FANTASTIC

JUNE 1958 Vol. 9, No. 6

	Trainee for Mars
	Fall of Knight
	Who Rules Space 25 by Lester del Rey
H. L. Herbert Publisher Hans Stefan Santesson Editorial Director Virgil Finlay Cover Design	There's Always Tomorrow 37 by Eric Frank Russell
	Operation Peanut Butter 44 by Robert F. Young
	Thundering Death
	Zoo
	Lost Aurora
	Science and Anti-Science 101 by John Christopher
	Shapes in the Sky 104 by Civilian Saucer Intelligence
	Universe in Books
	The Tie That Binds

FANTASTIC UNIVERSE, Vol. 9, No. 6. Published monthly by Kinc-Size Publications, Inc., 320 Fifth Ave., N. Y. 1, N. Y. Subscription 12 issues \$3.75, single copies 35% Foreign postage extra. Reentered as second-class matter at the post office, New York, N. Y. The characters in this magazine are entirely fictitious and have no relation to any persons living ar dead. Copyright, 1958, by Kinc-Size Publications, Inc. All rights reserved, June, 1958.

Printed in U. S. A.

trainee

for

mars

by ... Harry Harrison

The important thing was that they survive. Men were needed who'd be able to explore the surface once the ship landed.

MARS was a dusty, frigid hell. Bone dry and blood red. They trudged single file through the ankle-deep sand and in a monotonous duet cursed the nameless engineer who had designed the faulty in their pressure reconditioners suits. The bug hadn't shown during testing of the new suits. It appeared only after they had been using them steadily for a few weeks. The water-absorbers became overloaded and broke down. The Martian atmosphere stood at -60° centigrade. Inside the suits, they tried to blink the unevaporated sweat from their eyes and slowly cooked in the high humidity.

Morley shook his head viciously to dislodge an itching droplet from his nose. At the same moment, something rust-colored and furry darted across his path. It was the first Martian life they had seen. Instead of scientific curiosity, he felt only anger. A sudden kick sent the animal flying high into the air.

The suddenness of the movement threw him off balance. He fell sideways slowly, dragging his rubberized suit along an upright rock fragment of sharp obsidian.

Tony Bannerman heard the other

We seem so close to Space Flight that we've been afraid, these last weeks, that history might catch up with us and make Harry Harrison's exciting story dated. There is that danger, these days. Harrison, well known SF writer and editor, will be remembered for his OPEN ALL DOORS, in our February issue.

man's hoarse shout in his earphones and whirled. Morley was down, thrashing on the sand with both hands pressed against the ragged tear in the suit leg. Moisture-laden air was pouring out in a steaming jet that turned instantly to scintillating ice crystals. Tony jumped over to him, trying to close the tear with his own ineffectual gloves. Their faceplates close, he could see the look of terror on Morley's face—as well as the blue tinge of cyanosis.

"Help me-help me!"

The words were shouted so loud they rasped the tiny helmet earphones. But there was no help. They had taken no emergency patches with them. All the patches were in the ship at least a quarter of a mile away. Before he could get there and back Morley would be dead.

Tony straightened up slowly and sighed. Just the two of them in the ship, there was no one else on Mars who could help. Morley saw the look in Tony's eyes and stopped struggling.

"No hope at all, Tony— I'm dead?"

"Just as soon as all the oxygen is gone; thirty seconds at the most. There's nothing I can do."

Morley grated the shortest, vilest word he knew and pressed the red EMERGENCY button set into his glove above the wrist. The ground opened up next to him in the same instant, sand sifting down around the edges of the gap. Tony stepped back as two men in white pressure suits came up out of the hole. They had red crosses on the fronts of their helmets and carried a stretcher. They rolled Morley onto it and were gone back into the opening in an instant.

Tony stood looking sourly at the hole for about a minute, waiting until Morley's suit was pushed back through the opening. Then the sand-covered trapdoor closed and the desert was unbroken once more.

The dummy in the suit weighed as much as Morley and its plastic features even resembled him a bit. Some wag had painted black X's on the eyes. Very funny, Tony thought, as he struggled to get the clumsy thing onto his back. On the way back the now-quiet Martian animal was lying in his path. He kicked it aside and it rained a fine shower of springs and gears.

The too-small sun was touching the peaks of the sawtooth red mountains when he reached the ship. Too late for a burial today—it would have to wait until morning. Leaving the thing in the airlock, he stamped into the cabin and peeled off his dripping pressure suit.

It was dark by that time and the things they had called the night-owls began clicking and scratching against the hull of the ship. They had never managed to catch sight of the night-owls; that made the sound doubly annoying. Tony clattered the pans noisily to drown the sound of them out while he pre-

pared the hot evening rations. When the meal was finished and the dishes cleared away, he began to feel the loneliness for the first time. Even the chew of tobacco didn't help; tonight it only reminded him of the humidor of green Havana cigars waiting for him back on earth.

His single kick upset the slim leg of the mess table, sending metal dishes, pans and silverware flying in every direction. They made a satisfactory noise and he exacted even greater pleasure by leaving the mess just that way and going to bed.

They had been so close this time, if only Morley had kept his eyes open! He forced the thought out of his mind and went to sleep.

In the morning he buried Morley. Then, grimly and carefully, passed the remaining two days until blast off time. Most of the geological samples were in and the air sampling and radiation recording meters were fully automatic.

On the final day, he removed the recording tapes from the instruments and carried the instruments away from the ship where they couldn't be caught in the take off blast. Next to the instruments he piled all the extra supplies, machinery and unneeded equipment. Shuffling through the rusty sand for the last time, he gave Morley's grave an ironical salute as he passed. There was nothing to do in the ship and not as much as a

pamphlet left to read. Tony passed the two remaining hours on his bunk counting the rivets in the ceiling.

A sharp click from the control clock broke the silence and behind the thick partition he could hear the engines begin the warm-up cycle. At the same time, the padded arms slipped across his bunk, pinning him down securely. He watched the panel slip back in the wall next to him and the hypo arm slide through. Moving erratically like a snake as its metal fingers sought him out. They touched his ankle and the serpent's tooth of the needle snapped free. The last thing he saw was the needle slipping into his vein, then the drug blacked him out.

As soon as he was under, a hatch opened in the rear bulkhead and two orderlies brought in a stretcher. They wore no suits nor masks and the blue sky of earth was visible behind them.

Coming to was the same as it always had been. The gentle glow from the stimulants that brought him up out of it, the first sight of the white ceiling of the operating room on earth.

Only this time the ceiling wasn't visible, it was obscured by the red face and thundercloud brow of Colonel Stegham. Tony tried to remember if you saluted while in bed, then decided that the best thing to do was lie quietly.

"Damn it Bannerman," the

colonel growled, "welcome back on earth. And why did you bother coming back? With Morley dead the expedition has to be counted a failure—and that means not one completely successful expedition to date."

"The team in number two, sir, how did they do . . . ?" Tony tried to sound cheerful.

"Terrible. If anything, worse than your team. Both dead on the second day after landing. A meteor puncture in their oxygen tank and they were too busy discovering a new flora to bother looking at any meters.

"Anyway, that's not why I'm here. Get on some clothes and come into my office."

He slammed out and Tony scrambled off the bed, ignoring the touch of dizziness from the drugs. When colonels speak, lieutenants hurry to obey.

Colonel Stegham was scowling out of his window when Tony came in. He returned the salute and proved that he had a shard of humanity left in his military soul by offering Tony one of his cigars. Only when they had both lit up did he wave Tony's attention to the field outside the window.

"Do you see that? Know what it is?"

"Yes, sir, the Mars rocket."

"It's going to be the Mars rocket. Right now, it's only a half-completed hull. The motors and instruments are being assembled in plants all over the country.

Working on a crash basis the earliest estimate of completion is six months from now.

"The ship will be ready—only we aren't going to have any men to go in her. At the present rate of washout there won't be a single man qualified. Yourself included."

Tony shifted uncomfortably under his gaze as the colonel continued.

"This training program has always been my baby. I dreamed it up and kept after the Pentagon until it was adapted. We knew we could build a ship that would get to Mars and back, operated by automatic controls that would fly her under any degree of gravity or free fall. But we needed men who could walk out on the surface of the planet and explore it—or the whole thing would be so much wasted effort.

"The ship and the automatic pilot could be tested under simulated flight condition, and the bugs worked out. It was my suggestion, which was adopted, that the men who are to go in the ship should be shaken down in the same way. Two pressure chambers were built, simulated trainers that duplicated Mars in every detail we could imagine. We have been running two-men teams through chambers for eighteen months now, trying to shake down and train them to man the real ship out there.

"I'm not going to tell you how many men we started with, or how many have been casualties because of the necessary realism of the chambers. I'll tell you this much though—we haven't had one successful simulated expedition in all that time. And every man who has broken down or "died," like your partner Morley, has been eliminated.

"There are only four possible men left, yourself included. If we don't get one successful two-man team out of you four, the entire program is a washout."

Tony sat frozen, the dead cigar between his fingers. He knew that the pressure had been on for some months now, that Colonel Stegham had been growling around like a gut-shot bear. The colonel's voice cut through his thoughts.

"Psych division has been after me for what they think is a basic weakness of the program. Their feeling is that because it is a training program the men always have it in the back of their minds that it's not for real. They can always be pulled out of a tight hole. Like Morley was, at the last moment. After the results we have had I am beginning to agree with Psych.

"There are four men left and I am going to run one more exercise for each two-man group. This final exercise will be a full dress rehearsal—this time we're playing for keeps."

"I don't understand, Colonel . . ."

"It's simple." Stegham accented his words with a bang of his fist on the desk. "We're not going to help or pull anyone out no matter how much they need it. This is battle training with live ammunition. We're going to throw everything at you that we can think of and you are going to have to take it. If you tear your suit this time, you're going to die in the Martian vacuum just a few feet from all the air in the world."

His voice softened just a bit when he dismissed Tony.

"I wish there was some other way to do it, but we have no choice now. We have to get a crew for that ship next month and this is the only way to be sure."

Tony had a three-day pass. He was drunk the first day, hungover sick the second—and boiling mad on the third. Every man on the project was a volunteer, but this was carrying the thing too far. He could get out any time he wanted. Though he knew what he would look like then. There was only one thing to do, go along with the whole stupid idea. He would do what they wanted and go through with it. And when he had finished the exercise, he looked forward to hitting the colonel right on the end of his big nose.

He joined his partner, Hal Mendoza, when he went for his medical. They had met casually at the training lectures before the simulated training began. They shook hands reservedly now, each eyeing the other with a view to future possibilities. It took two men to make a team and either one

could be the cause of death for the other.

Mendoza was almost the physical opposite of Tony, tall and wiry, while Tony had the squat, solid look of a young bull. Tony's relaxed, almost casual manner, was matched by the other man's seemingly tense nerves. Hal chainsmoked and his eyes were never still.

Tony pushed away his momentary worry with an effort. Hal would have to be good to get this far in the program. He would probably calm down once the exercise was under way.

The medic took Tony next and began the detailed examination.

"What's this?" the medical officer asked Tony as he probed with a swab at his cheek.

"Ouch," Tony said. "Razor cut, my hand slipped while I was shaving."

The doctor scowled and painted on antiseptic, then slapped on a square of gauze.

"Watch all skin openings," he warned. "They make ideal entry routes for bacteria. Never know what you might find on Mars."

Tony started a protest, then let it die in his throat. What was the use of explaining that the real trip—if and when it ever came off—would take 260 days. Any cuts would easily heal in that time, even in frozen sleep.

As always after the medical, they climbed into their flight suits and walked over to the testing building.

On the way, Tony stopped at the barracks and dug out his chess set and a well-thumbed deck of cards. The access door was open in the thick wall of Building Two and they stepped through into the dummy Mars ship. After the medics had strapped them to the bunks the simulated frozen sleep shots put them under.

Coming to was accompanied by the usual nausea and weakness. No realism spared. On a sudden impulse Tony staggered to the latrine mirror and blinked at his red-eyed, smooth-shaven reflection. He tore the bandage off his cheek and his fingers touched the open cut with the still congealed drop of blood at the bottom. A relaxed sigh slipped out. He had the recurrent bad dream that some day one of these training trips would really be a flight to Mars. Logic told him that the army would never forego the pleasure and publicity of a big send-off. Yet the doubt, like all illogical ones, persisted. At the beginning of each training flight, he had to abolish it again.

The nausea came back with a swoop and he forced it down. This was one exercise where he couldn't waste time. The ship had to be checked. Hal was sitting up on his bunk waving a limp hand. Tony waved back.

At that moment, the emergency communication speaker crackled into life. At first, there was just the rustle of activity in the control office, then the training officer's voice cut through the background noise.

"Lieutenant Bannerman — you awake yet?"

Tony fumbled the mike out of its clip and reported. "Here, sir."

"Just a second, Tony," the officer said. He mumbled to someone at one side of the mike, then came back on. "There's been some trouble with one of the bleeder valves in the chamber; the pressure is above Mars norm. Hold the exercise until we pump her back down."

"Yes, sir," Tony said, then killed the mike so he and Hal could groan about the so-called efficiency of the training squad. It was only a few minutes before the speaker came back to life.

"Okay, pressure on the button. Carry on as before."

Tony made an obscene gesture at the unseen man behind the voice and walked over to the single port. He cranked at the handle that moved the crash shield out of the way.

"Well, at least it's a quiet one," he said after the ruddy light had streamed in. Hal came up and looked over his shoulder.

"Praise Stegham for that," he said. "The last one, where I lost my partner, was wind all the time. From the shape of those dunes it looks like the atmosphere never moves at all."

They stared glumly at the familiar red landscape and dark sky for a long moment, then Tony turned

to the controls while Hal cracked out the atmosphere suits.

"Over here—quick!"

Hal didn't have to be called twice, he was at the board in a single jump. He followed Tony's pointing finger.

"The water meter—it shows the tank's only about half full."

They fought off the plate that gave access to the tank compartment. When they laid it aside a small trickle of rusty water ran across the deck at their feet. Tony crawled in with a flashlight and moved it up and down the tubular tanks. His muffled voice echoed inside the small compartment.

"Damn Stegham and his tricks—another 'shock of landing' failure. Connecting pipe split and the water that leaked out has soaked down into the insulating layer; we'll never get it out without tearing the ship apart. Hand me the goo, I'll plug the leak until we can repair it."

"It's going to be an awfully dry month," Hal muttered while he checked the rest of the control board.

The first few days were like every other trip. They planted the flag and unloaded the equipment. The observing and recording instruments were set up by the third day, so they unshipped the theodolite and started their maps. By the fourth day they were ready to begin their sample collecting.

It was just at this point that they really became aware of the dust.

Tony chewed an unusually gritty mouthful of rations, cursing under his breath because there was only a mouthful of water to wash it down with. He swallowed it painfully, then looked around the control chamber.

"Have you noticed how dusty it is?" he asked.

"How could you not notice it? I have so much of it inside my clothes I feel like I'm living on an ant hill."

Hal stopped scratching just long enough to take a bite of food.

They both looked around and it hit them for the first time just how much dust was in the ship. A red coating on everything, in their food and in their hair. The constant scratch of grit underfoot.

"It must come in on our suits," Tony said. "We'll have to clean them off better before coming inside."

It was a good idea—the only trouble was that it didn't work. The red dust was as fine as talcum powder and no amount of beating could dislodge it; it just drifted around in a fine haze. They tried to forget the dust, just treating it as one more nuisance Stegham's technicians had dreamed up. This worked for awhile, until the eighth day when they couldn't close the outer door of the air lock. They had just returned from a samplecollecting trip. The air lock barely held the two of them plus the bags of rock samples. Taking turns, they beat the dust off each other as well

as they could, then Hal threw the cycling switch. The outer door started to close, then stopped. They could feel the increased hum of the door motor through their shoes, then it cut out and the red trouble light flashed on.

"Dust!" Tony said. "That damned red dust is in the works."

The inspection plate came off easily and they saw the exposed gear train. The red dust had merged into a destructive mud with the grease. Finding the trouble was easier than repairing it, They had only a few basic tools in their suit pouches. The big tool box and all the solvent that would have made fast work of the job were inside the ship. But they couldn't be reached until the door was fixed. And the door couldn't be fixed without tools. It was a paradox situation that seemed very unfunny.

It took them only a second to realize the spot they were in—and almost two hours to clean the gears as best they could and force the door shut. When the inner port finally opened, both their oxygen tanks read EMPTY, and they were operating on the emergency reserve.

As soon as Hal opened his helmet, he dropped on his bunk. Tony thought he was unconscious until he saw that the other man's eyes were open and staring at the ceiling. He cracked open the single flask of medicinal brandy and forced Hal to take some. Then he had a double swallow himself and tried to ignore the fact that his partner's hands were trembling violently. He busied himself making a better repair of the door mechanism. By the time he had finished, Hal was off the bunk and starting to prepare their evening meal.

Outside of the dust, it was a routine exercise—at first. Surveying and sampling most of the day, then a few leisure hours before retiring. Hal was a good partner and the best chess player Tony had teamed with to date. Tony soon found out that what he thought was nervousness was nervous energy. Hal was only happy when he was doing something. He threw himself into the day's work and had enough enthusiasm and energy left over to smash the yawning Tony over the chessboard. The two men were quite opposite types and made good teammates.

Everything looked good—except for the dust. It was everywhere, and slowly getting into everything. It annoyed Tony, but he stolidly did not let it bother him deeply. Hal was the one that suffered most. It scratched and itched him, setting his temper on edge. He began to have trouble sleeping.

And the creeping dust was slowly working its way into every single item of equipment. The machinery was starting to wear as fast as their nerves. The constant presence of the itching dust, together with the acute water shortage was maddening. They were always thirsty and had only the minimum amount of water to last until blast off. With proper rationing, it would barely be enough.

They quarreled over the ration on the thirteenth day and almost came to blows. For two days after that they didn't talk. Tony noticed that Hal always kept one of the sampling hammers in his pocket; in turn, he took to carrying one of the dinner knives.

Something had to crack. It turned out to be Hal.

It must have been the lack of sleep that finally got to him. He had always been a light sleeper, now the tension and the dust were too much. Tony could hear him scratching and turning each night when he forced himself to sleep. He wasn't sleeping too well himself, but at least he managed to get a bit. From the black hollows under Hal's bloodshot eyes it didn't look like Hal was getting any.

On the eighteenth day he cracked. They were just getting into their suits when he started shaking. Not just his hands, but all over. He just stood there shaking until Tony got him to the bunk and gave him the rest of the brandy. When the attack was over he refused to go outside.

"I won't . . . I CAN'T!" He almost screamed the words. "The suits won't last much longer, they'll fail while we're out there . . . I won't last any longer . . . we have to go back . . ."

Tony tried to reason with him. "We can't do that, you know this

is a full scale exercise. We can't get out until the twenty-eight days are up. That's only ten more days—you can hold out until then. That's the minimum figure the army decided on for a stay on Mars—it's built into all the plans and machinery. Be glad we don't have to wait an entire Martian year each time until the planets get back into conjunction. With deep sleep and atomic drive that's one trouble that won't be faced."

"Stop talking and trying to kid me along," Hal shouted. "I don't give a flying frog what happens to the first expedition. I'm washing myself out and this final exercise will go right with me. I'm not going crazy from lack of sleep just because some brass-hat thinks super-realism is the answer. If they refuse to stop the exercise when I call, it will be murder."

He was out of his bunk before Tony could say anything and scratching at the control board. The EMERGENCY button was there as always, but they didn't know if it was connected this time. Or even if it were connected, if anyone would answer. Hal pushed it and kept pushing it. They both looked at the speaker, holding their breaths.

"The dirty rotten . . . they're not going to answer the call." Hal barely breathed the words.

Then the speaker rasped to life and the cold voice of Colonel Stegham filled the tiny room.

"You know the conditions of this exercise—so your reasons for call-

ing had better be pretty good. What are they?"

Hal grabbed the microphone, half-complaining, half-pleading—the words poured out in a torrent. As soon as he started, Tony knew it would not be any good. He knew just how Stegham would react to the complaints. While Hal was still pleading the speaker cut him off.

"That's enough. Your explanation doesn't warrant any change in the original plan. You are on your own and you're going to have to stay that way. I'm cutting this connection permanently; don't attempt to contact me again until the exercise is over."

The click of the opening circuit was as final as death.

Hal sat dazed, tears on his cheeks. It wasn't until he stood up that Tony realized they were tears of anger. With a single pull, Hal yanked the mike loose and heaved it through the speaker grill.

"Wait until this is over, Colonel, and I can get your pudgy neck between my hands." He whirled towards Tony. "Get out the medical kit, I'll show that idiot he's not the only one who can play boyscout with his damned exercises."

There were four morphine styrettes in the kit; he grabbed one out, broke the seal and jabbed it against his arm. Tony didn't try to stop him, in fact, he agreed with him completely. In a few minutes, Hal was slumped over the table, snoring deeply. Tony picked

him up and dropped him onto his bunk.

Hal slept almost twenty hours and when he woke up some of the madness and exhaustion was gone from his eyes. Neither of them mentioned what had happened. Hal marked the days remaining on the bulkhead and carefully rationed the remaining morphine. He was getting about one night's sleep in three, but it seemed to be enough.

They had four days left to blast off when Tony found the first Martian life. It was something about the size of a cat that crouched in the lee of the ship. He called to Hal who came over and looked at it.

"That's a beauty," he said, "but nowheres near as good as the one I had on my second trip. I found this ropy thing that oozed a kind of glue. Contrary to regulations—frankly I was curious as hell—I dissected the thing. It was a beauty, all wheels and springs and gears, Stegham's technicians do a good job. I really got chewed out for opening the thing, though. Why don't we just leave this one where it is?"

For a moment Tony almost agreed—then changed his mind.

"That's probably just what they want—so let's finish the game their way. I'll watch it, you get one of the empty ration cartons."

Hal reluctantly agreed and climbed into the ship. The outer door swung slowly and ground into place. Disturbed by the vibration, the thing darted out towards Tony. He gasped and stepped back before he remembered it was only a robot.

"Those technicians really have wonderful imaginations," he mumbled.

The thing started to run by him and he put his foot on some of its legs to hold it. There were plenty of legs; it was like a small-bodied spider surrounded by a thousand unarticulated legs. They moved in undulating waves like a milliped and dragged the misshapen body across the sand. Tony's boot crunched on the legs, tearing some off. The rest held.

Being careful to keep his hand away from the churning legs, he bent over and picked up a dismembered limb. It was hard and covered with spines on the bottom side. A milky fluid was dripping from the torn end.

"Realism," he said to himself, "those technicians sure believe in realism."

And then the thought hit him. A horribly impossible thought that froze the breath in his throat. The thoughts whirled round and round and he knew they were wrong because they were so incredible. Yet he had to find out, even if it meant ruining their mechanical toy.

Keeping his foot carefully on the thing's legs, he slipped the sharpened table knife out of his pouch and bent over. With a single, swift motion he stabbed.

"What the devil are you doing?"

Hal asked, coming up behind him. Tony couldn't answer and he couldn't move. Hal walked around him and looked down at the thing on the ground.

It took him a second to understand, then he screamed.

"IT'S ALIVE! It's bleeding and there are no gears inside. It can't be alive—if it is we're not on earth at all—WE'RE ON MARS!" He began to run, then fell down, screaming.

Tony thought and acted at the same time. He knew he only had one chance. If he missed they'd both be dead. Hal would kill them both in his madness. Balling his fist, he let swing hard as he could at the spot just under the other man's breastplate. There was just the thin fabric of the suit there and that spot was right over the big nerve ganglion of the solar plexus. The thud of the blow hurt his hand—but Hal collapsed slowly to the ground. Putting his hands under the other's arms, he dragged him into the ship.

Hal started to come to after he had stripped him and laid him on the bunk. It was impossible to hold him down with one hand and press the freeze cycling button at the same time. He concentrated on holding Hal's one leg still and pushed the button. The crazed man had time to hit Tony three times before the needle lanced home. He dropped back with a sigh and Tony got groggily to his feet. The manual actuator on the frozen sleep

had been provided for any medical emergency so the patient could survive until the doctors could work on him back at base. It had proven its value.

Then the same unreasoning terror hit him.

If the beast were real—Mars was real.

This was no "training exercise"—this was it. That sky outside wasn't a painted atmosphere, it was the real atmosphere of Mars. He was alone as no man had ever been alone before. On a planet millions of miles from his world.

He was shouting as he dogged home the outer air lock door, an animal-like howl of a lost beast. He had only enough control then to get to his bunk and throw the switch above it. The hypodermic was made of good steel so it went right through the fabric of his pressure suit. He was just reaching for the hypo arm to break it off when he dropped off into the blackness.

This time, he was slow to open his eyes. He was afraid he would see the riveted hull of the ship above his head. It was the white ceiling of the hospital, though, and he let the captive air out of his lungs. When he turned his head he saw Colonel Stegham sitting by the bed.

"Did we make it?" Tony asked. It was more of a statement than a question.

"You made it, Tony. Both of

you made it. Hal is awake here in the other bed."

There was something different about the colonel's voice and it took Tony an instant to recognize it. It was the first time he had ever heard the colonel talk with any emotion other than anger.

"The first trip to Mars. You can imagine what the papers are saying about it. More important, Tech says the specimens and meter reading you brought back are invaluable. When did you find out it wasn't an exercise?"

"The twenty-fourth day. We found some kind of Martian animal. I suppose we were pretty stupid not to have tumbled before that."

Tony's voice had an edge of bitterness.

"Not really. Every part of your training was designed to keep you from finding out. We were never certain if we would have to send the men without their knowledge, but there was always that possibility. Psych was sure the disorientation and separation from earth would cause a breakdown. I could never agree with them."

"They were right," Tony said, trying to keep the memory of fear out of his voice.

"We know now they were right, though I fought them at the time. Psych won the fight and we programmed the whole trip over on their say-so. I doubt if you appreciate it, but we went to a tremendous amount of work to convince

you two that you were still in the training program."

"Sorry to put you to all that trouble," Hal said. The colonel flushed a little. Not at the words but at the loosely-reined bitterness that rode behind them. He went on as if he hadn't heard.

"Those two conversations you had over the emergency phone were, of course, taped and the playback concealed in the ship. Psych scripted them on the basis of fitting any need, apparently they worked. The second one was supposed to be the final touch of realism, in case you should start being doubtful. Then we used a variation of deep freeze that suspends about ninety-nine per cent of the body processes; it hasn't been revealed or published yet. This along with anti-coagulents in the razor cut on Tony's chin covered the fact that so much time had passed."

"What about the ship," Hal asked. "We saw it—it was only half-completed."

"Dummy," the colonel said. "Put there for the public's benefit and all foreign intelligence services. Real one had been finished and tested weeks earlier. Getting the crew was the difficult part. What I said about no team finishing a practice exercise was true. You two men had the best records and were our best bets.

"We'll never have to do it this way again, though. Psych says that the next crews won't have that trouble; they'll be reinforced by the psychological fact that someone else was there before them. They won't be facing the complete unknown."

The colonel sat chewing his lip for a moment, then forced out the words he had been trying to say since Tony and Hal had regained consciousness.

"I want you to understand . . . both of you . . . that I would rather have gone myself than pull that kind of thing on you. I know how you must feel. Like we pulled some kind of a . . ."

"Interplanetary practical joke," Tony said. He didn't smile when he said it.

"Yes, something like that," the colonel rushed on. "I guess it was

a lousy trick—but don't you see, we had to? You two were the only ones left, every other man had washed out. It had to be you two, and we had to do it the safest way.

"And only myself and three other men know what was done; what really happened on the trip. No one else will ever know about it, I can guarantee you that."

Hal's voice was quiet, but cut through the still room like a sharp knife.

"You can be sure, colonel, that we won't be telling anybody about it."

When Colonel Stegham left, he kept his head down because he couldn't bring himself to see the look in the eyes of the first two explorers of Mars.