushed the heavy steelite door into the gasketed jamb, wrenching the whole panel out of line. The protruding ends of the lock-bolts had been buckled against the casements, tearing out the thick padded gasket.

For a moment it arrested the gale of wind. But the inertia of the disturbed atmosphere was too great. All the men could do in that split second of time was gaze at it in horrified fascination. There was a loud report. A lock-bolt chipped off. And then the door caved in like a collapsing vacuum can. Immediately, the atmosphere surged through the door with increased velocity. Heath clung to an iron railing.

"Top deck!" he bellowed as loud as he could, starting up the ramp, "Top deck!"

The men followed him, pulling themselves up by the railing in the teeth of the gale. Heath fought hard to keep his reeling senses. The dropping air pressure affected the equilibrium canals in his ears, especially here in the middle of this vortex where the pressure was even less than on the top deck. A shooting band of pain clamped around his chest with sudden intensity. Heath gasped for air, the rarity of it making him swallow continually. It hardly filled his lungs.

He felt as though he were under the glass bell of a giant vacuum pump. Somehow or other he blundered his way to the top of the ramp. The men behind had their mouths wide in a gasping effort to get air. At the second deck the wind was not so great, and yet all were conscious of the dropping pressure.

"Hope we can get the bulwark closed before that air-lock gives out!" Heath yelled in Anderson's ear, even though the wind was not howling here. Pressure behind his eardrums made them sing like a man's ears coming out of a pressure tank.

"Well, if we don't, we'll not have long to worry about it!" Anderson returned laconically.

Heath reached the top deck, and made for the controls to slide the bulwark in place. Everyone was laboring for oxygen. He looked over the men. Anderson, Reynolds, Johnson . . . Rawlins? Where was he? The only one missing!

"Where's Rawlins? Anyone see him?" he asked anxiously.

No one seemed to know where he had disappeared. It had been every man for himself in the terrific effort to climb the stairs in the rarified atmosphere. Apprehensively, Heath turned to Anderson.

"Anderson, I'm putting you in charge here," he said quickly, looking over the rest of the men, "if that air-lock gives out before I get back close this panel tight."

"But—but what about you, sir?"

"If that happens, I'll be 'way beyond worrying what's to become of me!" returned Heath with a wry smile.

"Let me go instead, sir!" the engineer cried, starting for the companionway.

"Anderson!" It was a curt command. "You stay here!"

"Aye, sir." And he came back reluctantly.

"Close the partition now when I leave, and hold it ready for us when we return." Heath started down the flight of steps. He stopped for a second. "Reynolds, get into your

cubby-hole and plant your ear on the phone. Don't dare leave it!" Then he disappeared down the steps.

Heath was laboring painfully for breath by the time he reached the second deck. Strange how far away his footsteps sounded on the metal stairs. If only he could get his lungs full of air once! Even if it were fouled. He felt as though he had been thrown flat on his stomach. An ominous sound of howling wind reached him from the lower decks. Poor Rawlins. If the lock collapsed . . .

Suddenly he spied him. At the foot of the stairs the navigator sprawled out against the wall where he had evidently paused for breath, and then fainted, sliding down the wall to the floor. Blood trickled from his nose and over his lips to the deck. The thin air and the struggle up the companionway had been too much for him.

Heath wasted no time in reviving him. It was going to be a terrific effort as it was to get the limp body up to the top deck in time. Too bad he didn't bring along some of the crew after all. But then, he hadn't wanted to sacrifice any of them. The possibility was too great.

● Quickly, he stooped down and picked up Rawlins, putting him over one shoulder. Then the gruelling toil to lift one foot after the other, ever ascending the steps. Up, up he fought his way—fighting for breath and fighting an almost overpowering nausea. His fierce determination to get to the top of the steps and up the next flight to the top deck became a dull litany in his brain, a set of stimuli that drove his aching muscles on after all had become numb. Odd blood-colored globules were beginning to appear before his eyes. In a strange, detached way Heath carried on, wondering vaguely at the red spheres in space before him. Now they were beginning to burst into flaming streamers like an Orion nebula.

A moment of stark reality returned to him. Maybe this was red death! Or perhaps it was Nature's way to protect an organism driven far beyond its normal capacity for punishment. Then the top deck appeared. He was stumbling up the steps in a final spurt of energy. Something vital within him was fast being dissipated. Things began to sway drunkenly around him. The steps he had been mounting automatically seemed to grow higher with each effort. Instinctively he knew that when he reached the last step, that vital something would be gone, and he would collapse there. Suddenly, things began to happen fast. From below came a sharp clap of metal striking metal. Wind tore at them, sucked at them with the mighty power of a vacuum.

"Grab his arms!"

In a blurry sort of way he was conscious of men dragging him over the last step and through a narrow opening, a furious vortex of wind. Rawlins heavy weight was gone from his shoulder. He kept swallowing. Air! He could almost taste it. Something clanked into place.

"My God, captain, you were just in time!" Anderson was saying in a trembling voice, "the air-lock collapsed just as we caught sight of you coming up the steps."

After several wheezing gasps Heath was able to speak.

"Rawlins—how's he?"

"He's over there drinking water. Just fainted from over-exertion. He'll be all right. Guess his heart couldn't stand the strain in the thin air."

"Poor Rawlins." Heath swallowed the brackish water Anderson handed him and liked it. It slaked his dry

throat. Then he looked around. "Well, here we are—on the top deck," he hesitated, laboring for his breath, "and about twelve hours of atmosphere left."

"We're damn lucky to be this far and alive!" exclaimed Anderson appreciatively.

"Reynolds at his post?" asked Heath.

"Aye, sir, in his cabin."

Helped by Anderson, Heath slowly made his way to the radio room. Reynolds was at a control panel, slowly twisting a tuning dial and listening to his phone.

"Pick up anything besides that blasted space racket?" inquired Heath upon entering.

Reynolds looked up, startled. He reached for a tumbler switch. "Not a thing," he answered glumly. Then he started to speak into his transmitter. "Fueling station No. 88-X calling for help on 350! . . . Fueling station No. 88-X calling for help on 350! . . ."

Anderson and Heath sat in silence, listening intently with Reynolds between calls for some answering voice. All that issued from the speaker was a mysterious buzzing and crackling that expanded and faded ceaselessly, a seeming melancholy essence of space that infused them with an awesomeness of the vast stretches of uncharted heavens.

Heath, in spite of himself, was becoming discouraged. It seemed so hopeless now. No one would ever find them, being here on the outskirts of the regular inner trade routes. He looked around hopelessly. Humph . . . breathing their last. Suffocation! A horrible end for all these men—rolling on the deck with lolling, swollen tongues and gasping hoarsely in the final stages of strangulation. Even now they were wheezing for their wind. Maybe he owed it to them to suggest a more merciful way out: suicide. Suicide before they had to go through that other horror.

Suddenly, Heath came out of his apathy. A mumbling of voices broke in on his sombre mood. Anderson and Reynolds were at the port hole, talking excitedly.

"What do you suppose it is?"

"Looks like a small sun, doesn't it?"

Heath hastened to the port. "What's wrong?"

"That big ball of fire," exclaimed Reynolds, pointing into the heavens, "blazed up from nowhere just now!"

In the hard blackness of space burned a strange orange ball, a sphere that was constantly expanding, assuming giant proportions.

Heath made a mental calculation, a rough estimate of its distance. Probably twenty thousand miles off, perhaps less. But the longer he watched, the more he became convinced it was approaching them, and at an appalling velocity. The rest of the crew had come in, and were gaping in astonishment at the phenomenon.

"It's coming our way!" announced the captain uneasily.

● Fearfully the men watched the menacing intruder. An ironical smile crossed Heath's face. Suicide! They didn't have to wonder about their fate now. It would be instantaneous, when that huge sun struck them. Closer and closer it grew, filling all the vast space of the ebon heavens with its lurid mass.

Suddenly, a great flaming arc shot out from the ball of fire. The rest of the vast bulk seemed to flow after it to engulf the 88-X. Horrified, the men fought away from the port with animal cries of terror. Heath drew away in a white fright, still watching the port in hypnotic

fascination. It was upon them! An advancing holocaust. A sweeping world of incandescence. There was no solid impact. Just a hot leaping flame outside. A sheet of curling, darting fingers.

And then Heath blinked momentarily, and stared in bewildered amazement. All was black again outside, a dead blackness upon which burned the usual steady light of legions of stars. A startled, dumb-founded silence settled upon the crew. They looked around at each other half sheepishly. Still alive!

At the port Heath gazed out, astounded: in the rays of light from the cabin drifted a haze of snow white crystals passing in little clouds at times! He turned to Reynolds.

"What do you make of that!" he ejaculated, "a vast flame in space that disappears into nothing followed by a cloud of crystals."

But before Reynolds could answer, another voice broke in—a sonorous voice coming from the loudspeaker.

"Antares calling fueling station 88-X on 300 . . . Antares calling 88-X on 300 . . ."

"It's the collier—!" Excitedly Reynolds jumped for the instrument panel, yanking open a switch to cut in. With hands that almost trembled he lifted the transmitter to his mouth: "88-X answering on 300! . . . 88-X answering on 300!"

The droning voice in the speaker stopped for a moment, as if completely amazed. Then it came back in a torrent: "Hello 88-? Are you all right? Where are you?"

Where are you? We've been cruising in Cube 54-jB for twenty hours looking for you . . .

Quickly, Reynolds gave a full account of everything—Plutonian mutiny, the collapse of the air-lock, and the great flame in space.

"We've got a direction needle on you now. Haskins is computing your distance . . . here it is—30,000 miles. We're making all possible speed to raise you in several hours. It's a good thing you answered when you did, man, we were just about ready to turn back. We found your B-4 scattered all over space here, and thought you had abandoned the 88-X only to pile up," said the Antares operator. "Your man Baker wasn't much of a hand at navigating around a big meteor that got in his way—made a perfect hit!"

Heath grabbed the transmitter from Reynolds' hands.

"The B-4 piled up!" he cried aghast.

"Yeah, forgot to tell you we were attracted to it by the big flame you saw. In fact, Baker caused it. He must have been carrying a tremendous store of oxygen. That's what caused those clouds of hoar frost crystals you saw."

"What do you mean?"

"Don't you know you've been drifting in a cloud of ionized gas?"

"Of course. It put our pilot-beams out."

"Well, hoar frost in space is the result of combining oxygen and hydrogen!"

THE END