





Zip-Zip

AND THE RED PLANET

BY JOHN M. SCHEALER

Illustrated by Robert MacLean



NEW YORK: E. P. DUTTON & CO., INC.

Rocky Mountain College Library
Billings, Montana

Also by John M. Schealer

The Sycamore Warrior: A Mystery of Ancient Egypt,
This Way to the Stars, Zip-Zip and His Flying Saucer,
Zip-Zip Goes to Venus

Copyright, ©, 1961 by John M. Schealer
All rights reserved. Printed in the U.S.A.

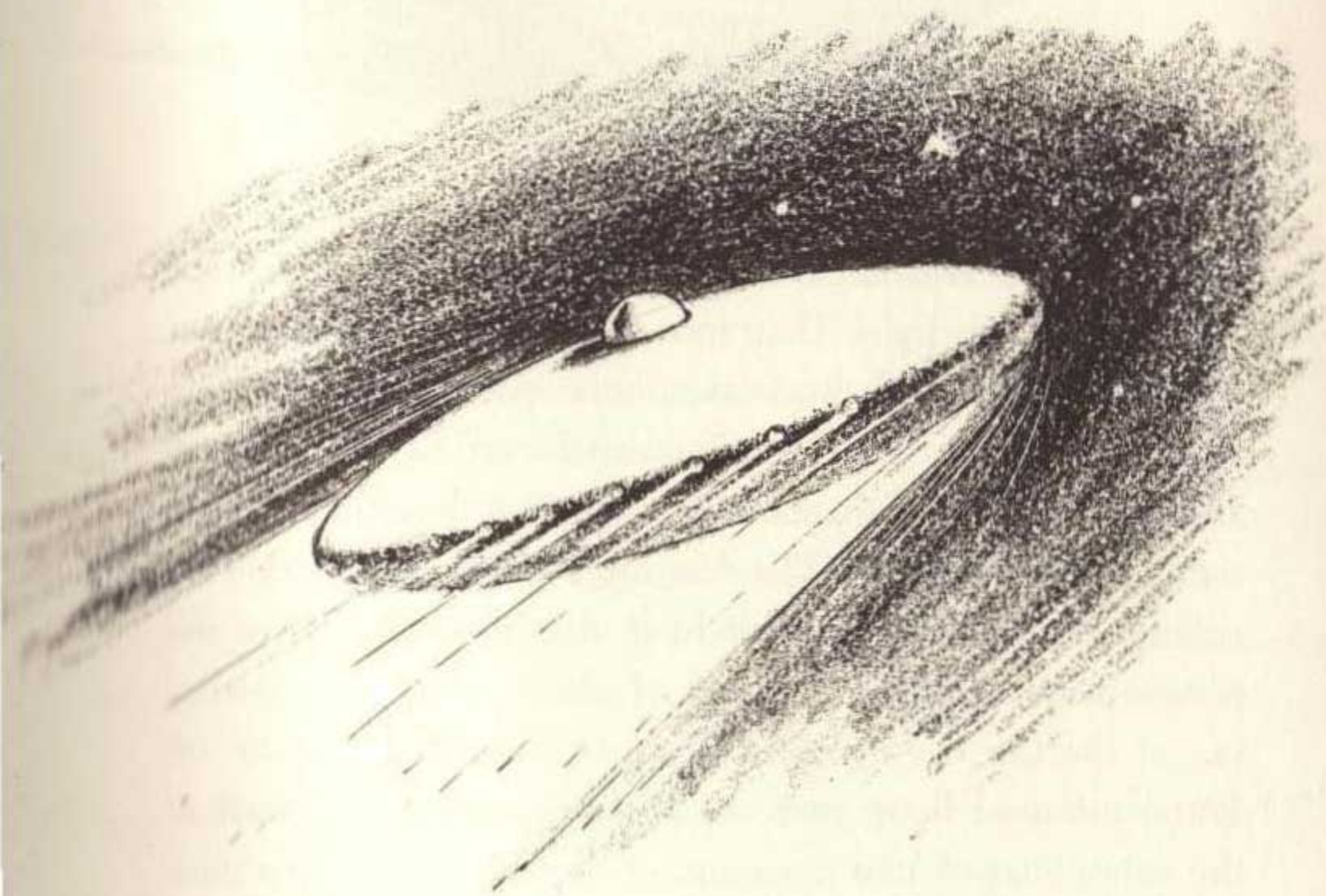
FIRST EDITION

No part of this book may be reproduced in any form without permission in writing from the publisher, except by a reviewer who wishes to quote brief passages in connection with a review written for inclusion in a magazine, newspaper or broadcast.

Published simultaneously in Canada
by Clarke, Irwin & Co., Ltd., of Toronto

Library of Congress Catalog Card Number: 61-12457

ZIP-ZIP AND THE RED PLANET





THROUGH the magnivisor masses of stars shone with a clear, steady light. Their movement, or lack of movement, gave no hint of the tremendous speed of the Martian spaceship as it hurtled through space toward its home planet. Seated on the broad cushioned seat before the ship's control panel was a lone man. The dim light of the faintly glowing ceiling, the only source of light in the cabin except for the distant stars, revealed a plume of yellow antennas growing out of the top of his smooth earless head. Behind him on four contoured body rests—two along each radial wall of the cabin shaped like a section of a circle—were five chil-



dren, and only one of these possessed antennas. The rest were obviously Earthchildren.

“Zip-Zip, I never thought I’d be going to Mars like this—and so soon after Christmas!”

“Watch the elbow, Sparky!” complained Randy Riddle, who was sharing one of the body rests with his younger brother. Randy was eight, just two years older than Sparky, but sometimes he felt like a father to Sparky. “And what do you mean, ‘so soon after Christmas?’ ”

Sparky rolled his head on the headrest to see Randy. “I mean—I just mean. . . .”

"You're mean all right. Tell us something new," quipped Tom Riddle. He occupied the body rest directly opposite Sparky and Randy.

"Don't rush me!" retorted Sparky.

From the rest before Randy and Sparky's, Bonnie Riddle looked back at the boys. Though she was not the oldest of the Riddle children, Tom's eleven years surpassing her nine, she took pride in being the most grown-up. "I wondered how long you boys could go without arguing," she said.

"I'm not arguing," objected Sparky. "I'm just talking."

"Right, you're just talking," heckled Randy.

"Sure!" said Sparky. "If you were as smart as you think you are, you'd be as smart as me."

Randy forced a laugh.

"Listen, will you?" Sparky went on angrily. "So many good things happened all at once, like Christmas and going to Mars. That's what I meant!"

Now the strange boy whom Sparky had addressed as Zip-Zip spoke from where he reclined on the right forward body rest. "I hope your visit to my planet will be a good thing," he said.

In spite of the gloom Randy detected a serious glint in Zip-Zip's large eyes, and the suspicion grew in his mind that somehow something had gone wrong with this trip to Mars. He and his brothers and sister had been looking forward to the trip ever since the boy from Mars had suggested it

on their return from Venus six months ago. So when Zip-Zip had appeared at their front door that night in the middle of a blinding snowstorm, it seemed too good to be true. During the excitement that followed, the exchanging of many words to get his father's and mother's permission to go to Mars with Zip-Zip, he had noticed nothing unusual about Zip-Zip's behavior. But as soon as they entered the spaceship, and the whistling snow was shut out, Zip-Zip became quiet, and he seemed to have trouble smiling, which was not like him at all. At first Randy had told himself that Zip-Zip's duties aboard the spaceship were responsible, but now he was certain that this was not the explanation.

"What's the matter, Zip-Zip?" blurted Randy suddenly. "Have I done something wrong?"

Zip-Zip half smiled. "You have a sharp eye and a good mind, Randy," he replied.

"What are you guys talking about?" asked Sparky.

"Randy thinks I am concealing something from you," said Zip-Zip. "And he is right."

Tom raised himself from his body rest as far as the restraining flight belt around his waist would permit, and since the spaceship was in free flight he seemed to float upright. "I don't understand," he said.

"Your visit to my planet was to be a great event—and it still can be—but ZIP since we, Hak"—he indicated the pilot of the spaceship—"and I, left Lafonee, or Mars as

you say, to come for you, we ZIP have been receiving disturbing messages on the cosmic-phone. Some troublemakers on Mars are again plotting ZIP against the government."

"Oh!" said Bonnie. "You have a war on Mars."

"No; nothing like that. What is happening now could lead ZIP to war, but—"

"What's all this got to do with us?" interrupted Tom.

"Let Zip-Zip talk, Tom, and you'll find out," said Randy, and Bonnie and Sparky agreed.

"It is not easy to explain," Zip-Zip continued. "Mars has had a world government for centuries, yet from time to time ZIP there is dissatisfaction among the people. For many years the leaders of that section of Mars known as Samoray ZIP have been critical of government policy. Most of all they object to the policy of trying to make up a ZIP shortage of nuclear fuel by peaceful means. The Samorays are a fiery high-spirited people, the most warlike ZIP of our people in ancient times, and they say we should take uranium and thorium ZIP from Earth and Venus by force. They complain that the present government is too easygoing; that ZIP Gordemuntu, the head of the government, is leading us to ruin by searching for mere scraps ZIP of uranium and thorium on uninhabited satellites. The very thought of making peaceful contacts with the ZIP people of Earth and Venus to buy fuel elements angers them."

Randy whistled under his breath. "You mean these Sam-

orays would like Mars to declare war on Earth—and Venus?”

“Yes; it amounts to that, I guess. But don’t be afraid. The government of peaceful men is strong ZIP and the great majority of my people are against fighting a war for any reason.”

“I still don’t see why we should be mixed up in this fight, or whatever it is,” said Tom. “We just want to see Mars.”

In Martian, Zip-Zip asked the pilot whether he had the spaceship on automatic pilot, and when the pilot replied, in Martian, that he had, Zip-Zip switched to English, saying, “Then tell our friends, Hak, why our plans have been changed.”

The pilot increased the ceiling illumination and floated around the back of the control seat with a graceful swimming motion. He was not tall, but his snug silver uniform outlined a muscular body. “I should be happy to explain to the gorillas of Earth,” he said as he made a grab for the high back of the control seat.

“Gorillas!” exclaimed Randy.

“We’re not gorillas,” said Bonnie irately.

“I’m a boy,” growled Sparky.

Tom again raised himself on his elbows. “What did you say his name is, Zip-Zip?”

“The *captain’s* name is Haktrofenti. You may call him Hak, which is like a first name. ZIP Trofenti is his family name. But before you say any more, Tom, I should warn

you that Hak ZIP likes to joke. You were only teasing them, weren't you, Hak?"

"Yes," he said. Flecks of light danced in his large blue eyes, and though he did not smile the lines around his mouth and eyes showed that he was not unused to smiling. "I remember enough of my schooling about Earth to know that they are elephants."

The children laughed.

"He's a joker for sure," chuckled Randy.

"The joke could be on him sometime," said Sparky.

Hak and Sparky seemed to be silently sizing each other up. Then Hak said, "It is a serious matter that we are faced with, children of Earth. As the first ZIP people of Earth to visit Mars, you were to be publicly welcomed. But in some way ZIP the Samoray rebels discovered that you were coming to Mars, and they have spread all kinds ZIP of wild rumors of an invasion from Earth, and of how Gordemuntu and the rest of the ZIP Supreme Council have been tricked by Earth."

Randy started to laugh and almost choked in his excitement. "They're talking about us? They say we are going to invade Mars—the four of us?"

Hak replied that that was the way it appeared.

"Did you hear that, Tom?" croaked Randy.

"It's goofy," said Tom, laughing.

"The rumors are so fantastic," Hak went on, "that Gordemuntu has no good reason for publicly denying them, yet ZIP they remain in the minds of some people. Besides, Gordemuntu does not believe that the Samoray ZIP rebels are finished. He thinks the rumors they have spread are only the beginning of a new and ZIP very strong action against his government.

"He zips," said Sparky.

"What?" said Tom.

"I said he zips. Hak zips like Zip-Zip."

Zip-Zip understood what Sparky meant. "Hak releases excess psychogalvanic energy that way, just as I do. Your language is so much easier ZIP to think and speak than our language that we must release psychogalvanic energy while speaking it ZIP to avoid getting a headache. Perhaps you want to name Hak Zip-Zip as you did me."

Randy looked annoyed. "For Pete's sake, Sparky, quit bothering us."

"You're always bothered," grumbled Sparky. "You're the most bothered person I know."

"What are we going to do?" asked Tom, getting back to the problem that awaited them on Mars. "If you say we're not welcome—"

"Oh, I did not say that!" Zip-Zip broke in quickly. "But your presence on Mars must be kept a secret until the situ-

ation ZIP changes. . . .” Zip-Zip’s voice trailed off into embarrassed silence, a silence that was interrupted by a high-pitched humming sound.

Hak returned to the control panel and, in the jumble of color-keyed buttons and levers, he pressed a silver button. The humming stopped immediately. In his own musical language, he spoke a few words, then paused. A minute dragged by.

“I remember that that funny sound comes from your cosmic-phone, Zip-Zip,” said Randy. “But what’s the holdup? Why doesn’t Hak get an answer?”

“You forget, Randy, that radio is not instantaneous. Radio waves travel at the same speed as ZIP the waves of visible light.”

“One hundred and eighty-six thousand miles per second,” said Randy confidently.

“Right. So if—”

“Oh,” exclaimed Randy, “I get the picture. We’re still so far from Mars that it takes minutes for radio messages to travel back and forth.”

“Exactly,” said Zip-Zip. “On a planet the distances involved in radio communication are so small that communication *seems* ZIP instantaneous.” Now he spoke to Hak in Martian, and Hak answered briefly. “Hak says we are about twenty-eight million miles from Mars, so you can see that the ZIP time between speeches must be about five minutes.”

Bonnie brought the palms of her hands down sharply on her body rest, causing her body to strain against her flight belt. "Goll-ee, isn't space big? It's hard to imagine how big it really is."

Hak had been listening to the children's conversation. Now he joined in. "Ope," he called to Zip-Zip, using his Martian first name.

"Call me Zip-Zip," urged the boy from Mars. "I like the name my friends of Earth gave me better than my real name."

"I shall try to remember that," said Hak, amused. "All I wished to say was this. If you want to give the ZIP Earth-children a completely accurate picture of what is happening, you should point out that the time between answers ZIP is constantly being shortened, because we are bearing down on the planet transmitter at four million miles an hour."

"Say, Zip-Zip, you never told us anything about this flying saucer," said Randy. "Even in the snowstorm we could see it was too big to be your old one."

"The door is different," observed Bonnie.

"Hatch!" corrected Randy. He took pride in being technically correct. "This hatch is like a bubble on a plane, instead of pointed."

Zip-Zip nodded and his antenna plume waved gently. "This spaceship is larger. It is a military spaceship—what we call a six-R ship, because it has ZIP six gamma ray projectors. The atomic generator of this ship has to be very

powerful ZIP to operate its heavy-duty equipment, which includes many devices not in a civilian ship. For instance, this ZIP ship is equipped with a force screen that doubles the protection of the regular triple hull against ZIP meteors."

"I wonder why we can't build a spaceship like this," said Tom.

"Maybe I could if I tried," said Sparky. Then he giggled, and all except Tom laughed.

"Oh, I didn't mean us," said Tom impatiently. "I meant our scientists."

"I think your people, all the people of Earth, are doing very well," said Zip-Zip, still smiling. "In a short time they ZIP have accomplished a great deal. Of course they might do better if they could ZIP govern themselves better." He stopped short and glanced around sheepishly. "At the moment I, as a Martian, have no right to criticize your planet's ZIP politics. My own people are not setting a good example."

An outpouring of Martian sounded through the cabin. Randy was the first to notice that Hak was not speaking, but that the cosmic-phone, the perforated metal ball attached to the top edge of the control panel, had come to life.

As Hak began his reply to the radio voice, Zip-Zip translated the message for the Riddles. "We are to land at Spaceport Eighty-four. That is an emergency port in the desert. Representatives ZIP of the government will meet us there."

He settled back on his body rest, and as if talking to himself he added, "It is very strange, very strange."

Feeling the strain of their trip, each busy with his own thoughts, the children were finally content to rest quietly. Hak had plunged the cabin into semidarkness again, and only a gentle whispering sound—the mild static of outer space—told of the open radio transmitter, that invisible tie to the mysterious planet Mars which was rushing through the dark of space somewhere ahead.

RANDY felt as if he were falling. For a few seconds he did not know where he was. Then he saw Hak standing before him.

"You fell asleep. All of you slept like the musee in winter. I have locked your body rests ZIP at a forty-five-degree angle, and faced them opposite our line of motion to protect you against the ZIP force created by deceleration. The high-energy force screen that hugs the control seat when the ZIP forward rockets are operating does not take in these body rests. So keep your flight belts ZIP buckled. Relax. Do not try to leave your body rests!" Hak poked Sparky in the ribs. "That includes you."

"I know it!" Sparky yelled after Hak's retreating figure.

Randy reacted quickly to his brother's impoliteness. "Cut it out!" he cautioned him and jabbed him in the side.

"Cut it out yourself!" snapped Sparky, rubbing his side. "I'm getting black and blue."

Whatever reply Randy had in mind was lost forever when Hak opened up the batteries of lateral rockets ringing the forward area of the large circular spaceship. Like an enormous hand, a force several times the pressure of Earth's gravity pinned Randy against his body rest. How long the ordeal lasted he could not guess, but he was very glad when it ended, and very disappointed, too, when it was repeated over and over again. He had undergone the same strain when they had built up speed, but then it had seemed worth-while. Slowing down was not very exciting.

Suddenly Sparky screamed.

With an effort Randy asked what was the matter. He felt his body growing lighter.

The cabin brightened, and everyone began to talk at once. Hak appeared at Sparky's side, looking worried.

"I'm O.K.," said Sparky in a voice that was not very convincing.

Hak examined him, even asking him to open his mouth. "I think you have not been injured, Sparky," he said finally.

"It was my nerves," sighed Sparky.

Tom heehawed. "Your nerves!"

"If mother has nerves, I guess I can have nerves," said Sparky with his usual vigor.

"He's all right," said Randy. "He's mean again."

Hak grinned. "I am glad you are mean again, Sparky. I truly am. Still we must go on decelerating if we are to land on Mars on approach. ZIP I shall give you longer rest periods between high gravities."

As Hak withdrew, Sparky muttered, "You know, I could get to like that guy."

It was about an hour later that Randy and the rest of the children heard the welcome news.

"Lafonee ahead!" called Hak.

"Mars?" asked Bonnie.

"Yes, Mars," answered Zip-Zip.

The serious deceleration was passed, Hak said, so, if they liked, the children could come to the control seat. There was room for only four more, he noted, but for the remaining flight time Sparky, he thought, could sit between Tom's legs, and they could use a single flight belt.

"Gangway!" shouted Sparky. "I want to see Mars."

Hearing this, Hak quickly warned the children that they were again in free flight and should keep hold of something as they moved around, for the least exertion could send them against the cabin ceiling.

Bonnie was the first to reach the control seat. Through the magnivisor—a device that magnified the spaces between the atoms of the spaceship's metal side and made it more transparent than glass—she saw a disk about four times the size of the Moon, mottled with red and a variety of

greens. The darker areas of the lower half of the disk were bluish-green, and lines of this same shade of green crisscrossed the entire planet. A heartfelt "beautiful" escaped Bonnie's lips, and her brothers quickly mimicked her, though they were just as thrilled by the sight of Mars.

"How far are we from it?" asked Randy.

"About a hundred thousand of your miles," said Zip-Zip.

"That is right," said Hak. "We shall touch down in a few hours."

"Hours!" exclaimed Tom. "Do you mean Martian hours?"

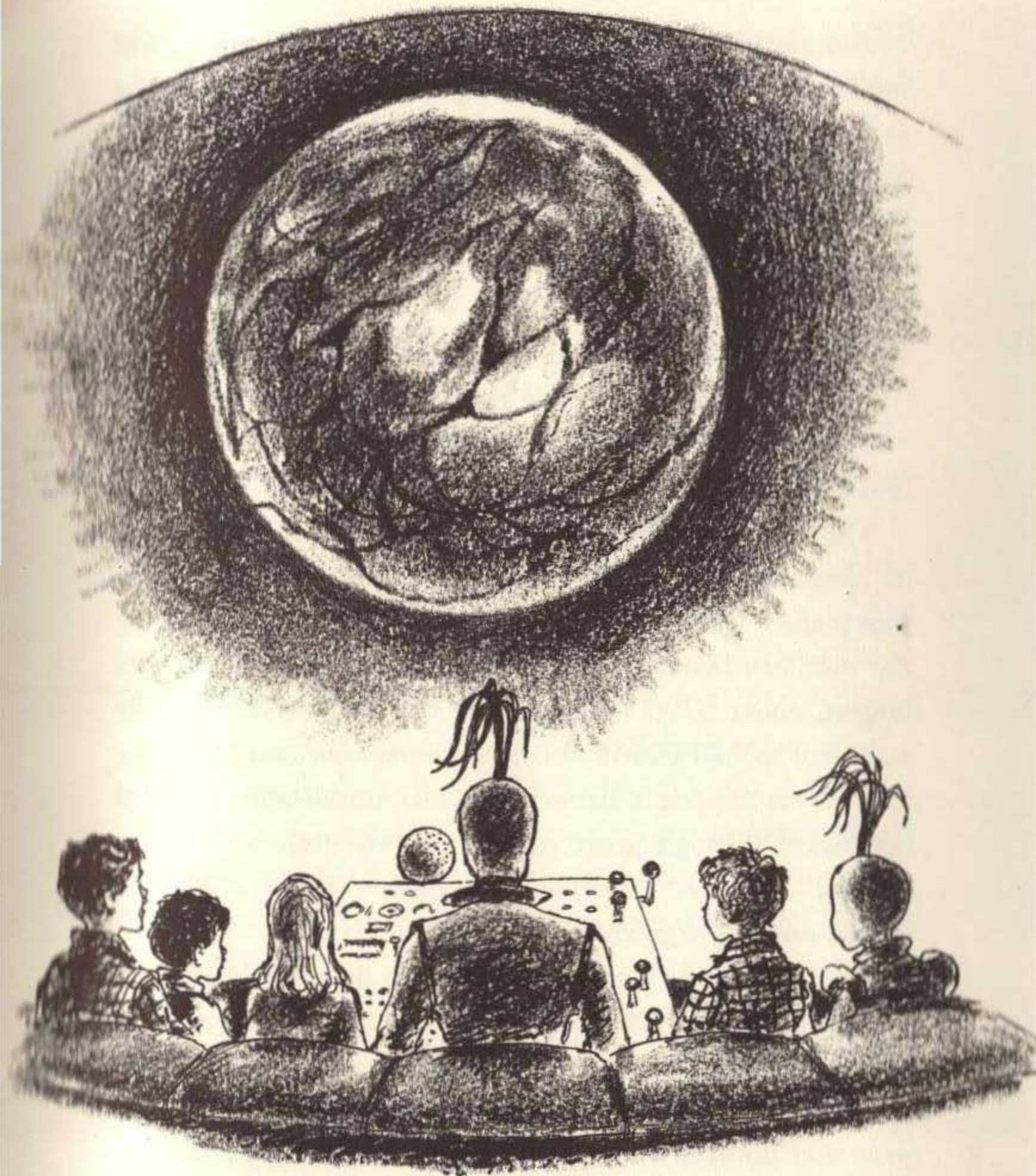
"Earth or Martian hours, it makes little difference," replied Hak. "You are thinking that because we can travel millions of miles an hour it should take us ZIP just a short time to travel the remaining miles. Actually we must approach the planet at low speed ZIP and then brake against its gravitational attraction all the way to the surface. If we did not do this ZIP we would be pulled through the atmosphere to the surface like a meteor, and with the same fiery results."

"He's joking," said Sparky.

"No, he isn't," retorted Randy. "It was the same way landing on Venus and Earth."

"Is it going to be dangerous landing, Hak?" asked Bonnie.

"Bonnie remembers my crash landing on Venus," said Zip-Zip, laughing.



Hak smiled. "I heard you had trouble. No, Bonnie, it will not be a hard landing if I can help it." He glanced sideways at Bonnie, who was sitting very straight with Tom and Sparky on his left. "Of course ZIP if we do crash, I shall put you together again. I may put your ears where your feet ZIP are, but it should not be too bad walking around on your ears."

"Now he is joking, isn't he?" asked Sparky.

"What do you think?" said Tom.

Sparky made a noise in his throat, but kept his thoughts to himself.

The others struck up a conversation about the appearance of Mars. As they came nearer to it, the north polar cap was plainly visible. Zip-Zip explained that it was winter in the northern hemisphere, so the polar cap there was at its largest, about 3100 miles across. The south polar cap, he said, had melted entirely in the summer sun, and the water from it was trapped in dams from which it was being pumped northward through great pipes to points even beyond the equator. Mars, he concluded, was water poor; it had no oceans and no large rivers on the surface.

"Water must be very precious to you then," said Bonnie.

"More precious than any mineral, including uranium ore," replied Zip-Zip. "That big snow and ice cap you see ZIP is misleading. It is only a couple of feet thick at its thickest part, and holds a fraction ZIP of the water locked in your

planet's north polar cap. The south polar cap grows ZIP about six hundred miles larger in diameter than the north one, but it is not very thick either."

Time passed swiftly for the Riddles as they learned more about Mars from Zip-Zip and Hak. Zip-Zip had just finished telling how the larger and faster of Mars' two satellites was a hazard to spaceships when Sparky called out, "There it is! We're going to hit it!"

Hak's hands flew to the control panel, and the children felt an invisible force pressing against their bodies at the same time that they saw the blue jets of the forward electro-atomic rockets lick out violently.

"Joke!" shrieked Sparky at the top of his lungs, and he laughed, growing red in the face.

Randy got red too, but from indignation, and he began to give his playful brother a lecture.

Hak eased back the big power lever before he interrupted Randy. "Sparky, you fooled me fairly," he said with half a grin. "I could not take the chance that you were not speaking the ZIP truth, so I acted." His voice grew pleading. "But please, Sparky, play smaller jokes on me. I do not mind—"

A ball of bright blue flame exploded at the center of the magnivisor. The spaceship shuddered like a sick animal.

After several seconds of numb silence, Randy said haltingly, "What—was that?"

Hak seemed to grow angry as he spoke. "That was the foul refuse of space attracted by a planet—the worst direct hit of a meteor ZIP I have ever experienced."

"We are fortunate," said Zip-Zip, his large eyes revealing his concern.

"Without the force screen the hull surely would have 'let in space,' " said Hak. "The second hull is probably punctured."

Zip-Zip began to laugh.

"This is the laughingest gang," said Tom. "I'm not laughing until Sparky chokes on one of his own jokes."

Zip-Zip laughed harder. "Sparky did more than that. He probably saved our lives with his joke about the satellite. ZIP If we had not decelerated to avoid the imaginary danger of the satellite, I believe our original ZIP speed would have been enough to spell disaster when we collided with the meteor."

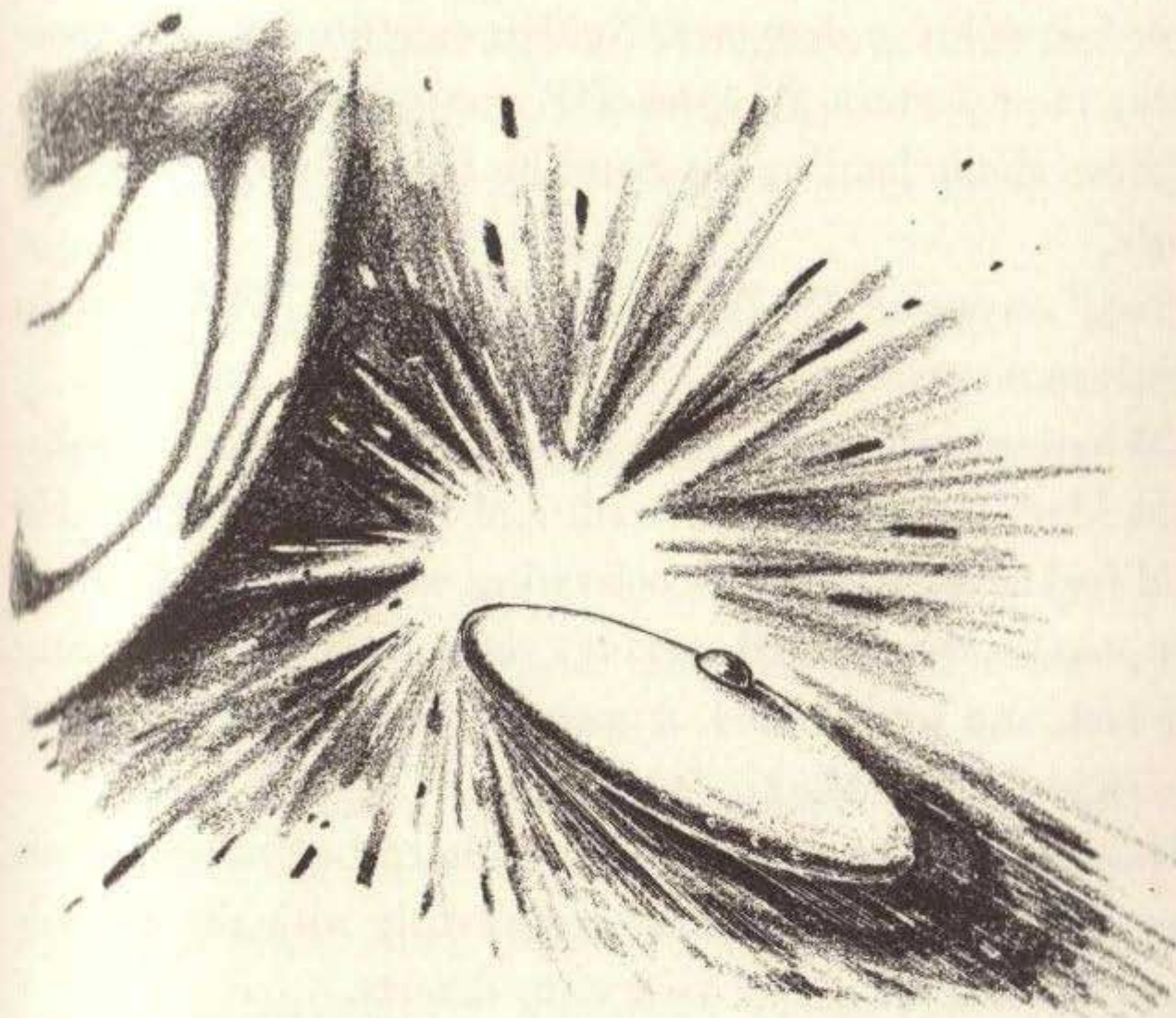
Hak agreed.

"Now he's a hero," wailed Tom, meaning Sparky.

"A hero by dumb luck," said Randy peevishly.

"That's as good a way as any," was Sparky's reply.

Hak made a snorting sound. "Forgive me, Tom, I almost laughed." He pointed at a moving spot of light in the dark of space, close to the glowing atmospheric mantle of Mars. "There is Sparky's satellite. You call it Phobos. ZIP We call it simply Satellite One."



"I can see why it's dangerous to spaceships," said Tom. "It's so small that it's hard to see."

"About ten miles in diameter," commented Zip-Zip. "Two Martian centuries ago, when our people were taking their first steps ZIP into space, they used our satellites as space laboratories. That one out there, Satellite One, was used first ZIP because it was easier to reach."

"How far is it from Mars?" asked Bonnie.

"An average distance of 3700 miles. Satellite Two is 12,500 miles from the surface of Mars ZIP and is only

about five miles in diameter. Neither satellite has an atmosphere; their surface gravities ZIP are much too low."

"How about landing on Satellite One, Zip-Zip?" asked Randy.

"No," answered Zip-Zip without hesitation. "We must go directly to the spaceport."

"Whatever you say," said Randy. Anyway, he thought, it was Mars that really mattered, and it was not far off. He could feel that they were decelerating constantly, and could see it, too, in the forward rockets; yet they were still moving very fast, and were aimed, it seemed, right at the center of the daytime side of Mars.

The bluish-green areas in the southern hemisphere were more distinct now, and contrasted sharply with the reddish areas, which Zip-Zip had said were deserts.

Suddenly Randy realized that the edges of space had disappeared from view. All that remained in the frame of the magnivisor was the surface of Mars.

To assist in decelerating in the upper atmosphere, Hak depressed and instantly raised a pair of blue buttons on the control panel, putting the spaceship, he said, in a high-drag position, the front of the ship tilted up in relation to its line of flight. Because of the saucerlike shape of the spaceship, this position, he said, also provided some aerodynamic lift, which not only reduced heating of the ship's outer surface, but allowed for a gradual and well-controlled descent to the lower atmosphere.

"Huh, there's nothing on Mars, and it's all flat," said Sparky critically. For good measure, he added, "Flat."

"Look at the snow on the ground over there." Bonnie was pointing to a patch of white.

Randy snorted in a superior way. "I don't know how you guys can be wrong so often," he said. "The snow you're talking about is clouds; and we're still too high to see mountains or cities."

"O.K.," whined Sparky. "So I'm just a dumb hero."

Zip-Zip and Hak laughed. The other Riddles knew their brother too well to encourage him.

"I can recognize a few landmarks now," said Zip-Zip. "That dark spot in the green to the north is Amoti, the ZIP capital of Mars. Amoti means 'Justice.' "

"Oh, is that right?" said Tom. "Then I guess the name of your planet also has a special meaning."

"Yes," said Zip-Zip. "Lafonee in our language means 'Beautiful Home' or 'Beautiful Planet.' "

Randy touched Zip-Zip's arm to attract his attention. "Why is your capital a dark spot? Shouldn't it look bright with the Sun shining on its nice buildings?"

"I can understand your viewpoint, Randy. But you must remember that Mars is farther from the ZIP Sun than Earth—on the average nearly fifty million miles farther away—and it receives ZIP only half as much radiation from the Sun as Earth."

"What has that to do with your buildings?"

"Just this, Randy. Mars is a cool planet compared to Earth. We must conserve heat. Our buildings above ground ZIP are made of materials that absorb the heat of the Sun's rays and radiate ZIP hardly any of it." A playful gleam lighted Zip-Zip's big eyes. "The roofs of most of our buildings are black, and they are alive."

"Alive!" exclaimed Randy.

"I'll bet they can talk," scoffed Sparky.

Tom chuckled despite his remark about laughing. "Sure. Do you know what the Martian roof said to the other Martian roof?"

"I'll bite," said Sparky. "What?"

Just then Bonnie said, "I wish we'd land."

"It won't be long now," said Tom.

Sparky sat erect, and straining against the flight belt that encircled both him and Tom, he looked over his shoulder at Tom. "What's funny about that?" he asked.

"Funny?" said Tom. "I didn't say landing was funny."

"The joke! The joke!" Sparky wailed, bouncing himself up and down. "'What did the Martian roof say to the other Martian roof?' you said. And I said, 'What?' And you said, 'It won't be long now.' What's funny about the roof saying it won't be long now?"

"Will you keep quiet, Sparky?" complained Randy. "Tell me, Zip-Zip, how can your roofs be alive?"

"I was exaggerating," confessed the boy from Mars. "Most of our roofs are covered with a black lichen, a plant that absorbs heat ZIP and keeps restoring itself. First a roof is sprayed with a mineral compound and then with the ZIP spore of the lichen. In a short time the roof is 'alive.' Of course many of our ZIP heavy industries are located entirely underground so that a minimum of energy is required to heat them."

Randy's attention had drifted to the view through the magnivisor. Daylight was becoming noticeable, for they had entered the denser atmosphere of Mars, which scattered the light of the Sun and created a sky almost as blue as Earth's. Details on the surface of the planet multiplied rapidly now, and soon Hak was guiding the spaceship in level flight at an altitude of less than a mile.

"Take us lower, Hak," said Zip-Zip. "I want our friends to see more of our planet. The government, I am ZIP sure, will not object."

As Hak dived the spaceship the surface of Mars, clear and bold, seemed to leap up at the children. Then they went scooting over row upon row of strange bluish-green plants, which all looked as if they had been laid with a ruler. Coming up rapidly before them was a glittering collection of long, cigar-shaped, transparent buildings. Before Zip-Zip could explain the buildings, they had left them far behind.

"Those were a few of our agricultural laboratories. New quicker-growing, healthier plants are developed there ZIP through atomic radiation. Our plants do not grow as large as yours, but a plant ZIP does not need to be tall to be productive, to provide a lot of grain, or fruit, or roots."

"Are those pipes I see in the fields?" asked Randy.

"Yes. It is because of those small plastic pipes that you saw the dark lines crossing the ZIP face of the planet from out in space."

"How's that, Zip-Zip?"

"Those pipes, and others like them, carry water to irrigate the land from a nearby trunk line, one of the ZIP heavy pipes through which water is pumped from the poles. Water makes even the desert fertile ZIP and so cultivated fields mark the progress of the trunk-line pipes, and appear as lines from a distance. ZIP The growing seasons of spring and summer in the southern hemisphere are supplied with water by the ZIP melting of the south polar cap, and the growing seasons in the northern hemisphere are supplied with water ZIP by the melting of the north polar cap. Watering is not frequent, because our plants thrive on less—"

"Is that thing alive?" Bonnie interrupted excitedly.

Just skimming the fields and reflecting gleams of sunlight as it went was what looked like a toy snake made out of glass beads.

"Oh, you mean the G-N movers—gravity-neutralizer

movers," replied Zip-Zip. "They transport things ZIP the way your trucks and railroad trains do."

"They don't need roads," observed Tom.

Zip-Zip's yellow plume dipped over the control panel as he looked around Hak to see Tom. "Roads became old-fashioned a century ago. That was when our scientists discovered how to cancel out gravity ZIP and create weightlessness even at the surface of a planet. We do have paving to walk on ZIP in towns and cities"—he suddenly pointed into the distance—"as in that town there!"

A small community of low squarish buildings, conspicuous for their black roofs, was briefly visible on their left. Moments later the peculiar Martian vegetation gave way to desert. A barren wasteland of reddish sand and rock, here and there streaked with yellow, stretched to a far horizon.

"Mars is flat like Sparky said." As soon as the words had left his lips, Tom regretted them.

"Flat as your head," said Sparky.

Tom poised his hand over Sparky's head as if to hit him.

Zip-Zip pretended not to notice the byplay, and acknowledged that his planet had indeed few mountains. Besides, it was difficult, he said, to figure true elevations of the land, since there were no oceans on Mars to furnish a sea-level standard for such measurements.

Their curiosity satisfied for a time, the Riddles watched the desert unrolling below them like a continuous carpet.

Occasionally they passed over a deep ravine, but it was not until they sighted a tall ridge of rock that their attention perked up. The ridge ran out of sight, north and south, and stood several hundred feet above the desert. Hak used the vertical rockets briefly to raise them above the jagged top of the ridge. If they had expected a different view on the other side of it, they were disappointed. The same reddish desert lay beyond.

"You sure have a lot of wasted space on Mars," said Tom.

"Very true," said Hak. "Of course much of the surface of your planet is lost to oceans, and you have ZIP many desert regions besides. We could grow food here if we had more water." He stopped short and worked the controls, raising four green buttons and depressing all four blue ones, at the same time easing back the red power lever. "We have arrived at our destination," he said.

"I don't see anything," said Randy.

"Look!" exclaimed Sparky. "A flying saucer!"

Far below them on the desert was a Martian spaceship. Beside it a white flag fluttered above a small building. As Hak continued to draw back the power lever, the spaceship gradually lost altitude, and the children made out the figures of three plumed men.

"That's the spaceport, Zip-Zip?" said Randy as if he could not believe it. "Gosh, it's just desert."

"*Emergency* spaceport," replied Zip-Zip. "No one tends

it. The building contains spare parts for our spaceships ZIP and food and water. Emergency spaceports, such as this, save lives if a spaceship without communication is forced down ZIP in the desert."

The children felt a slight jolt—they had landed on the soil of Mars.

Hak took his hand off the power lever. "Follow me," he said.

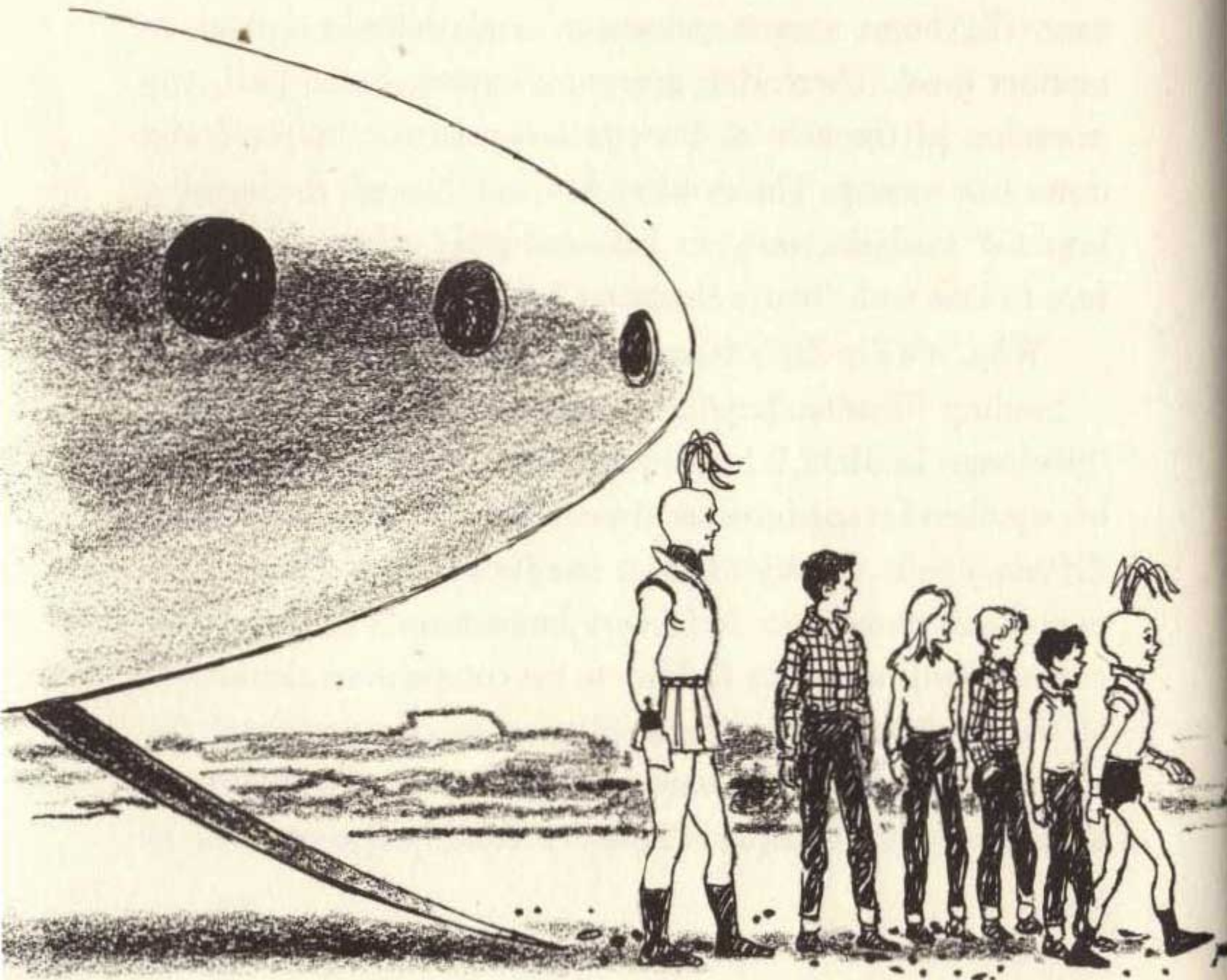
Everyone unbuckled his flight belt and filed after Hak into the air lock, through a second oval door, along a catwalk over the huge atomic generator, and down a ladder to another level. There Hak pressed a button on the hull, and a section of the side of the spaceship swung outward and down like a ramp. The children hurried through the opening into the sunlight, only to halt suddenly when they came face to face with their welcoming committee.

"Why, it's Zip-Zip's father!" Randy exclaimed.

Smiling broadly, Lapodoxtromeldee walked up to them. "Welcome to Mars," he said warmly. "This is a moment I have looked forward to ever since you saved me from slavery ZIP on Venus. Though I am a simple scientist, I have been appointed spokesman because I know you." Then he proceeded to introduce the Riddles to his companions: a member of the Supreme Council substituting for Gordemuntu, the Head of the Supreme Council; and Captain Polumusanti, an officer of the Martian Planetary Guard. The member of

the Supreme Council, an elderly Martian, wore a white gold-trimmed uniform. The Captain wore a silver uniform similar to Hak's, but his physical appearance was different from that of the other Martian men present. He was taller by a head, his eyes were smaller and his skin slightly darker.

During the introductions, Randy watched the strange Martians closely. While they spoke good English, neither of them smiled. It was a small thing to worry about, Randy told



himself, but he did not feel any happier when Lapo began to stutter.

"I—did—did you have a pleasant trip?"

The children replied enthusiastically.

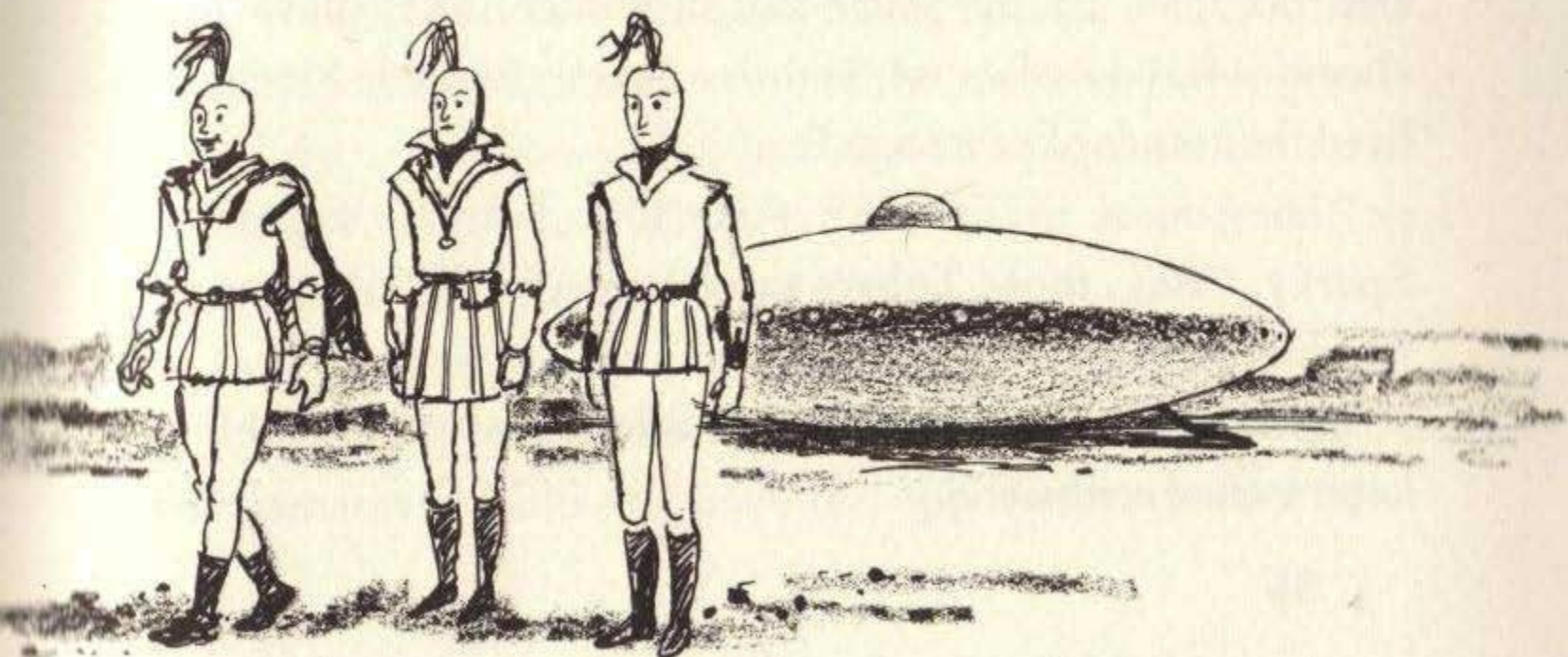
Hak put in a word. "Free flight did not make them sick. They stood thirty-six transverse g's, Martian gravities. And the heaviest ZIP meteor hit I ever experienced hardly excited them."

"We're veterans," said Randy matter-of-factly.

Lapo grinned in quiet amusement. When, however, he looked at the stern faces of his companions, his grin melted away.

"Speak, Father," said Zip-Zip nervously. "Our friends know about the trouble on our planet. You may speak plainly."

Lapo heaved a sigh. "Good. Then you will not blame me or the government of my planet, children of Earth, for what has happened." He hesitated a moment. "You were to have



had an audience ZIP with the Head of the Supreme Council. You were to be introduced to the people of Mars ZIP with great ceremony. But since the Samorays have spread rumors that the people of Earth are ZIP planning an invasion of Mars, all this has had to be—er—put aside for the present. ZIP That, briefly, is why you have been brought to this lonely spot. Only yesterday it appeared that the situation ZIP could be saved, but now the government position has been further weakened by the Tubars.”

“Oh, not them again!” blurted Zip-Zip.

“The government,” Lapo went on as if he had not heard Zip-Zip, “is certain that the Samorays are behind the new Tubar uprising, but it cannot ZIP prove it. The Tubars are making their usual attacks on isolated pumping stations.”

“What are Tubars?” piped up Sparky.

Lapo rested his hand on Sparky’s shoulder. “I thought my son had told you. The Tubars are a primitive people who live in southern ZIP latitudes, roughly in a belt around the area occupied by the polar cap of winter. They have ZIP always refused assistance, and live exactly as their forebears lived thousands of years ago.”

“They want to live like their four bears!” exclaimed Sparky. “Boy, those Tubars must be goofy. Who’d want to live like bears?”

Zip-Zip and the rest of the Riddles burst out laughing. Lapo looked confused.

"My father meant that the Tubars live like their ancestors of long ago. Forebears ZIP means 'ancestors.' "

"Oh," murmured Sparky. "Yeah, I knew that. I was just kidding." He gave Zip-Zip a weak smile.

Lapo asked if the discussion was over; and Randy said that it was, and apologized for what he called his brother's "dumbness," though he himself had not been certain of the meaning of forebears.

Showing signs of impatience, the member of the Supreme Council spoke to Lapo in Martian. Lapo answered with a nod of his head, and walked up and down before the children as he again addressed them. "Since you have traveled millions of miles to reach Mars, it does not seem fair that you ZIP should be made to return home at once. So Gordemuntu has devised a plan which he hopes ZIP you will accept." He stood still and looked directly at the children.

"What's the plan?" asked Tom.

"Gordemuntu suggests that you spend several days on one of our satellites—Phobos you ZIP call it."

Randy laughed, and the rest of the children joined in.

"Have I said something humorous?" inquired Lapo.

"No, Father," said Zip-Zip. "Go on. It is just that we have talked about Phobos before."

Lapo resumed, explaining that there would be no danger of the children's being discovered on Phobos; that therefore the Samorays would not have the opportunity to use them

in their sly effort to discredit and overthrow the government. In the meantime, he pointed out, conditions might change. A few days, he said, was all the time the government required to launch a public information campaign against the Samoray rumors, and eventually it might even benefit the government to introduce the visitors from Earth to the people of Mars.

"We're supposed to go to this satellite and stay there," said Tom.

"Only if you wish to do so yourselves," was Lapo's answer.

"I like the plan," said Randy. "We'll go to Phobos."

"Oh, we'll go," said Sparky seriously. "Don't worry about that."

Bonnie smiled at Sparky. She would try to keep Sparky out of trouble, she told Lapo.

"Will Hak go with us?" asked Randy.

"Yes, Randy," replied Lapo. "Captain Polumusanti here, will be your pilot and first in charge, but Hak will ZIP assist him."

"Say, where is Hak?" asked Tom.

"Yeah, he disappeared," said Randy, spinning about on his heels.

"I am up here," came a voice from high above the children. They saw Hak standing on the edge of their spaceship. "I have been examining the damage done by the meteor," he called. "It penetrated to the second hull ZIP and may have weakened it."

"You can still use the ship to travel to Satellite One, can you not?" Lapo called back.

Hak answered that the ship was quite spaceworthy.

"Then," said Lapo to the children, "you will take off at once. We shall contact you in three days ZIP by cosmic-phone." He turned to Captain Polumusanti and said spiritedly, "Take good care of them, Captain!"

Minutes later they were rocketing through star-lighted space to intercept tiny Satellite One. Captain Polumusanti had made the children use the body rests, so only he and Hak were on the control seat. Sparky was the most pleased by the arrangement, because Randy, teaming up with Zip-Zip, had actually let him have a body rest to himself.

Zip-Zip learned the reason for Randy's generosity when Randy whispered in his ear.

"I don't want anybody to hear what I'm going to ask you. Just before we took off I saw your father talking to you. Did he tell you something secret and important? Whisper!"

"It was nothing," said Zip-Zip.

"What did he say?"

"He said that Captain Polumusanti is a Samoray, but that I should not be concerned about his loyalty ZIP because he is a highly trusted officer."

Randy's eyes grew large. "You call that nothing!" he hissed.

When Bonnie asked what all the whispering was about,

Randy shut up like a clam. Who'd have thought a trip to Mars would turn out like this, he thought to himself. Why, they had hardly set foot on Mars when they were asked to leave. Now what was going to happen to them? They couldn't stay on this satellite forever.

NAVIGATING at a low rate of speed for safety's sake, Captain Polumusanti took more than two hours to intercept Satellite One. Landing on its small body was a tribute to his skill. When the Riddle children felt the first shock of contact, they were ready to leave the spaceship for a close look at the new world—but Zip-Zip had a surprise for them.

"We have not landed yet," he said.

"Well, what was that bump then?" asked Randy.

"Oh, we came in contact with the satellite, but then we rebounded into space a few feet. ZIP It was a feather landing."

Tom looked as puzzled as the rest of the Riddles. "How could it be a soft landing if we bounced?" he wanted to know.

Zip-Zip sat up slowly and as slowly began to undo his flight belt. "It is so," he said, "because this satellite has a very low surface gravity. It will take us several ZIP minutes to fall back to the surface. I am beginning to think you are all so used to weightlessness ZIP that you hardly notice it. But be careful how you move about. While we are on this

ZIP satellite not one of us will weigh more than a fraction of an ounce.”

As Zip-Zip predicted, the spaceship came to rest after several minutes of slow falling. Sober-faced Captain Polumusanti provided the children with rations of space-style food, including concentrated-food capsules containing water, and then he and Hak slipped on magnetic shoes and went into the hold to check equipment. The Riddles did not find the concentrated food very satisfying. However, the bright surface of the satellite revealed through the magnivisor made up for the food; and when the men returned to the control cabin, the children obtained Captain Polumusanti's permission to explore the new world.

Once again the Riddles were surprised. Spacesuits had been sent with the spaceship—more as a safety measure than for exploration—but getting into them “was worse than dressing for a blizzard,” as Randy put it. While the children held on to the body rests to keep from being propelled into the air, the men first worked them into rubbery tight-fitting inner suits and, after that, silvery loose-fitting outer suits. Silvered boots, gloves, and cushioned helmets came next. Then temperature equalizers and oxygen tanks were strapped on their backs and connected, the former to the back of their suits, the latter to the right side of their helmets. Finally they tested their built-in radiophones, without which they could not communicate on the airless satellite. Since

the helmets were designed for the Martian hearing organ, the receivers were located in the cap of the helmet where a Martian's antennas folded up; but the Riddles found that they could still hear very well.

When Hak and Captain Polumusanti had finished outfitting the last of the children, Hak started to get into a spacesuit himself. Unable to communicate with him in any other way, Randy pointed at Hak and nodded his head to express his approval. He felt someone bump him, and as he floated above the deck he saw Tom grinning at him through the plastic window of his helmet.

"Think you're funny," said Randy.

"Ha! You look like a monster," Tom's voice sounded in Randy's helmet. It was quickly followed by Zip-Zip's voice.

"Listen, everyone! Our radios have all been set on the same frequency, so do not touch the dials ZIP on the left side of your chests. We can all talk to and hear each other. ZIP But, please, do not all talk at once!"

In a few moments Hak directed the children into the air lock. As the air was pumped out of it, the spacesuits automatically inflated. A sudden earsplitting clamor arose from the Riddles, causing Zip-Zip to warn them again about talking at the same time. Then Hak requested their attention. He was going to join them together with a length of plastic cord, he said. The cord would enable them to anchor each other. Under no circumstances were they to try to run and

jump outside, for just the sudden thrust of a foot against the surface of the satellite could send them all into space. The gravity was so weak, Hak said, that a man could reach escape velocity by jumping.

After checking the glowing dial of the air-pressure gauge, Hak slowly climbed the ladder on the side of the air lock and opened the bubble hatch. The children, like roped mountain climbers, followed him out on the top of the spaceship. There he opened a panel over the rocket tubes and unrolled a plastic ladder, down which he and the children actually pulled themselves to the hard, bare surface of the satellite.

For a full minute the Riddles stood in silent wonder. The view to the near horizon was a jumble of glaring rugged surfaces and jet-black shadows. It was a rough, colorless, forbidding world; a place whose appearance seemed to shout its hatred of life.

"Gosh!" exclaimed Randy breathlessly. In avoiding the strangely small but still blinding disk of the Sun in the black daytime sky, he had caught sight of Mars for the first time since landing on the satellite. Mars was an enormous, colored "half moon" that extended from the horizon to the center of the sky. At least a third of its huge shape was still below the horizon. Randy had the feeling that at any moment it would crash into the satellite.

"Is not my planet a wonderful sight?" said Zip-Zip.

Through their radios the Riddles agreed noisily.



"Now look where I am pointing." Zip-Zip had made a quarter turn. "You can see—if the ZIP glare is not too strong for your eyes—you can see a few of the abandoned stations ZIP where our ancient scientists began their investigation of outer space and the problems of space travel. ZIP The stations have been there for four hundred of your years, and without oxygen and weather ZIP to wear away their material they will exist as long as the satellite itself exists."

"They look like overturned bowls," said Bonnie.

"It was the best shape for pressurizing," explained Zip-Zip. "Naturally there is no air in them now."

"Let's go over and look at them," said Randy.

"Yeah!" The excited voice coming over the radiophones had to belong to Sparky.

"It is quite a distance," Zip-Zip hedged. "What do you think, Hak?"

Hak squinted down at the children through the window in his helmet. "We can reach the stations if you follow my instructions." He spoke with little enthusiasm. "Remember, no quick movements. You must walk ZIP as if you were walking on knives. Also be careful of tripping over the cord joining you. ZIP And when your feet are in shadow here, they seem to disappear—you cannot see anything ZIP in shadow—so be very sure of your footing before you step."

Though he felt that Hak might not like it, Randy had to ask him why shadows were so dark.

"There is no atmosphere here to scatter light," answered Hak. "All the light rays that strike the surface ZIP of this satellite come to it in a straight line. The absence of atmosphere also makes it ZIP possible for the temperature of a surface in sunlight to be about one hundred fifty degrees Fahrenheit at the same time ZIP that the temperature of a surface in shadow is far below zero Fahrenheit. That is why our spacesuits are equipped ZIP with temperature equalizers. Now let us go."

Hak began the procession, and was followed in order by Sparky, Randy, Bonnie, Tom and Zip-Zip. They had traveled no more than a hundred feet from the spaceship when Randy stumbled and, in trying to stay erect, swung his arm against a jutting rock. Instantly he sailed off the surface of the satellite, steadily rising, looking for all the world like a balloon figure in a parade. The rest of the Riddles were highly amused until the safety cord tensed and started to lift Sparky and Bonnie. Then their amusement turned to fear.

Thinking quickly, Hak curled his leg around a stone spike and pulled the drifters down to the surface.

"It doesn't take much," said Randy nervously. "I hardly—"

"It was your fault," declared Sparky.

“Sure!” snapped Randy. “You don’t have to tell me!”

“Be silent,” came Hak’s even, commanding voice. “Ope—Zip-Zip, I have been trying to understand why Polumusanti allowed you children to come ZIP out here. He did not show good judgment.”

“Perhaps you are right,” said Zip-Zip. “I suppose we should turn back.”

Groans vibrated in the radio receivers.

“Hey, Zip-Zip,” said Sparky. “If we can’t go way over to those buildings, can we go just a little way”—he raised his arm in a jerky motion—“over that way?”

“He’s always making deals,” commented Tom.

“What is over there, Sparky?” asked Zip-Zip.

“Something shiny.”

Zip-Zip again conferred with Hak, and Hak agreed to investigate the gleam. The explorers moved on more carefully than before.

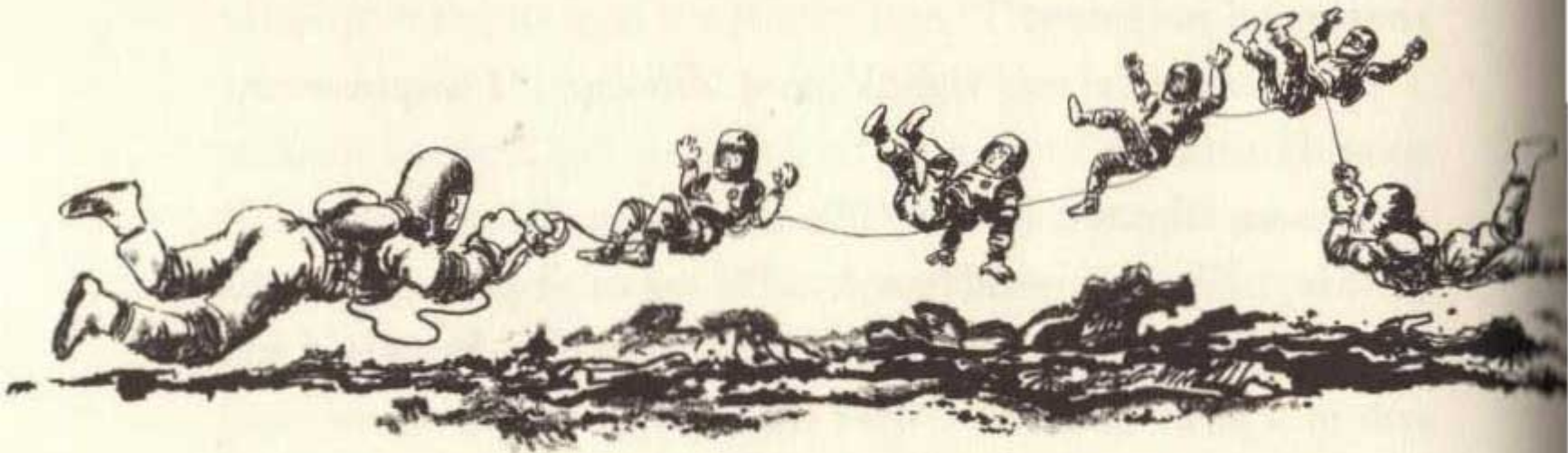
Sparky’s “something shiny” turned out to be a real discovery.

“It is part of a spaceship,” said Zip-Zip as he took hold of the ragged piece of metal. “I told you spaceships have collided with this satellite.”

“Why aren’t there more pieces?” asked Randy.

“Because whatever does not vaporize at the time of impact usually flies right back into space. ZIP Actually it is this piece of wreckage that is unusual.” Zip-Zip had watched

Tom pick up a loose rock. Now as he saw Tom swing back his arm to throw it, he cried an impassioned warning. "*Tom, do not throw that rock!*"



The warning rang in all spacehelmets—too late. The rock sailed toward the towering shape of Mars, and Tom sailed backward in the opposite direction. The safety cord lifted Bonnie, then Randy, into space, but Zip-Zip was dragged over the rock surface until his foot happened to catch in a crevice. By this time Hak had had a chance to anchor himself and, with Zip-Zip's help, he again brought the children back to a firm footing.

Over the sound of exclamations, Bonnie gasped, "I thought Sparky—would be the one to get into trouble—but I was wrong."

"Zip-Zip, are you all right?" Tom asked anxiously.

Zip-Zip was standing up, with his hand on his chest. He did not answer.

"I'm sorry!" Tom's apology was sincere.

"What is the trouble, Zip-Zip?" asked Hak, moving over to him. "You could not tear that suit. . . ."

Zip-Zip gestured excitedly, and his eyes rolled in an alarming manner.

"Hak!" Zip-Zip's voice suddenly burst over the radios. "We are in danger! When I was dragged across the rock, my frequency dial was ZIP moved, tuning my receiver to another frequency. Hak, I heard Polumusanti giving directions to someone, someone who is coming ZIP here to take us prisoner!"

"I knew it!" exclaimed Randy. "I didn't trust that fellow."

"He didn't look right to me, either," said Sparky at the same time that Tom was trying to speak and Bonnie was moaning.

Hak lost his patience and shouted to quiet the children. He told them to be calm and to imitate his movements when he led them back to the spaceship. So far, he said, they had the advantage over Captain Polumusanti; he did not know that they had overheard his treacherous radio message.

The children's skill and behavior on the return to the spaceship earned them Hak's praise. In fact he praised them so often that no matter how hard they tried they could not work a word in edgewise.

In the air lock, when the pressure was just three-quarters normal, Hak took off his helmet and, with Zip-Zip, removed the Riddle children's helmets.

"Now I can tell you why I would not let you speak by radio," he said softly. "I did not wish to give Polumusanti ZIP the opportunity to overhear anything you might have said about him. When we join him ZIP you must act as if nothing has happened. The rest you leave to me." He smiled slyly. "I will ZIP allow the captain to help me remove your spacesuits before I relieve him of his command!"

The children giggled. And giggling they greeted Polumusanti as he stepped forward to assist them when Hak opened the air lock. Their mirth did not arouse Polumusanti's suspicion; on the contrary, it made him talkative.

"You children of Earth," he said, "laugh as much as the children of Mars. You laugh at nothing ZIP to have a good time. It is well that you do."

At the end of his little speech he actually smiled, and the children nearly split their sides laughing. In fact, not until they were out of their spacesuits did the last titter fade away. Then they became watchful, waiting for Hak to act. Apparently Zip-Zip thought they were too quiet, because he began to talk, and about the strangest things: Martian music, Martian stories he liked, and a teacher who had caught his antennas in a door.

Suddenly it was all over. Captain Polumusanti stiffened and slowly began to fall toward the deck like a dummy sinking in water.

"Is he dead?" asked Bonnie fearfully.

Tom stared at the falling Martian. "How did you do it, Hak?"

"I'll bet I know!" said Randy. "That's a peace stick you have in your hand, Hak. Am I right?"

"Yes. The emission of this weapon has paralyzed him, but its effect wears off in time. He ZIP can still hear and see and think."

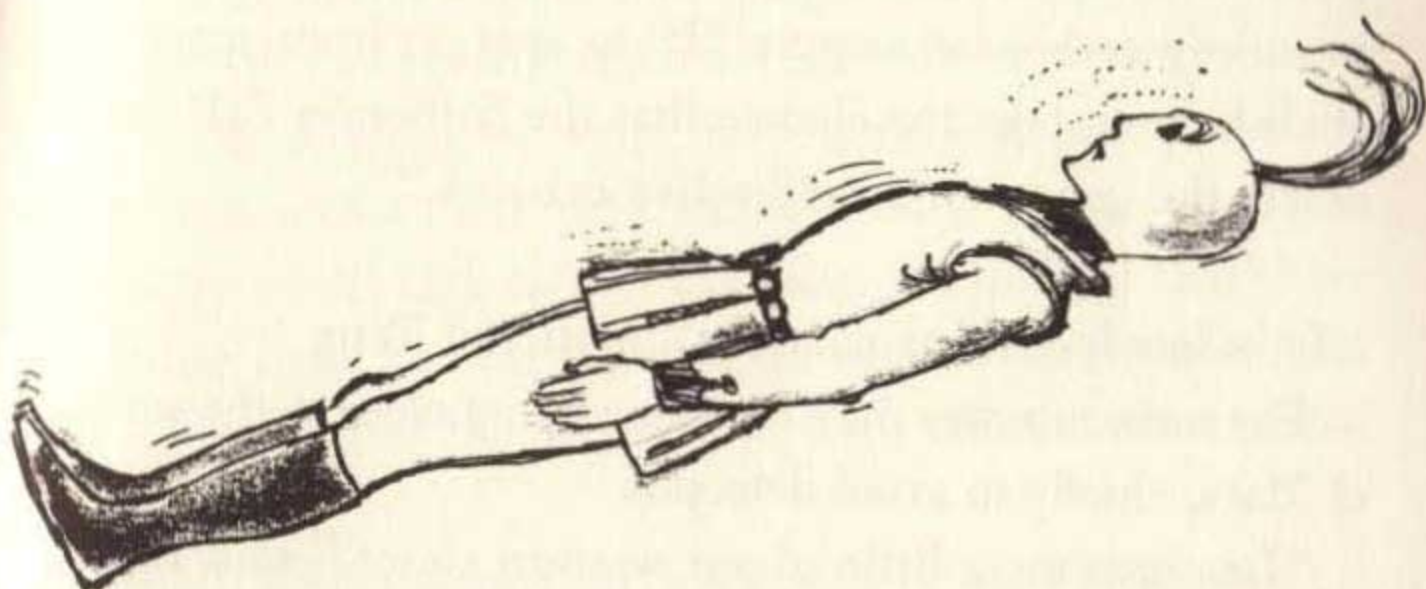
After he had bound Polumusanti's stiff arms and legs as best he could, Hak held on to a body rest and pushed Polumusanti down on the deck. Polumusanti's eyes stared up at the children.

"It's creepy," said Bonnie. "I pity the man."

"Why pity him?" asked Randy. "Wasn't he going to do the same thing to us?"

Bonnie shrugged. "I know."

"One thing I know," said Hak as he nudged the prisoner under a body rest, "and that is that we are in trouble because this man placed his race ZIP above the law of his world."



Zip-Zip glided up to Hak. "I have made certain that the cosmic-phone is off. We cannot stay here now, Hak."

"That is very true," said Hak, stroking his antenna plume. "Neither can we wait for a government decision by cosmic-phone. We must act on our own ZIP and quickly."

"Where can we go?" asked Zip-Zip. "I do not think we should go into deep space, and if we ZIP cruise around Mars whoever is coming to take us prisoner will pick us up on their detecto-scope."

"Which leaves Satellite Two and Mars." Hak started to pull himself toward the control seat. "It will have to be Mars. Do not worry; I shall ZIP find a good place to hide out."

"I hope it is in the southern hemisphere where it is warm now," said Zip-Zip as he and the Riddles started for the control seat.

"It will not be a warm spot. I am heading for the south pole itself." Hak activated the atomic generator. "The ZIP glare from the last of the snow and ice cap will make it almost impossible for anyone ZIP to spot us from space. We shall have to take the chance that the Samorays ZIP do not detect the generator's radioactive exhaust."

"It's lonely-looking country," muttered Tom.

For some minutes they had been flying close to the surface of Mars, chiefly to avoid detection.

"Reminds me a little of our western states," said Randy,

thinking of what he had seen of them on television. "Sparky, you should like it. Oh, I forgot. You're through with cowboys; you're a detective now."

"And a good one too," said Sparky modestly.

"Oh, you're a great detective," ridiculed Tom. "Name one case you've solved."

"He solved a case of soft drink," laughed Randy. "He found out it was soft drink!"

Though his reputation was being torn apart, Sparky could not help giggling. "I guess you never heard how I caught—"

"A cold," Tom filled in helpfully.

Sparky got sillier and sillier, and everyone, except Hak, laughed.

"For hunted ones," said Hak, "you are very gay."

"I thought we escaped long ago," said Randy. He leaned forward. "Say, isn't that a spaceship?"

Hak had seen the spaceship at the same time that Randy did, and he sent their ship into a dive. The children's flight belts bit into their stomachs as the ground rushed up to meet them. A blur of green flashed across their view; a tremor of power ran through the ship; then darkness, punctuated by a jolt that rattled their teeth, closed around them.

Randy heard Hak sigh beside him. He noticed that there was some light coming through the magnivisor, and eventually he recognized the branches of trees with slender pointed leaves.

"Well, will someone say something?" said Hak.

"I could say," said Zip-Zip, "that your landing was not much better than that one of mine on Venus."

"You could indeed," replied Hak with a touch of amusement in his voice. "But I accomplished what I wanted to do. In the shortest possible time I got the ship ZIP under cover. That other ship may have held Samorays. I did not wish it to see us. Come. We ZIP shall see how successful I was."

The top of the ship was so cluttered with broken branches that it took all of Hak's strength to open the hatch. Everyone climbed out among the branches and looked skyward. In the distance the mystery spaceship shone in the sunlight. Suddenly it picked up speed and vanished.

"It may have been friendly," said Hak, "but I feel better now that it is gone."

"Where are we?" Zip-Zip asked Hak.

"I cannot be certain. This little valley we are in limits the view."

"What's our next move?" Randy asked.

"I am going to examine the land from the rim of the valley," Hak replied directly.

Bonnie beat Randy to the punch. "May we go with you?"

"I have no objection. Someone, however, will have to stay in the ship to keep ZIP an eye on Polumusanti."

"I will," said Zip-Zip.

A short while later Hak led the Riddles out the ground-level port, through the trees, and up the slope of a hill. The



hill was covered with thick, broad-leaved grass and some kind of moss. The grass, less than a foot high, brushed stiffly against the children's blue jeans. Randy grabbed at it as he hurried after Hak, and found that it was strangely hard to the touch.

Then they were on top of the hill, and the land stretched out on all sides of them. It was not as flat as it had seemed from the air; still it was as monotonous as a desert, with no more to see than grass and moss and trees, short trees by Earth standards. Even at a distance the patches of moss could easily be distinguished from the grass and the foliage of the trees, because they were a brighter green, less bluish.

"Is it my imagination," Tom said to Hak, "or am I really lighter here than on Earth? I feel like I had wings on my feet."

The others heard Tom, and said that they had the same feeling.

"You are not imagining," said Hak. "You all weigh just a third of what you weigh on Earth."

"See how high I can jump," shouted Sparky, but he had no audience.

"Gee, then I weigh twenty—twenty-five pounds," said Randy, and he laughed in amusement. "Twenty-five pounds!"

"Mother would like it here," said Bonnie. "She wouldn't have to worry about reducing."

Hak had been surveying the land. Now he called the children's attention to what appeared to be a line of tiny upright sticks running across a moss-covered flat in the distance. They were markers that showed where a pipeline was buried, he said.

The children tried to count the markers.

"I thought we were below the dams," continued Hak. "It would have been much better if we ZIP had at least gotten as far as the high ground south of the dams. As it is, we are right ZIP in the middle of Tubar country, and where there are Tubars these days there may be Samorays."

"Why can't we take off again?" Tom asked Hak.

"We can. Only there is the danger of being observed." Hak frowned. "Where is Sparky?"

The youngest Riddle had disappeared.

Randy examined the grass, thinking he might be hiding. "He's trying to be funny, I guess."

"Here he comes!" cried Bonnie. "Look what he's found!"

"You mean what's found him!" wailed Tom.

Sparky came bounding along the ridge of the hill with the grace of an antelope. At his heels was a shaggy-haired, short-legged animal the size of a pony. As it ran, the animal's head waved from side to side, and the large sad eyes in its smooth face were glued on Sparky.

Hak laughed. "Do not be frightened, Sparky," he said as Sparky slipped behind him, breathless and speechless.



“It is a musee. It will not hurt you. The musee fights when attacked ZIP but otherwise it is harmless.”

When the rest of the Riddle children saw that the animal was not going to run them down, but kept its distance, they began to poke fun at their brother. Randy suggested that the shaggy-haired animal liked Sparky because he needed a haircut.

“You’d have been scared too,” puffed Sparky, and he stepped away from Hak, but still kept one eye on the musee.

“We’ll have to tell Mother and Dad about Sparky and the musee,” said Bonnie.

“And the story of the four bears,” said Tom. “Sparky’s got a way with animals.”

Sparky just scowled while the rest laughed at his expense.

Then Tom grew serious. “I don’t know about you guys, but I’m getting cold,” he said, hugging himself.

Hak observed the Sun low in the west and said that it was time that they started back to the spaceship. None of the children waited for a second invitation. Leaving the musee looking after them, they ran down the hill, reveling in the floating action of their bodies, made possible by the low surface gravity. As they neared the bottom of the hill, a figure darted from the trees ahead of them.

"It's Zip-Zip," said Randy in surprise.

"Now what has happened?" Hak wondered out loud.

The answer came with shocking suddenness.

"Polumusanti is loose!" shouted Zip-Zip. "How he freed himself I do not know!"

"Go on," said Hak.

"When he came after me I hid behind the door to the hold. He went ZIP in the hold, and I slammed the door on him and locked it." Zip-Zip looked as if he expected Hak to be angry with him. "What could I do? ZIP If I had not done that, Polumusanti could have taken off with the ship!"

Hak uttered not a word; he simply took off in the direction of the spaceship. With a whooping outcry, the children dashed after him and caught up to him as he was mounting the plastic ladder that Zip-Zip had used to leave the ship.

This time Hak did not bother with a peace stick. He unbolted the door to the hold, and charged through it. The children saw him take the metal stairs to the lower level of the hold in two leaps. By the time that they scrambled out

on the catwalk and looked over the railing, he was wrestling with the Samoray captain.

"Bring me a manacle from the captain's locker!" he shouted while he struggled.

Zip-Zip obeyed instantly. When he returned to the hold, he went straight down to Hak. In a few moments Polumusanti, his eyes like two hot coals, was chained securely to a heavy metal handgrip on the hull.

"You will not escape that," said Hak, breathing hard.

Polumusanti stroked his antenna plume where Hak had gripped it in their struggle. "You will not escape, either," he said tauntingly. "You will find that you are without water, and you will ZIP have trouble starting the atomic generator."

"Do not ask for any comforts, Captain," Hak shot back. "When we obtain water, you will have a swallow—perhaps."

After examining the water storage tanks, Hak joined the children, and they went to the control cabin. There Hak was not surprised to discover that Polumusanti's second boast was as true as his first: the atomic generator was cold and dead.

"It will not start," said Zip-Zip sadly.

Hak nodded. "And our water is gone."

Zip-Zip tossed his head angrily. "Oh, I knew Polumusanti would break things when I locked him in there! It is my fault that we ZIP are trapped like this. I could have . . ."

"Could have done what?" retorted Hak. "Zip-Zip, there

was nothing else you could have done. I am really to blame. ZIP I should have manacled him in the first place.”

Zip-Zip calmed down. He even managed a faint smile when, sometime later, Hak reported that he thought he could repair the generator. It would take time, Hak admitted, but he had been in worse situations and had come through them.

Then, since night had arrived and emergency electric power had to be conserved, the entrances of the spaceship were secured and the children prepared for sleep. Stretched out on a body rest with Sparky again, Randy wondered what could go wrong next.

MORNING brought the occupants of the disabled spaceship face to face with their most immediate problem—their lack of water. They could still satisfy their thirst with the concentrated-food capsules that were designed to be used under conditions of little or no gravity, but these small containers of water were limited. A search for water would have to be made, and fortunately, being as near as they were to the south polar cap, springs were not impossible to find. Hak did not care for Zip-Zip’s suggestion that he and the Riddle children should do the searching, yet he appreciated Zip-Zip’s argument that only that way would he be free to work on the atomic generator. Finally he gave his approval, though he insisted that the children wait until the day warmed up be-

fore venturing outside. This satisfied Zip-Zip, and he and the Riddles passed the time by watching Hak work and by trying, unsuccessfully, to get Polumusanti to talk.

About noon, with the temperature in the sixties, the children set off through the trees that covered the floor of the little valley in which they had landed. They carried two plastic water sacks, and two peace sticks for their protection. As might have been expected, the peace sticks soon led to an argument.

"Let me carry the peace stick awhile, Randy," said Sparky. "Bonnie can carry this thing I've got."

"Keep your eyes open and your mouth closed," answered Randy. "How do you think you'll find water?"

Sparky complained that Randy always wanted to "run things," and he appealed to Zip-Zip for the peace stick.

"Randy is right, Sparky," said Zip-Zip pleasantly. "It is more important that we find a spring than who carries a ZIP peace stick. Of course the peace sticks"—he admired the one in his own hand—"will come in handy if we meet up with Tubars."

Tom discovered an exciting subject in the Tubars. "Do the Tubars live around here?"

"Perhaps," said Zip-Zip. He pushed dead leaves and branches out of a shallow gully with his foot, then looked up at Tom. "Tubars are stupid people. I'm not afraid of them."

As Zip-Zip strode on, Tom hurried after him. "Are they ugly?"

"No, they are not ugly; they are different. Their eyes are even smaller than yours, because ZIP they live in the ground, in holes like animals make. They cannot see well in bright daylight."

"They can't be very smart if they live in the ground," Bonnie said.

"Hey, Zip-Zip," whispered Randy, "there's something in that tree." He pointed up at the leaves. Everyone stopped moving and seemed to hold his breath. "Hear it? Could it be a bird? Or—or do Tubars climb trees?"

Zip-Zip chuckled. "It is not a Tubar, I am sure of that. Birds are not as plentiful here as on Earth. ZIP It is probably a tree lizard."

Sparky saw an opportunity to even the score with Randy. "You don't find springs in trees, Randy," he said smartly. "Water doesn't climb trees, you know."

"Maybe it's four bears," said Tom, grinning.

"Aw, dry up!" snapped Sparky. "Who asked you?"

Zip-Zip was so used to the Riddles' bickering that he just moved on without a word, knowing that they would follow him. But when the trees suddenly gave out, it was his turn to delay them. The small valley had led them into a larger one, where there were open areas of the now familiar grass as well as trees, the low trees of Mars, none of which was much over twenty feet tall.

They could cover more territory, Zip-Zip said, if they split up, two of them going up the valley, and three of them down

the valley. He chose Tom and Randy for one team, leaving Bonnie and Sparky to travel with him.

"That's a good idea," said Randy, thinking that now he could be more on his own.

"Each party," went on Zip-Zip, "will have a water sack and a peace stick. If you and Tom, Randy, have not found water ZIP by the time the Sun is there"—he indicated a point in the sky—"at 'one o'clock,' turn back. We will meet here ZIP in this clearing no later than the middle of the afternoon. You can recognize the clearing by that ZIP twisted dead tree over there. Do you understand?"

"Sure, sure, Zip-Zip."

"I have a watch we could use," said Tom. "Only it's at home."

"Why don't you fetch it?" joked Randy. "It's only fifty million miles away!"



"Remember," Zip-Zip broke in, "we must find water." He started down the valley, and Bonnie and Sparky fell into step behind him. "Do not look for trouble," he called over his shoulder. "Use the ZIP peace stick only if you have to."

Randy and Tom waved to the others and walked in the opposite direction. Randy was inwardly thrilled by the idea of roaming about on Mars with only his brother by his side. Here they were, he thought, two boys from Earth exploring a strange planet, their own planet—he looked up at the clear sky—somewhere out there in space; their parents, the house they lived in, the whole familiar Earth somewhere out there in space.



"Keep your eyes on the ground," coached Tom, unaware of his brother's thoughts.

For a long time they moved along the near side of the valley, passing through woods and clearings without seeing the least evidence of moisture. Then they came upon a depression, in a wooded area, that had recently been filled with water. It was still muddy enough to satisfy a queer slick-skinned animal with six legs. Randy was going to use the peace stick on the little animal, but Tom reminded him of what Zip-Zip had said about using the peace stick, and they passed on, leaving the animal to its peaceful privacy. As they emerged from the trees again, Tom stumbled over a fallen tree trunk. He decided that the trunk was a good seat, and sat down on it; and Randy gladly followed suit. Soon afterward a musee leisurely crossed the clearing before them, apparently unaware of their presence. A little later the stillness was broken by a sound resembling the quacking of ducks, and suddenly a pack of doglike creatures bolted out of the woods on the far side of the clearing. The racing animals headed straight for the boys. Then they changed course in a body, sweeping sharply to one side as if traveling on a track.

Both Randy and Tom had jumped to their feet at their first sight of the strange animals.

"Look at them go!" said Randy. "Golly, I thought they'd run right over us."

"Funny things," muttered Tom, still trembling from his scare.

Randy kicked at the grass. "Well, shall we go on? We have time. The Sun isn't at one o'clock yet."

"I guess we have to," said Tom.

"You don't sound very eager."

"I'm not. I don't think there's enough water on Mars to take a bath."

Randy shrugged. "But we can't let Zip-Zip down. Say, do you still have the water sack?"

"Yes. I stuffed it in my pocket."

"I just wondered."

Tom's face brightened. "Look. Isn't that a cave or something, in the hill over there?"

Randy followed Tom's gaze. "Let's find out."

On their way to the dark spot on the hill, Randy talked enthusiastically about water being found in caves. This, he said, might be a lucky break.

Drawing close to the dark spot, they saw that it was actually an opening in the side of the hill. They climbed up a grass-covered hump in front of the opening and stood looking into it. The little amount of light that passed through the opening revealed a passage going deep into the hillside.

"What do you think it is?" Tom asked.

"Doesn't look like a cave," replied Randy.

"A ground hog makes a hole in the ground," said Tom,

"but it would take a pretty big ground hog to make this hole."

"You're not kidding. Look, I can stand up in it." Randy walked into the shadows.

"Hey, where are you going?" said Tom.

"I want to see how deep it is. And I still think there's water here."

"Zip-Zip said we shouldn't look for trouble."

"I'm not; I'm looking for water. Anyway, I have the good old peace stick. Come on! Are you afraid?"

Reluctantly Tom joined Randy, and they shuffled along the smooth, hard-packed earth floor of the passage together. They could barely see as the passage turned to the left, but when they edged around the bend their eyes picked up a source of light from up ahead.

"Gosh!" exclaimed Tom. "There is another tunnel."

Randy never had a chance to reply, for at that moment a string of dark figures glided out of the side passage, grabbed both him and Tom, and carried them off.

On the floor of the main passage, where Randy had dropped it, lay the peace stick.

WINDING through the lower part of the valley with Zip-Zip, Bonnie and Sparky found a variety of small wonders tucked away in the surface monotony. Bonnie was constantly ohing and ahing at the plants and flowers. Sparky naturally was



more interested in the insects that crawled over the plants and flowers.

Since the Martian scene was hardly new to him, Zip-Zip was able to keep his mind on the search for water. Taking his bearings at one point, he happened to see a flock of large birds alight in a broad open space out in the valley. The birds, he told Bonnie and Sparky, might have landed for food or merely to rest, but there was the possibility that they had been pulled out of the sky by the lure of water; at any rate it would bear looking into. Several minutes later the children were rewarded with the pleasant sight of birds rising into the air with glistening drops of water dripping from their beaks. Rejoicing, they rushed up to a fair-sized pool of water, and like the birds enjoyed a much-needed drink.



Then Zip-Zip filled the water sack, and they headed back to the clearing where they were to meet Tom and Randy. When they arrived there, it was still not the middle of the Martian afternoon, so they settled down under the dead marker tree to wait. But as the Sun sank lower and lower, with no sign of the boys, their success in finding water became less and less important. Finally Zip-Zip admitted he was worried.

"They're just poking around," said Sparky.

"Perhaps," said Bonnie doubtfully. "They—they could be lost." She shivered. "It's getting cool, isn't it?"

"I know," said Zip-Zip in a small voice.

"Is it winter here?" asked Sparky.

"No," answered Zip-Zip.

"Then why is it getting cold again?"

Zip-Zip took a deep breath as if he were weary. "On Mars, Sparky, the nights are cold even in summer. We are farther from the Sun than the Earth is ZIP at all times, but it is our lack of clouds that really makes the difference. Here the ZIP heat of the Sun stored up by the planet during the day escapes into space quicker than on Earth. ZIP On Earth there is a lot of water in the atmosphere to prevent the rapid loss of heat."

"Sounds complicated," remarked Bonnie.

Sparky was not going to be accused of being stupid again. "If you're a girl, maybe," he said.

For a time no one spoke, and the shadows grew longer.

Suddenly Zip-Zip jumped up and said, "We must search for them. They cannot be caught out here at night."

Leaving the water sack under the trees, they went up the valley in the direction the boys had taken a few hours before. At intervals they called to the boys, then stood perfectly still and listened. With every failure the answering stillness became more terrible. Finally, when their breath showed white in the air, Zip-Zip, on the verge of tears, declared that they would have to give up the search.

It was then that Bonnie and Sparky realized how serious was the plight of their brothers. Bonnie sobbed aloud as they retreated before the growing cold. And Sparky threw question after question at Zip-Zip, trying to understand what had happened, what it all meant.

"I can tell you nothing more," said Zip-Zip, "except that Tom and Randy will be fortunate if they can ZIP find a way to protect themselves against the cold through the night. I almost hope the Tubars have ZIP captured them; they would be better off."

Sparky had a lump in his throat as he said, "Can't you think of something to do for them, Zip-Zip? You're so smart."

"I shall do my best," replied Zip-Zip with an effort. "If Hak has repaired the generator, we can fly low over the ZIP valley and look for them by searchlight, the infra-red searchlight."

"But if he hasn't?" Bonnie's voice wavered as she spoke.

Zip-Zip hesitated. "We might use spacesuits to look for them. . . ." His voice drifted off weakly. "No; it will be dark by the time ZIP we can return here. I cannot see how we could find them on foot with just spacelights. At sunrise . . ." Again his voice failed him.

By the time they arrived in the clearing which marked their entrance into the large valley from the valley holding the spaceship, their teeth were chattering. Zip-Zip gathered up the water sack, and, with late sunlight slanting through the trees, he and Bonnie and Sparky ran most of the way back to the spaceship.

Hak opened the lower port for them, and when he saw only three of the children come through it, his big eyes filled with concern.

"Where are the boys?" he asked, glancing outside the ship. "Oh, I regretted letting you go as soon as you had left! Quickly ZIP tell me what happened to them."

Zip-Zip dropped the water sack. He let his arms hang slack at his sides in an attitude of complete defeat. "I do not know," he said quietly.

"Do you mean to say you lost them?"

The metallic clang of the port closing rang through the hold.

"Yes, Hak. . . ." Zip-Zip courageously withstood Hak's critical gaze and explained, as he knew it, what had taken

place. "I was hoping," he concluded, "that we could search the valley with the spaceship."

"That is impossible," Hak said curtly. "I believe I have located all the damage, but it will take ZIP hours to complete repairs."

Bonnie rubbed her tear-stained eyes. "Then there is no hope for Randy and Tom."

Hak put his arm around Bonnie. "There is always hope," he said comfortingly. "And I know what I must do."

"What is that, Hak?" asked Zip-Zip.

"When Polumusanti betrayed the government, the responsibility to protect the Earthchildren became mine. Now I am going to call the government ZIP for assistance. With the lives of two Earthchildren already at stake, it would be foolish ZIP not to use the cosmic-phone simply because of the possibility of giving away our position to the Samorays."

Hak was already halfway up the ladder to the catwalk when Zip-Zip asked him whether he knew their location.

Hak paused on the ladder with the great rocket tubes radiating over his head like the legs of a giant spider. "I took a reading from the stars before I sealed the ship last night," he called down to Zip-Zip. A moment later he disappeared into the air lock.

Zip-Zip turned to Bonnie and Sparky. "We may as well go to the control cabin ourselves," he said. "Do not worry. Gordemuntu will send help to us from Amoti in minutes."

"Just the same," said Sparky, sniffing, "I wish I hadn't been so mean to Randy."

That was all Bonnie needed to send her into another crying spell, and Zip-Zip and Sparky both responded with soothing words. Bonnie lifted her head and her eyes happened to fasten on Polumusanti sitting on the deck, his arm slung on the manacle chain. Instantly anger chased her grief, and she raised her arms and made tight little balls of her hands. "It's all your fault!" she shouted at Polumusanti.

When the children gathered around Hak at the control panel, he still had not made contact with Amoti, the capital of Mars. Between calls, he tossed a remark in Martian at Zip-Zip, who translated it for Bonnie and Sparky. It seemed that the emergency solar power system, used to operate the cosmic-phone when the generator failed, was not delivering much current.

Suddenly Hak raised his hand for silence. A voice, speaking Martian, sounded from the silver ball on the control panel.

"I have them!" Hak said under his breath. He leaned forward and the difficult Martian language flowed from his lips.

Now and then Bonnie and Sparky caught a familiar word, a name, but that of course was all they could understand.

Then Hak stopped speaking, and he and the children waited for the silver ball to answer. The silence in the control

cabin lengthened. Hak's expression grew troubled as he worked the cosmic-phone control button and rotated an orange dial.

"Dead!" he exclaimed. For a few seconds he sat deep in thought. "Yes, that must be it."

"What do you mean?" asked Zip-Zip.

Hak pointed at the ceiling. "The broken branches on the top of the ship prevented the solar cells from recharging the current accumulator ZIP during the day. Between the demands of the temperature control system and my working in the ZIP hold with full illumination the accumulator has been drained."

"Do you think the government station heard you?" asked Zip-Zip.

"I cannot be certain."

"You gave our position as soon as they ZIP replied. I heard you."

"Yes, Zip-Zip. But probably only the Samorays picked it up!"

STRUGGLING against shock, Tom and Randy were carried through a dark void by beings they could not see.

Impressions of bare muscular arms, thick hair, and a strange sweet smell inflamed Randy's imagination, and rendered him completely helpless. Flickering light abruptly revealed the rough sides of the tunnel through which he was

passing. Then the sound of voices came to him, and the walls vanished, and he saw that they had entered a kind of room. Almost at once he was lowered to the floor, and the light of a blazing fire stabbed his eyes, momentarily blinding him. Recovering his sight, he saw Tom hunched beside him. With his heart pounding, he ventured a look at his captors. Though he did not know exactly why, he was relieved to see that they were not hairy, but were just wearing skins of animals. With their coarse brown antennas, heavy-lidded eyes, and weathered faces, they were obviously not of the same race as Hak and Zip-Zip. But he felt no real fear of them, for their manner was one of dumb curiosity, like that of a nosy dog.

And like dogs that lose interest in a game, the strange people turned away from the boys and milled about, and the din of voices rose. For the first time Randy realized that he was among many people, that the underground chamber was large. Cautiously he looked about. There were other fires besides the one before him; just how many he could not tell because of the earth pillars which had been left to support the roof when the chamber was excavated, and which interrupted his view. The ceiling was not very high, at least not where he was. There was an opening in it above the fire, and it was smoke-blackened.

Randy started when he felt a tug on his jacket. It was only Tom.

"Do you know who these people are?" whispered Tom. "Tubars!"

Randy's eyes widened. "I think you're right."

"And more of them are coming into this place all the time. I've seen them. Funny though—they're not paying any attention to us."

"Just like we weren't here."

"They all keep moving around as if they were busy, but I can't see that they're doing anything."

"I wonder what that awful sweet smell is."

"I noticed that, too, Randy. Sounds crazy, but I think it's the Tubars themselves."

"Yeah? Well, I bet they don't take a lot of baths." Randy coughed. "I'm thirsty. Aren't you?"

"I could drink all the water on Mars. But how about trying to leave this place? No one is watching—" Tom grabbed Randy's arm. "Look at that!"

Around the fire an animal was crawling toward them. The red light of the flames played over the smooth scales covering its humped body and longish head, and made it look like something born out of fire. As its snakelike tail came too close to a glowing log, its mouth gaped open, revealing sharp white teeth.

"I'm not staying here," gasped Randy, and he cast inquiring glances at the primitive Martians scurrying around him.

What followed took the boys completely by surprise.

From out of nowhere a booted foot struck the scaly animal squarely on the jaw, and with a grotesque backward twist it curled up in a ball and rolled across the floor.

Randy sprang happily to his feet, thinking he saw Hak standing before him. But it was not Hak. The sudden appearance of a civilized Martian in a uniform like Hak's had temporarily confused him. Then he realized that it did not matter that the man was not Hak. He was still an intelligent Martian, and a possible friend.

"Will you help us?" he appealed to the man. "Gee, I hope you speak English!"

The uniformed Martian grinned at them, his hands resting on the two weapon holders at his sides. "It is too good to be true," he said in English. "The Earthchildren have come to us."

"Huh?" said Tom, now standing.

"What do you mean, we've come to you?" asked Randy puzzledly. "I asked if you'd help us get out of this hole."

"Why would I do that when I have been searching ZIP for you?"

"You're a Samoray!" exclaimed Tom.

"Yes, proudly a Samoray."

Randy's face fell. "Oh, great! And I thought you were a friend. You're worse than the Tubars."

"Ah, you know the name of this ignorant race. Our lead-

ers ZIP are right; even the children of Earth are dangerously wise."

"My dad wouldn't agree with you," said Randy.

"What ZIP is 'dad?' "

"Skip it!"

The Samoray tried to hide his displeasure. He changed the subject. "I can still be your friend," he said. "In fact I have changed my mind. I shall be pleased to escort you ZIP to your spaceship, if you will only lead the way."

Randy and Tom exchanged knowing glances.

"We're not buying that," said Randy. "I wouldn't trust you to mail a letter."

"I do not understand you," said the Samoray.

"Don't try," answered Tom.

Without another word, the Samoray took each of the boys by the arm and started to lead them through the crowded chamber. Randy protested, shouting that he knew the Samorays wanted to start a war with Earth, that they were sneaky and were working with the Tubars to turn the people of Mars against their good leaders. But the Samoray ignored him, and dragged him along until they came to the far end of the chamber, where he thrust both Randy and Tom into one of many shallow excavations in the chamber wall. After speaking to two Tubars, he walked away. The Tubars seated themselves before the entrance to the boys' hole, blocking it. Even these sentries could not remain idle; with thick



stone knives they cut steadily away at pieces of wood which were taking on the rough appearance of human hands.

In the dim light of their prison, Randy said, "I used to like caves," and he tried to laugh.

"I'd like to know what they're going to do with us," said Tom. "On second thought, I don't want to know."

Randy replied with a grunt. He was beginning to feel weary, yet he was determined not to sleep.

"If you want to get dizzy," said Tom, "watch those Tubars carving whatever they're carving. They never stop."

"Cut the jokes," said Randy. "Let's try to figure our way out of this mess." He paused. "I wish Zip-Zip were here to help us."

"Me too. He knows these people. I wonder what he and the others are thinking now. I bet they're worried about us."

The boys sat in silence. Outside their prison the busy stir of the Tubars went on relentlessly.

A sudden disturbance at the entrance of the digging roused Randy from a half-sleep. The yellow-plumed Samoray was looking in at him.

"I thought you Earthchildren would wish to know that you are going on a journey tomorrow," he said. "My superiors have ZIP ordered me to show you more of our planet to prove that we Samorays can be ZIP as gracious as the people of Gordemuntu."

"Promises," muttered Randy sleepily.

"What we want is a drink," said Tom. "And we're hungry."

The Samoray grinned. "You shall have food and drink; the squeezings of the judar plant ZIP and the roast flesh of the gog, the animal I kicked by the fire." His head disappeared from the entrance.

"Gog!" Tom repeated. "I thought he was going to eat us; now we're going to eat him."

Randy crawled closer to his brother. "What do you make of that trip business?"

"I don't know," replied Tom. "If Dad were here, I think he'd say, 'Let's stay home.'"

ABOARD the spaceship Hak and the children spent a troubled night. As the tree-filtered daylight coming through the magnivisor faded into darkness, they resorted to two portable spacelights for illumination. In the same way they found a substitute for the ship's electronic temperature control system in spacesuits, which they shivered into by the light of the spacelights. Nothing else could have reminded them more cruelly how slim were Tom and Randy's chances of surviving the cold Martian night in the open. For a time it was all that Hak could do to keep the children from leaving the ship to search for the boys in the dark. But finally they gave in to his arguments, and he secured their helmets and saw that they were comfortable on the body rests. Then,

gathering up the spacelights, he went into the blacked-out hold to work.

At the first glimmer of day, Zip-Zip slid off his body rest and stumped across the cabin to see if Hak was lying on the control seat. Disappointed, he turned about and saw Bonnie and Sparky sitting up in their spacesuits. He helped them to the deck and motioned for them to follow him into the hold. From the catwalk they saw a glow of light behind the atomic generator deep in the hold, and they went down the ladder to investigate.

Polumusanti was still manacled to the hull, but now he also was clad in a spacesuit. Around the curve of the hulking generator, Hak slept with his helmeted head propped on a section of tubing. Surrounding him on the grill deck was an array of tools, and two spacelights were focused on a cluster of small valves. Zip-Zip took hold of Hak's shoulder, and Hak straightened up. Through the window of his helmet, the children saw him blink his eyes and yawn. Next he stood up and adjusted the frequency dial on his chest, after which he did the same for the children.

"Can you hear me?" he asked.

The children could.

"I see that you took pity on Polumusanti," said Zip-Zip.

"Yes. He would have frozen. It is still too cold to remove your spacesuits." Hak hesitated when he heard Bonnie whimper over his radio. He knew she had connected his re-

marks about the cold to her lost brothers. "But," he went on boldly, "you can ZIP remove your helmets long enough to eat and drink."

"I'm not hungry," squeaked Sparky. "Let's look for Randy and Tom."

"Yes. Have you repaired the generator, Hak?" said Zip-Zip.

"I shall soon try a trial run," Hak replied. "Meanwhile, feed the Earthchildren, Zip-Zip, and then take them out ZIP on the top of the ship to help you clear away those branches. The branches may have hidden us ZIP from Samoray eyes, but now they are depriving us of heat because, as I said, they are shading the ZIP lenses of the solar cells. I shall not be long," he added in a kindly tone of voice.

Zip-Zip silently turned away from Hak, and the Riddles tagged after him.

It was, however, the middle of the morning when Hak sat down before the control panel to discover how successful he had been. Minus their spacesuits, Zip-Zip, Bonnie, and Sparky hung over him like scientists awaiting the result of an important experiment. No one spoke. All eyes focused on Hak's hand gripping the large red power lever. The knuckles of his hand whitened, and slowly the power lever inched forward. A familiar hissing penetrated the cabin.

"Look!" cried Zip-Zip, pointing out the magnivisor. "The rockets! They are working!"

Sparky and Bonnie gave a cheer.

Hak said that the rockets sounded true. Then close upon his words came a muffled explosion, followed by an unmistakable human cry. Hak jerked back the power lever, and leaped to his feet, almost upsetting Sparky.

"It came from the hold!" said Zip-Zip.

"Stay here!" commanded Hak as he rushed at the air-lock door.

"What happened?" chorused Bonnie and Sparky.

Zip-Zip just shook his head and looked at the Riddles with worried eyes.

After a while Sparky said, "I smell something."

"Hot metal," was Zip-Zip's brief reply.

Hak appeared in the cabin door, his face downcast.

Zip-Zip went to him. "Is it serious?"

"I have failed. Too much heat. ZIP A rocket tube vaporized at a weak spot."

"Polumusanti certainly yelled loud enough," said Zip-Zip.

"Yes. He not only has a strong voice, but he is luckier than we are. Hot metal ZIP burned through the emergency current accumulator, so we are entirely without power again."

Sparky squinted up at Hak. "Can't we fly now?" he asked him.

"A musee," Hak replied, "would have a better chance of flying than this spaceship."

"Well, what are you waiting for?" Bonnie's blue eyes flashed as she tossed back her blond hair with a sweep of her hand. "I'm going to look for Tom and Randy myself, and I don't care if I have to walk all over Mars!"

Zip-Zip looked at Bonnie's determined face. "She is right. We must search on foot. ZIP There is no other way."

"Yes," agreed Hak. "If the government radio station had heard my appeal for help, a rescue ship would have found us ZIP long ago."

"Should we wear spacesuits?" Zip-Zip asked Hak.

Hak gave the matter some thought. "No," he said. "They would slow us down; and we cannot accomplish anything at night, anyway." He started for the hold. "I shall ZIP fill a flask with water," he called back. "Zip-Zip, you collect space-food and two peace sticks."

After hiking into the broad valley where Tom and Randy had disappeared the previous day, Hak and the children made a wide turn and climbed halfway up the ridge forming the near side of the valley. It was Zip-Zip's idea that if they continued northward, up the valley, at an elevation, their eyes could sweep a larger area of the wilderness than was possible from the floor of the valley. Then, if necessary, on the return trip, they could still travel through the lowland

itself for a close inspection. So it was that they nearly walked into the Tubar burrow which the boys had sighted from below.

Both Zip-Zip and Hak noticed the trampled vegetation around the entrance, and they could see that it was recently done, for the bruised and broken blades of the thick Martian grass were still fresh and moist.

"It's a live one!" said Zip-Zip.

"I can see that," said Hak. "But I am puzzled."

"You mean because the entrance is overgrown."

"Yes, Zip-Zip." Hak walked boldly into the burrow, the children close behind him. "Many people have traveled in and out here, and very recently, but the ZIP entrance of an active community would be bare as a rock."

Sparky edged up to Zip-Zip and said, "What are you and Hak talking about? Isn't this a cave?"

"Oh, I'm sorry, Sparky. We should have told you that we think this is the entrance ZIP to a Tubar community."

Bonnie had listened to Zip-Zip's explanation. "Aren't you afraid—of the Tubars, I mean?"

"Not with this peace stick," said Zip-Zip, waving the slender rod. "Hak and I could hold off an army in this narrow passage."

Just then Hak returned to the children from a short excursion in the burrow. "I am going to give you the chance of holding off an army," he said to Zip-Zip. "We are going

to search this digging ZIP because it is just possible that Tom and Randy were captured by the Tubars and ZIP brought here. I shall go first, but have your peace stick ready, Zip-Zip."

With Sparky whispering about "a funny smell," they passed around the bend in the burrow and made out the fatal side passage. Hak halted the column. He would follow this new burrow alone, he said, so that Zip-Zip could guard the exit. Several minutes went by before the children again heard footsteps in the side passage, and they were much relieved when it turned out to be Hak.

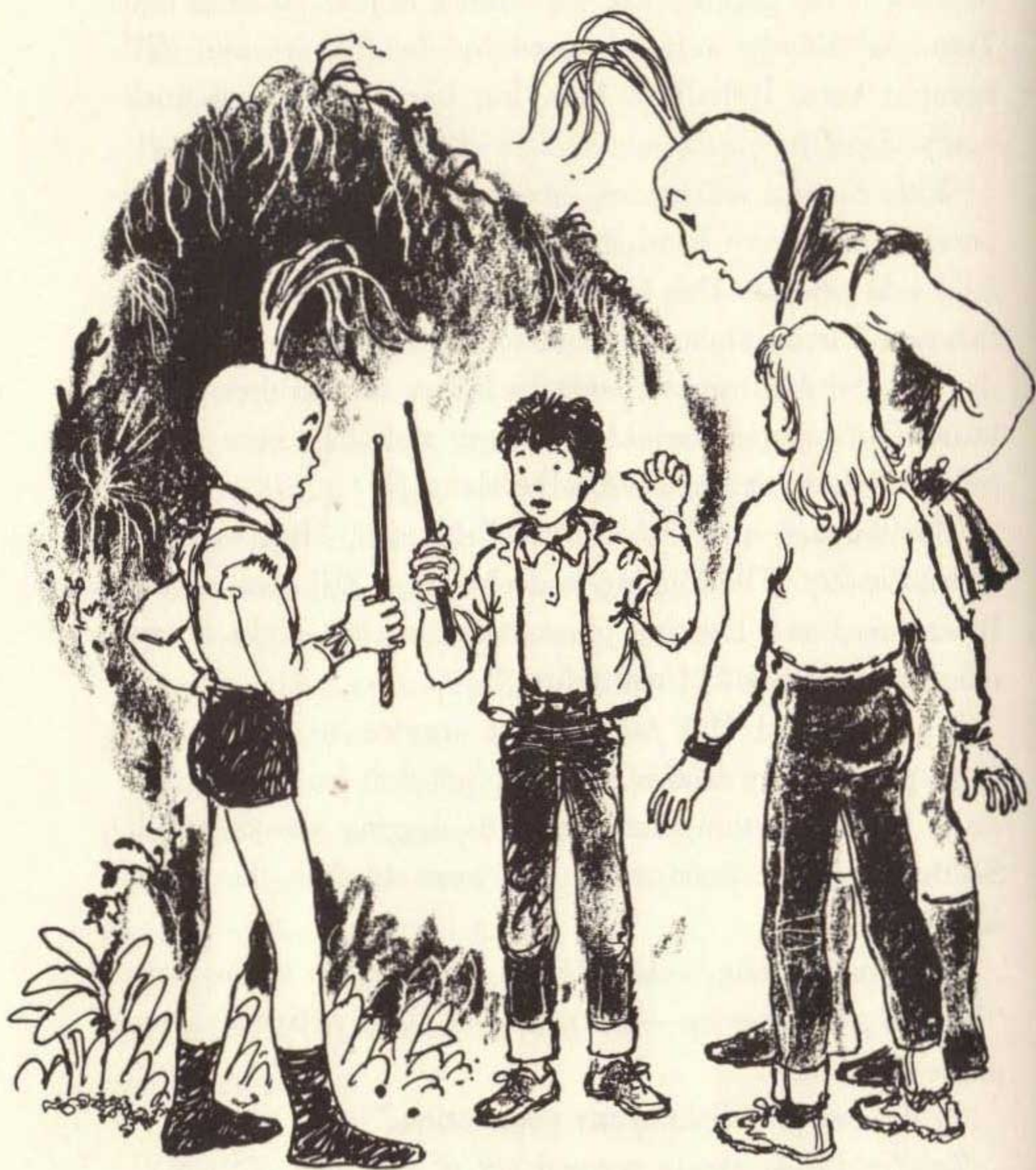
"No Tubars, no Earthchildren," he said. "But we were right, Zip-Zip. The digging is no longer a ZIP community. It was used as a meeting place as late as last night. I saw the glowing embers of many fires."

Zip-Zip asked Hak whether he wanted to pursue the main passage any farther. Hak replied that he did not, because he was certain that the whole digging was deserted. So they retraced their steps, and soon stood in the warm sunlight again.

"The day is long," said Zip-Zip, glancing up at the Sun. "We can go farther up— Why did you ZIP give Sparky your peace stick, Hak?"

"I did not give Sparky my peace stick."

Zip-Zip's eyes nearly popped out of his head. "Sparky! Where did you get it?"



"This thing? I picked it up in there." He pointed at the Tubar burrow.

"That must be the stick I gave Randy!" exclaimed Zip-Zip.

"Tom and Randy are alive!" shouted Bonnie.

Zip-Zip took the surprising evidence from Sparky. "This means the Tubars have them. They did not freeze!"

"There is no time to lose," put in Hak. "We must find the Tubars before they ZIP harm the boys." With the children, he strode down the slope.

"But how can you possibly find the Tubars?" said Bonnie, again disheartened.

"I may not be able to track like a trained hunter," said Hak, with his eyes on the ground, "but a trail like this I could follow to the ZIP south pole."

WHAT time of day it was when they were pulled from their stuffy "cell" Tom and Randy did not know; nor did they care. They were going to be taken on a mysterious journey, their destination unknown; yet until they knew what was in store for them, they could not feel fear, could not feel at all. All the strange people and sights around them seemed to be unreal. Had they actually left the Earth, or was this crazy Tubar underground chamber the result of too many hot dogs and soft drinks? They received a convincing answer when a bustling group of squint-eyed Tubars pushed and prodded

them through the underground passages out into the open, where the familiar morning Sun, already some distance up the sky, burst upon their sight. Cold nipped at their fingers and ears, and they quickly stuffed their hands in their pockets to keep them warm. The Tubars did not seem to mind the cold, unless their silence could be attributed to it. Already a long column of them wound down into the valley, disappearing into a patch of trees. Those in charge of the boys showed no emotion of any kind, no hatred, no anger; and when they saw that the boys kept moving along with the column, they stopped prodding them, and silently walked by their side.

"If we only knew where they are taking us," said Randy in a low voice for fear of exciting his captors.

"What's it matter?" answered Tom out of the corner of his mouth. "We don't know one place from another on Mars."

"Joke," was all Randy said.

"I haven't seen the Samoray," said Tom. "If he hadn't turned up, I think we could have gotten away."

Randy took his hands out of his pockets and blew on them, then held them under his arms. After a time he said, "They must be nice and warm in the spaceship. I wonder if Hak fixed the generator."

"Maybe the Samorays found them," said Tom gloomily.

"Did I hear someone mention my people?"

The boys turned their heads in the direction of the voice, and recognized the Samoray.

"Oh, it's you," said Tom.

"I was concerned about you," said the Samoray, smiling, "but you do not seem happy to see me. Did I not give you ZIP food and drink?"

"The drink was so bitter I choked on it." Randy made a sour face as if he still tasted the drink. "And that gog meat was terrible." Actually he had liked the roast gog, but he had an irresistible urge to irritate the Samoray.

"We Samorays live as well as Earthpeople," said the Samoray boastfully. "These Tubars ZIP are barbarians."

"Yeah," said Randy, "they don't have fine clothes like you Samoray barbarians."

If the eyes of the Samoray had had the power to kill, Randy would have died on the spot. But in a moment the Samoray mastered his anger. "The Tubars do things we would not think of doing," he said. "They eat gogs!"

"I guess that makes us barbarians, Randy," said Tom.

"You are worse," said the Samoray evenly. "You Earthpeople are a threat to Lafonee. That is why the government that brought you ZIP here must be destroyed. Gordemuntu does not see the evil growing, like the black lichen, on Earth ZIP and if he did he would be too weak-minded to act."

"Those are lies," came back Randy.

"That's right," said Tom heatedly. "Why don't you admit you just want to start a war to steal our uranium?"

The Samoray appeared ready to make another speech, but then he simply said, "You are very brave, but wait," and he increased his stride and moved off toward the head of the column, his yellow antenna plume bobbing over the heads of the Tubars.

All through the conversation between the boys and the Samoray, the boys' Tubar guards had maintained their silence. However, as soon as the Samoray had gone, they began a lively jabbering among themselves.

"It sounds as if we gave these fellows something to talk about," remarked Tom.

"I believe they're afraid of the Samoray," said Randy. "And I don't really blame them. I didn't like that 'just wait' line he gave us."

Tom grunted and looked very sober.

If the boys had been observant when they had begun their enforced journey, they would have seen that they were traveling down the valley in the direction from which they had come the day before. But, since they had been concerned with other things then, they never realized that they passed within a short distance of the mouth of the small valley holding the spaceship.

Impressed only by the sameness of the Martian wilderness, they followed the Tubars before them with a feeling of com-

plete resignation. After keeping to the flat bottom land for some time, they were suddenly directed to the valley's western ridge, which they eventually mounted. Trees and the walls of a narrow gully carved into the other side of the ridge blocked their view of the adjacent valley until they came out on a rock spur. There they were treated to a breath-taking sight. Spread across the entire width of the valley beneath them was a dam, and behind it a vast sheet of gleaming ice, with patches of blue water showing through it.

By the size of the dam, Randy thought that it must have held all the water on Mars. As he continued to look at it, he wondered why the Tubars were converging on it; why the Samoray wanted him and Tom brought there.

After the Tubar column reached the floor of the valley, it snaked from one wooded area to another as if the head of it had lost its way. Consequently, the boys lost sight of the dam, and constantly anticipated a close glimpse of it. Finally an embankment appeared through the trees, and they naturally assumed that it was the base of the dam. But the woods went on uninterrupted. There was no dam, no water. Earth, loose earth, filled the woods up to the lower branches of the trees. If the boys had not had the trees to go by, they might have thought that their course had taken them into a deep trench. While they were still grappling with the mystery of the loose earth, they came upon another puzzling sight. They had entered an open area, clear of trees, but

alive with Tubars. Amid the seeming confusion, the boys were brought to a halt. A familiar sweet odor attacked their nostrils. Overhead a canopy of branches and rope was suspended from the surrounding trees. From an opening in the ground under the crude canopy, fur-clad Tubars were emerging, carrying baskets of earth. While they scurried down avenues between the piled earth, other Tubars bearing empty baskets issued from the same avenues and formed another line of traffic going back into the burrow.

The Samoray suddenly appeared out of the antlike mass of Tubars and spoke to the boys' guards. Turning to the boys, he said, "Come, Earthchildren. I shall show you our great work." He pulled the boys into the line entering the burrow.



With mixed feelings Tom and Randy watched the ground close around them. At first their descent was so steep that they had to brace their legs to avoid breaking into a run down the incline. Then the earth floor leveled off, and they walked along with the usual ease permitted by Mars' low surface gravity, their way lighted by torches thrust into the damp walls of the burrow. Spidery roots hung from the ceiling, and on the walls a parade of shadows followed the moving lines of Tubars. This was enough to make the boys uneasy, but in addition the burrow kept weaving, so that they never knew what to expect around the next turn.

With his eyes on the line of outgoing Tubars, Randy called over his shoulder to the Samoray: "Are you going to make



us dig? We're not very good at digging." While he waited, in vain, for an answer, the passage gradually inclined upward, only to level off again. Overhead the roots abruptly disappeared from the ceiling, and in their place openings that let in shafts of sunlight appeared at regular intervals and added to the light of the torches.

Randy would have liked to talk to Tom, but since the Samoray could hear everything he said, he held back. Anyway, what was the use of talking, he thought. They were on a strange planet, under the ground; the man taking them into this mine, or whatever it was, hated the people of Earth; and, to top it off, no one who could help them knew where they were. It was, he decided, like a football game with the score forty to nothing against you, and only one minute to play.

Tom, who was walking ahead of Randy, suddenly whirled around. "Where are you taking us?" he demanded in a voice charged with fear and resentment. "We haven't done you any harm."

"Go!" shouted the Samoray angrily, and shoved Randy into Tom, and pushed them both along. "You are blocking the passage! We are almost there."

"Where?" said Tom, but he obeyed the Samoray.

Moments later they rounded a turn and the boys beheld the end of the burrow. It was a sight they would never forget. By the yellow light of many torches they could see Tubars and gogs clawing furiously at the earth, crawling over each

other, slipping and sliding in a confused mass. By some miracle, quantities of earth collected behind the grotesque excavators, and workers hurriedly scraped it into the baskets of the carriers with hand-shaped scoops similar to the one the boys had seen their Tubar sentries carving the previous night. What made the operation even more frightening were the growls which issued from the mouths of men and animals alike.

Fascinated and terrified, Randy and Tom made themselves small against the side of the burrow; and only after they were startled by the sound of laughter did they notice that their captor was engaged in conversation with a uniformed companion, undoubtedly a Samoray.

"You could not understand what we said," said their captor. "But I can tell you now that Haktromantu Dam, the largest dam on Mars, will soon be blown ZIP into the sky." He seemed to enjoy the boys' amazed expressions. "No telltale spaceship will be seen over the dam, yet suddenly it will be ZIP destroyed. *And* when the ruins are examined—as they will be—your bodies will be found ZIP and it will appear that the people of Earth, not we, are working secretly to destroy the ZIP people of Mars. Thus have our great leaders taken advantage of your presence on Mars."

"The people of Mars will never believe it," asserted Randy. "Not the good people."

"You are wrong. Imagine what your own people would

think if after a disaster on Earth they discovered ZIP the bodies of Martians in the wreckage.”

The Samoray smiled when he saw the impression he had made on his captives.

Then Randy’s face brightened. “Ha! Your smart leaders forgot something. We’re just kids, and nobody on Earth has a rocketship to get to Mars. So how—?”

“Like all children,” interrupted the Samoray, “you think too clearly. You are large enough to cause suspicion, and ZIP it does not matter that Earthpeople are without spaceships. When your bodies are found, what can the ZIP people of Mars believe? All the details of your arrival here have been kept secret; and ZIP if Gordemuntu tries to explain how you came to be on Mars, we shall simply say he lies.”

“Aw, that’s crazy,” said Tom. “Why should the people of Mars think we want to hurt them? And if we really wanted to hurt them, we’d bomb their cities.”

The Samoray shook his head. “Water is our weakness. The destruction of Haktromantu Dam will be as great a blow to my planet as ZIP the destruction of its cities. It will bring famine to all the people. Long before their bellies hurt ZIP from hunger, they will believe the worst about Earthpeople. Then Gordemuntu and his followers will be ZIP cast aside, and fearless men will rule Mars.”

“I don’t believe you,” said Randy, stalling for time. “I don’t believe these Tubars can wreck a big dam.”



"This," said the Samoray, indicating a small black box on his belt, "is a microbomb. In a short time I shall place it at the end of the passage ZIP which will be directly below the dam"—he pointed overhead—"up there. Do you understand?"

Just by looking at his brother's worried face, Randy could see that Tom was as convinced as he was that the Samoray meant every word he had said. He was going to blow up the big dam they had seen, and them with it. Randy cast a furtive glance down the passage. He did not like the idea

of being "a body," so there was only one thing left for him to do. Yanking Tom's arm, he cried, "Come on!" and lunged past the Samorays, between the lines of Tubars. Not by design, but simply because he was startled, an incoming Tubar got in Randy's way, and they both went sprawling on the floor of the burrow. As Randy jumped to his feet, he faced a familiar object held in the hand of his captor. A tingling sensation surged through his entire body, and he was unable to move. He had been paralyzed by a peace stick! Even as he fell backward, he knew he was falling, but he could not do a thing to prevent it, could not move even his eyes.

Lying on the floor of the burrow, he fought a terrible battle in his mind. But no matter how much he desired it, his body would not take orders. The sound of a voice speaking the rapid language of the Tubars jolted him out of a growing feeling of panic. He felt himself being lifted. With his unfocused side vision, he picked up impressions of Tubars, and a steady jerking action on his body and the seeming movement of the ceiling informed him that he was being carried through the burrow. He heard more talking, and an instant later he clearly saw Tubars before him and felt his feet and then his back touch upon something solid. He wanted to cry when he understood that he had been propped against the side of the burrow like a store dummy; and tears did well up in his eyes and roll down his stiff

cheeks. Moments later a commotion before him made him regret his weakness. With difficulty he peered through his tears. "Tom!" his mind shouted. They had done the same thing to him. Yes, they were setting Tom up beside him.

"Listen, Earthchildren! I know you can hear me." The familiar Samoray was standing before Randy. "You are now a *safe* distance from the bomb site. Your ZIP bodies will not be marked. It will appear, you see, that you were accidentally drowned while destroying the dam. ZIP Now I shall make certain you stay here."

Randy saw the Samoray's arm rise, and his body tingled as if a million tiny needles were passing through it.

THE trail left by the Tubars had been no problem for Hak to follow until he and the children came to the bare-rock spur overlooking the new valley. There, however, the sudden grand view of Haktromantu Dam meant more to him than the trail. He sensed that the dam and the unusual activity of the Tubars were in some way connected. Searching out the most natural places for a descent into the valley, he soon recovered the Tubar trail, and he and the children resumed the pursuit. In the valley itself, the winding course they were forced to take led Bonnie to remark that perhaps the Tubars had tried to mix up anyone who might have been following them. Hak, still thinking of the dam, had another idea about the tortuous trail. He had not failed to notice

that it never allowed a clear view of the dam, and therefore the regular guards stationed on the dam would never have had an unobstructed view of the Tubars.

Entering a clearing, they came upon a number of trails radiating from a circle of heavily trampled vegetation. To a skilled tracker the ground would have readily revealed its story, but since Hak and the rest were not wise in the ways of woodcraft, they were puzzled and confused, and spent valuable time going over the ground. It was Zip-Zip who came up with a possible solution to the puzzle. One trail, which led directly into the near woods, was broader and much more heavily traveled than the others, so, Zip-Zip thought, it was reasonable to assume that this was the continuation of all trails. The other trails suggested to him that Tubars had come to this spot from many directions. Hak was quick to agree with Zip-Zip, partly because his theory made sense, and partly because he wished to press on. He had hoped for quicker results in the search for the boys. The afternoon was slipping away; and with all evidence pointing to a large tribal gathering of Tubars, it would not be an easy task to free the boys—if indeed the Tubars were holding them.

Eventually the trail through the woods brought the searchers to the embankment of piled earth. Hak took one look at it and promptly pulled the children into the undergrowth.

"We have found them," he said in a low voice.

"Who?" asked Sparky.

"The Tubars. That mound is from a Tubar burrow."

"I wonder why they are digging on the plain," said Zip-Zip. "They usually make their homes in hills. . . ."

"It is strange," said Hak. "I thought they were raiding the control station of Haktromantu Dam."

"The dam!" muttered Zip-Zip. "That is it! ZIP They are tunneling under the dam to wreck it!"

Hak's eyes came fiercely alive. "It is possible. The government space patrol would not be able to see the operation under the cover ZIP of the trees. . . . Oh, Zip-Zip, if it is true, we have stumbled on the most daring and diabolical scheme ZIP the enemies of the government have ever attempted."

"Yes, the Samorays must be behind it," said Zip-Zip with suppressed excitement. "The Tubars are too stupid to figure out such a plan."

"I said 'if it is true,' " emphasized Hak. "Our job now is to find out if it is. ZIP Ah, why was I born to be a hero? I started out to rescue two Earthchildren, and now. . . ."

"I'll help you," said Sparky. "I'm not tired."

Hak smiled. "I am counting on you. And we will find your brothers."

Zip-Zip held up his hands, his eyes round and expectant. "Listen! Someone is coming."

Hak told the children to crouch down in the undergrowth, and to be perfectly still. A glance at Zip-Zip disturbed him. "Zip-Zip, your antennas! Hold them down."

The sounds of movement from the direction of the trail were not continuous. They stopped, started, and stopped again.

Sparky impatiently inquired what was taking him so long, and was shushed by everyone.

"Perhaps he saw us," whispered Zip-Zip.

Hak held his finger to his lips, then cautiously peered over his leafy concealment. He let go of his antenna plume and stood up. "A musee!" he sighed.

The children rose and stared at the shaggy, sad-eyed animal.

"If you do not wish to be chased, Sparky, do not let him see you," jested Hak.

"I won't," returned Sparky quite seriously.

Hak faced the embankment. "The next time it may be a Tubar or a Samoray. We must move on; but not through the ZIP passage used by the Tubars. Though it will be slow going, our safest course is over the piled earth."

Walking around and through the limbs of the trees—which normally would have been above their heads—proved a strange experience for the children. The leaves, stiff and spiny like the Martian grass, pulled at their clothes; still they managed very well, following every direction Hak made with his hands. Suddenly he motioned for them to halt, and

by his expression they knew that he had made a discovery. Presently they were all looking down at the camouflaged clearing where the Tubars were busily passing in and out of their burrow. Hak drew back into the trees, motioning the children to him.

"It appears that your theory is more than theory," he whispered to Zip-Zip.

"I didn't see Tom and Randy," said Bonnie sadly.

"They are probably in the burrow," said Zip-Zip.

Hak agreed. But, he said, before they made any plans, he had a scouting job to do, alone; and he warned the children not to move from the spot while he was gone.

After many anxious minutes, the children welcomed the sight of a returning Hak. Breathing hard, he lowered himself beside them.

"There is no doubt about it," he said. "The Tubars are running a tunnel to the dam. I saw their ventilation holes. ZIP They extend across the plain between this woods and the dam." He took a deep breath. "If those insect-brained Tubars cannot understand ZIP that the plas-stone side of the dam will stop them dead, why do the Samorays not tell them? ZIP And if the Samorays wish to destroy the dam with a technological weapon, why do they not use a ZIP ray from the air? It is a great mystery. Oh, I noticed another thing out there—a storm is forming."

"That could help us," said Zip-Zip.

Hak registered a pained look. "But *that* will not!"

Nosing its way through the limbs of the trees was a musee.

"Oh, no!" said Zip-Zip under his breath.

"Is he the same one?" asked Sparky, crawling up behind Hak.

"It will do no good to ask him," answered Hak. "Let us hope that 'he' does not ZIP give us away to the Tubars."

"Oh, I'm so mad at those old Tubars, I could fight them all," said Bonnie.

"I am ready," said Zip-Zip. "What do you say, Hak?"

Hak glanced toward the edge of the embankment. "It must be done. Whether the boys are in the burrow or not, I must try to stop this ZIP operation. I know you children want to help me, but you are so—young."

Zip-Zip, his feelings hurt, lowered his eyes and pushed at the loose ground with his feet. "Perhaps—perhaps you can get help from the dam," he said generously.

Hak shook his head. "From what I saw, there is not time for that. Before I could reach the dam station and convince the ZIP men in charge that I was not a Samoray trying to trick them, it would be night."

"Well," said Zip-Zip, "we have three peace sticks, including the one I gave Randy, and though I am *young* I know ZIP how to use one, and Bonnie or Sparky could learn to use one in a minute."

Hak gazed at the children warmly. "I could not ask for better partners," he said.



Overhead a gust of wind whipped through the treetops, and the light within the woods dimmed. Almost at once the air grew chilly.

“What’s happening?” asked Sparky.

Zip-Zip had barely time to say that the storm had arrived when a flash of blue-white light lit up the woods, closely followed by a long, splintering crash that could only be thunder. Then the whole world seemed to go mad. Cold wind tore through the trees, and lightning revealed the wildly tossing branches as the sky let loose a barrage of thunder. In Sparky’s frightened eyes the trees appeared to be struggling to break free of the ground to escape the fury of the storm.

Presently, above the noise of the storm, Hak and the children became aware of another sound, the sound of screaming voices. Hak quickly crawled to the edge of the embankment, and the children went right after him. In the open space below them, a wild scene was taking place. The covering of branches and rope over the clearing had been ripped to pieces by the wind, and amid its remains and dozens of cast-away baskets the Tubars were running and stumbling about like panic-stricken cattle. As more of them poured out of the burrow to join the frenzied mob, they began to spill through the passages between the piled earth.

“Hundreds of them!” said Hak to himself.

“Look!” exclaimed Zip-Zip after another thunderclap had

shaken the very ground. "The musee is down there! Listen to him bellow!"

The laughter of the children was lost in the tumult.

Then a new figure appeared on the scene.

"A Samoray!" Hak said, nudging Zip-Zip. "The snake has come into the open. See him—at the mouth of the burrow. ZIP Oh, he is having trouble!"

This was quite plain, for although the spectators on the embankment could not hear him over the cries of the Tubars and the storm, they could see his mouth moving and his wild gestures. Obviously he was trying to control the crazed Tubars, but their fear of the storm was stronger than his words. Then the unseen spectators saw him lift his face to the sky, and in the time it took him to retreat into the burrow they understood what had caused his action. Wind-driven rain swept across the clearing and dripped from the leaves of the trees. Rivulets of yellow water ran down the earth embankments surrounding the clearing, collected rapidly in pools amid the debris, and in a growing flood gushed into the burrow. During this time, the Tubars were not idle. Apparently no more fond of water than of nature's fireworks, they splashed about in it and spun off into the passages between the earth. Finally a lone figure had the clearing all to himself. With the thunder now in the distance, the musee was cavorting most happily in the mud.

Hak leaped up, rain streaming down his face. "Arise, my young warriors!" he sang out. "Nature has cleared the way for us. You are going with me into that ZIP burrow to finish the job."

The children, long tired of talking in whispers, shouted their approval.

A few quick instructions to Bonnie on how to use a peace stick, a slippery run down the muddy embankment, a wide detour around the musee, and they descended into the burrow, four abreast.

Water, not men, blocked their way at the bottom of the incline. Hak saw that the passage rose farther on, so he tested the depth of the water and found that it was not too deep for the children to wade through, and together they went on. The yellow light of the torches gleamed on the water ahead of them and made the waves stirred up by their walking look orange. Sparky complained that the water was cold, to which Bonnie replied, "You're always playing in water at home, so keep quiet."

Moments later they walked out of the water and up a gentle incline, at the top of which the burrow ran level, if not straight.

Still there was no opposition. By the changing light of the flickering torches they could make out no sign of life ahead. Hak had just pointed out how the wind blowing through the vents in the ceiling was troubling the torches,

when they rounded a bend and nearly stumbled over a handful of Tubars sitting dumbly along the walls of the burrow.

The army of four drew up short.

Hak said, "Do not use your peace sticks if they do not come at us." And as he anticipated, the primitive Martians merely watched them and let them pass.

"This is easy," said Sparky.

"Up to now," said Zip-Zip, staring ahead.

"Can't we call to the boys?" inquired Bonnie. "Maybe they'd hear us and answer."

"No," said Hak promptly. "I was just going to tell you to keep your voices low. We know there is at least ZIP one Samoray in here, and we must take him, or *them*, by surprise."

After they had gone around another turn, Zip-Zip asked them to stop. He explained that he thought they were being followed. They listened together, but heard nothing.

"I am more concerned about that," said Hak, pointing at the water dripping from the ceiling, as they moved on. "The rain could easily cause the ZIP roof to fall in on us."

"That'd be fun," said Sparky.

Hak shushed Sparky. At almost the same moment Zip-Zip broke the silence with a yell that frightened even Sparky.

"There they are! Randy! Tom!"

Above Zip-Zip's head the side of the passage glowed and melted in a blue flame.

"Gamma gun!" Hak yanked Zip-Zip to the inside of the bend they had just rounded. Bonnie and Sparky were already there.

"Did you really see them?" asked Bonnie. "Did you?"

"Yes! I did not see who fired at me, but I saw Tom and Randy clearly. They were ZIP leaning against the wall."

"Leaning! They're hurt!"

"No. I think someone used a peace stick on them."

The air near the children was suddenly scorching hot, and down the passage the ceiling erupted blue flame.

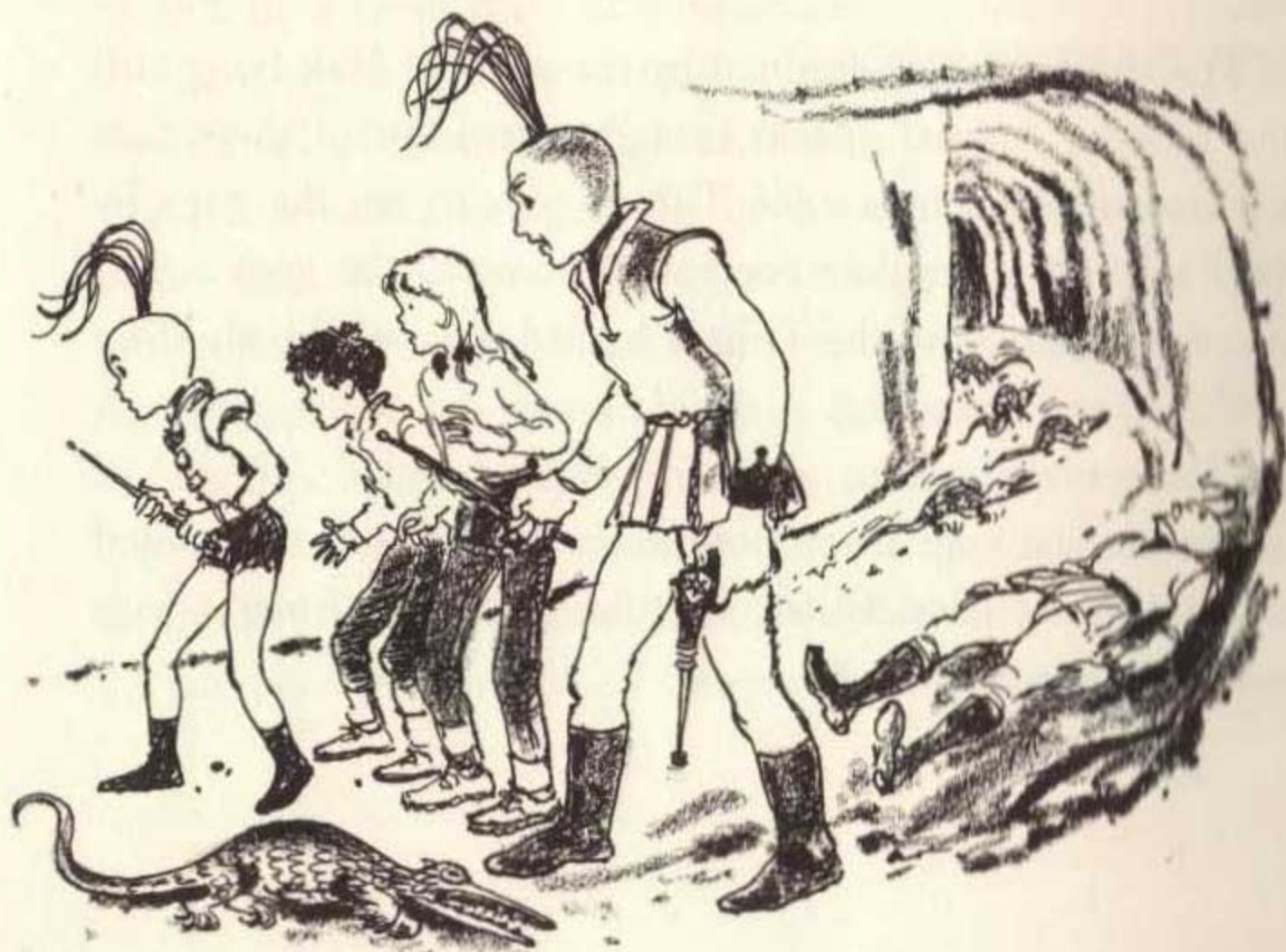
Hak spoke quickly as he kept his eye on the passage ahead. He did not know how many Samorays opposed them, but their only chance against gamma guns was to make a joint assault. For his plan, Zip-Zip would use two peace



sticks. Bonnie would stay with Sparky out of range. The way Hak spoke left no room for argument.

Then the time for action arrived.

On signal Hak dived across the passage and Zip-Zip stepped around the bend. Their weapons silently did their work. Much to their surprise they found that they had been fighting only one man. Hak walked up to the stiffened Samoray, wrenched the gamma gun from his hand, and pushed him over. He turned to Tom and Randy standing like statues under a torch in the wall. Zip-Zip, Bonnie, and Sparky surged forward, only to stop dead in their tracks. From the head of the burrow, a weird crew of men and animals was charging down on them. In the lead of the large party of Tubars and gogs was a uniformed Samoray. When



he saw Hak, he leveled his gamma gun at him. As he squeezed the activator, Hak whirled and fired the gamma gun he had taken from his victim. The Samoray's charge went wild, into the ceiling of the passage, and dropping his gun and clutching his head where Hak's charge had vaporized his antennas, he collapsed in agony.

But the Tubars, with their frightful companions, came on, making animal noises and holding aloft rocks and an ominous assortment of wooden tools. They had been aroused, and nothing could discourage them except physical force. Not wishing to hurt them needlessly, Hak stuck the gamma gun in his belt and turned his peace stick on the leaders. As they toppled over stiffly, a volley of rocks filled the air. One of them caught Hak on the head, and he staggered and fell.

The children were stunned by the sight of Hak lying still and bloody. Animal growls brought them out of their daze in time for them to see the Tubars picking up the gogs by their tails. In a single co-ordinated motion, the gogs coiled into scaly balls, and the Tubars hurled them at the children as if they were bowling.

"Do not let them hit you!" Zip-Zip warned.

But the last gog struck Bonnie on the leg, and it uncoiled with snapping jaws. Quick as a flash, Zip-Zip froze it with one of his peace sticks.

"I am just as afraid as you," he shouted, "but we must ZIP fight for our lives—Hak, your brothers."

Bonnie seemed to understand. She grabbed a couple of the rocks the Tubars had thrown, and Sparky did the same.

Uncertain, but courageous, the three children faced the oncoming primitive horde.

"Now!" Zip-Zip commanded Bonnie and Sparky. "Throw your rocks!"

In the close quarters of the burrow, two rocks found their mark. Three other Tubars fell before Zip-Zip's peace sticks in rapid succession. But the Tubars moved right over their fallen comrades as if they did not see them; and Zip-Zip brought down two more victims, and a third and a fourth, switching his aim once to save Sparky as he dashed forward to pick up a fresh piece of ammunition.

Abruptly the Tubar attack faltered and stopped. The Tubars milled about in noisy confusion.

Zip-Zip held his fire, puzzled by the strange spectacle before him. Were these dull-witted men giving up the fight, he wondered. As he heard a noise behind him, self-reproach flashed through his mind. He had forgotten those Tubars they had passed in the passage! Something heavy and very much alive struck his shoulder like a hammer. He spun completely around and, with the shouts of the Riddles filling his head, he saw, of all things, the musee charging into

the midst of the Tubars. Enraged by several gogs hanging by their teeth on his long hair, the musee pranced and snorted.

Zip-Zip smiled with relief. The poor animal had followed them all the way through the burrow, and had attracted the gogs that had rolled by them.

So upset were the primitive Tubars by the interruption that they forgot all about the children, and in no time at all they had scattered up and down the burrow to the last man.

Zip-Zip rushed to Hak's side. Anxiously he took him by the shoulders and called him by name. Hak's eyes opened slowly, and he groaned. In his dazed mind he thought the battle was still on, and dragged himself to his feet.

"Where are they?" he said weakly.

"We defeated them."

Hak grinned. "And I said you were too young." Then he saw the musee, which had taken to rubbing its gog-infested coat against the wall of the burrow. "What is the musee doing here?"

Before Zip-Zip could reply, Bonnie and Sparky appeared at his side.

"Oh, you're not dead!" said Sparky to Hak.

"No, it seems that I am alive."

"So are Tom and Randy!" said Bonnie happily. "They can't talk, or anything. But they are breathing and their eyes are alive!"

Hak emptied his water flask over his head and washed his wound. Wiping his face with his sleeve, he said, "We must leave this place. Try to revive the boys, Zip-Zip. I shall ZIP take care of the Samorays."

Not having seen the performance of the tortured musee, Hak was surprised to discover that the Samoray he and Zip-Zip had paralyzed was dead, looking as if he had been trampled. Muttering to himself, he threaded his way up the passage through the fallen Tubars to the prone Samoray who had lost his antennas. He rolled him over, and when he observed a small black box attached to the Samoray's belt, he began to undo the belt. Suddenly the Samoray came to life. Leaping up, he overturned Hak, and bounded down the burrow. Hak struggled unsteadily to his knees and drew his gamma gun. The full charge of gamma rays went into the ceiling of the burrow ahead of the Samoray. Fused earth rained down into the passage, and then with an awful sagging motion an entire section of the roof collapsed, engulfing the Samoray beneath it and spilling around the children's feet. Bright sunlight poured into the burrow.

"By the stars, what I almost did!" Hak reproached himself aloud. He cast aside the gamma gun as a hated thing, and half walked, half ran to the children. "Quickly," he urged them, "help me carry Tom and Randy over onto the cave-in. We shall be safe there ZIP and from there we can climb to the surface."

Even while Hak and the children labored to get Tom and Randy to the surface, their bodies began to lose their stiffness, and by the time they had the two boys in the open they were able to speak and move freely.

The first thing Randy said was, "I wanted to help you! You can't know how much I wanted to help you!"

"We know," said Hak.

"You came just in time," said Tom, stretching his arms and legs with obvious pleasure. "The Samorays were all ready to blow up the dam, and make it look like we did it."

"I knew they planned to disintegrate the dam," said Hak. Zip-Zip looked at Hak questioningly.

"Yes, Zip-Zip. I saw a microbomb on the belt of the Samoray who was trapped ZIP in the cave-in."

"Then the Samorays didn't escape?" said Randy. "I couldn't see everything."

"We met only two," said Hak. "They are both dead."

Bonnie made herself heard. "Goll-ee, I'm freezing. I guess I didn't think about being cold before." She stroked her hair and her hand came away muddy. "My hair's a mess! Oh, I feel awful!"

While the children took stock of their appearance, Hak contemplated the towering face of the dam only a short distance away. "We are not yet out of danger," he said grimly. "On the top of the dam is a place of warmth ZIP but we cannot climb the dam. So it is a case of going to Pluto to

reach Earth. ZIP One end of the dam is as far as the other."

"I believe we could keep warm overnight in the front section of the burrow," said Zip-Zip. "Unless, Hak, you think ZIP we can reach the dam station before the Sun sets."

"I do not know what to say. Oh, this head of mine! It is like a drum."

"Sparky!" Bonnie suddenly called out when she noticed her brother leaning over the open burrow. "Get away from there."

"What's the big idea?" said Tom. "Didn't you get enough of that place?"

Sparky obeyed reluctantly. "I was just wondering about the musee. Can't we help him?"

Hak answered for the Riddles. "No, Sparky. We shall have enough trouble helping ourselves. We must—" He never finished.

Zip-Zip bounded past him, pointing at the sky and crying, "Spaceships!"

Everyone saw them—two small silvery disks that appeared as if they would fly into the Sun.

"And three more," said Hak, pointing to the north.

It soon became evident that all five spaceships were heading in their direction. As they loomed larger, the children danced in the mud out of sheer excitement. They were still working off energy when one of the two ships sweeping in from the west glowed with an intense blue light and dived

into the ground, sending up a tongue of flame. The flame separated from the ground and, licking the sky, vanished.

Dumfounded, the children froze in various poses.

"Some of those ships are Samoray," said Zip-Zip. "But which ones?"

There could be no immediate answer to Zip-Zip's question. Everyone knew it, and everyone went on watching the thrilling drama that was unfolding high over their heads. For a time it was not clear which of the swiftly moving spaceships was chasing which; but all of a sudden one ship zoomed straight up and out of sight, and two other ships sped after it. The remaining ship hovered, motionless. Several seconds dragged by. Then to one side of the hovering craft a spot of orange light grew larger and larger until it rivaled the brightness of the Sun.

"A direct hit on the uranium chamber," said Hak knowingly. "We shall not hear any sound of the explosion. ZIP It happened beyond the atmosphere, in space."

The hovering spaceship began to lose altitude, and glided straight for the spot where Hak and the children were standing. The roar of its vertical rockets blasted their ears and it set down on the muddy plain a short distance from them. Would friendly members of the Planetary Guard emerge from the ship, they wondered, or had they fallen right back into the hands of the Samorays?

Slowly the side of the spaceship opened, forming a ramp.

Several yellow-plumed Martians stood in the ship's lighted interior. One of them ran down the ramp, calling out, "Ope! Haktrofenti! Are you and the Earthchildren all right?" It was Zip-Zip's father.

A moment later there was a happy reunion, with everyone participating. Lapodoxtromeldee was amazed by Hak's brief account of the battle in the Tubar burrow. He, in turn, surprised Hak and the children when his remarks showed that he already knew about the Samorays' intentions to destroy the nearby dam. Moved to laughter by the children's flood of questions, he suggested that they seek the warm interior of the spaceship before they talked further, and no one objected.

Once inside the hold of the spaceship, Lapo explained first how the government had learned that they were no longer on Satellite One. A spaceship of the Planetary Guard patrolling a pipeline in Tubar territory had heard a fragment of Hak's appeal for help on its cosmic-phone. But because of its reference to Earthchildren, the crew thought it was a prank of another patrol, and they forwarded it in a routine report to the Amoti headquarters. Fortunately the message was called to the attention of Gordemuntu's assistant, who, as one of the few people trusted with the knowledge of the Earthchildren's arrival on Mars, passed it on to Gordemuntu himself. Gordemuntu immediately called in his military commanders. Though the message supplied only one

element of their position, the reported weakness of the radio signal and the fact that it had been picked up by only one spaceship suggested that it came from a source near the position of the receiving spaceship. Gordemuntu had promptly ordered a broad search for a grounded spaceship in that area.

"No wonder it took you so long to find us," said Bonnie. She clamped her hand over her mouth. "I'm sorry! I didn't mean that the way it sounded."

Lapo smiled good-naturedly. "We really found you twice, you know. Imagine our feelings when we discovered your ZIP spaceship with only Captain Polumusanti in it."

"Did you let him get away?" asked Zip-Zip.

"No. His explanation of your absence made us suspicious. However, you need not worry about the ZIP Samoray troublemakers any longer, Ope. Their plot has been defeated. You yourself must have seen ZIP the fiery end of the desperate leaders."

"Were they in those spaceships that blew up?" asked Randy.

Lapo nodded grimly.

"But how, sir, did you know we were here?" asked Hak. "Why, you even knew about the Tubar burrow ZIP before I told you about it."

Lapo's eyes sparkled. "The same coded Samoray radio message that told us how a storm had delayed their plan to destroy ZIP Haktromantu Dam told us how they were going



to make the destruction appear to be the work of Earth-people. ZIP The Samorays were not aware that we had broken their code."

The Riddles were very pleased and impressed by Lapo's story. Tom made a little speech expressing his gratitude for everything Lapo and his people had done for them.

Not wanting to be outdone, Randy spoke up. "That goes for me too. And I guess you'd like to know how the Tubars really caught me and Tom."

Lapo replied that he did. "But I must refuse the pleasure of hearing your story now," he added. "A man, you see, is waiting ZIP to meet all of you in the control cabin."

Though Randy was visibly disappointed, he, along with the others, willingly followed Lapo through the spaceship. Entering the control cabin, they saw a Martian, in a handsome black and gold uniform, standing at one side of the magnivisor. For some time he kept his back to them, and since Lapo did not speak, but stood rigidly at attention, no one else dared breathe a word.

Randy expected to see an old man, but when the mysterious Martian faced about, Randy saw he was not old at all, and even smiled like Zip-Zip.

"I apologize," said the Martian in English. "I was amused by a musee out there. So little has amused me lately."

"A musee!" said Sparky excitedly. "May I see him?"

"Of course you may see him."

Sparky ran to the Martian's side as if he were his father. The others saw Sparky's face light up. "It's him!" Sparky called to them. "There's one animal on him yet, but he doesn't care." He looked up at the Martian. "Thanks, Mr.—er—whatever your name is."

"My name is Gordemuntu. What is your name?"

Tom, Randy, and Bonnie gasped together.

Sparky seemed hypnotized by Gordemuntu. "Sparky Riddle is my name," he almost whispered. "You're—you're like the President."

"I am the present head of the government of Mars. Does that ZIP surprise you?"

"No!" squeaked Sparky, and he fled back to the others.

The Head of the Supreme Council moved closer to his visitors, and his eyes wandered over the Riddle children's muddied clothes and faces. "Earthchildren," he said, "you have suffered much to help my government and the people of Mars. Thanks to you—and ZIP the son of Lapodoxtro-meldee and Captain Haktrofenti—we have been able to prevent the overthrow ZIP of sane and just government on my planet, thus safeguarding the peace of your own planet, Earth. ZIP The people of Mars will never know what *nearly* happened to them, but speaking for them I thank you."

The Riddle children were at a loss for words. Zip-Zip, Hak, and Lapo smiled at them approvingly.

Then Lapo spoke. "Honorable Gordemuntu, shall I see to

it that the Earthchildren bathe and have new clothing?"

"By all means, Lapo," replied Gordemuntu. To the Riddles he said, "With your permission, I shall present you to my people on perspecta, our ZIP three-dimensional television. When you are ready to leave Mars, your spaceship will be escorted to the ZIP vicinity of Earth's satellite by a full formation of spaceships of the Martian Planetary Guard. But please ZIP do not misunderstand me; I am not trying to hurry you home. You must see more of Mars. Is there anything about Mars ZIP you would especially like to know?"

Gordemuntu's friendliness made Sparky bolder. "Yes, I'd like to know something," he said. "What did the Martian roof say to the other Martian roof?"

"Oh, brother!" exclaimed Tom.

