

SATELLITE
SYSTEM

By H. B. FYFE

Having released the netting of his bunk, George Tremont floated himself out. He ran his tongue around his mouth and grimaced.

"Wonder how long I slept ... feels like too long," he muttered. "Well, they would have called me."

The "cabin" was a ninety-degree wedge of a cylinder hardly eight feet high. From one end of its outer arc across to the other was just over ten feet, so that it had been necessary to bevel two corners of the hinged, three-by-seven bunk to clear the sides of the wedge. Lockers flattened the arc behind the bunk.

Tremont maneuvered himself into a vertical position in the eighteen inches between the bunk and a flat surface that cut off the point of the wedge. He stretched out an arm to remove towel and razor from one of the lockers, then carefully folded the bunk upward and hooked it securely in place.

With room to turn now, he swung around and slid open a double door in the flat surface, revealing a shaft three feet square whose center was also the theoretical intersection of his cabin walls. Tremont pulled himself into the shaft. From "up" forward, light leaked through a partly open hatch, and he could hear a murmur of voices as he jackknifed in the opposite direction.

"At least two of them are up there," he grunted.

He wondered which of the other three cabins was occupied, meanwhile pulling himself along by the ladder rungs welded to one corner of the shaft. He reached a slightly wider section aft, which boasted entrances to two air locks, a spacesuit locker, a galley, and a head. He entered the last, noting the murmur of air-conditioning machinery on the other side of the bulkhead.

Tremont hooked a foot under a toehold to maintain his position facing a mirror. He plugged in his razor, turned on the exhauster in the slot below the mirror to keep the clippings out of his eyes, and began to shave. As the beard disappeared, he considered the deals he had come to Centauri to put through.

"A funny business!" he told his image. "Dealing in ideas! Can you really sell a man's thoughts?"

Beginning to work around his chin, he decided that it actually was practical. Ideas, in fact, were almost the only kind of import worth bringing from Sol to Alpha Centauri. Large-scale shipments of necessities were handled by the Federated Governments. To carry even precious or power metals to Earth or to return with any type of manufactured luxury was simply too expensive in money, fuel, effort, and time.

On the other hand, traveling back every five years to buy up plans and licenses for the latest inventions or processes—that was profitable enough to provide a good living for many a man in Tremont's business. All he needed were a number of reliable contacts and a good knowledge of the needs of the three

planets and four satellites colonized in the Centaurian system.

Only three days earlier, Tremont had returned from his most recent trip to the old star, landing from the great interstellar ship on the outer moon of Centauri VII. There he leased this small rocket—the Annabel, registered more officially as the AC7-4-525—for his local traveling. It would be another five days before he reached the inhabited moons of Centauri VI.

He stopped next in the galley for a quick breakfast out of tubes, regretting the greater convenience of the starship, then returned the towel and razor to his cabin. He decided that his slightly rumpled shirt and slacks of utilitarian gray would do for another day. About thirty-eight, an inch or two less than six feet and muscularly slim, Tremont had an air of habitual neatness. His dark hair, thinning at the temples, was clipped short and brushed straight back. There were smile wrinkles at the corners of his blue eyes and grooving his lean cheeks.

He closed the cabin doors and pulled himself forward to enter the control room through the partly open hatch. The forward bulkhead offered no more head room than did his own cabin, but there seemed to be more breathing space because this chamber was not quartered. Deck space, however, was at such a premium because of the controls, acceleration couches, and astrogating equipment that the hatch was the largest clear area.

Two men and a girl turned startled eyes upon Tremont as he rose into their view. One of the men, about forty-five but sporting a youngish manner to match his blond crewcut and tanned features, glanced quickly at his wrist watch.

"Am I too early?" demanded Tremont with sudden coldness. "What are you doing with my case there?"

The girl, in her early twenties and carefully pretty with her long black hair neatly netted for space, snatched back a small hand from the steel strongbox that was shaped to fit into an attaché case. The second man, under thirty but thick-waisted in a gray tee-shirt, said in the next breath, "Take him!"

Too late, Tremont saw that the speaker had already braced a foot against the far bulkhead. Then the broad face with its crooked blob of a nose above a ridiculous little mustache shot across the chamber at him. Desperately, Tremont groped for a hold that would help him either to avoid the charge or to pull himself back into the shaft, but he was caught half in and half out.

He met the rush with a fist, but the tangle of bodies immediately became confusing beyond belief as the other pair joined in.

Something cracked across the back of his head, much too hard to have been accidental.

When Tremont began to function again, it took him only a few seconds to realize that life had been going on without him for some little time.

For one thing, the heavy man's nosebleed had stopped, and he was tenderly combing blood from his mustache with a fingertip.

For another, they had managed to stuff Tremont into a spacesuit and haul him down the shaft to the air lock. Someone had noosed the thumbs of the gauntlets together and tied the cord to the harness supporting the air tanks.

Tremont twisted his head around to eye the three of them without speaking. He was trying to decide where he had made his mistake.

Bill Braigh, the elderly youth with the crewcut? Ralph Peters, the pilot who had come with the ship? Dorothy Stauber, the trim brunette who had made the trip from Earth on the same starship as Tremont? He could not make up his mind without more to go on.

Then he remembered with a sinking sensation that all of them had been clustered about his case of papers and microfilms when he had interrupted them.

"I trust you aren't thinking of making us any trouble, Tremont," drawled Braigh. "Give up the idea; you've been no trouble at all."

"Where do you think this is getting you?" demanded Tremont.

Braigh chuckled.

"Wherever it would have gotten you," he said. "Only at less expense."

"Ask him for the combination," growled Peters.

Braigh scrutinized Tremont's expression.

"It would probably take us a while, Ralph," he decided regretfully. "It's simpler to put him outside now and be free to use tools on the box."

Tremont opened his mouth to protest, but Braigh clapped the helmet over his head and screwed it fast.

"You'll never read the code!" yelled Tremont, struggling to break free. "Those papers are no good to you without me!"

Someone slammed him against the bulkhead and held him there with his face to it. He could do nothing with his hands, joined as they were, and very little with his feet. It dawned upon him that they could not hear a word, and he fell silent. Twisting his head to peer out the side curve of his vision band, he caught a glimpse of Peters suiting up.

A few minutes later, they opened the inner hatch of the air lock and shoved Tremont inside. Peters followed, gripping him firmly about the knees from behind.

"Here we go!" grunted Peters, and Tremont realized that he could communicate again, over their suit radios.

"You won't get far, trying to read the code I have those papers written in," he warned. "You'd better talk this over before you make a mistake."

"Ain't no mistake about it," said Peters, pressing toward the outer hatch. "So you chartered the rocket. You felt you oughta go out to see about a heavy dust particle hitting the hull. You fell off an' we never found you."

"How will you explain not going yourself? Or not finding me by instruments?"

Peters clubbed Tremont's foot from the tank rack he had hooked with the toe.

"How could I go? Leave the ship without a pilot? An' the screens are for pickin' up meteorites far enough out to mean somethin' at the speeds they travel. So you were too close to register, leastways till it was way too late. You must have suffocated when your air ran out."

Tremont scabbled about with his feet for some kind of hold. The outer hatch began to open. He could see stars out there.

"Wait!" shouted Tremont.

It was too late. He felt himself shoot forward as if Peters had thrust a foot into the small of his back and shoved. Tremont tried to grab at the edge of the air lock, but it was gone. A puff of air frosted about him, its human bullet.

The stars spun slowly before his eyes. After a moment, the gleaming hull of the Annabel swam into his field of view. It was already thirty feet away and the air lock was closing. He caught a glimpse of a spacesuited figure with the light behind it.

Then he was looking at the stars again.

The small, distant brilliance of Alpha Centauri made him squint in the split second before the suit's photoelectric cells caused filters to flip down before his eyes. Then it was stars again, and the filters retracted.

"They can't do this!" said Tremont. "Peters! Do you hear me? You can't get away with this!"

There was no answer.

The rocket came into view again, farther away. He had to get back somehow. Forgetting the bound position of his hands, he attempted to check his belt equipment. Holding his arms as far as possible from his body was not enough to let him get a look at the harness from within his helmet.

He tugged violently at the cord holding the thumbs of his gauntlets, and thought it gave slightly.

Maybe it just tightened, he thought.

To free his hands, he drew his arms in through the wide armpits of the suit sleeves, built that way to enable the wearer to feed himself, wipe his brow, or adjust clothing or heating units within the suit. He felt more comfortable but that got him nowhere except for the chance to consult his wrist watch.

Set at the lunar time of Centauri VII-4, it told him that when he had gone out of the airlock five minutes before the time had been 17:36. It did not strike Tremont as being a very promising bit of data—warning him merely that when he began to feel the want of air, it would be about 21:30. He longed for a pen-knife.

"There's one thing I'm going to ask about on my next trip to Sol—if I make one!" he muttered. "Has anyone developed a reliable, small suit air lock, so you can pass things out from your pockets?"

He thrust his hands once more into the arms of the suit, and felt as far along his belt as he could. He did manage to reach the usual position of the standard rocket pistol. The hook was empty.

"Well, that's that!" he groaned. "They didn't forget. I have nothing to maneuver with."

He pondered worriedly. Perhaps the air—if he dared to waste any, it would make

a small jet. Slow, but he had all the rest of his life!

He settled down to picking at the cord about his thumbs with the tips of the other fingers in his gauntlets. It seemed possible that he might in time chew it up to the point where it could be snapped.

The stars streamed slowly past his line of vision as he spun through the emptiness. Two or three little bits of the cord chipped off and drifted away. Tremont realized that it was frozen and brittle. He redoubled his efforts. After a few minutes of clumsy clicking of fingertips against thumbs, he strained to pull his hands apart.

The cord parted and his arms jerked out to their full spread with such suddenness that he felt his backbone creak. For a moment, he hung motionless inside his suit, wondering if he had hurt himself.

Recovering, he groped about, checking for his equipment. He discovered that nothing had been left. No knife, no rocket pistol, no line with magnet for securing oneself to a hull.

Well, at least I can reach the valves of the air tanks, he reassured himself.

He watched for the ship, so as to judge his direction. Several minutes passed before he allowed himself to recognize the truth of his situation: he could no longer see the gleam of Alpha Centauri on the hull!

He was already too far out to dare to waste air. He might give away his last four hours of life just to send himself in the wrong direction.

"How did I get myself into this?" he groaned.

He set himself to thinking back to his meetings with the others. Dorothy Stauber had landed from the same starship after passage from Sol, but he had not become acquainted with her during the trip except to pass the time of day. He seemed to remember that she had turned up in the Customs dome to ask his advice on travel....

"Ye-ah!" he growled to himself. "After I phoned to lease a rocket. She must have known, but how?"

Someone in the shipping office? Well, why not Peters, the pilot? And then Braigh had come along, pretending to have been on his way back to Centauri VI and hoping to buy a fast passage on a small vessel for business reasons. He had been free and ready with his money, leading Tremont to consider cutting his own expenses on the charter.

It seemed, on the face of it, that the three of them had never met until the Annabel lifted.

"But they had, all right!" Tremont told himself. "That was no chance, anywhere along the line. I've been very neatly highjacked!"

The girl must have trailed him to make sure they picked up the right man. Braigh had never explained exactly what he was doing on the satellite; he could have arranged for the assignment of the rocket, or perhaps of the pilot, when Tremont called. Then they had gathered around to hitch rides, and had been in control ever since.

Tremont looked at the slowly progressing constellations and cursed himself. He began to have the feeling that there would be no way out of this. They would

regret pitching him into space in such an offhand manner, he reminded himself, when they opened his case. It would be too late as far as he was concerned.

Come to think of it, he considered, that Braigh looks pretty smart, under that idiot-kid pose. He might just break my code, given time. And the parts made up of model photos or drawings he can sell almost as is.

When he came to think of it, Tremont was surprised that no one had tried the same racket before. He had laid out a fortune for what the three thieves were stealing from him.

He drew in his left arm again and raised the wrist to the neck of his helmet. By looking down his nose, he discovered to his surprise that he had been out nearly an hour. He had wasted more time than he thought in reviewing his earlier encounters with Dorothy aboard the starship and the others at the spaceport.

He raised the water tube to his mouth and sucked in a mouthful. The taste was stale.

I could do with a beer, if this is the way I'm going out, he thought. They can joke all they want about dying in bed after traveling to the stars; but you could order a beer even if it killed you.

It gradually dawned upon him that the hazy light he had accepted as being a nebula must be something closer. He watched for it, and discovered after a few moments that it was growing brighter. It continued to do so for half an hour.

"It might be another ship!" he breathed, then he began to shout, "Mayday! Mayday!" over his radio.

He kept it up for nearly a quarter of an hour, even after the outline was definitely recognizable as a rocket. He found himself drifting across its course near the bow. It was hard to estimate the distance, but he guessed it to be something like a hundred yards.

Drifting? he asked himself. It should be going past me like a shooting star! Unless they took exactly the same curve from Centauri VII—

Then he could read the numbers he feared to see. AC7-4-525. His own ship.

He had gone out of the air lock mainly on a puff of air, with some fumbling help from Peters. That had been enough to send him out of sight of the ship—in space, not necessarily very far—and now he was back, after two hours.

A long, flat orbit in relation to the ship, he told himself, remembering in time to avoid speaking aloud that Braigh might be at the ship's radio, but actually weaving back and forth across the rocket's course, just nipping it at this end.

He edged a hand inside the suit again and turned off his radio. If he found an answer, it would be fatal to be overheard mumbling about it.

The ship now seemed to be rushing at him, and Tremont deduced that his orbital speed had increased as he approached the focus represented by the Annabel. He would doubtless pass near the air lock at about his expulsion speed.

"Here's the chance!" he exulted. "A little air let out to slow down ... or even just to veer close enough to lay hands on something! You launched me, Peters, but you didn't lose me."

Getting through the airlock should be easy enough. He might be well up the shaft before the others emerged from the control room. In fact, unless Peters were on watch, the air lock operating signal might flash unnoticed on the board.

"And I'll be cracking skulls before they know what's up!" he growled.

It struck him with a flash of ironic amusement that he had not felt half so much hate when believing himself doomed. After two hours of sweating out his helplessness, he had discovered a lively resentment of the vicious callousness with which he had been jettisoned.

He was only about twenty-five yards away now, seemingly circling the ship. Peering closer, he saw that actually he was sweeping in toward it.

Now, be ready with the air tank valve, just in case! he warned himself.

The great fins loomed to his right; the hull blotted most of the sky from his view. It looked as if he would curve down to a spot beside the same air lock from which he had been expelled. It seemed to be still open.

Then he saw the shape of a helmet rise around the curve of the ship. Someone was out on the hull.

Tremont switched on his radio and listened.

The spacesuited figure climbed completely into view. There appeared to be a line running from the belt into the air lock, and the figure carried a long pole of some sort.

"Oh, there you are, Tremont!" came Braigh's voice over the receiver. "I've been waiting for you."

The chuckle that followed made Tremont curse, which in turn provoked a hearty laugh from the other.

"You didn't think I'd forget you?" asked Braigh. "We figured out what happened as soon as we heard you putting out those distress calls. After that, it was just a matter of timing. Have you had an amusing trip?"

"Have you found out you can't make anything of those papers yet?" countered Tremont.

"Oh, the coding? It might take a little time, but we have plenty ... now, now, Tremont! That kind of abusive language will get you nowhere."

Tremont had drifted to a point above the other's head, almost within reach. He was kicking out in little motions that betrayed his eagerness to come to grips with Braigh or something solid.

"Why, Tremont! I do believe that you thought I came out to bargain with you," chuckled the blond man. "Not at all! I told you that you'd be no trouble. I just came out to finish the job Peters bungled."

Tremont saw the pole jabbing upward at his stomach. Instinctively, he grabbed at the end. Braigh was not disturbed.

"Take it with you, then!" he laughed, letting go his end with a powerful push. "Let me know if you're alive the next time you come around, so I can come out

again."

Tremont began to swear at him, then got a grip on himself long enough to snap his radio off.

He had begun pulling himself down the pole when Braigh had shoved. That sapped some of the force, but it was still enough to send him spinning out into the void once more.

The ship receded slowly. He saw Braigh return to the air lock and enter. A moment later, that light was cut off, and Tremont began to back off into space as he had the first time.

They know all about it, he realized. They could leave me any time just by burning a little fuel. Peters wouldn't care about wasting it—I paid for it. Maybe he's just too lazy to calculate the course correction.

If so, he decided, the pilot was right. Tremont might drift back, but two more hours from now, when he would be at his closest, would be too late. He would be too near the end of his air to use it to make sure of the last few feet.

He looked at the pole in his grip. It was an eight-foot section of aluminum from the cargo racks.

"Maybe ..." he muttered.

Whirling the pole around by the end, he managed after considerable trial and error, to slow his wild spin enough to keep the ship in view.

The only question then was whether he dared to take the chance; and he really had but one choice. The full orbit would be too long a period.

He estimated as well as he could the direction of his progress, allowed a few degrees which he fondly hoped would curve him in to a closer approach at the meeting point, and hurled the pole into space with all his strength.

After that, there was nothing to do but wait and hope that he had cut his speed enough to bring him to the ship ahead of schedule by a shorter orbit.

Tremont finally gave up looking at his watch when he found himself peeping every three minutes, on the average. The immensity of space was by now instilling in him a psychological chill, and he drew both arms in from their sleeves to hug an illusion of warmth to him. The air pressure in the sleeves gradually overpowered the springs of the joints, and extended them to make a cross.

As far as he could tell from the gauges lined in a miniature row along the neckpiece of the suit, his heating system was functioning as designed. The batteries had an excellent chance of lasting longer than he would.

He began to dwell upon thoughts of squeezing Peters in the steel grip of his gauntlets until the pilot's fat face turned purple and his eyes popped. Another promising activity would be to bang Braigh's head against a bulkhead with one hand and Dorothy's with the other.

Wonder if they found the gun in my locker? he mused.

Finally, only a lifetime or two after he hoped to see it, he sighted the ship again. His watch claimed the trip had lasted less than ninety minutes.

He encountered unexpected trouble approaching the hull. Realizing that he was lucky to come close at all by such a guess, he tried to steer himself with brief jets from his air tank, and wound up on the verge of bashing directly into a fin. He avoided that, but had to use more air to spin back for a more gentle contact.

The metal felt like solid Earth to him as he seized the edge of a fin and planted the magnets of his boots firmly on the hull.

It was perhaps twenty minutes later, when Tremont was beginning to worry again about his air supply, that the hatch of the air lock began to open.

Crystals of frost puffed out as the water vapor left the air. Braigh's helmet appeared, then the whole spacesuited figure floated up before the spot where Tremont was watching. The highjacker dropped the magnet of his life line against the hull and started to turn around.

Tremont grabbed the edge of the hatch with one hand, yanked the magnet loose with the other, and kicked Braigh in the right area.

The spacesuited figure shot off, tumbling end over end, into the void. A startled squawk sounded over Tremont's receiver.

"See how you like it!" he snarled.

He ignored the begging of the suddenly frightened voice, and dived into the air lock. In seconds, he had the outer hatch shut and was nervously watching the air pressure building up on the gauge.

If they notice at all, they'll think it's Braigh coming back! he exulted.

He made it into the central shaft without meeting anyone. Pulling himself forward in the bulky suit was an awkward task, but well worth it for the expression on Peters' face when Tremont burst through the control-room hatch.

After dealing with the pilot in about two minutes, most of it spent in catching him, Tremont went back along the shaft and found Dorothy in her bunk. Before she could release the netting, he folded the bunk upon her and secured it to the hook. Only then did he allow himself the time to remove his helmet and make free of the ship's air.

"What are you going to do?" demanded the girl, rather shrilly.

Tremont realized that she must have seen the unconscious Peters floating outside in the shaft.

"You won't like it!" he promised.

"Tremont! I didn't know they'd do anything to you. Can't ... you and I ... make some kind of ... deal?"

Tremont stared at her levelly.

"But I'd have to really sleep sometime," he pointed out gently. "How can I trust you...?"

He was hardly a million miles out from the satellite system of Centauri VI when the Space Patrol ship he had called managed to put a pilot aboard to land the Annabel for him on the largest moon.

Tremont returned wearily from helping the man in the air lock—which he did with a practiced efficiency that surprised the pilot—to resume his talk with the patrol-ship captain waiting on the screen.

"We could have done it sooner, you know," said the latter curiously. "Well, now that I see him beside you, perhaps you'll explain your request to delay, and also what those pips trailing you are."

"It's all the same story," said Tremont, and explained his difficulties.

The patrol captain frowned and expressed a wish to lay hands on the highjackers.

"Well, they're due back in"—Tremont consulted his watch—"about two hours. I wanted them near the ends of their orbits as you approached."

"You mean there are three bodies out there?"

"Live ones, in spacesuits," said Tremont. "Experience is a great teacher. As soon as I sighted Braigh coming back, I set up a regular system."

He explained how he had removed all tools from the three spacesuits, added extra tanks, and stuffed the trio into them, either unconscious or at gunpoint.

"Then, having fastened the ankles together and wired the wrists to the thighs so they couldn't move at all, I launched them one at a time with enough pressure in the air lock to give four-hour orbits. That gave me sleeping time."

"And what about them?" asked the captain.

"Oh, at the end of that period, they'd come drifting in at one-hour intervals. Counting all the necessary operations, each of them got thirty minutes actually out of the suit to eat and so on. Then out he'd go while I fished in the next one. They didn't like it, but they weren't so tough one at a time."

"Let's see—" mused the captain. "Every four hours, you'd have to spend ... why, only two hours processing them. As a result, you kept complete control and came shooting in here with your own satellite system revolving about you."

"And your friends? How have they been passing the time?"

"Well, either figuring out how to take me next time," guessed Tremont, "or wishing they were moving in more honest circles!"

END