

YOUNG READERS

**Science Fiction
Stories**



RICHARD M. ELAM

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*** START OF THE PROJECT GUTENBERG EBOOK YOUNG READERS SCIENCE FICTION STORIES ***

YOUNG READERS Science Fiction Stories

By RICHARD M. ELAM

ILLUSTRATED BY
VICTOR PREZIO

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TO
THE YOUNG TRAVELERS
OF TOMORROW

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YOUNG READERS

Science Fiction Stories

BETH AND THE TWILIGHT STAR

Beth Harrison and her father had driven into the desert to look for dead branches of “jumping cactus,” which were used in making lamps for Mr. Harrison’s tourist shop in Tucson. He and Beth had just gotten out of the station wagon and were gazing up a slope of bristly cacti.

“This looks like a good place, Daddy,” Beth said.

Mr. Harrison nodded. “We’ll have to hurry, though. It’s getting late.”

They started up the sandy slope carrying straw market bags that would hold their gleanings.

“Maybe we’ll see some Flying Saucers,” Beth said half-jokingly. “Someone thought he saw one out here the other day.”

Her father grinned. “Flying Saucers indeed! You and that lively imagination of yours, Beth!”

They set to work searching for dead branches. They found a few good specimens. But they were not enough to suit Beth and she decided to broaden the search. She went over the slope and up and down another, and before long her roaming carried her out of sight of her father.

Amidst the stunning colors of the sunset, Beth could make out a lone star—Sirius—the brightest true star in all the sky. It reminded her of a pearl glowing in the heavens.

Presently Beth had a bag full of cactus wood for the lamp shop. She was about to return to her father when suddenly she saw something ahead that she had not noticed before. Almost hidden within a dense thicket of smoky green *paloverde* was a shiny surface that reflected the dying sun's rays. Her imagination stirred, Beth decided to investigate.

She put down her bag and made her way into the thicket. As she moved carefully through the thorns, she found some of the branches pushed aside as if someone had used this path before. She was almost through when she tripped and fell head-first. Her forehead bumped against an unyielding branch, causing her to see more than one star this time.

She didn't know how long she lay on the ground half-stunned before she got to her feet. There was a painful bruise on her forehead, but her curiosity was still strong and she went on. The shiny surface turned out to be a wall as smooth and glossy as steel.

"Jeepers!" Beth thought. "What can it be?"

She reached out to touch the wall. Before she could do so, a door opened in the wall.

The first thing she noticed beyond was a soft yellow light filling a handsome room. Feeling like Alice on the threshold of Wonderland, she stepped inside, more thrilled than afraid.

She heard a sighing behind her and saw the door closing shut. Only then did she become frightened. She beat against the wall, wishing that she had not been so rash as to venture into such a strange place.

She heard a voice say, "That will not help."

Beth turned and saw a girl of about her own age standing on a richly-carpeted platform across the room. The odd

unearthliness of the girl struck Beth immediately. She was pretty and her skin was milky white. Her costume seemed to be of a blue phosphorescent material, as did her shoes. Her short hair was almost as red as glowing coals.

“Wh—who are you?” Beth stammered.

“I am Linnia,” the girl replied in a voice that sounded almost as if she were singing. “You are Beth.”

“Yes,” Beth replied in amazement, “but how did you—?”

“I can read your mind.”

Beth gulped. “You can?”

“Come over and sit down,” Linnia said. “We shall talk.”

She sat in a nearby chair that seemed to be made of steel matchsticks, it looked so frail. Beth sat in the chair opposite and found that it was very sturdy.

“You are thinking that I look very strange to you,” Linnia said. “You seem strange to me too, but that is because we are of different worlds.”

Beth gulped again. “D—different worlds?”

Suddenly the yellow light in the room changed to a pulsing orange. Linnia straightened up quickly. “That is the signal,” she spoke. “I did not expect it so soon. We must hurry and prepare ourselves!”

Beth started asking questions, but Linnia said not now. Beth found herself following the girl across the room to a row of couches. Beth lay down on one and somehow knew exactly what she was to do. She guessed that Linnia was putting the thoughts into her head. She lifted the straps that hung at the sides and buckled them across her body.

The couch was soft as a cloud and Beth was thinking how much she would like to have a bed like this when all at once she felt herself sinking deeply into the cushion as if a great hand were thrusting her down. For several moments she was as giddy as if she were riding the roller-coaster at the carnival. Then finally her breath came back and she felt herself rise to the top of the cushion again.

“We can get up,” she heard Linnia say. “We’re coasting now.”

They unbuckled their straps and rose to their feet. Linnia walked over to the wall, pressed a button, and a blind rolled back, revealing a long window.

“Look,” Linnia said.

Beth joined her and looked out the window. Her heart fairly rose into her throat. She was up in the sky, far up in the sky! Through a veil of clouds beneath she could see the curve of the earth itself!

Beth seized Linnia by the arm. “Jeepers, what’s going on! Where are you taking me?”

Linnia pointed to the white beacon of Sirius in the blue-black sky.

“You’re from Sirius?” Beth asked in amazement.

“Yes, from Tata Moori, one of its planets. Our work on earth is through for right now and my father and I are returning home to make a report.”

Linnia went on to say that her father’s space ship was only one of many which were studying the earth to see how the people here lived. Her father’s assignment had been to make an analysis of the soil. The visitors intended no harm and in time they planned to meet the people of earth face to face.

“Well, I have already met you,” Beth said boldly, “and I’m ready to go back!”

Linnia shook her flame-topped head. “We tried to keep our ship hidden, but you found it, Beth, and so there is nothing to do but take you back with us for awhile. When you came close, the electric eye opened the door and let you inside before it was time for any earth person to see one of our ships.”

“But my father and mother,” Beth said desperately, “and my friends! They’ll be worried to death! You must not take me, Linnia! Please, isn’t there something you can do?”

Linnia studied Beth’s pleading face. Then she replied, “I’ll talk to my father. He’s busy running the ship, but I’ll do what I can for you. While I’m gone, you can see what it’s like on our world by pushing the button on that cabinet against the wall. Father and I look at the film sometimes to keep from getting homesick.”

Beth was in no mood for looking at pictures. She was feeling worse by the minute as she considered what it would be like to be parted from her family and friends. As she sat in the chair, dreading and wondering, suddenly it became too much for her and she began to cry.

“Jeepers, why did I ever wander off from Daddy?” she moaned.

The tears made her feel better and presently she was calm enough to go over to the cabinet and turn it on. A large screen brightened and she saw a strange land unfolding before her eyes.

There were winding highways raised into the sky and skyscrapers like tall crystal columns. She saw motorcars of tear-drop design and helicopters filling the air. The people

looked much like Linnia, with phosphorescent clothing, and all had hair as flaming red as Linnia's own.

She saw a strange land unfolding before her eyes
She saw a strange land unfolding before her eyes

Yes, Tata Moori looked like an exciting place to visit, but it was not a visit Beth would want to make without another person from her own planet. As she thought about her predicament, she began to be scared again and the tears filled her eyes once more. Why, Sirius was *trillions* of miles from Earth!

She went to the window. The dwindling earth was becoming a green ball against the black deeps of space. The stars were dazzling and seemed as countless as the sands of the seashore. The view made Beth terribly homesick.

Finally Linnia returned.

Beth looked at her anxiously, trying to read her fate in the foreign girl's eyes.

"What did your father say?" Beth asked, with fluttering heart. "Did he say he'd take me back? Please tell me he did!"

Linnia smiled. "Yes, Beth. He said that we are not supposed to take younger persons to Tata Moori. He was angry with me for not telling him you were aboard, but I told him you came in just before we blasted off."

"Gee, I'm so relieved!" Beth said happily. "I don't mean I wouldn't like your company, Linnia, but you know how it is."

"Yes, I know," Linnia replied wistfully. "I have missed my mother and friends too. I had to take my brother's place on

this trip when he became sick. You see, everyone on Tata Moori learns science when they are very young.”

“I’ve been wondering how it is that you speak English, Linnia.”

“We keep tuned in on your radio and television,” Linnia answered. “That’s how we learned your language and so many other things about you.”

“You people seem to be ahead of us in progress,” Beth said. “I believe there is much we can learn from you.”

“We can learn much from you too,” Linnia spoke. “I hope the people of our planets are permitted to meet very soon.”

The girls had to belt down on their couches again because of the mounting speed at which they were returning to earth. Beth felt herself sinking deeply into her cushion once more and she grew breathless again. Minutes later, the ship stopped moving.

Beth hurriedly unbuckled and ran over to the window. Through a break in the *paloverde* thicket she could see her father’s station wagon parked at the roadside. She was back at the same place she had started from.

“Thank goodness!” she breathed.

Linnia walked with her to the outer door.

“My father said he’d like to have met you,” Linnia said, “but he is too busy preparing for our blast off again. We must hurry because we are behind schedule. Before you leave, Beth, Father has said that you must promise never to speak a word about all this to anyone. I have searched your mind and I know you to be honest.”

Beth was disappointed that she could not make known her fabulous journey, but she promised that she would never tell.

Linnia waved her hand at the door and the electric eye opened it.

“Goodbye, Beth,” Linnia said.

“Goodbye, Linnia.”

Beth heard the sighing of the door as it closed behind her.

Suddenly her head began aching and she remembered the fall she had taken earlier. As she made her way out of the thicket, she began to have a queer feeling about her adventure. It made her wonder if perhaps she might not have been unconscious and imagined the whole thing.

When she reached the car, her father said with some concern, “You were gone so long I started to come for you, Beth. What happened to your forehead?”

She told him about her fall but did not mention the space ship.

“Did you see something land a few minutes ago, Daddy?” Beth asked.

Mr. Harrison grinned. “You mean, maybe, a Flying Saucer? No, I’m afraid I didn’t. Are you sure your imagination isn’t working overtime again, Beth?”

As they were about to get into the car, Beth saw a dark object in the distance rise from the ground and move off into the deepening twilight. She was certain she did not imagine this.

“You saw that, didn’t you, Daddy?” Beth asked.

Mr. Harrison nodded. “Probably a hawk. Hmm, it looks like it’s heading right for the Evening Star, doesn’t it?”

Beth gazed at the brilliant light of Sirius, gorgeously bright now with darkness closing in.

“I wish I knew if it really was,” Beth murmured.

GIB TAKES A SPACE TEST

Gib Bromfield was nine, and the thing he wanted to do most was to make a flight into space. A colony on the Moon had already been started for scientific research, and a huge man-made space platform circled the Earth once every twenty-four hours.

“I want to go back to the Moon with you, Father,” Gib would plead every time Mr. Bromfield came home on a furlough.

“I’m afraid you’re still a little young, Gib,” his father would reply. “Some day you will be able to go out into space with me, but not yet.”

Mr. Bromfield was a construction engineer, and he was helping to build a big spaceport on the Moon. He came home to see his family every six months. Each time he returned, Gib couldn’t wait to meet him at the front door of their prefabricated home.

Gib would shake hands with him like a man and take his bags from him. Then he would step back and admire the tall, handsome man in the glossy black boots and gray uniform of the Space Service. By this time, Mother usually came running up, followed by Sandra, Gib’s little sister.

On Mr. Bromfield’s latest visit, Gib waited until the usual family talk had subsided before he started asking his father about his recent adventures. After Father had brought him up to date, Gib asked the same question he always asked:

“Father, my I go back with you this time for a short visit—just a short one?”

Mr. Bromfield smiled and ruffled Gib’s blond hair. “It’s not the time element, Gib,” he said patiently. “It’s the rigors of space itself, which are much rougher than Captain Rocket on TV would have us believe.”

Gib’s face fell. He had hoped that this time his father would give in and let him go back. Mr. Bromfield could see that his son was disappointed. He stared at Gib thoughtfully for a moment, then spoke again.

“All right, Gib, I’ll put you through S.Q.T. If you pass it and still want to go spaceward, I’ll take you.”

“Gee, do you mean that?” Gib burst out.

He was so excited he didn’t know what to do. Gib had never had any doubt that he would pass the S.Q.T.—the Space Qualification Test—that all those who go spaceward must take.

Mr. Bromfield went immediately to the video-phone and put through a call to S.Q.T., having them place Gib’s name on the space test list.

“Thanks, Father!” Gib said excitedly. “At last I’ll be going spaceward!”

“We’ll see,” Mr. Bromfield replied soberly.

Gib spent the next afternoon on the first part of the test, which was a complete physical examination.

“It didn’t hurt the tiniest bit,” Gib joked with his father that night. “If all the parts of the test are as easy as this first one, I won’t have any trouble.”

Mr. Bromfield did not say anything, but he smiled to himself as though he knew something that Gib did not know.

Gib and his father took the elevated expressway to the S.Q.T. center early the next morning in their atom-powered Johnson Superjet. The final portions of Gib's test would be covered today.

The first part was familiarity with the space suit. In company with about fifty other candidates, Gib was given a supply of clothing. Then everyone was shown how to zip up their thickly insulated suits in front. Next, an attendant snapped metal cylinders to their shoulders and screwed the flexible tubing into valves on their suits. Last to be put on were helmets of light metal that had a darkened glass in front so that the wearer could look out.

"Now, all of you turn the little black knob on your chests," the tester said. His voice sounded muffled to Gib because of the helmet he wore.

Gib turned his knob and felt his suit blowing up like a balloon as air flowed in from the oxygen tanks.

"This is how you would be dressed for a walk on the Moon," the tester told them. "Now I want all of you to walk into the next room."

As Gib went into the room with the others, he was thinking how easy the test had been up until now. And what fun it was taking the very tests that Captain Rocket himself must have taken at one time! He thought his father was surely mistaken for having doubted his ability to pass the S.Q.T.

The tester left the room and shut the door. In a few moments Gib began to have a strange sensation. He was feeling lighter and lighter, and the others with him were beginning to float right off the floor!

Gib struggled frantically as he felt himself go off balance. Each movement he made, however, shot him off at swift, crazy angles. He felt himself sweating with fear, and for the first time he was believing that maybe the S.Q.T. wasn't going to be so easy after all.

It seemed as if he had the strength of a Samson, but it was a strength he could not control. A simple kick sent him hurtling across the room toward the wall! He tried to brake himself, but nothing he did would stop him. He crashed headlong into the wall. It shook him up a little, but he was not hurt. He saw that the wall was thickly padded.

After about fifteen minutes of helplessness, Gib felt himself getting heavier again and saw his companions drop to the floor in normal position. The tester came in with some doctors. The doctors looked over each candidate and asked many questions. Gib was still dazed and wasn't sure of the answers he gave.

When the doctors were through, the tester explained what had happened: "This room was de-gravitized, which means the Earth's gravity in here was cut off by mechanical means. It's the same condition you will find in a space ship when the gravity plates are turned off. From the looks of some of you, this experience was something of a shock. But the final test will be even rougher. Anybody who wants to drop out now may do so."

Gib saw that about a third of the candidates had had enough. Gib was still giddy himself and started to join them. He was disappointed in the harshness of "zero-gravity." It had always looked so simple to him the way that Captain Rocket "swam" about in his rocket flyer.

Gib did not want his father to think him a quitter, though, and decided to stick out the test to the end. When his turn came, he was led into a huge room by himself and up to a queer-

looking machine. It resembled one of the thrill rides at a carnival, the one that whirls you round and round like a ball on the end of a string. Gib entered a tiny cabin at the end of the large swinging arm and sat down in a thick foam-rubber reclining chair.

As he was strapped down, the tester said to him, "This is called the 'Centrifuge,' son, and it simulates the blast-off from Earth in a rocket ship. You appear to be a little young to be taking it, so if you've had enough just yank that lever in front of you and we'll stop the machine."

"I—I will," Gib replied, getting scared already.

He got more scared as all sorts of instruments were strapped to him. The tester explained that these were to record his reactions. As the door was closed on him. Gib had a trapped feeling. Then he composed himself and waited for the worst, telling himself that a spaceman must be brave.

Presently he felt the cabin begin to move, slowly at first. This much was fun, Gib thought, just like the carnival ride. As the cabin picked up speed, it was even more thrilling. But then as the speed increased still more, Gib began to lose his enjoyment.

Faster and faster he went, and Gib was crushed deeply into the chair cushion. He felt his cheeks draw back from his teeth, the corners of his eyes making him squint. There was heavy pressure on his chest, as if an elephant were standing on him. His breath hung in his throat and he saw strange colors and darting forms before his eyes.

He stood the agonizing effect as long as he could, and then his frightfully heavy hand crept unsteadily toward the lever in front of him and jerked it.

The cabin began losing speed and finally stopped. Gib saw a blurred image open the door and offer his hand. As he stumbled out, his head feeling big as a watermelon, Gib vaguely remembered hearing the tester say:

“You needn’t feel badly about this, son. You almost lasted it out. Come back in another year or two and then I think you’ll be able to pass.”

Gib still wasn’t quite himself as he met his father in the waiting room. He was quivering all over, and his dad wouldn’t quite come into focus.

“I flunked the test, Father,” Gib told him.

“It sounds to me as if you’re glad you did,” Mr. Bromfield replied, with a chuckle. “I was afraid it might be too rough for you, son, but I knew there was no other way to show you that space travel isn’t as easy as the comic books make out.”

“I’ll try again next year,” Gib said, “or the year after that, anyway. That’s what the tester told me.”

“I’m sure you’ll be ready then,” Mr. Bromfield replied. “Now, what do you say we go home? Captain Rocket is almost due on TV.”

THE SPACE MAIL RUN

The way he felt now, Jerry Welsh was almost sorry he had left Earth. The Moonship landing seemed to be crushing the very life out of him, although he lay flat on a couch to ease the strain.

Jerry turned his head toward his father, who was strapped down like himself, and suffering too. The craft was under its own control, for no human could withstand the rocket's present speed and still be able to steer in for a landing.

Capt. Welsh was on his bi-weekly mail run to Luna, the Moon, and for the first time in ten years of service he had a passenger—his own twelve-year-old son.

At last Jerry felt a hard jolt under him. He knew the rocket's tail fins had finally touched ground. Jerry unstrapped himself with rubbery fingers and sat up. Then he tried to stand, but flopped down again.

“Wow, I feel giddy!” he groaned.

His father laughed. “You'll get your bearings presently, Son.”

How long Jerry had waited to make this space mail run with his father! Then finally last year, Capt. Welsh had said that Jerry could go with him when he became twelve, as he was especially husky and strong for his age.

But now that the great moment had come at last, Jerry wasn't sure he was enjoying it as he had expected, for he had found

space so vast, so dark, and so frightening.

“Do you still want to be a spaceman, Jerry?” his dad asked suddenly, as though Jerry had spoken his thoughts aloud.

“I—I think so, Dad,” he replied hesitantly.

“I see you’re doubtful, Jerry,” Capt. Welsh said. “I won’t put you on the spot so early.”

They climbed into space gear—electrically-heated suits and clear plastic helmets fitted with radios. Lastly they donned oxygen tanks and flooded their suits with the life-sustaining gas.

They gathered up the mail sacks and climbed down the ladder to the ground, heading for the largest of a group of buildings which made up Moonhaven, center of Earthmen’s activity on the airless planet.

The stars burned fantastically bright overhead. Traces of frost topped the distant Lunar Alps. It was incredibly cold out here, for the Moon was in its two-week period of night.

Capt. Welsh got a receipt for the largest mail bag, and then he and Jerry went out a rear door of the building carrying the rest. An atom-powered mail car awaited them. It had an open top and huge wheels that looked like saw-toothed gears.

“Climb aboard the Moon jeep, Jerry,” his father said. “We’ve got ten mail deliveries to make.”

Inside, Capt. Welsh pulled down a section of the dash panel revealing a map. “Here’s a map of our route. There aren’t many mail stops on the Moon yet, but they are all important.”

“And the mail must go through!” Jerry added.

Capt. Welsh nodded soberly. “That’s the first law, Jerry.”

As they moved off Jerry saw the big friendly globe of Earth hanging like a green jewel halfway up the jet black sky. He wondered what his mother and baby sister were doing this moment a quarter of a million miles away.

Capt. Welsh showed Jerry how to run the jeep. Jerry found this easy for he had already had a course in mechanics in preparation for his future career as a space man. But sometime later their peaceful ride was interrupted when Capt. Welsh suddenly leaned over and grabbed the wheel.

Jerry was thrown to the side as the car swerved. The vehicle straightened out and slammed to a halt as his father controlled the wheel and applied the brakes.

“What happened?” Jerry breathed, his heart pounding.

His father pointed behind them. “Look.”

Jerry turned and saw the edge of a treacherous ditch running right across the roadway where they would have passed over. The gorge was several feet wide.

“I didn’t even see it,” Jerry murmured, sick with fear at what might have happened.

This wasn’t the first time he’d been shaken on this journey. It made him wonder as he had once before if he had what it took to be a space man, or if this adventure would make him decide never to leave the atmosphere of Earth again.

“Scared?” his father asked. Jerry nodded.

“Don’t worry. I was too for a moment.”

“You were?” Jerry asked with surprise.

“Fear was given to man, so he could save himself from danger, Jerry,” Capt. Welsh said. “Don’t be ashamed of it.

Fear is nothing to be ashamed of unless you let it get the best of you. Never forget that.”

They arrived at their first delivery point, an engineering project on a plateau surrounded by mountains. There were the foundations of great buildings to come, constructed of hard Lunar granite.

The space-suited figures came running when they recognized Capt. Welsh and his mail car. Jerry marveled how the formerly stern expressions of the workmen brightened when the foreman handed mail out to them.

“It must be fun bringing mail to men who are so far from their homes and families,” Jerry said when they were on their way again.

“I guess that’s why I’ve put up with the lonely hours of seeing nothing but stardust for the past ten years,” Capt. Welsh answered. “But I love it, Son, and I wouldn’t trade jobs with any man.”

Their next delivery site was a cavern where men were prospecting for uranium. They too were overjoyed at receiving messages from home. The jeep rolled on from there to a huge plain which was being prepared for a future spaceport. Capt. Welsh and his helper dropped off another mail sack and then were on their way again. Some hours later, all but two deliveries had been made.

“Next stop is the astronomy observatory,” Capt. Welsh told Jerry.

They crawled over sandy hills that taxed the gripping power of their spiked wheels, wound in and out of towering buttresses of black basalt, and bored through natural tunnels like a pair of human moles. Then the observatory came into view.

A smiling little scientist with thick glasses signed for the mail at the door. He invited Jerry to come back and visit the place before he returned to Earth.

“You haven’t seen anything until you look through their great telescope,” Capt. Welsh told Jerry as they drove off.

“What’s our last stop?” Jerry wanted to know.

“A geology camp where some scientists are digging into ancient rocks,” his father said. “It’s only about seven miles away, but the going will be a little rough before we get there. It’s a good thing it’s our last stop because we don’t have any too much oxygen left in our shoulder tanks. I usually don’t take this long on a mail run.”

The roadway carried them through a narrow pass with a high hill of loose rock on one side and a sloping embankment on the other. Jerry’s first warning of trouble came when he was flung suddenly forward. He heard the sickening drag of the wheels as his father’s boot hit the brakes. Just ahead of them he saw a cascade of rocks sliding down the hill.

The next moment Jerry felt an even harder blow as the jeep was grazed by one of the large boulders. The small car was swept out of the roadway like a toy and rammed against a pillar at the cliff edge.

Jerry screamed in fear as he felt himself being thrown out of the car. He struck the ground hard and began rolling head over heels down the precipice.

When the numbing shock of his fall had worn off, Jerry climbed dazedly to his feet and looked up the slope down which he had been thrown.

“Dad!” he cried. He slipped and scrambled up the incline in reckless haste. He found Capt. Welsh sprawled unconscious

just below the upper brink of the precipice. Jerry knelt and looked into his face through the clear plastic helmet. His father's eyes were closed and there was an ugly bruise on his forehead where it must have struck the helmet in his fall.

“What am I going to do?” Jerry groaned aloud.

He himself would have to make the decisions and carry them through if the two of them were to survive. It was a shocking thought. Then it came to him what his father had said about fear: a person need never be ashamed of fear so long as it was not permitted to get the upper hand.

Jerry pulled his father up onto the roadway and tried to bring him around, but without result. Jerry examined the jeep. One side was badly smashed, but the engine still appeared sound. The car was tipped over against the rock column. Jerry was thankful that the jeep was only one-sixth of its Earth-weight on the moon. It was a tremendous effort but he finally righted the car and got it back on the road.

He jumped into the front seat and started the engine. It sputtered, then hummed into activity! Jerry studied the map on the panel. He located their present position by the giant crater, Plato, at his distant right. Then he traced the winding route leading to the geology camp. He was closer to the camp than the observatory, but ahead lay a rugged route, one with which Jerry was totally unfamiliar. He got out and went back to where Capt. Welsh lay.

“Which way should I go, Dad, ahead or back?” he asked helplessly, just as though his father were able to answer him.

Something told him that Capt. Welsh would want him to go ahead—to finish the mail run that had never missed a round in ten years. Jerry got his father into the back seat, then gunned the jeep and struck off into the unknown ahead.

He was thankful for the old worn trail that led the way for him. It presently carried him through a gloomy valley. Jerry switched on his headlights, but the twin spears of brightness gave him little comfort in the spooky place. Grotesque rock columns rose like menacing ghosts on both sides of him.

At last he was out in the open again. The road led him around the steep ledge of a yawning crater, evidently caused by a huge crashing fireball from outer space.

Jerry carefully guided the jeep along the dangerous cliff. If one of his wheels should slip over the side, it would be a fall to frightful death a hundred feet straight down. At last even this peril was past, and Jerry drove up a gradual incline over bare rock to a bluff that overlooked the distant land for many miles.

“The camp!” he said joyfully. “That’s it below—only a few miles away!”

He followed a curve that swept onto the plain below. When he was on a level again, it seemed that all his troubles were over. He felt better by the moment as he drove closer and closer to his destination.

Then, without warning, his wheels began to bog down in a pumice mire. His heart did a flip-flop and he checked the map. He saw a warning to drivers to avoid this spot. In his overconfidence, he had blundered right into it!

He gave the little jeep full power. It jerked crazily through the clinging stuff. Over to the right the pumice seemed to thin out, and farther over he could see the roadway he should have taken. He swung his wheels to the right and the jeep lurched through the gray sand, using up a lot of power, but making little progress. For minutes on end Jerry gave the jeep all it had, and he could hear its engine laboring tiredly.

Suddenly the motor died. Jerry tried to start it again but could not. He checked his temperature gauge. The engine was extremely hot from the continual use of top power. From his mechanical school course, Jerry realized the rotors had “frozen” and that it wouldn’t run again until they had cooled off.

As he waited impatiently for the engine to cool, a warning voice in his mind was saying: “Your oxygen is getting lower by the second. If the jeep doesn’t get out of here within the next fifteen minutes, you and your dad will never make it.”

Jerry shook off the terrible thoughts. He stamped his feet to warm them. The electric circuit in his suit seemed to be breaking down. If it collapsed completely, he would be frozen instantly by the Lunar cold.

Jerry massaged his dad’s hands and legs in case his suit, too, was getting colder. He worked steadily until his hands ached. Then he checked the gauge again. It was falling slowly, but heavy insulation was still keeping the engine hot.

At last Jerry decided he should not wait any longer. With a prayer on his lips, he pressed the starter button. The engine rumbled sluggishly, coughed, then quickened to full strength. He jammed the fuel pedal hard and tried to guide the jeep's swirling, spinning motion through the Lunar sand. Slowly the little car pulled itself like a weary swimmer toward the firm bank. Finally the wheels found good traction and the jeep lurched onto the roadway.

Jerry heaved a tremendous sigh and sped down the path toward the geology camp.

Less than an hour later Jerry was being permitted into the room of one of the huts where his father had been carried for examination by the camp physician. Jerry had been told that his father had suffered a slight concussion, but that he would be all right.

Capt. Welsh smiled from his cot as Jerry walked in.

"Hi, space man," his father greeted. "The doctor says the men here were mighty happy to get their mail on time."

"I'm glad I came on here, then, instead of going back to the observatory," Jerry murmured.

"You did the job in the best tradition of the Space Mail Service, Jerry," Capt. Welsh said, smiling proudly. "If I had any doubts that you'd be able to follow me some day, Son, they're gone now."

Jerry nodded happily. A few doubts had been removed from his own mind in the past hour.

ALL ABOARD FOR SPACE

It had already been a wonderful birthday for the twins, Sue and Steve Shannon, when their father asked, “How about it, kids—are you ready for that space ride I promised?”

Sue’s big hazel eyes looked like walnuts as she stared in surprise. Steve’s blue eyes were more like plums. Could they really believe what they were hearing?

“I said I’d take you on the ride when you two reached 12, didn’t I?” Mr. Shannon went on.

They hadn’t forgotten and were suddenly as excited as two young ducks who have just discovered water. Mr. Shannon looked at his watch. “We’d better get ready. The next flight is at four o’clock.”

Less than a half hour later, Mrs. Shannon was bidding goodbye to the three as they climbed into the family helicopter on the roof of their home. In this year of 2004 nearly everybody owned a ’copter. Mrs. Shannon had been invited to go along but she said no coaxing in the world could get her up in one of those “rocket things.”

The overhead doors of the garage swung open as Mrs. Shannon pushed the button on the wall. As soon as the three riders were comfortably seated, Mr. Shannon started up the engine and the overhead blade began churning. Gently the ’copter lifted into the blue sky and headed out over the city.

“I can’t really believe we’re going to take a trip into space!” Sue said happily.

“Some day I’m going to be a spaceman and travel to *all* the planets!” Steve declared.

The plane passed over beautiful triple-decked highways, over green farms loaded with scientific equipment and solar mirrors, over plastic-domed skyscrapers. Presently a large oval appeared just ahead. “There’s the space port!” Sue exclaimed.

When Mr. Shannon got the signal to land, he brought the helicopter down into the parking lot at the edge of the port. Then the three jumped out onto the ground. As they walked toward the main building, the twins excitedly noticed the busy activity of the field. What impressed them most were the massive torpedo-shaped rockets which were half-buried in their concrete launching pits.

“Where is that biggest rocket going, Dad?” Steve asked.

When his father said it was going to the moon, a tingle raced up the boy’s spine and all at once he wished he could be on the ship himself.

“There’s our rocket over there,” Mr. Shannon said, pointing to a smaller craft of light-weight beryllium metal just across the way. Near the pit was a sign that read:

SPACE RIDES DAILY.
ENJOY THE THRILL OF A LIFETIME A THOUSAND
MILES ABOVE EARTH.

Mr. Shannon got their tickets. Then after a heart check-up they waited in line with the other eager sight-seers. Finally the space port officer took down the chain that held back the crowd and permitted them to approach the rocket. They had to

cross a bridge to get from the pit edge into the ship. As they crossed, Steve looked down into the hot pit and saw clouds of flame and smoke pouring from the great jet tubes.

In the ship, the Shannons were given couch numbers in a large room with the rest of their companions. Then a steward came around with a special candy which he told the passengers to eat to prevent their getting sick. Next everyone was issued queer-looking shoes with metal soles.

“What’re these for, Dad?” Sue wanted to know.

She saw her father and brother exchange winks. “She’ll find out, won’t she?” Mr. Shannon teased.

As Steve and Sue lay on their soft couches and fastened plastic belts across their bodies, their father explained the purpose of this. “We’ll blast-off at a pretty fast speed and if we weren’t buckled down we’d be thrown about and hurt.”

When the moment of blast-off came, Steve and Sue went through the most exciting experience of their lives. A loud roar filled their ears and it felt suddenly as if the bottom of their stomachs had dropped out. They were pressed deeply into their couches and they had the feeling of being flattened out as though under the foot of an elephant. Then slowly Steve and Sue felt the awful weight lifting from them and finally it was gone altogether.

“Ugh!” Sue groaned dizzily, unstrapping herself as the others were doing. “What happened?”

When she tried to walk, she understood the purpose of the metal-soled shoes. “We scarcely weigh anything now,” their father explained. “The magnetism of our soles is the only thing that keeps us from floating about like a feather.”

The guide, who said his name was Mr. Quinlan, led the sight-seers to a huge window. The young Shannons gasped in wonder at what they saw. The sky was nearly pitch black and filled with more burning lights than they even guessed could exist.

“We’re about a thousand miles above the earth,” Mr. Quinlan said. “We’re out of the earth’s atmosphere and that’s why the sky is dark and the stars so brilliant. Our rear jets are thrusting just barely enough to keep us from being pulled back down to earth.”

The guide next said that they would go outside the ship in space suits. Sue and Steve whooped in joy for they had not expected this. Mr. Quinlan distributed space gear from a cabinet. Then he explained how they were put on. After the flexible suits and plastic helmets were donned, everyone turned on his oxygen, which came from shoulder tanks. The others looked to Steve like balloon toys inflated with air and he had to laugh as they waddled about.

The tourists were led out of a side door onto a balcony which resembled a large fire escape. Everyone was told to buckle himself to the rail by a short length of cord in front of him.

“If one of us were to lose contact with the ship,” Mr. Shannon warned his son and daughter, “he’d go drifting off into space.” Sue and Steve shuddered at the thought of this.

Everyone was told to buckle himself to the rail by a short length of cord
*Everyone was told to buckle himself to the rail by a short
length of cord*

Mr. Quinlan pointed out whirls of misty clouds that were called nebulas. He also showed them star clusters and the brighter planets. The sight-seers had a closeup view of the earth that looked like a shimmering green ball. The guide did

his speaking through a small radio attached to his suit. Each tourist had a receiver in his helmet through which he could listen.

For almost a full hour Sue and Steve, together with the other spell-bound passengers, took in the splendor of this strange silent place, the vastness of which staggered the imagination.

“Isn’t this a wonderful tribute to the greatness of God’s creation?” Mr. Shannon said to his children. Steve and Sue had to agree with him wholeheartedly.

When Mr. Quinlan was ready to go back into the ship, he tried the outside door switch, but the door failed to open. Over his two-way radio circuit, the passengers could hear a worried discussion between him and the pilot inside. They learned that a tube of compressed air which operated the outer door was jammed. There was nothing that could be done about it from the inside. Some of the women began sobbing, believing they would never return to earth again.

Mr. Shannon looked at his son and daughter anxiously. “Keep your chins up, kids,” he said. “Nothing was ever gained by people losing their heads. I’m sure they’ll figure out some way to save us.”

“I—I’m not afraid, Dad,” Steve said bravely.

There were tears of fright in Sue’s brown eyes but her small chin was courageously set and she would not permit herself to give in to the terror she really felt.

“You’re brave ones,” their father said, putting his big arms around their shoulders.

Mr. Quinlan approached the Shannons. “Mr. Shannon,” he said, “I’ve got something important to talk over with you and your son.”

The two listened closely as the guide outlined a daring plan. He pointed to a small, circular opening some ten feet above the platform. He said that if a person could climb into the opening he could turn an emergency valve that would double the air pressure and clear the jammed tube. Since Steve was the only boy on the platform, and therefore the smallest, Mr. Quinlan wanted to know if Steve would try it. Steve felt his heart fluttering crazily. He was both afraid and excited.

“There’s only one danger, son,” the guide pointed out. “You’ll have to unfasten your safety line. If you think you can keep calm, though, there should be no real risk.”

“What will happen if the job isn’t done?” Mr. Shannon asked grimly.

Mr. Quinlan shrugged. “There’s not much that can be done. These suits will run out of oxygen in twenty minutes and only your boy is slim enough to get inside the opening. Then, too, they can’t land the ship without the risk of tossing us all out.”

Mr. Shannon said quietly to Steve, “It’s up to you, son. If you believe you can go through with it without losing your head and getting thrown from the ship....”

Steve swallowed hard, thinking of the lives of the others around him that depended upon him. “I’ll try it,” he managed to say.

He felt his knees go weak when the safety rope was unfastened from his waist and he realized there was nothing now but his magnetic shoes to hold him to the ship. Carefully Mr. Quinlan boosted him up toward the opening above. *Tick-tick-tick* went his metal soles against the shiny skin of the craft as he made his way upward by means of special climbing handles on the rocket hull.

“Keep calm,” he told himself. “A spaceman doesn’t lose his head.”

He was thankful for the firm grip of his gloves as his fingers closed about the sides of the chamber and he pulled himself up inside. It was a close fit even for him. Mr. Quinlan had told him that usually the emergency valve was easily reached from the deck above but that during this trip the deck was closed off for repairs and couldn’t be entered.

Steve found the valve handle and turned it as he was instructed. Almost immediately he heard the deafening blast of many voices in his receiver. Among the words he heard were, “The door’s opening!” Steve sighed deeply and carefully started down again.

But the danger was not over yet. He still had to be very cautious. This was brought to him sickeningly when he drew his foot back with greater force than usual and found himself weaving backward into space. With a chill of terror he grabbed a climbing handle and pulled himself snug against the ship’s hull again. Finally he felt the strong arms of his father on the lower part of his legs. He relaxed and was helped down onto the platform amid the cheers of everyone around.

The sight-seers, sobered by their close call, trooped silently back into the ship. A moment later the craft began dropping earthward, its jets acting as brakes to check the rapid descent.

After landing, the Shannons were called into the office of the Chief of Operations at the space port.

“Young man,” the chief said to Steve, “let me congratulate you for the brave thing you did.” He offered his hand and Steve felt a flush of pride as he took the big palm in his own.

“Such an unselfish deed can never be fully repaid,” the chief went on. “Tell me, Steve, do you like space-going?”

Steve’s eyes glowed with stars. “Very much, sir,” he said. “Some day I’m going to become a spaceman myself.”

“Then this little reward we have for you and your sister may help you reach your goal.” He held out a plastic-sealed card. Steve took it as his heart raced. It was a lifetime rocket pass!

WHEEL IN THE SKY

Sue and Steve Shannon were riding with their father in a “space ferry” several thousand miles above the Earth. They could look out of the plastic windows of the little ship and see the winding curve of Central America far below.

“Look, Steve!” Sue exclaimed. “I see the Panama Canal!”

“There’s a storm over the Gulf of Mexico,” Steve said, studying a big gray patch over the water. “It makes you feel like a king being so high above everything!”

The Atlantic and Pacific were throbbing blue carpets, topped by breakers of molten silver where the sunlight hit them. It was a marvelous sight, more like a scene from a fairy-land.

“There’s the big space ship we got off,” Sue pointed out. “It’s beginning to drop back to Earth.”

“And there’s the ‘Wheel in the Sky,’” Steve said, looking ahead. “We’ll soon be there! Isn’t it great?”

Compared to the tiny ship they were in, which was shaped like a medicine capsule, the Wheel in the Sky was a gigantic thing. It looked like an automobile wheel and by its moving spokes the children saw that it was turning just like one.

“Why does the Wheel spin, Dad?” Steve asked.

“That’s in order to give the people inside of it a feeling of weight,” Mr. Shannon explained. “As I told you before, things

in space have no weight because there is no gravity out here to speak of. What happens when you ride on the merry-go-round on the school playground?"

"You have to hold on tight or it'll throw you off," Steve answered.

"The Wheel in the Sky does the same thing. It tries to throw you off, but since you are safely inside of it, all it can do is throw your weight against the floor of the Wheel. Understand?"

The children nodded and smiled, pleased at knowing one more fact about the strange ways of space.

As the ferry neared the big space station, Steve watched the black heavens all around them. The stars were thicker than salt crystals and glittered like precious gems. Close to the Wheel, the ferry had to use its rockets in order to keep up with the spinning of the Wheel. Presently a door in the rim of the Wheel opened. Two men in space suits appeared in the doorway and threw out a line which stuck to the ferry by magnetism. Then the men pulled the little ship inside and closed the doors.

"Here we are!" the ferry pilot called to his passengers. "Everybody out!"

Since there was fresh air in the hangar, the riders did not have to use space suits. Just as his father had said, Steve found that he could walk around as easily as he did back in Arkansas.

"Ready for a tour of the Wheel, kids?" Mr. Shannon asked.

"Sure!" the twins replied together.

Mr. Shannon worked for the American Space Supply Company which carried supplies to the planets of the Solar

System. This was the year 2004 and by now nearly all the planets or their moons had budding Earth colonies. Sue and Steve had earned free lifetime space passes because of a heroic act Steve had done a month before on the twins' very first trip into space.

As Mr. Shannon took the two around the "man-made moon," they were almost overcome by all the wonderful things they saw. They learned that the Wheel in the Sky was both a scientific laboratory and a military lookout. With their big telescopes, the Space Guard could see every mile of Earth, for the Wheel circled the globe several times a day.

While the Shannons were in the Military Lookout Room peering at the world through a telescope, Sue said, "I wish Mom could be here with us."

"I do, too, Sis," Steve replied. "But it would take all the soldiers in the Humpty-Dumpty story to get Mom into a rocket, wouldn't it, Dad?"

Mr. Shannon chuckled. "I believe it would, Son."

Their father leaned over and whispered something to the officer at the telescope, who nodded. The man slipped a high power lens on the telescope and turned it on a certain part of the United States, toward which the Wheel was slowly moving.

"Take another look, Sue," her father said.

Sue eagerly went to the eyepiece. The telescope brought a city into very close range. It seemed as if she had only to reach out a finger to touch the tall spire of a building. Suddenly she gasped. She knew that building! It was the home office of her father's place of work. The city was Little Rock, Arkansas, their own home!

“Steve, look!” she said excitedly to her brother and let him see for himself.

Steve was as thrilled as Sue. Together they moved the telescope lens over all the familiar spots of the great space city, which in this day had a million population. They were able to locate the wee speck that was their own home in the suburbs.

“I can almost see Mom hanging out the wash in the yard!” Steve said with a grin.

Before the children were through looking, they noticed several black hazy spots in different parts of the state.

“What are these, Dad?” Steve asked, showing them to his father.

“They’re tornadoes, Son,” Mr. Shannon replied. “There seems to be an unusually large crop of them this season. There are even some close to Little Rock. The Weather Control Bureau here has a way of dealing with them, though. They do many skillful things in Weather Control. They can make it rain in dry parts of the world and even melt snow drifts in blizzard areas.”

“What can they do about a tornado?” Steve asked.

“When one threatens a city they fire a guided missile—a bomb—that breaks up the twister before it can do any harm. We’ll visit the Weather Control Bureau as soon as we’ve been to the hub of the Wheel.”

Mr. Shannon led them out of the Military Lookout Room. Steve and Sue then found a job of climbing facing them. In order to reach the hub, they had to go through one of the spokes leading into the center of the Wheel. The children saw

before them a nylon ladder stretching as far as they could see down a long corridor.

“Let’s start climbing,” their father said.

“Why can’t we just walk along the hall,” Sue asked, “instead of doing it the hard way?”

“You’re forgetting that the Wheel is always throwing you outward as it spins,” Mr. Shannon said. “If you tried to walk down the spoke it would be like trying to walk against a hurricane. For this reason, you two must be careful not to lose your grip on the ladder or you’ll be flung down the corridor against the rim.”

The three began climbing hand over hand along the ladder. They got along very well until Sue suddenly became dizzy and lost her hold. She screamed as she began flying down the corridor. Steve’s heart nearly stopped beating for a moment. He heard his father calling out loudly in a frantic voice: “Grab the ladder, Sue! Grab the ladder!”

At first Sue did not seem to hear and kept hollering in fright. Then she understood and reached out wildly with her hands for the nylon ladder as she swept along. One hand seized a piece of it and she held on for dear life, her body still hanging in mid-air as the force of the turning Wheel kept trying to throw her outward.

“Hold on, Sue!” her father called. “We’re coming!”

He and Steve swiftly crawled along the ladder to the spot where Sue was clinging with one hand.

“Hurry!” she cried. “I can’t hang on much longer!”

Just as she was about to let go, Steve reached her and held on to her with his free hand. Then his father lent his help and Sue

was safe. She sobbed for a moment from the fright she had had and Mr. Shannon suggested that they go back to the rim where they would be safe again. Both children agreed, for they had suddenly lost all interest in the hub.

By the time they got to the Weather Control Bureau they found more worry awaiting them. Men were hustling about the huge room with serious looks on their faces. One of them was looking into the eyepiece of a large machine that was pointed out the window down onto Earth.

“What’s wrong?” Mr. Shannon asked one of the men.

“A tornado is headed for Little Rock, Arkansas!” was the shocking reply. “I hope our missile scores a hit, but it isn’t going to be easy because the Wheel has already moved past the United States!”

“The missile’s *got* to hit!” Steve burst out. “Our home and Mom are there!”

“Yes, it’s simply *got* to!” Sue added tearfully.

The Shannons had to stand helplessly on the side as the tornado fighters went to work. The missile gun was in another part of the Wheel, but the orders for firing it would leave this room by radio.

“Oh, why couldn’t Mom have come with us?” Sue asked. “She would have been safe here!”

Steve felt his whole body tensing like a wound spring. The perspiration was beading his forehead and his knees were weak. On his father’s face there was a dark look and Steve saw that his big hands were opening and closing.

“Twenty seconds to go before firing,” the man at the machine said slowly over the radio mike on his chest. “Steady.

Eighteen—seventeen—”

“Why don’t they hurry?” Sue cried. “They’re so slow!”

“They have to do it a certain way,” Mr. Shannon answered.
“They know what they’re doing, Honey. Don’t be afraid.”

But she *was* afraid. And so was Steve. And her father, too. Everyone in the room was afraid because no one could say whether the tornado could be destroyed before it hit the city or not.

“Eight—seven—six—” droned the unhurried voice of the operator.

The Shannons hardly dared breathe for fear of disturbing the man at the machine. Steve felt Sue’s body quivering next to him. It seemed as if the seconds were dragging on endlessly.

“Three—two—one—FIRE!”

Steve felt nothing but he knew the tornado bomb was on its way, speeding hundreds of miles a second Earthward.

For long, awfully long, moments after the operator had said, “Fire!” the Shannons waited for him to speak again. He kept looking calmly through the eyepiece of the machine as though just studying the stars. Then at last they saw a smile spread over his face and he said to everyone in the room, “It’s a hit! Little Rock is safe!”

The tornado bomb was on its way, speeding hundreds of miles a second
Earthward

*The tornado bomb was on its way, speeding hundreds of miles
a second Earthward*

Sue and Steve whooped as if it were Christmas morning. Where a minute before they had been greatly worried, now

they were happy as they never believed they could be.

“Whew!” Mr. Shannon sighed. “I’m afraid I’ve had enough excitement to last me a lifetime!”

“Not me, Dad,” Steve said, as the fire of adventure began to glow again in his eyes. “I won’t be satisfied until I’ve seen what lies beyond the Wheel in the Sky!”

DANGER ON THE ICE CANAL

Steve and Sue Shannon were at Mars Port No. 13. This was one of the many colonies on the planet Mars where Earth scientists were carrying on work. It was a town of plastic tops, called domes, that were clear as glass. The town was at the center of three canals that led outward into the red desert.

The Shannon twins were now touring the largest dome with Biff Warren, who worked for their father's space cargo company. Suddenly their tour brought them to a large cafeteria where many of the workers were eating.

"Umm!" Sue exclaimed. "Smell that turkey!"

"Yeah!" Steve said. "It sure makes your mouth water, doesn't it?"

"Which reminds me," Biff said, looking at his watch. "We'll have to finish up our sightseeing pretty soon. The quicker we get back to your father's ship, the quicker we can have our own turkey feast!"

"I can hardly wait for that!" Sue sighed, as the wonderful smell of the holiday meal kept tickling her nose.

When Thanksgiving dinner was finished aboard the big space freighter that had brought the children to Mars, the ship would take off into space. But before that, Biff, Sue and Steve would have to go twenty miles back down the ice canal to reach the ship.

Biff had become a close friend of the young Shannons, having made trips with them to other ports in space. Sue liked Biff because of his quick smile and gentle patience. Steve liked him because he was all that Steve would like to be some day himself—a fearless, bold spaceman.

They finished up their tour of the dome. They saw the room where giant machines made oxygen out of chemicals and blew it through the building so that there was fresh air to breathe all the time. And they saw the astronomy hall far up on top of the dome where scientists could see the heavens through the thin atmosphere much clearer than they could from Earth.

“Isn’t it about time for the fuel rocket to be shot off, Biff?” Steve asked.

Biff nodded. “I think it’s just about time,” he said. “We’ll suit up and go outside to see.”

In the dressing room they put on their space suits. As though they were his own children, Biff carefully checked the young Shannons’ air tanks, built-in heaters, and their helmet radios for talking to one another. Finally Biff rubbed gelatin on their helmets so that they would not frost over in the cold that was a hundred degrees below zero.

Outside they found space-suited figures gathered around the fuel rocket cannon. The cannon was pointed toward a shiny ball high up in the purple-black sky.

“Look, Sis, there’s the space ship toward which they’re going to shoot the fuel rocket,” Steve said.

“I see it!” Sue cried, her eyes dancing excitedly.

“They have to line up the cannon with the ship just right or the rocket won’t reach it,” Biff said.

“Won’t the rocket hit the ship?” Steve asked.

“No, it’ll lose all its speed by the time it reaches the ship,” Biff told him. “Then they’ll take on fuel from the rocket by means of a long hose.”

Suddenly the three of them heard a loud roar and saw a burst of flame. Like a bullet, the rocket left the muzzle of the giant gun and rose into the sky.

“They’ll be shooting off more rockets before they have enough fuel for the space ship,” Biff said. “There’ll be a little wait in between each firing.”

“Look, Biff, isn’t the space ship right over the canal where we’ll be heading back?” Steve asked.

“That’s right, Steve,” Biff answered. “You’ll remember, our ship is at the end of the canal. We’ll be able to see the rockets go off as we head back—which we’d better do right now, if we’re going to have any turkey and pumpkin pie!”

The canals of Mars had been carved out of a great desert by water and fierce winds. Because of the ice that filled them, they made good highways. The three went to the canal bank to see if their sled was ready to go, and it was. The sled looked like a big bombing plane with the wings off. Instead of wheels, there were long runners beneath it. In this sled Biff and his young helpers had brought supplies to the colony several hours before.

Steve, Sue and Biff climbed into the front seat. Then Biff shut the door. He pushed buttons in front of them. Steve and Sue felt the sled’s engines throbbing. The next moment the sled shot off over the smooth sheet of ice, Biff holding tightly to the steering wheel.

“Wheeeeeee!” Sue screamed in delight. “Offffffffffff weeeeeeee gooooooooooooo!”

“Like a rooooller cooooster!” Steve shouted.

They sped along at a hundred miles an hour. This was as much fun as they had had on their last space journey.

Each of their trips into space seemed to be more exciting than the last. They had won a lifetime free pass into space and by now they were sure they would need a lifetime in which to see all of its many wonders. A brave act by Steve on their first space trip had earned them their pass. Right now, Steve thought that their mother and home, back in Arkansas, seemed as far away as Deneb, the North Star of Mars.

“We’ll be there in about ten minutes,” Biff said. “The ship leaves in thirty, which gives us some spare time.”

“Look,” Sue said, “there comes the first fuel rocket back down in a parachute.”

“That’s right, Sue,” Biff replied.

Steve studied the bank of the canal. Along it he saw scrubby cactus, which was forever fighting for life in the cold, dry atmosphere. Beyond the bank stretched acres of red wasteland, and sand drifts piled up by strong winds that never stopped blowing.

A few minutes later, Sue noticed a bright streak against the purple sky. It was nearly as bright as the tiny sun, which was so far away that it could not keep Mars warm.

“There goes another fuel rocket!” Sue called out, pointing through the windshield.

As Biff caught sight of it, he jerked up sharply in his seat, bumping the shoulders of Sue and Steve on both sides of him.

“That rocket’s too low!” he exclaimed. “It’s not lifting! Something’s gone wrong!”

Steve felt chills run up his spine. He was seeing the danger too, now. The rocket was dropping ahead of them, a screaming bomb filled with explosive fuel. It was still quite a distance away, but even Steve knew that it would make a terrible blast when it struck the ice.

Biff’s feet hit the brakes of the sled and the runners chewed into the hard ice pack, shrieking, and bringing the sled to a skidding stop. The riders were slammed forward. Sue and Steve were dazed, but not hurt. When Steve’s mind cleared, he saw that Biff had thrown himself over in front of Sue and him to protect them. But in doing this, his helmet had thumped against the windshield. He was now slumped over and not moving.

“Sue!” Steve cried. “Biff is hurt!”

Just then they felt the shock of the explosion. It tilted the sled at an angle and dropped it down again with a hard jolt. The air was filled with flying chunks of ice. It looked like a hailstorm outside. The ice clattered against the windshield like stones. Sue and Steve were relieved when it finally stopped. But the explosion had left the ice sheet in front of them broken and choked with lumps of ice.

“Steve,” Sue moaned, “what are we going to do?”

Steve looked at Biff who was still not moving. He could see a big lump on Biff’s forehead where his head had struck the helmet, knocking him out. The children tried to revive their friend, but could not.

“We’ve got to get the sled to the ship ourselves, Sue!” her brother said. “Biff may need a doctor! Besides, I bet we’ve all missed our Thanksgiving dinner!”

“I won’t want any dinner if Biff is hurt badly!” Sue said tearfully.

At first it seemed like an impossible thing for a pair of twelve-year-olds to run the big sled. But Steve remembered how Biff had worked the controls and he believed he, too, could do it. He changed seats with the unconscious spaceman and tried the levers and buttons.

Presently the sled’s rockets began to pour fire out of the rear. But Steve couldn’t get the sled to move. He was afraid it had been damaged. Then Sue showed him a lever to push which she had remembered seeing Biff shove. As Steve worked it gently, the sled started off slowly.

“We’ll go slow,” Steve said, “and take it very easy.”

The explosion had hit at the far edge of the canal so that there was a narrow place on the other side where the ice was still smooth. Steve carefully guided the sled across the canal and through the unbroken part. When there was smooth ice before them, Steve picked up speed a little. As he drove, Sue tried to awaken Biff.

Steve would have found their adventure a lot of fun if things weren’t so serious at the moment. It wasn’t every day that a boy had the chance to drive a giant rocket sled on a distant planet!

At last Steve saw the round top of the space ship just over the horizon. It was at that moment that Sue called out the good news:

“Biff’s awakening, Steve!”

The boy saw their friend slowly rise up, then shake his head to clear it. When he smiled at them in his pleasant way, they were sure that he was going to be all right. By the time they had told him what had happened, he was his old self again. He took the controls and looked at his watch.

“Time’s running out,” he said. “We’ve got to hit top speed again. Hold onto your helmets! Here we go!”

And off they went at lightning speed once more. It seemed to Steve as if they covered the distance between them and the space ship in seconds.

As the sled came to a gentle stop beneath the giant freighter, Biff said, “It looks like we’ll make our Thanksgiving dinner on time after all, doesn’t it, kids?”

“Yeah,” Steve answered, “and this is certainly one Thanksgiving that I’m really thankful!”

“I know what you mean, Steve,” Sue said thoughtfully. “We’re thankful that we’re alive!”

Biff and Steve both nodded. It was a holiday none of them would ever forget.

CARGO FOR CALLISTO

The big rocket freighter was speeding through the star dust of outer space. It was carrying supplies to Callisto (one of the twelve moons of Jupiter) and the Shannons, on another space adventure.

Steve and Sue looked out a window of the freighter at the airless world growing in size. Callisto was a gigantic roughened rock, but it was a globe larger than the planet Mercury. It reminded Steve of a giant cockle-burr hanging in the sky.

Suddenly the children heard a tiny voice behind them say, "Rocket away!"

They turned and Sue exclaimed, "It's Bud!"

The blue parakeet, a budgy, blinked lazily at them. The twins had met Mr. Whittle's pet a week ago. He had taken a liking to them from the very start. They didn't know that a few hours from now their very lives would depend on this little fellow.

"We'd better take him back to Mr. Whittle," Steve said.

The budgy kept studying them with his flat face and blinking his tiny button eyes. Then he squawked again, "Rocket away!"

"It'll be 'rocket away' for you, young fellow!" Steve said sternly. "Up on my finger, Bud!"

The bird did as he was ordered. They took him down the hall to Mr. Whittle's room. Bud's owner, off duty now, was a tall, spidery crewman with a big Adam's apple. He always gave his pet full run of the ship.

Mr. Whittle whistled to the parakeet, but the bird stayed on Steve's finger.

Mr. Whittle chuckled. "Hey, I believe he likes you two better than his master!"

"We like him, too," Sue told the crewman.

"You can keep him for a few days if you want to," Mr. Whittle said. "I'm going to be pretty busy after we land."

"Gee, we'd like to look after him!" Steve answered.

"If you take him outside on Callisto, you'll have to put him in that air-tight cage over there I had made. It's sort of like a space suit for him."

Sue and Steve played with Bud in the room they used for games until it was time to "strap down" for landing. Then they went to the couch hall and lay down on cots like the other space travelers were doing. They buckled straps across their bodies to keep them in place.

For a long time, Steve and Sue lay there as the big freighter began cutting its rushing speed. It felt to Steve as if a giant anvil were crushing downward on his chest. Take-off and landing were always the roughest moments in space travel, as the twins had already found out on other space trips.

At last the ship set down on Callisto. The young Shannons went back to the game room. Then with the bird on Steve's shoulder, the twins looked out the window at the strange new world.

They saw a land bathed in ghostly twilight. Very little light was coming from the sun. It was so far away that it was only a small circle. Most of the light came from a huge shape that looked like somebody's lost beach ball resting on the ground. Its bottom edge just touched the horizon.

Sue and Steve were joined by their father, who worked for the space freight company.

"That's His Majesty, Jupiter—the king of planets," Mr. Shannon told them. "He's over a million miles away and yet he looks close enough to touch, doesn't he?"

"Let's go outdoors, Dad!" Steve begged.

"No reason why we can't," Mr. Shannon replied.

After they had put on their space clothes, Steve popped Bud into his warm, air-tight cage.

As they all went outside, they saw the crewmen unloading the cargo.

"There's the colony over there," Mr. Shannon said, pointing to a high framework that looked something like an oil derrick.

"They mine here for a mineral called magna. It's very valuable, because without it we couldn't have atomic engines. Magna is what keeps our rocket tubes from melting under the terrific heat that goes through them."

"May we go down into the mines, Dad?" Steve asked.

"We'll see if we can," said his father.

As they walked toward the mining place, Mr. Shannon said, “Underneath us are pockets of poisonous gas like that found in Jupiter’s atmosphere. Sometimes it leaks into the mining tunnels causing danger from suffocation.”

“I sure hope the gas stays where it belongs while we’re down there!” Steve said and swallowed the lump of fear in his throat.

They turned their attention to Jupiter. It looked even more like a beach ball now with its stripes of beautiful colors. Mr. Shannon said the bands were floating ice bergs of the poisonous gases he was talking about.

“No ship can land on Jupiter,” he said. “Its gravity would crush a spaceman flat. Gravity pull is much stronger on the larger planets, you know. Jupiter’s atmosphere is many thousands of miles deep. Raging storms are going on beneath it all the time.”

“Ooo!” Sue gasped. “I guess we’re close enough to it then!”

Other wonders of the sky were the round beacons of Jupiter’s other moons, three of which were about the same size as Callisto. They hung like bright searchlights in the starry heavens.

The men at the mining place greeted the Shannons warmly. They had not seen anyone from Earth for so long that they had grown very lonely.

The chief mining engineer said he would be glad to take the visitors on an underground tour. His name was Dr. Harding. He was plump and short and wore black-rimmed glasses inside his space helmet.

He led them into an elevator and it sank into the darkness. Steve remembered about the poisonous gases that crept about underground and it made him shiver to think about it.

Dr. Harding watched Bud hopping around uncomfortably inside his small space cage. “Do you remember, Mr. Shannon,” he asked over his suit radio, “when they used to use canary birds in mines to warn about leaking gas? The birds would notice it first and give the miners time to get out.”

“I’ve read about that, Dr. Harding,” said Mr. Shannon.

“Now we have automatic warning machines in the tunnels to do that,” the chief engineer told Sue and Steve.

Deeper and deeper below the soil of Callisto the elevator sank. At last the cage reached the bottom, and the riders found themselves in a large cavern. There were machines and men all about, working busily. Tracks led off into tunnels and ore cars were running on them. Some were going empty into the tunnels while others were coming out full of rock and gravel.

“The magna is separated from the rock in that big machine over there,” Dr. Harding explained. “Want to ride an ore car into one of the tunnels?”

“Sure!” Steve spoke up.

“The mine is air-conditioned,” the chief engineer said, “so we can take off our helmets.”

This done, Steve let Bud out of his cage. The little bird hopped up on his gloved finger, saying, “Rocket away!” several times. His two-word language seemed to do for everything.

One worker controlled all the cars at a main switch in the middle of the cavern. The Shannons and their guide climbed

into an empty ore car and it rolled into a tunnel.

Glistening dark rock crowded in on Sue and Steve from all sides. Steve hoped the walls were strong enough so they would not come crashing down on their heads! There were lights along the way to help brighten the gloom.

After clicking along like a trolley for awhile, the car came to the end of the line. It was a large room with more machines and workmen. The men were digging magna ore out of the wall with drills.

As Dr. Harding explained about the work, Bud began flitting about as though sight-seeing on his own. He was shy of the workers at first, but then made friends with them. He spoke to them with his favorite two words and the men laughed in great fun to hear him.

Then a few minutes later, Bud began acting queerly. He flew back to Steve's finger and started wobbling as though dizzy.

"What's the matter with him?" Steve asked.

"He's sick or something!" Sue cried out. She took the budgy from Steve and cuddled him in her own gloves. But the little blue bird seemed to be no better.

Dr. Harding walked over to look at the bird. Then he ordered, "Everybody into the ore car! We have to get out of here fast! Sue, hold the bird up close to your suit!"

The workers dropped their tools as if they were red hot and climbed into the car. Mr. Shannon helped Sue and Steve on, then jumped on himself.

Dr. Harding pressed the electric button that was the signal to the operator in the main cavern to move the car. The car began

to roll down the track. It picked up speed as Dr. Harding kept pressing the button.

“Leaking gas, Dr. Harding?” Mr. Shannon asked worriedly.

The chief engineer nodded. He sniffed the air like a hunting dog after a scent. “Take a deep breath, everyone, then hold it!”

Steve thought his lungs would burst, but finally Dr. Harding let them take another deep breath. By the time they had taken one more, the car had reached the main cavern. As it rolled to a stop, Dr. Harding jumped down and ran over to the car operator.

Steve saw a door slide down and close off the tunnel where they had come out. Then the little man gave a deep sigh and took off his black-rimmed glasses to wipe them.

Sue and Steve watched Bud hopefully. He was standing more steadily on Sue’s finger now.

“I think he’ll be all right,” the chief engineer said. “We sure owe Bud a lot for warning us the way he did. Something must have happened to the warning machine. It was supposed to set off a siren.”

“If it weren’t for Bud we might have been overcome before we could have gotten out of there!” Mr. Shannon added.

“You’re so right!” Dr. Harding said. “The men will go back in there in gas masks to find the leak and see what’s wrong with the warning machine.”

“We’re plenty lucky!” Steve sighed, his spine still prickly from their narrow escape.

Sue kissed the budgy. “You’re a hero, Bud,” she told him, “and we love you!”

Bud blinked lazily. Then as if to show that he was all right again, he squawked, “Rocket away!”

THE BIG SHOW ON TITAN

The space freighter had landed on Titan, the largest moon in all the Solar System. The Shannon twins had been anxious to reach this moon of Saturn because their father had told them that something very exciting might happen here before they left.

There was still another reason why the children had looked forward to the landing. They would meet a boy of their own age who was the son of a worker. He had been living on Titan for the past two years and would be able to show them around.

Steve and Sue came down the outside “gangway” of the cargo ship and stepped onto the frozen ground of the distant world. The twins wore space suits, of course, for the air outside was extremely cold and it was poisonous as well with raw methane and ammonia.

Steve saw beautiful Saturn, with its colored rings, filling much of the blue sky. Titan was a world of close mountains, worn smooth by lots of windy weather. A film of glistening ice covered the peaks like caps of glass.

“Look up there, Sue!” Steve said. “Over our heads! That’s the famous skyport of Titan!”

“I wish we could go up there!” Sue said.

“Maybe we’ll get the chance,” answered Steve.

Ahead of them stood a rounded plastic dome. Men were carrying into it cartons of supplies which the space freighter had brought. The twins' father, who was an official of the American Space Supply Company, was still aboard to take care of the unloading.

A boy came out of the domed building. "Are you the Shannons?" he asked over his space radio.

"Yes, we are," Steve replied.

"I'm Bobby King."

Sue and Steve said they were glad to meet him. He asked if they would like to go up and see the skyport.

Both the young Shannons answered a quick, "Sure!" together.

They followed their new friend into the plastic dome. Bobby King pointed to an overhead cable. Hanging from the heavy cord was a cable car.

"All aboard!" Bobby called, like a train conductor.

Sue and Steve giggled with pleasure as they entered the car, followed by Bobby. Bobby pushed a switch and the cable car began to move.

"We're going up like a corkscrew," Bobby said.

Round and round, right out of the top of the building, moved the cable car. Up and up it went. It took about ten minutes to reach the top. As soon as they got out, two men passed them who were talking about a storm that was on the way.

"Boy, if there's a storm coming, you two are sure in luck!" Bobby told Sue and Steve.

Steve and Sue looked at one another, puzzled. Why should their young friend be pleased over a coming storm?

They saw before them a space that looked as flat as a highway and larger than a football field. There was a row of hangars along the far side.

“Wow, we sure must be high!” Steve burst out. They seemed to be almost on a level with the mountains.

“We’re a whole mile off the ground,” Bobby told him. “The skyport rests on the corners of two mountain ridges.”

They went over to one of the clear plastic walls that edged the skyport.

“Gee, the freighter sure is little down there!” Sue said.

It almost took Steve’s breath away. The big space ship indeed looked no larger than a toy down below.

“Why did they go to such trouble to build this?” Steve asked.

“Because there wasn’t any place flat enough on the ground,” Bobby answered. “My father says they need a main skyport on Titan because there are so many companies here digging for uranium. The colonists fly here to get their supplies and mail.”

“I see some dark clouds over the mountains,” Sue said. “Does that mean a storm is coming?”

Bobby’s helmet nodded. “It sure does! You two are the luckiest ones! You got here right at the start of the storm season.”

Steve and Sue were still puzzled as to why Bobby wanted it to storm.

Bobby showed his guests a faint star burning through the blue atmosphere. "That's Earth," he told them, "750 million miles away. My father thinks we can go back for a visit in a few weeks. I'll be glad."

"Where do you live here, Bobby?" Sue asked.

"My father and I stay in an apartment a little way from here," Bobby answered.

"How about school?" Steve wanted to know. "Do they have one on Titan?"

Bobby shook his head. "My father teaches me. He's out with some prospectors today."

Bobby showed them Titan's other nine sister moons, which looked like glowing fireballs. Steve saw that most of the daylight came from Saturn because the sun was so far away. It wasn't nearly as bright here as it was on Earth.

"I wish we could run over to Saturn for a visit," Sue said, jokingly.

"You don't really, Sue," Bobby told her. "You couldn't stand up in its heavy gravity. Saturn's almost as big as Jupiter, you know."

"What are Saturn's rings made of?" Steve asked.

"Oodles and oodles of rocks," Bobby replied. "They are traveling so fast that they make the rings look like one solid piece."

Wind was beginning to howl around them and this seemed to make Bobby very excited.

The coming storm must be something special, Steve thought. His curiosity had been aroused strongly.

The clouds gathered darker and more thickly behind the mountains. The wind was driving harder.

“Hadn’t we better go inside?” Sue asked, worriedly.

“Shucks, no!” Bobby said. “It won’t be any fun unless we’re right out in it! There won’t be any rain. It’s too cold on Titan for rain.”

Suddenly the three heard a loud siren wail.

“That means a jet plane is coming in,” Bobby said. “All planes have to land when word of a storm gets around.”

The plane’s wheels touched down and the ship rolled along until a hook on it caught a line that stretched across the runway. The line brought the plane to a sharp halt.

The jet’s wings were folded down and the ship was pushed off to a hangar. Two more ships landed afterward. Then a blinding flash lighted up the sky. It made Steve and Sue blink and jump in fright.

“Look!” Bobby exclaimed. “The storm has begun!”

Other men had come out to see what was going to happen and they lined up along the edges of the skyport with the children.

Bobby pointed to a sparkling balloon of light that burst into a blossom of sparks over the mountains. A moment later a red dagger flash skipped across the peaks. During all this there were loud crashes and rumblings. Steve was scared and thrilled at the same time.

“It’s just like fireworks!” Sue called out.

Now Steve could understand why Bobby had looked forward to the storm. He guessed, too, that this was the exciting

surprise their father had said might happen while they were here.

An orange pinwheel, like a Fourth of July sparkler, rose from a mountain top and looped upward. It grew bigger and bigger and fainter and fainter at the same time. It was really a beauty.

“What causes the fireworks?” Steve asked above the noise.

“Partly strong wind,” Bobby said loudly, “and partly Titan’s gases exploding against the mountain tops!”

They watched spellbound for fifteen minutes, then a half hour. The Shannons were sure they had never seen anything quite so breathtaking as this.

At one time a row of peaks seemed to glow with a sheet of red flame. The flame danced and flickered like a forest fire for a long time before it faded out.

The children had been enjoying themselves so thoroughly that they knew nothing of the peril that was heading their way.

The first warning came when one of the skyport men standing nearby shouted over his space suit radio. Steve whirled in alarm. His heart seemed to stop beating completely for a terrible moment.

A tardy plane had come in for a landing on the sky platform. But the howling wind had kept everyone from hearing the warning siren.

Because of the fierce blowing, the plane had not hooked firmly to the braking line. It scooted off to the side and was heading for the very spot where Bobby, Steve and Sue stood.

“Bobby!” Steve cried. “Get out of the way!” As Bobby ducked for safety, Steve also moved quickly. Sue screamed as

Bobby grabbed her hastily by her space glove. He had to jerk her sharply in order to get her out of the path of the runaway plane.

The plane crashed into the plastic wall of the skyport, tearing out a section of wall as though it were thin cardboard. The ship was left dangling on the very edge as if ready to fall a mile to the ground.

“The poor pilot!” Sue cried. “Oh, I can’t look!”

But the skyport men had come running quickly over and together they pulled the jet plane back to safety. They helped the scared pilot out. He walked shakily off into one of the hangars.

“Whew! That was close!” Steve breathed. “For him and us, too!”

“My heart is still thumping like a drum!” Bobby said.

As for Sue, she was too upset to say anything at all.

They turned to look at the fireworks to take their minds off the accident. The wonderful ending of the show almost made them forget it completely.

They saw a dazzling white light burst like an empty volcano. The banner of fire rose as high into the sky as huge Saturn. Then it spilled over like a great fountain. It changed into purple, then blue, green and red.

Before dying out, it gave the big planet a lovely ruddy glow, showing up its rings like a gleaming necklace of rubies. That was the end of Nature’s grand performance.

“Wow, wasn’t that terrific?” Steve asked. “A show like that in a grandstand on Earth would cost you three-and-a-half.”

“Maybe four!” Sue chimed in.

“You can’t see this show anywhere on Earth, Steve,” Bobby said. “Titan is the only place. And the good thing about it is that it’s all for free!”

ADVENTURE ON THE SUN'S DOORSTEP

Sue and Steve Shannon watched the magic world of stardust through a port of the rocket freighter. The ship was moving under power of its atomic engines, headed toward the sun.

They had one more cargo stop to make before returning to their beloved soil on the Earth.

The twins heard the clack of magnetic soles behind them. Without such shoes holding them to the floor, space travelers would float about helplessly like wingless birds.

“Hi, kids,” greeted their father. “Growing tired of the view?”

“I guess I am, Dad,” Steve admitted. His blue eyes were tired.

“How far away is Apollo’s Chariot now?” Sue asked.

Mr. Shannon grinned. “That’s the umpteenth time you two have asked that. But I suppose I’m as restless as you are to get back to Mom in Arkansas.”

Hearing this made Steve suddenly homesick. There was really no place like home, just like the poet had said. Steve knew Sue felt the same way. He had seen a wistful look in her hazel eyes every time they had talked of Little Rock.

The seemingly endless days finally did end. The three Shannons went up into the lookout dome with the crewmen.

The dome was covered by a darkened plastic screen to cut down the blinding glare of the sun, which was very close.

It was a heart-stopping sight for Sue and Steve. The planet Mercury covered the face of the sun like a black plate. Streaming out from the edges were mountainous tongues of living fire. Mr. Shannon called this flaming halo the sun's *chromosphere*.

"Gee, what a thing to see!" Steve gasped.

"It's—it's unbelievable!" Sue added, breathless.

"Indeed, it is," Mr. Shannon agreed. "See that thing like a lighted wheel just ahead of us? That's Apollo's Chariot. It was named after the famous Greek sun god, you know."

Sue and Steve knew that Apollo's Chariot was really a space laboratory that was a home for scientists who were studying the sun. They had been the ones who had given their tiny world its colorful nickname. It was protected with asbestos and other special material to shield it from the heat as it circled the great star, month after month, year after year.

"We had to contact Apollo's Chariot while Mercury was shading our ship from the sun's rays," Mr. Shannon said. "We aren't protected like Apollo's Chariot is."

"Mercury seems as big as the sun, the way it covers it completely," Steve remarked.

"That's because we're so close to Mercury," his father explained. "Actually, the sun is so much bigger it's like comparing a pinpoint to a grapefruit!"

In the midnight darkness between the ships, giant searchlights had to be turned on. Then the scientists on the other ship came out onto their loading platform to receive their cargo.

Conversation was carried on by means of space suit radios with those aboard the freighter, who stood on their own outside platform.

“Why can’t we get closer to Apollo’s Chariot?” Steve asked Biff Warren, who was the twins’ favorite among the crewmen. Biff was piling boxes and crates at the edge of the platform.

“Space regulations,” answered Biff. “If a meteor should hit one of us, the other ship would explode too if we were close. Also, rocket tubes are so tricky that you never know when one is going to misfire and send your ship scooting off suddenly in the wrong direction.”

One end of a double cable was fastened to rings on the freighter’s platform. Then the other end was tossed across the space between the two ships and attached by the scientists to their own side.

Steve saw the crewmen around him pick up cords from out of the cable equipment box. They fastened one end to buckles on their suits and the other to the cable. Steve guessed that the lines were a safety measure to keep the men from drifting off into space as they carried the cargo across.

The first crewman picked up a crate as lightly as if it were a pile of feathers. Then with his foot he shoved off from the platform.

He guided the crate through the emptiness with his gloved hands and the men on the opposite platform helped him aboard. Another crewman stepped off the freighter with another crate. Then another crewman with another piece of cargo. The carriers returned by the other cable line.

Steve went over to his dad who, as an official of the American Space Supply Company, was supervising the work as always. “Dad, may Sue and I carry a box across? We’ll be careful.”

Mr. Shannon thought a moment. "I suppose it will be all right. There's no way you can go adrift if you fasten on to the cable. But you have to be careful you're snapped on securely."

Mr. Shannon made a place for them in line. Sue in front. There was a wait before Sue's turn so that more crates could be placed on the platform's edge. The children looked beyond Apollo's Chariot at the huge black circle of Mercury as it masked the mighty sun.

"Biff," Steve asked his friend as he was stacking the crates, "why couldn't the Apollo scientists study the sun from Mercury?"

Biff chuckled and it made a funny crackling sound over the young Shannons' radios. "Men will land on Mercury when they grow hides of asbestos, Steve. It's so hot on the sunward side that there are supposed to be lakes and pools of lead there! The other side never sees the sun, so you can imagine how cold it is! Think you two would like to go there?"

"I should say not!" Sue answered for both of them.

When the next piece of cargo was ready to go over, Biff checked the children's safety cords. Then he let Sue push off from the platform with a box in front of her. A few moments later, Steve followed. The boy heard his sister giggle excitedly as they floated across. Searchlight beams were in their eyes but they didn't mind. Steve, too, thought this great fun after being cramped for so long on the freighter. He looked down at the empty space below, but he knew he could not fall and so was not afraid. Reaching the other platform, he and his sister were helped aboard.

"They sure are using young crewmen these days!" joked one of the scientists, a tall man who seemed to be working harder than the others. "Nice work, young folks!"

The scientist was in the act of changing the children's cords over to the returning cable when a slight mishap occurred. One of the crates coming over bumped into him. He laughed as he again got to his feet but his laughter quickly changed to alarm when Sue suddenly pushed off from the platform. She had thought her cable line was secure and that she was ready to make the exciting trip back across the gulf.

"Wait, miss!" the scientist called. "I didn't finish fastening your cable cord!" He reached for Sue but her suit slipped out of the fingers of his bulky space gloves.

Steve froze for an instant in terror at what he had seen. Then without thought of anything else except his sister's danger, he dove right off the platform after Sue, not realizing or caring that his own cable cord was not fastened.

If the scientist had not grabbed for Sue she might have floated safely across to the freighter. But by touching her he had sent her off in a direction beneath it.

Over his radio, Steve heard her screaming for help and saw her flinging her arms and legs about like a drowning swimmer. Steve was moving faster than she and presently caught up with her.

"What are we going to do, Steve?" she cried, holding tightly to him. "We can't stop! And it's so dark out here!"

Steve knew that unless someone came to their aid they would drift on and on since there was no air to slow them down. But he didn't tell Sue this.

He remembered, as he had at times before, that a spaceman must keep his head in an emergency. He spoke comforting words to Sue, telling her to try to be calm, that help would be coming.

He saw her flinging her arms and legs about like a drowning swimmer
*He saw her flinging her arms and legs about like a drowning
swimmer*

Even as he told her this a spear of light hit them and a voice broke in on their radio: “Steve! Sue! Stop struggling! I’m on my way to you!”

“Biff!” Steve exclaimed, and the dread in his heart suddenly lifted. He looked over his shoulder and saw their big friend approaching, guided by the light that had been flashed on them from the freighter.

There was a little plume of flame trailing behind him. In a few minutes he had caught up with them. Sue was so glad to see him she grabbed the big spaceman and her helmet bumped against his in an attempted kiss.

“Oh, I’m so glad to see you, Biff!” she sobbed. “I was so *awfully* scared!”

“You’re all right now,” Biff said gently. “Both of you hold on to me and we’ll go back.”

Steve took Biff’s left arm and Sue firmly grasped one of Steve’s. Biff carried a type of hand rocket, called a “pusher,” that he had used to shoot himself along toward them. By pointing the rocket in the opposite direction from which he wanted to go, the “pusher” pushed him in the manner of the rocket tubes on the freighter.

Biff pointed the pusher away from the freighter. Steve saw a burst of fire beside them and the three of them sped off toward the big ship. As Sue reached the platform, her father was there to help her aboard. She could see in his eyes the fear he had felt for them.

Steve was surprised to have the crew greet him warmly with pats on the back. The boy turned to his father. “Why are they calling me a hero?” he asked. “It was Biff who saved us!”

“Not taking credit away from Biff, any good spaceman would have done what he did,” said Mr. Shannon. “But few would have attempted your trick of jumping into space after your sister with no way of getting back. Right, Biff?”

Biff nodded his plastic helmet. “It wasn’t the smartest thing you could have done, Steve, but it showed your bravery. Courage counts just as much as ability in a spaceman. Don’t ever forget that, son.”

Steve, who wanted to be a spaceman some day, would not forget it.

THE FLYING MOUNTAIN

Steve and Sue were playing a game as the freighter headed through space toward Earth. It was fun trying to see who could build the higher tower of sticks. The young Shannons were in extra good spirits. Before long they would be seeing Mom and their home in Arkansas, after being in space for so many months.

Steve carefully placed the last stick on his tower which was almost as high as he could reach.

“*I won, Sis!*” he exclaimed. But as he drew his hand away, it brushed against the tower, causing the sticks to drift off in all directions.

“*I won!*” Sue cried gleefully, “*Yours broke up!*”

Steve made a face and began picking the sticks out of the air before they floated too far. It was lack of weight in space that made it possible to play such a game. The twins would have hung in the air like the sticks if their shoe soles were not held to the floor by magnetism.

“*I’ll beat you next time,*” Steve boasted.

Before they could start again, their father came into the room. “It looks as though we may not be getting home as quickly as we had expected, kids. Captain Furman has received an S. O. S. from a passenger rocket that’s down on the asteroid, Sierra.” The twins knew an asteroid to be one of the thousands of tiny planets in the Solar System.

“Are we going to her aid?” Steve asked.

“It depends on whether we have enough fuel or not,” his father replied. “Even atomic fuel runs out sometime, you know. Captain Furman is talking with his officers now. It’ll be a shame if we can’t help the *Pole Star*—as much as I want to see Mom.”

It was just like his unselfish dad to say that, Steve thought. He felt the same way about it. And he didn’t doubt that tender-hearted Sue was of the same mind.

Mr. Shannon started out of the room again. “I’m going to see what they are going to do.”

Steve and Sue went back to their game. But somehow it wasn’t as much fun now. People were in trouble and trouble in space was often a frightening thing.

It seemed like a long time before their father came back. He walked in so fast that his magnetic shoes sounded like tiny hammers. “Kids,” he said, “the captain wants to see you.”

“*Us?*” Steve asked.

“That’s right. Come quickly.”

They went out, leaving some sticks in mid-air and others drifting off. The young Shannons walked shyly into the captain’s room where all the officers stood. Steve felt out of place among the neatly uniformed spacemen.

Mr. Shannon was in charge of cargo which the freighter dropped off at different ports in space, for he was an official of the American Space Supply Company. But he had nothing to do with the running of the ship.

“Young folks,” said the tall captain, who had a blond mustache, “we want you to help us solve a problem.”

“Sir?” Steve asked, puzzled.

“Here it is,” went on the chief, in his booming voice. “If we go on past Earth to Sierra to help the *Pole Star*, it’ll leave us with only a fifty-fifty chance of having enough fuel to reach Earth. But the *Pole Star* is running short of supplies and their radio just went dead a while ago. It’s too late to get help from Earth. The crew is divided on what we should do, so I decided to call you two in to see what you think.”

A husky crewman spoke out boldly, “What do these kids know about space, Captain? They’re not even old enough to be out here! I say stick to our course and get this crew and ship back safely to Earth!”

The remark angered Steve, but the spaceman looked too big to talk back to. Sue wasn’t so timid.

“You ought to be ashamed of yourself!” she exclaimed. “Thinking of yourself when other people are in trouble!”

Steve and his father were surprised at Sue’s outburst. Captain Furman and the other crewmen smiled.

“I think that solves our problem,” the captain spoke firmly. “If the young lady has courage enough to overlook the risk, the rest of us should have it, too. Thank you, Sue. We move at full rocket thrust to aid the *Pole Star*.”

As the Shannons went out into the corridor, Steve asked his sister, “Wow, Sue, what made you talk back to that big fellow like that?”

“He was so selfish!” Sue answered. “Besides, it made me mad to hear him say we didn’t know anything about space! Why,

we've been over almost all of the Solar System, haven't we, Dad?"

Her father pressed her shoulder. "Of course, honey. I'm proud of you, because I felt the same way."

It took a few days for the freighter to reach the asteroid. The space ship, in going past the Earth, had come close enough for the Earth to be seen as a misty, green light. It made the twins long for home as they saw it.

"Sierra is like a big meteor, isn't it, Dad?" Steve asked, as the three of them looked downward on the flat, egg-shaped rock.

His father nodded. "It's often called, 'The Flying Mountain,' because of the low peaks on it. Sierra is only a mile long and less than that wide."

"I remember from school that it wasn't discovered until 1965," Sue said.

"That's because it's so small and isn't very bright in the sky," her father spoke. "Most of the asteroids are much farther out, between Mars and Jupiter, but a few come in close to Earth like Sierra, Hermes, Eros and some others."

The freighter landed safely in a flat area about two hundred feet from the *Pole Star*. The Shannons could see the damaged space ship jammed against a cliff. Brilliant sunshine reflected upward from bare dark rock, dazzling their eyes. It was over a hundred degrees on Sierra, for there was no atmosphere to check the sun's heat.

"Boy, what a place for a sunburn!" Steve said.

"It's certainly summertime on Sierra!" Sue added.

They watched crewmen in space suits come out of the freighter and begin uncoiling a spool of rope that would stretch between the two ships. Safety lines led from all the men back to the cargo ship.

“There’s almost no gravity at all here,” Mr. Shannon told his son and daughter, “because the asteroid is so small. If the people from the *Pole Star*—providing there are any alive—didn’t have the rope to hang on to, they might float right off Sierra.”

The children asked to go outside. The three suited up and went out, using safety lines, just in case.

The glare was so strong that they had to lower their darkening glasses over the face part of their helmets. The heat was such that they had to switch on the cooling outfits in their suits. It was strange to see the edge of the asteroid so close, just beyond a fringe of dagger-like peaks. It was like being on a big space raft.

The twins tried walking. They were less than feather-light and it was quite a job for them even to keep upright. Sue decided this wouldn’t be a very good place to spend a summer vacation.

Sue’s cooling outfit made her sneeze. She was lifted right off the ground and her father had to pull her down quickly. She and Steve laughed but they had been scared.

“See, it doesn’t take much to send you sky high!” Mr. Shannon joked, speaking over the radio set which all three of them carried in their space suits.

At last the crewmen, who had been moving so carefully over the ground toward the *Pole Star*, reached the ship and fastened the rope to it. The outer door of the *Pole Star* was then opened by someone inside.

“Thank goodness somebody’s alive in there!” Mr. Shannon said thankfully. “I guess the ship just coasted into the rock wall without too much force.”

The freighter crew began helping people out of the passenger rocket. If things weren’t so serious, it would have been funny for Sue and Steve to see them in their balloon-like space suits, bouncing one careful step at a time and holding on for dear life to the rope.

As the party neared the freighter, the twins suddenly saw their father dash toward the ship. In his haste, Mr. Shannon seemed to have forgotten where he was and went scooting upward like a high-jumper.

“Dad!” Sue and Steve cried out together.

Mr. Shannon had to put out his hands and feet at the last minute to keep from crashing into the wall of the freighter. Then he pulled himself down to the ground with his safety line. When they saw that their father was unhurt, Sue and Steve began walking toward the ship with careful steps.

They heard their dad exclaim, “Mr. Ballinger!” as he walked over to one of the men from the *Pole Star*.

“John Shannon!” the man said.

It turned out that Mr. Ballinger was the president of the American Space Supply Company and was Mr. Shannon’s boss. Mr. Ballinger explained that the *Pole Star* was heading for Mars when there was an explosion in the rocket tubes. By landing on Sierra the captain thought there was a better chance of their being found than if they had just kept drifting in space, because all ships knew the path of “The Flying Mountain.” No one had been hurt in the landing and the *Pole Star* had enough fuel to get the freighter back to Earth.

“I don’t know whether I should fire you people or not for risking my good freighter just to save an old codger like me!” the friendly Mr. Ballinger joked.

“We almost didn’t,” Steve’s dad reminded him and explained how Sue’s outburst had decided the problem.

“You’ve certainly got some smart ones there, John,” Mr. Ballinger said, smiling at Sue and Steve. “Your son has already proved himself a hero before and now it’s Sue. Yes, sir, I sure wish I had a pair like them!”

But the twins scarcely heard him. They were thinking that, in spite of the great fun they had had on all their space adventures, how wonderful it was going to be to see Mom again and set foot on the grandest planet in all the Solar System—Earth!

CASTAWAYS IN SPACE

The two of them had just shoved the supply case against the chute door when the space ship gave an unexpected burst of rocket power, knocking Skip Miller against the release lever. The escape door shot up and a big square of black space opened before the boys' eyes.

Glen Hartzell was stunned to see his friend go spinning down the incline and follow the supply case toward the open door. Automatically, Glen stretched his lean body full length trying to grasp Skip's space suit before he escaped. But his momentum sent him skidding down the slope and the next thing he knew he was out in space, too.

A week ago Glen wouldn't have cared whether he faced death or not. He and Skip had just made the scorned fraternity of "Wockies," washed-out cadets. His failure had cut like a knife. He had wanted to pilot ships through the depths of space more than anything else in the world. Instead, he and Skip had been assigned to ground crews on Mars. That, at least, had been their destination until Skip's elbow unexpectedly made them castaways in space.

Glen's first thought was directed to Skip, who looked like a toy balloon as he drifted through the vacuum. "Skip!" he called over his space suit radio. "Do you hear me, Skip?"

"Yeah, Glen," Skip's reply was scarcely more than a squeak.

Glen looked down and ahead where a massive rock some ten miles in diameter hung in the starry emptiness. "If we can make Phobos, we may be all right."

"We're done for," Skip groaned.

"We're not!" Glen's wits were sharpened by the danger. "We're lined up pretty well with Phobos. She doesn't have any gravity to speak of and we may be able to land on her."

"We won't make Phobos," Skip argued. "We'll either run into Mars' gravity field and crash on its surface or float through space until our air runs out."

“Shut up, Skip!” Glen’s tone was sharp. “Listen to me. See if you can pick up a little speed by kicking out behind with your feet and hands. If you can catch up with the supply case, hang on.”

Skip didn’t reply but Glen saw his arms and legs begin to move. Glen worked his own. It was a grueling effort, but Glen found that he was able to increase his speed much in the manner of a space ship’s thrust. By the time Glen touched Skip’s suit, both of them were sucking freely of their precious oxygen.

“What’s the idea?” Skip asked as his gloved hand clutched the strap of the supply case and Glen held onto him.

“We’ll use the case as a buffer to break our fall,” Glen explained. “Remember, it’s covered with foam rubber so that it won’t shatter when it hits.”

The two had been preparing to drop the emergency supply case on Mars at the time of the accident. Glen was glad now that they’d donned space suits.

Glen saw that the space ship was now only a tiny needle against the red disk of Mars. He and Skip had probably not even been missed by the crew. When they did find out, they wouldn’t know where to look for the boys.

Phobos was a jagged, frightening giant below, but Glen held nothing but love for it. Their speed had increased slightly, but it did not look as if they would hit the ground dangerously fast.

Glen felt Skip’s muscles tense for the landing.

“Steady, fellow!” Glen breathed.

He felt a rough jar in the pit of his stomach. Glen bounced off Skip's back as though he were rubber. He spread out his arms to ease his fall, then was surprised to find his body settling down to rest as lightly as a leaf.

Glen felt a prickly chill in his cheeks. "We've got practically no weight at all!" he breathed. Skip had almost drifted off into space again, but Glen grabbed his leg and pulled him back.

"It's a crazy world, isn't it?" Skip searched the rocky landscape that sloped down from them on both sides. It was weird to be on a globe so tiny you were conscious of its roundness.

Glenn nodded. "We've *really* got to keep both feet on the ground!"

"What if they don't find us, Glen?" Skip asked. "What then?"

"I don't know, Skip," Glen sighed. "Let's see what's in the supply case."

Glen was able to crawl better than he could walk over to the supply case. Skip followed. Glen pressed a button on the case and the top sprang up.

"Whew! There's not much that isn't included!" Skip said. "Spare oxygen tanks, a bubble tent outfit, food capsules, water maker, first-aid, flares, books, electronic stove-heater."

"Let's put up the bubble tent," Glen said. "It'll help save our heat."

As he had learned in cadet training, he removed a cylinder from the outfit and pulled a lever. It popped open and a plastic bubble began growing out of it. The bubble, which was slightly oblong and transparent, enlarged to about seven feet, then detached itself from the cartridge airtight. After it had

hardened for several minutes, Glen took an electric saw from the kit and cut a small door in the side. They made hinges from self-sealing plastic strips.

They used the foam rubber from around the case for flooring, then put the supplies inside the bubble. They turned on the heater and then turned off the heat units in their suits.

“How long do you figure our supplies can last, Glen?” Skip asked.

“They’re supposed to last two people ten days,” Glen replied. “Don’t you remember that question on our exam?”

“Don’t remind me!” Skip said. “I’m tired of hearing about the cadet corps.”

“I know,” Glen said bitterly.

“How could they flunk us on one question?” Skip asked. “It wasn’t fair.”

“I agree with you,” Glen answered, “but the fact remains that we’ve got to take it.”

Skip chuckled grimly. “You talk as if we have a lifetime ahead of us. We don’t know whether we’ve got *tomorrow*.”

“Which reminds me, we’d better send off some flares to let somebody know where we are.” Glen picked up some of the rocket flares and “drifted” out of the bubble tent. He set up a flare on its tripod legs, pointed it at Mars’ ruddy face and pulled on the release catch. But it wouldn’t move.

“It’s jammed!” Glen tried another rocket and got the same result. Then another, and another. They were all useless, all the catches warped, possibly from having been kept too near a heat source in the ship.

“How are we going to signal Mars now?” Skip asked.

“Anything we toss out will be drawn to the planet by its gravitation,” Glen was thinking out loud.

“How about throwing out some of the extra supplies we have?” Skip proposed. “We can attach a note.”

“It’s a million-to-one shot they’d be found. Don’t you realize that only a fraction of Mars has colonists? No, I’m afraid we’d wait here until doomsday if we had to count on that.”

“But what else is there to do?” Skip’s eyes were round with dread.

Glen fought down his own sudden despair. “It looks as though we’ll have to get to Mars on our own, Skip.”

“Now you’re crazy! We’d be smashed to pieces!”

“Not the way I’m thinking.” A plan was forming in Glen’s mind, as he scrambled into the bubble tent and came out with one of their engineering books. Skip watched in amazement as Glen began working math problems in the dirt with a piece of stone.

After a while, Glen said, “I think it’ll work, Skip. Want to take a chance?”

“I’d like to know what it is first.”

“We can use the chute from the supply case and attach it to the bubble,” Glen explained. “Then we can ride in the bubble to Mars.”

“It sounds fantastic!”

“I’ve figured it every way I know,” Glen said. “At least, it’s better than sitting here and hoping we’ll accidentally be

found. Shall we try it?"

Skip shrugged. "If it's our only chance. But I hope you've figured all the angles!"

"We'd better get started right away," Glen advised. "We may need all our air tanks if we have to do some walking when we land."

They set to work fastening the lines of the chute around and under the plastic bubble. They used more of the plastic strips to secure the lines tightly. The chute was still folded, since the vacuum on Phobos had failed to trip the automatic release. The boys decided to carry only a minimum of supplies to make their weight as light as possible. When they were ready to go, they climbed into the bubble and Glen shoved them off with one foot outside the door. Then he closed the door.

"How long will it take us to get there?" Skip asked.

"I've figured on about a hundred hours," Glen answered. "That should put us close to Mars City, figuring on Mars' rotation. But if it doesn't, we should be able to reach some research settlement."

They moved slowly at first. Glen hoped for only enough speed to carry them into Mars' gravity pull. As they approached the red planet, their speed would increase and that worried Glen. If they whacked into Mars' air blanket too fast, the chute might be ripped from the bubble.

To while away the many hours, the boys dozed and took turns reading the one novel they had brought along. Their legs soon became cramped and sore, and they would have given a good deal to have been able to stretch or walk about.

On the third day, the boys could see the canals criss-crossing in a tangled network on the ruddy globe of Mars. On the

fourth day, just as Glen had figured, the glassite domes of Mars City began to show through the violet haze of atmosphere. Glen wondered how fast they were going. There was no way to tell because their insulation kept them from feeling the rush of air.

“Cross your fingers, Skip,” Glen warned. “Our chute should open in the next few minutes.”

The seconds appeared to last hours as they waited, and Glen suffered a torture of suspense. What if the chute did not open? In that case, they would end up in fragments on Mars’ red earth. Or what if the force of the air should jerk the chute off the bubble?

Even as Glen worried, he felt a sharp drag and was tumbled over on Skip.

“Look! The chute’s open!” Skip pointed overhead.

Some minutes later, the red ground rushed up at them like an enfolding blanket. Their final problem faced them now. If they landed safely, they would have conquered space in a way no spaceman had ever done before.

Glen’s muscles drew tight and his heart thumped rapidly as the last few hundred feet melted away. He wanted to close his eyes during these final seconds but he forced himself to watch the rising ground so that he could brace himself at the moment of contact. He was glad they had the foam rubber cushion beneath them.

Glen counted off the last few feet. “A hundred—fifty—twenty—!”

As they struck, Glen was thrown against the ceiling of the bubble. Plastic clattered against plastic as the bubble rolled over on the ground many times before stopping. Glen

straightened himself out. He was shaken up but he was unhurt. He looked across at Skip.

“We made it,” Glen said, but his voice shook, as if he wasn’t yet able to believe it. He tore off the door seals, shoved out the door. Then they got out and stretched their legs. Looking at the domes of Mars City in the distance, Glen asked, “Ready to start walking?”

“After being cooped up like a chicken, I’m willing to walk all over Mars. Let’s go.” Skip’s natural good humor had returned.

Less than an hour later, an astonished captain at the Mars City spaceport heard the boys’ strange story.

“Your courage and ingenuity have been incredible!” the captain said when they had finished. “I can’t believe that you two are Wockies. If you weren’t flunked for reasons of scholarship, I’m sure you’ll be reinstated.”

“We weren’t flunked for that reason, sir,” Skip said.

“For what reason then?” the captain asked.

Glen smiled wryly as he replied, “We were flunked, sir, because we failed the test to determine whether we could bear up in an emergency or not!”

THE BIG SPACE BALL GAME

It was an unusual setting for baseball. Instead of a blue sky, there was the darkness of space and the brilliance of stars overhead. The light of Earth flooded the scene, and surrounding the oversized diamond were the walls of Copernicus crater, over fifty miles across.

On the mound, Bill Cherry was pitching practice balls to his catcher, Ollie Taylor. Only underhand throwing was allowed in baseball on the Moon, for the ball was exceedingly fast in the light gravity and airlessness. Bill, in snug-fitting space gear, was standing farther than the regulation ninety feet from the plate. This was because of the pitcher's advantage over the batter in Lunar ball.

Bill wound up and threw. The ball shot like a bullet into Ollie's double-padded mitt.

"Thatta boy, Bill!" Ollie's voice came over Bill's space suit radio. "If you're this sharp when we meet the Comets this afternoon, we're bound to win our first championship!"

"That's enough practice, fellows!" Coach Lippert called, coming out of the dugout. "No use giving our best before the game!"

It was the *big* game for the team from Plato, which was tied with the league leaders in this last game of the season. Plato was the farthest colony on the Moon and was named for the big crater in which it was located. Copernicus colony, the baseball leader, had won the championship every year since

the school league had been formed. As a prize, the champions were always given a free rocket trip to Earth.

The Plato Rocketeers were homesick for their mother planet. One of them, little Pete Irby, had never set foot there. He had been born on the Moon.

“It must be wonderful to go around without even a space suit on like they do on Earth!” Pete said wistfully to Bill.

“Don’t worry, Pete,” Bill said confidently. “I have a feeling that this is our year and that we’re all going to Earth.”

“I sure hope you’re right,” Pete replied, with great feeling. “I can’t wait to see the great national parks and rivers and all the other wonderful things there!”

At game time the grandstand was filled and some people were standing. It was the largest crowd ever to see a ball game on the Moon. Much of the crowd was made up of hopeful parents from the Plato colony who had come seven hundred miles by rocket plane to see their boys play.

The champion Copernicus Comets ran out onto the field in big bouncing strides. For on the Moon a person was capable of jumping and running in great leaps because of the low gravity, only one-sixth of Earth’s.

The Plato Rocketeers were the visiting team would bat first. When the outfielders had taken their positions, they were tiny forms far out in the distance with nothing but gray wilderness behind them for a backstop. There were eleven men in Moon baseball because of this greater outfield range. Two extra fielders played behind the shortstop and second baseman and were called “short fielders.”

Bill noticed a wheel chair below the railing of the grandstand. His mother and dad had brought his crippled younger brother Skippy to see the game! Bill had known his parents were going to rocket over from Plato in time for the game, but they had not said Skippy would come along. Bill gave Skippy a wave and his little brother waved back.

The lead-off batter for the Rocketeers walked to the plate swinging a bat, padded to keep it from hitting the ball too hard and far. The Comets' ace pitcher, Carl Cadman, hurled three fast strikes over almost before the batter had gotten a good foothold. Carl struck out the next batter as well and then forced little Pete Irby to loft a high infield fly for the third out.

"Let's get 'em, Bill!" Ollie said excitedly as the Rocketeers took the field.

"We'll sure try," Bill promised his catcher.

Bill took the mound. With his space gloves he massaged rosin into the baseball. After getting the signal from Ollie, Bill swung his arm down and around. The batter swung sharply, driving the ball toward third. The baseman made a dive for the ball, but he missed it. His body seemed to glide in slow motion in the light gravity.

Bill walked the next batter, making two on and none out. Jack Brenna, the Comets' heaviest hitter, was up. Bill got two strikes on him and then Jack took a better toehold. As Bill saw bat and ball connect solidly on the next pitch, his heart fell.

The ball arched like a comet across the dark sky. The left fielder took a dozen giant steps after the ball but then gave up. The ball seemed to be going for miles. It was a home run.

The Comets did not score anymore that inning, but the damage seemed to be already done. The champions were leading 3-0.

Bill was first up for the Rocketeers. As he went to the plate swinging a bat, his eye caught Skippy's wheel chair, and he saw his game little brother waving encouragement. It made him want to try even harder to put his team out in front. Bill knew he would have to do it with his hitting, since he had failed as a pitcher.

But Bill got no closer to a hit than a long foul into the stands. Then he struck out. The two teammates following him also failed to get on base.

The game moved along with no more scoring for the next five innings. It was still 3-0.

In the last of the seventh inning the Plato Rocketeers had more trouble. The first Comet batter topped the ball slowly to Pete at shortstop, who tried too hard to make the play. The ball rolled between his legs and the runner went all the way to second.

Pete was so busy grumbling about his last error that he muffed the next play too. He jumped ten feet into the air trying to reach the high, bounding ball, but he misjudged it and it went on past. The runner on second loped down to third in long strides. Bill called time in order to give Pete a chance to settle down.

"We'll never win this game!" Pete groaned. "Why don't you fellows say I'm not any good—like you're thinking!"

"Stop talking like that!" Bill told him over his suit radio. "You're thinking too much about going to Earth, Pete. You're trying *too* hard!"

"I'll try to do better," Pete promised.

The next batter drove a high fly to center, sending the runner in from third and making the score 4-0. Bill walked the player

following, but then he was lucky enough to strike out the hard-hitting Jack Brenna.

The next Comet drove a hard liner to Pete. Pete scrambled for the ball, but once again he muffed it and it went on into the outfield. The shortfielder recovered it quickly but threw wide to third, sending the runner into the plate with the Comets' fifth run.

When Bill looked at Pete, the little fellow had thrown his big fielder's glove into the air and was beginning to walk brokenheartedly off the diamond.

"Pete!" Bill heard Coach Lippert call sharply over his suit radio as he ran onto the field. "Get back to your position, son! I don't like a quitter on my team."

Players and coach huddled in the infield. They looked like a gathering of teddy bears in the space suits. Bill could see tears of bitterness inside Pete's plastic helmet.

"Fellows," the coach said, "what did we come seven hundred miles across the Moon to do?"

"To play ball," someone answered, "—and win."

"All right, then. What do you say we start doing it? Pete, I'm going to send you to left field where you used to play. Dan, in left field, will take your place at shortstop."

The Rocketeers retired the side without further scoring. Then as though to prove that the pep talk had helped, the team came up with three big runs of their own!

Pitching with all his skill, Bill was able to set down the Comets in order. It was now the top half of the ninth inning, the last chance for Plato to win the game. They were still

behind 5-3, and the two-run lead seemed as big as the Milky Way to Bill.

Dan started it off by walloping a double down the right field line. Pete followed with a single that bounced high over the right shortfielder's head. The fielder behind him took the ball and threw quickly to his catcher to keep Dan from scoring off third. But then the Rocketeers' luck seemed to have run out as the next two players struck out.

"It's all up to you, Bill," the coach told his pitcher as Bill selected his favorite bat.

"I'll be swinging, coach," Bill said determinedly.

He looked toward the stands as he walked to the plate. Skippy was waving encouragement again.

"This one is for you, Skippy," Bill murmured, stepping up to the plate.

Carl tried to make him swing on two bad pitches.

"Careful," Bill warned himself. "There are two outs—only one more left to us in the whole game!"

The next ball was just the one Bill wanted. He swung with all his might. He saw the ball rise and lose itself in the white dust of starlight overhead. And then he was off!

Loping past second, he saw the left fielder still bounding like a rabbit after the ball. The coach slowed him up on third base.

"Take it easy, Bill," he said with a happy grin. "That ball is on the dark side of the Moon by now!"

Bill could see the Plato rooters waving their arms wildly in glee, and his radio picked up their loud cheers. As he crossed the plate with the leading run, he waved to Skippy who was

almost out of his wheel chair in his excitement over his big brother's tingling homer.

The score: Plato 6, Copernicus 5. The game was far from over, though. The Comets still had their last turn at bat.

Bill got the first player to raise a high infield pop-up. In the Moon's light gravity it seemed as if the ball would never come down. But it finally did, and Dan took it for the first out.

Bill walked the next Comet, to put one on and with one out. The following batter forced the runner at second, making it two out and giving Bill a much more confident feeling.

But then up to the plate walked Jack Brenna!

Bill swallowed hard and began to sweat inside his space suit. He failed to get the ball over the plate on the first two pitches. Jack swung on the next pitch and sent a hard foul ball behind third base.

"Must be careful," Bill thought. "A homer with the man on base will win the game for the Comets."

Bill came though with a fast ball. Jack met it squarely and as the ball towered high over the infield, Jack felt all quivery and weak. He turned his head regretfully and saw the ball rising high and far against the midnight black of space. He saw little Pete Irby galloping away from the diamond as fast as he could go.

"Get it, Pete!" Bill pleaded under his breath. "Please get it!"

Everybody in the stands was on his feet. This was the play that would decide the game—and the championship.

Pete finally made a last second leap that brought him twenty feet off the ground. Bill could hardly see ball and glove meet.

But they did meet and Pete had done the impossible!

They had won!

The Rocketeers whirled the coach and Bill easily up on their shoulders, because of the light Lunar weight. Then they began parading happily around the diamond to celebrate their very first championship. When Pete had made the long trip in from the outfield, he too was carried around on his teammates' shoulders.

“That was a swell catch, Pete!” Bill called out to the little fellow. “You sure saved the day for us!”

“You know what, Bill?” Pete said, grinning. “If I’d missed that ball I would have kept on running—yep, right into space! I was determined to make that trip to Earth one way or another!”

PAPER TREASURE FOR MARS

Hugh Davone and Link Malloy sat at the wall desk of the space ship compartment poring over their albums of interplanetary postage stamps. The atom-powered *Princess of Mars*, cargo and passenger liner, was only a few hours out on its Earth-to-Mars run.

“It makes me nervous thinking of the thousands of dollars’ worth of stamps we’re carrying in the wall safe,” Link said. “I don’t think I’m going to enjoy this trip.”

“Take it easy, Link,” Hugh replied, with a lighthearted grin. “There are Space Guardsmen aboard ship to protect us.”

The fellows were on their annual vacation from the Space Cadet Corps. Since cadets in training could ride any space ship free, the two were escorting a valuable shipment of Mr. Davone’s interplanetary stamps to another dealer opening up shop in Mars City.

“I’m worrying about that white-haired old character your dad said asked suspicious questions at his shop the other day,” Link said. “Seems funny that he is making the trip to Mars the same time we are.”

“Probably only a coincidence,” Hugh answered. “There’s only one flight a month to Mars, you know.”

“There are unscrupulous dealers who would give anything to lay their hands on our shipment,” Link went on. “This deal

means an awful lot to your dad's stamp business, Hugh. If we should bungle the job, he certainly would lose a lot."

"Sure he would," Hugh agreed, then he added, "but we aren't going to bungle it."

This seemed to satisfy Link and a smile of confidence deepened the corners of his broad, friendly mouth.

Hugh picked up a stamp with his tongs. "I came across this duplicate from the Venus pictorial issue. It's the six-dollar blue of the Valley of Mists. Have you got it?"

Link leaned over. "No! What have you been doing, Hugh, holding out on me? How about some of my 2027 Lunar commems in trade?"

They worked out an exchange. The Lunar stamps were curious specimens, imperforate and circular. They depicted the Lunar hemisphere which faces Earth. The single-stamp issue had been distributed on the fiftieth anniversary of man's first landing on the moon and was much in demand.

Suddenly there was a knock on the outer door of the compartment.

Hugh got up and went to the door. As he walked, his magnetic-sole shoes rasped against the metallic floor like a knife being honed. He opened the door.

A man with the face and build of a leprechaun looked at Hugh. His pale but alert blue eyes peered steadily into Hugh's. Hugh also began to wonder why this customer at Davone's Philatelic Shop should be making the voyage to Mars with them.

"Yes, sir?" Hugh asked.

“May I come in?” the man asked. “My name is Oscar Benasco.”

Hugh hesitated, thinking about the valuable cargo, then he replied reluctantly, “Yes.”

“Your father certainly has a fine shop, Hugh Davone,” the elderly man said brightly as he entered. “However, I was disappointed to find out that he had packed up some of his choicest space items and was selling them to Mr. Elfs, a dealer on Mars.”

“You know quite a lot, Mr. Benasco,” Link remarked coolly.

“Yes, I pride myself on my shrewdness,” Mr. Benasco replied in a modest manner. His roving eyes came to rest on the boys’ albums. “I see you two have collections of your own.”

“Nothing very valuable,” Hugh replied. “But we enjoy our stamps just the same.”

“Ah, yes,” Benasco said. His eyes brightened with eagerness and he placed the tips of his outspread fingers together. “Speaking of valuable items—those you are taking to Mars—no doubt you keep them in your compartment safe. I wonder if you might show them to me?”

“I’m sorry, Mr. Benasco,” Hugh said, “but I promised my dad I wouldn’t take the stamps out to show anyone until they were safely in the hands of Mr. Elfs on Mars.”

Benasco looked completely crestfallen. His rounded shoulders slumped and the most pained expression covered his face. “Surely just a look—” he pleaded.

“If you are going to Mars, as you must be,” Hugh went on, “you’ll be able to see them all in Mr. Elfs’s shop, and you can talk to him about any stamps you might want to buy.”

“Then that’s your final answer?” Mr. Benasco asked, his disappointment giving way to annoyance.

“I’m afraid it must be,” Hugh told him. “I’m sorry.”

“You’ve disappointed me sorely, young man,” Mr. Benasco retorted. “Good day to you.”

He turned briskly and clattered out the door. As he left, Hugh caught sight of the handle of an old type miniature rocket pistol protruding from his coat pocket.

“Did you see that pistol?” Link asked, in surprise. “It’s a wonder he didn’t hold us up for the stamps right here and now! But I guess he was afraid to risk it.”

“For a moment I almost felt sorry for him and was about to give in,” Hugh admitted. “Now I’m glad I didn’t.”

In the days that followed, Hugh and Link saw little of Mr. Benasco except in the dining room.

One morning, near the end of the flight, Hugh and Link were standing in front of their compartment port looking out. The orange-red globe of Mars was so dominant that it seemed to press back the surrounding stars and nebulae to near obscurity.

“Only a few more days and our shipment will be safely in the hands of Mr. Elfs in Mars City,” Hugh said. “Then Mr. Benasco will be Mr. Elfs’s worry.”

“That will be just dandy as far as I’m concerned,” Link replied earnestly.

By this year of 2031, space mail service had increased to such proportions that it had opened up a brand new field of stamp specialization for the philatelist. It was for this reason that Mr.

Elfs was attempting a stamp hobby business in Mars City. Mr. Davone's portfolios of both low and high values was to provide him with the bulk of his opening merchandise.

Even the most remote colonies of the Solar System, including the farthest on Triton, Neptune, had their own postage by now. The lone Triton bi-color, picturing Valhalla Peak, tallest mountain yet discovered in the System, was one of the most wanted by collectors.

Suddenly the chimes for lunch were heard over the compartment intercom.

Entering the dining room, Hugh and Link saw Benasco in his usual place at the end of the table near the door. They took their seats and Link smiled at his plate. "Cubed beef, Hugh."

Hugh grinned. "You can't say they don't aim to please on the *Princess of Mars*."

But the fellows did not get to finish their cubed roast, nor did anyone else at the table.

A shock hit the ship like an unheralded thunderbolt. Hugh had the crazy feeling of being in a nightmare. After the deafening report, he felt his lap belt snap, and then he was hoisted out of his chair as though in the vortex of a whirlwind. The table tore loose from the floor fittings. Hugh bounced into a coffee urn and it nearly stunned him. Groans of distress from those around him filled his ears.

"What has happened?" Hugh thought dazedly.

The ship's disaster siren pealed along the corridors of the *Princess of Mars*. Medical men with stretchers came running and officers snapped out brisk orders. Hugh groped anxiously through the melee for Link. He struggled over twisted chair tubing and found his friend helping those who were hurt.

“We’ve got work to do,” Link told him.

Hugh rolled up his sleeves. He was still giddy. “I’m ready,” he said.

It was reported later that there were no fatalities, but there were enough injured persons to keep the infirmary staff busy for awhile.

Hugh and Link, working side by side with the medical men, had not seen anything of Benasco since the accident. The ship’s engineers revealed that a meteorite had caused the disaster. It had struck fairly close to the compartment occupied by Hugh and Link. Hugh shuddered to think what it would have been like to have been tossed about in their room like a pea in a whistle. Such would have been his and Link’s fate had the strike occurred half an hour earlier.

The cadets had not yet had the opportunity to check their quarters for damage. When the physician in charge finally freed them with thanks for their help, Hugh thought about the stamps for the first time since the unnerving incident.

“Link,” he said urgently, “we’ve got to get back and check on those stamps! This has been a perfect set up for Benasco and his scheme!”

“Right behind you,” Link said as they hurried from the infirmary.

Along the way, the two found warped walls and doors that had been flung open. Luckily all the occupants in the worst-hit area had been in the dining room at the terrible moment, or there surely would have been fatalities.

Reaching their compartment, Hugh and Link found that the door had been forced open by the explosion.

Hugh hurried over to the wall safe. He felt a chill of dread race through him. The vault door also was open and the chamber was empty.

“They’re gone!” Hugh said hoarsely. “All of Dad’s stamps are gone!”

Hugh slumped remorsefully on his cot, taut fingers combing through his hair. “Dad wanted to have the stamps insured,” he said bitterly, “but I was trying to save him money. The insurance fee was enormous, and on top of that he would have had to pay the fare both to and from Mars for the agents who would carry the shipment. How I wish they had done it now!”

“If Benasco has the stamps, we may still be able to recover them,” Link said. “Let’s go see him.”

Hugh got up, his face set, his palm shaped into a fist. “If Benasco *is* the one, I’ll personally—oh, never mind! Come on!”

They moved down corridor “E,” which was away from the center of the damage. This was the hall where they knew Benasco’s room was located. Scarcely anybody was in the section at present. Those who resided in the nearby rooms were either helping out in the emergency, or they were idly watching the beginning of repairs. The outside meteor bumper and the inner buffer bulkheads had kept the destruction to a minimum. By automatically sealing themselves off from the rest of the ship at the moment of impact, the protective bulkheads had kept the ship from being decompressed.

Hugh and Link found their suspect’s door closed. Hugh walked up to it and tried the knob.

The door opened under Hugh’s push, but the compartment was vacant.

“He’s gone,” Link said.

“He must be somewhere close by,” Hugh returned impatiently. “We haven’t passed him on the way, so he must be farther down the corridor.”

“Maybe he’s looking for a place to hide the portfolios until we land,” Link suggested. “He knows we’ll suspect him of taking them.”

Hugh nodded. “Let’s go.”

As the two moved ahead down the quiet passageway, Link spoke in a tense voice, “Do you think we’re right trying to tackle that little guy alone? We’re each bigger than he is, but he’s got a pistol and we haven’t.”

“We’ll be careful,” Hugh promised.

There were a number of storerooms lining the corridor. The cadets checked one after another. The rooms were shrouded in tomblike silence and full of dark hiding places. But the search revealed no sign of Benasco or the missing portfolios.

“He seems to have disappeared right into the air,” Link said discouragingly. “Hugh, I hate to say it, but something tells me we aren’t going to see either Benasco or those stamps again.”

They were approaching the door of an outer-ship repair room. Hugh knew that a ladder in this room led directly up to the outside hull of the ship.

“You’re probably thinking along the same lines that I am, Link,” Hugh replied gravely. “It may be farfetched, but a person as shrewd as Mr. Benasco makes out to be might have cooked up a pretty clever plan. He may have had a portable transmitter hidden somewhere so that he could contact another party outside the ship.”

“I get it!” Link said. “He might have radioed this crony in a space taxi to meet him on the outer skin. Then they could both take off with the loot and either land on Mars or on one of the moons!”

As Link spoke, Hugh was staring through the plastic window of the room. A wall hid much of the interior from view. Suddenly he saw the very man they were seeking cross the room and disappear beyond the corner of the concealing wall.

Link caught a glimpse of him too. “Hey!” he burst out. “Wasn’t that *him*?”

“It sure was,” Hugh replied, feeling better now. “He probably just entered the room from another door along the next side corridor.”

Hugh gently turned the knob and the door swung open soundlessly. “We’ll slip in softly,” he whispered. “Then we can try to take him by surprise around the corner up ahead. We’ll have to watch our step because he’s probably desperate and will have his pistol ready for use.”

“He deserves to get twenty years for a theft like this,” Link whispered fiercely. “How did he ever expect to get away with it?”

“He *won’t* get away with it,” Hugh whispered confidently. “Right now he’s probably getting into a space suit so he can pop through the outer hatch and join his confederate outside.”

They had reached the corner on tiptoe. Hugh, in the lead, peered carefully around the corner. He gaped in surprise at what he saw:

Benasco was seated on the floor like a child with a new scrapbook, and he was chattering away ecstatically to himself!

“My, oh, my, what a splendid group!” he was saying. “There’s a *tete beche* pair of old 1989 Space Stations I’ve always wanted! And look at this one—a full sheet of Europa triangles! Oscar Benasco will have the most splendid collection of space stamps in all the Solar System!”

Benasco was seated on the floor like a child with a new scrapbook
*Benasco was seated on the floor like a child with a new
scrapbook*

Hugh came out of hiding, followed by Link. “The jig’s up, Mr. Benasco,” Hugh said. “How about returning our property?”

The old man was so preoccupied that he did not notice Hugh and Link immediately. “Dear, dear,” he purred, “what a beautiful set of Einstein memorial surcharges! I wonder if young Davone will break up the set? I have some of them.”

“He’s just a queer old guy,” Link remarked as the two of them strode up to him.

“Oh, hello, boys,” Mr. Benasco greeted them casually. “I was hoping I’d found a place where I wouldn’t be disturbed for awhile. I knew you’d come by my room. I hope you don’t mind the liberty I’ve taken with your stamps. But I did *ask* to see them and you refused, you know?”

Hugh took from him the portfolio he was holding. “How many stamps have you removed from here?” he demanded.

The man’s snowy brows went up in surprised indignation. “Removed?” he shrilled, his face coloring. “I’ve never been accused of stealing in my life, sir! I merely borrowed your collection to see if it has the items I need. When the explosion blew open your safe, it was simply a temptation I could not resist.”

“Those rare items you need cost money,” Hugh reminded him. “Lots of it.”

“Young man,” Mr. Benasco grunted, “you do not need to tell me of the value of postage stamps. I’m well acquainted with Scott’s catalogue. I have every intention of paying for my merchandise.” He pulled out such a wad of bills that Link gasped. “You see, I *can* pay.”

“What about that rocket pistol you’re carrying in your pocket, Mr. Benasco?” Link asked suspiciously. “Do you always go around armed?”

“Oh, this?” the old man asked, taking out the rusted miniature model. “This is nothing but an old relic of mine when I was a space hand myself on a freighter. I carry it with me sometimes, because it gives me a feeling of confidence.”

Hugh chuckled as a vast feeling of relief came over him. “You certainly had us fooled, Mr. Benasco. We thought surely you were a stamp thief out to steal our valuable stamps.”

“Perhaps my methods have puzzled you somewhat,” Mr. Benasco declared. “But I had to see those rarities before you got rid of them. Somebody might have bought them before I could. Perhaps Mr. Elfs would have held them out for his own collection. You must sell them to me, young man! I believe I should die if I could not get them! Stamps represent the only pleasure that is left to me.”

“All right, Mr. Benasco, since it means so much to you,” Hugh agreed, smiling. “Being a hobbyist myself, I know what a hold stamps can have on a person. We’ll take the portfolios back to our compartment and discuss the stamps you want. But if my father or Mr. Elfs complains about this, you’ll have to share the blame.”

“Gladly, gladly,” was the willing reply. “Do you mind telling us why you’re going to Mars, Mr. Benasco?” Link asked.

“I’ve got a son there working on a canal project. He invited me and my stamp collection to come and stay as long as I liked, since I had lived with my other son so long in the States. I thought it was nice of him.”

As Hugh and Link were leading the way out of the room, the portfolios safely tucked under their arms, Hugh remarked in a whisper to his pal, “Link, I’ll never prejudge another person as long as I live.”

Link stole a look back at Mr. Benasco who was clicking along behind and smiling rapturously. “That calls for a mutual pledge, Hugh,” Link replied soberly, with a shake of his head. “Let’s shake on it.”

And they did.

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