The ScarletLakeMystery A RICK BRANT SCIENCE-ADVENTURE STORY, No. 13 BY JOHN BLAINE

Giant rockets that probe the borders of space provide authentic scientific background for this breath-taking Rick Brant adventure. When Rick, son of a famous scientist, and his pal Scotty go to work at a secret rocket base in Nevada, only two men at the base know their real mission: to track down the saboteur who calls himself "The Earthman."

Thrills and perils during a rocket firing, in an abandoned desert mining town, at a radar-tracking station, and in the instrument chamber of a great rocket lead to the solution of the scarlet lake mystery.

How Rick uncovers the terrifying threat to Project Pegasus, and how this discovery culminates in an unexpected adventure that nearly costs Rick his life when he ventures into dangers no man has ever faced, will keep the reader spellbound to the very last page of this gripping story.

CHAPTER I

Spindrift

Rick Brant released the sling pouch with his left hand and let it drop smoothly to the end of its double string. The sling swung through a complicated arc, out to its full length, down again behind his back, then,

with rapidly increasing speed, over his right shoulder. With a final whip he swung the pouch forward and released the free end of the string at precisely the right moment.

The rock left the pouch at astonishing speed, whistling as it traveled out to sea. Over fifty yards from shore it slapped into the water only a few feet from a bottle that bobbed there as a target.

Don Scott, nicknamed Scotty, nodded his approval. "Okay, David. Another hour of practice and you can go hunting Goliath."

Rick grinned. "I'm getting the hang of it," he admitted. "Let's see you heave another one out there."

The boys had collected a pile of assorted water-polished stones from the beach near Pirate's Field, and brought them to the front of the big Brant house facing the Atlantic Ocean.

Scotty selected one of the larger ones, then checked his sling. The sling was simplicity itself. Two pieces of strong cord were connected to each side of the pouch, made of heavy canvas about four inches long and three wide. One string ended in a loop, which Scotty slipped over his right forefinger. The other string ended in a large knot, which Scotty held between his forefinger and thumb.

Scotty placed the stone in the pouch and gripped it in his left hand, holding the stone in place with thumb and forefinger. He took throwing position, left hand holding the pouch slightly lower than shoulder height while his right held the strings in the center of his body just above his belt buckle.

He released the pouch and put his solid weight into the throw.

Rick's lips pursed in a silent whistle. The stone sang shrilly as it flew up, up, up and far out. Then the trajectory dropped off rapidly and it fell into the sea.

"Bless Bess!" Rick exclaimed. "Three hundred yards if it was an inch!"

Even Scotty looked a little surprised. "I'm going to quit while I'm ahead," he announced.

Barbara Brant, a slim, pretty, blond girl a year Rick's junior, hailed them from the porch, then ran down and joined them. "Hi! What are you two doing?"

"Scotty just won the rock-throwing championship of the East Coast," Rick told her.

Barby looked surprised. "He did? I thought you were waiting for Dr. Gordon?"

"We are, but we decided to try out Scotty's new sling while we were waiting."

The boys, and in fact the entire scientific staff of Spindrift Island, had been in a state of excitement for the past few days because of a telegram received from Dr. John Gordon. Dr. Gordon had been on leave for some time, working on a special project at a rocket experimental station in the West. A few days before, Dr. Hartson Brant, Rick's father and head of the Spindrift Scientific Foundation, a world-famous research organization, had received word from Gordon that Rick and Scotty were needed for a special assignment. Gordon had not given any details in his wire.

This morning Dr. Gordon had phoned that he had been delayed, but would arrive by Navy plane around noontime. Long before noon, Rick and Scotty had moved Rick's four-passenger Sky Wagon off the grassy runway that ran along the seaward side of the island, then settled down to the rock-throwing

session.

Barby said, "I'm pretty good with a slingshot. Let me try."

Scotty handed her the sling. She looked at it dubiously. "What's this? It isn't a slingshot."

"It's a sling," Rick explained. "Not a slingshot. You know-like David and Goliath."

Barby looked her disbelief. "You mean David killed Goliath with two pieces of string and a piece of canvas?"

"He probably used leather thongs and a leather pouch," Scotty said, 'Taut the idea is the same."

"Show her," Rick suggested.

Scotty picked up another of the larger stones and let fly. It dropped short of the earlier throw, but the effect was enough to make Barby's blue eyes open wide.

"Where did you get it?" she asked excitedly.

"Made it. Steve Ames showed me how, and how to throw."

The Spindrift Scientific Foundation, located on Spindrift Island off the New Jersey coast, had been called upon several times to assist the United States Government. In many of the cases, the scientific staff worked under the direction of a topnotch intelligence agent by the name of Steven Ames. Rick and Scotty had taken an active part, in spite of the fact that they were only in their teens.

Working for JANIG, the intelligence group that Steve Ames represented, had taught both boys a great deal about intelligence procedures. This training was a major reason why John Gordon had called on them for assistance.

"Isn't it a funny weapon for Steve Ames to use?" Barby asked. "I mean, after all, spies are supposed to use guns or knives, aren't they?"

Rick grinned. "Sure. They carry knives between their teeth, and they have at least two guns each. Walking arsenals, that is what they are. It takes a strong man to be a spy, on account of all the heavy metal he has to lug around."

Barby ignored him. "Scotty, how come Steve knows about slings?"

"It's a hobby. He and a few others are trying to keep the art of using slings alive," Scotty explained. "It's been nearly forgotten."

"I see." Barby glared at Rick. "If you can't give me a civil answer when I ask a question, I won't ask you any more!"

Rick pointed out, "You'll have to stop for now, anyway, because Scotty and I have to leave on this special job of John Gordon's. Besides, the only reason you're mad is because you can't go."

Barby always felt cheated when Rick and Scotty left the island on some exciting expedition or job. She had vowed to be a boy in her next reincarnation.

Scotty stepped in as peacemaker. "Barby won't mind," he said. "After all, Jan Miller will be here in a few days."

After completion of *The Electronic Mind Reader* case Hartson Brant had persuaded Dr. Walter Miller, an expert who had worked with the Spindrift staff, to join the Foundation permanently. That meant Barby would have Miller's daughter, Jan, as a companion, and Barby was delighted beyond words. The boys were pleased, too. Not only was Jan nice to have around, but her presence-they hoped-would mean less trouble from Barby when they were going off somewhere.

The Millers would move into one of the new cottages behind the orchard, next to Parnell Winston, the staff cyberneticist. Howard Shannon, expert in the natural sciences, and his family would be their other neighbors.

At the moment, however, Shannon and Tony Briotti, the staff archaeologist, were away on an expedition in the SuluSea. Rick and Scotty had been keenly disappointed at being left behind. But Dr. Gordon's offer of a new job had cheered them up considerably.

"Shouldn't Dr. Gordon be arriving?" Barby asked.

Scotty looked at his watch. "He should. But he didn't give any definite time."

Barby poked at a sling stone with one slipper. "Where are you supposed to go?"

"Somewhere inNevada, Dad says," Back replied.

"I thought Dr. Gordon was at White Sands Proving Ground inNew Mexico."

"So didI," Scotty remarked. "The telegram was the first I knew about his working inNevada."

Barby held up her hand. "Listen!"

A plane was in sight! Rick identified it as a prop-driven Navy utility job. No doubt of it, Gordon was arriving!

They watched eagerly as the plane lost altitude, flaps and wheels lowered for the landing. The pilot brought it in over the big radar antenna on the laboratory roof, then dropped onto the runway for a three-point landing opposite the orchard.

The three ran around the wing, bracingthemselves against the prop blast. Rick took the suitcase that was handed to him by Dr. Gordon, who leaped lightly to the ground after his luggage.

The scientist, a short, wiry man with gray hair cropped crew-cut fashion, waved to the pilot, then motioned the young people back as the pilot turned with a blast of his prop and taxied to take-off position in front of the lab.

Because of the racket, no one tried to talk until the plane was nearly out of earshot. Then Barby spoke for all of them as they walked to the house. "We thought you'd never get here!"

Dr. Gordon smiled his pleasure at being home again. He shook hands with the boys. "You've no idea how nice and green this island looks after the Nevada desert. And you've no idea how hungry I am! Is it

too late for lunch?"

Mrs. Brant answered him from the porch. "You have just two minutes to wash up and come to the table, John!"

Hartson Brant appeared behind her. He shook hands with Dr. Gordon as the three young people escorted him to the porch. "Welcome home, John."

"Thanks, Hartson. It's good to be back. Where are the others? Zircon, Weiss, and Winston? I know Tony and Howard are off on an expedition, but I thought the others were home."

"They are. Parnell Winston is probably having lunch at his cottage. Hobart and Julius are inNew York, examining some new equipment for the lab. They'll be back tonight."

Rick was dying to ask questions, but he knew this was not the right time. At lunch, perhaps, they might be given some details.

John Gordon looked at him and grinned. "Here's Rick Brant," he declared, "politely holding his tongue when he's about to pop like a firecracker with questions. Your self-control does you credit, Rick, Want one bit of data to chew on while you're waiting?"

Rick gulped, then returned the grin. "Yes, sir!"

John Gordon lowered his voice to a confidential pitch. "We have an enemy," he stated. "What kind of enemy may be seen clearly in the name by which hegoes." He paused.

"What name?" Rick asked impatiently.

"Homo Terrestrialis."

John Gordon turned and hurried upstairs to his room to wash up for lunch.

Rick stared after him. What in the name of a simple-minded spacefish did that mean?

Homo Terrestrialis.

Man of Earth.

Earthman!

CHAPTER II

Assignment: Rocket Base

Rick turned the phrase over and over in his head, trying to make sense out of it.Earthman? Who wasn't an earthman? The whole human race was composed of them. Of course ordinary people didn't refer to themselves as *homo* terrestrialis, but that's what they were just the same.

Scotty was just as puzzled. "Do you make anything out of it?" he inquired.

Rick shook his head mutely.

As Barby made a beeline for the library, Scotty called after her, "Where are you going? It's lunch-time."

She answered without pausing. "I'm going to consult the dictionary before Dr. Gordon comes down."

"Maybe she has something there," Rick said. "Let's go-"

But the dictionary gave no clues. *Homo* was simply "man," and *terrestrial* was simply "of earth."

"Terrestrial is in here, but not terrestrialis," Barby complained.

"Same thing," Rick said. "Adding 'is' just makes it a Latin form. No, there's nothing strange about the term, except it's strange that anyone should use it."

"We'll find out," Scotty reminded him. "John Gordon was just teasing us. Let's go eat. Maybe he'll break down at lunch."

Rick realized the sense of what Scotty said, but he couldn't stop worrying the problem as his dog, Dismal, might worry a bone. Then, when they all sat down to lunch, his father effectively blocked discussion of it, and their new assignment, by talking with Dr. Gordon about mutual friends out West.

Finally Mrs. Brant came to her son's rescue. "Now, Hartson, and you too, John. You've teased Rick and Scotty enough."

Mr. Brant chuckled. "I wondered how long he was going to put up with our reminiscences before blowing a fuse or something."

Rick grinned sheepishly. He should have guessed that the two scientists were deliberately keeping the conversation off the main subject just as a joke.

John Gordon took a generous helping of salad. "All right. I'll talk, but you'll have to excuse me if I mumble a little. I intend to go right on eating. I've been looking forward to this for months!"

"We'll excuse you," Barby said quickly. "Only please start!"

Gordon smiled at her. "Can you keep secrets?"

"I always have," Barby retorted.

"All right. Then you can listen. But what I say must not be repeated."

The scientist paused long enough to drain his glass of milk and refill it from the pitcher.

"Well, to begin with, we moved from New Mexico to Nevada only a short while ago, in order to separate

our work from military research. We created a new test base inNevada, not too far from the Atomic Energy Commission's Nevada Test Site, although we have no connection with it."

"Then you're not on a military project?" Scotty asked.

"Yes and no. The work is sponsored jointly by the Department of Defense and some other agencies, including the National Science Foundation. However, we are not working on military projects, in the sense that our rockets are not weapons. They're for research purposes. Of course some of the things we're doing will be valuable for military application later, and so our test base is closed to the public and most of our work has a high classification. Usually the work is secret, but sometimes it's top secret. Is that clear?"

Scotty and the Brants agreed that it was.

"Very well. Since we operate under security, every person who works on the base is fully investigated and cleared for top secret. This is an important point. You know how thorough these investigations are. Once a security check for top secret is completed, there is literally nothing of importance that isn't known about a person. But in spite of the most careful security work, there is someone on our base about whom we do not know everything.

"It's absolutely baffling," Gordon continued. "Our first project was a simple one, with a tested rocket system. Actually, we used a modified Aerobee, a rocket of proven dependability. Nothing should have gone wrong. But when we fired, the rocket exploded at the top of the launcher. We investigated thoroughly, of course, and found someone had cleverly sabotaged the shoot."

"The what?" Barby asked.

"The shoot. When we launch a rocket we simply call it a shoot."

"Oh. Now I understand."

"Ask any questions you want. Well, we discovered that someone had rigged a steel bar at the top of the launching tower. It was spring-loaded and triggered to move right across the path of the rocket when we fired."

"What does spring-loaded mean?" Mrs. Brant asked.

The bar was activated by a spring. The spring was under tension. The steel bar lay along one of the pieces of the frame, and was held by a latch. When the trigger withdrew the latch, the spring pushed the bar across the path of the rocket. That's what spring-loaded means in this case."

"Couldn't anyone have found the steel bar?" Scotty wanted to know.

"Yes, if anyone had looked for it. But once the launching tower was erected, there was no reason for anyone to go to the top for an inspection."

Scotty nodded his understanding.

"To go on, as soon as we found the bar and the spring mechanism we knew we'd been sabotaged. But that wasn't all. Etched on the bar was a rather good picture of a knight in armor, in the process of driving his sword through a rocket. Underneath was the inscription: *Homo* Terrestrialis.

"I don't get it," Rick complained.

Gordon grinned. "Neither didwe . And we still don't get it. But you can be sure we started a few balls rolling. First, Security checked every man's file again. They missed no one. Even the security officers and guards were rechecked. Then they started a program to find out who on the base had any talent as an artist. Nothing was found. The security chief sent photos of the etched picture and the whole bar mechanism to every security agency in the government, including the FBI, Central Intelligence, and the military. He drew a blank. No one had ever heard of anyone calling himself the Earth-man, and the technique wasn't familiar."

The scientist paused long enough to eat a little more, then resumed.

"Meanwhile, we were getting a Viking rocket ready to launch. We checked it from nose to fins. We didn't miss a thing. Then we posted a guard around it, and a guard to watch the guard. We took no chances at all. The project engineer even slept near the rocket where he could keep an eye on it."

"Did anyone climb the tower?" Barby asked.

"There was no tower. A Viking rests on its fins. Anyway, it took off. It climbed ten miles, then went on an erratic course. We couldn't control it. Fortunately it crashed on the Las Vegas Bombing andGunneryRange, which is a closed military area nearby, so no one was hurt. At first we thought it was just one of those typical accidents that happen during rocket research. Even the best-performing rockets sometimes go haywire. But when we got into the wreckage, we found the steering vanes had been tampered with, in a way that inspection couldn't have disclosed."

"Was there a picture?" Scotty asked.

"Not in or on the rocket. But when we got back to the base after inspecting it, everyone was excited. Someone had sketched a knight in armor with crayon right on the concrete of the launching pad."

Rick said thoughtfully, "Then you can eliminate those who went to inspect the crashed Viking."

"Unfortunately, no.We have no way of telling when the picture was drawn. No one was seen near the launching pad between the time the rocket was fired and the discovery of the sketch on our return from the gunnery range."

"Do you think this sabotage is the work of an enemy agent?" Hartson Brant inquired.

John Gordon shrugged. "Perhaps. Yet we don't really think so. In the first place, an enemy agent would probably not leave a calling card. And second, we're reasonably sure no agent could have gotten past the security check."

There was silence while Scotty and the Brants thought over what Gordon had said. The scientist busied himself with the excellent food, and finally accepted a cup of coffee.

Rick voiced aloud the angles that puzzled him the most. "If not an enemy agent, then why the sabotage at all? Who would have anything to gain but an enemy?"

"If we had the answers, we could find the saboteur," Gordon pointed out. "If we knew why he calls himself 'The Earthman' we might also have a lead. But as it is, we're stumped. It could be anyone on the

base, including me."

"Is it you?" Barby asked in a stage whisper.

Gordon looked around, as though to make sure there were no eavesdroppers. "I don't think so," he whispered, "but I'll have to admit I haven't looked since yesterday."

"What do you want the boys to do?" Mrs. Brant asked.

The scientist became serious again. "It's a desperate hope," he admitted, "but there is always a possibility they might turn up something if we plant them as undercover agents. Rick and Scotty not only have good sense, but they're lucky. Maybe they'll be lucky enough to stumble over or sniff out a lead."

"How do we do this?" Rick wanted to know. He was definitely interested in the job. Just the idea of witnessing a big rocket shoot was exciting enough, even without the added attraction of a saboteur to be uncovered.

"You get jobs," Gordon stated. "But you'll have to get them on your own merits, because if I intervened in your behalf that would be a tip-off. Only I and the Chief of Security will know about you."

"Can you trust the Chief of Security?" Barby asked.

Gordon smiled."A fair question. All I can say is,trust must start somewhere. If Tom Preston is the Earthman, I'll turn in my spaceman's suit and proton disintegrator and resign from the human race."

Rick grinned. "All right. We'll trust the Chief of Security on your say-so. What's the next step?"

"Well, you're not old enough to have much of a work history, so we'll have to exaggerate your ages and the time you've worked. It will be safe enough, so far as being found out is concerned," Gordon said. "Security makes all reference checks, including employment, and Tom Preston will handle your cases personally."

Dismal rubbed against Gordon's leg. The scientist slipped him a scrap of cheese from the salad, then looked guiltily at Mrs. Brant.

"John Gordon! How many times have I told you not to feed Dismal at the table?" she exclaimed in mock anger.

Gordon looked sheepish and hung his head. "I'm sorry. Anyway, boys, I'll advance you funds. You fly toLas Vegas as soon as possible and apply to Lomac for jobs."

"To who?I mean, to whom?"

"Lomac, Rick. The base is run by a contractor, an engineering firm by the name of Logan and Macklin, Lomac for short. They hire all but a handful of scientific personnel, like project directors and their chief assistants, who come from a variety of places, including government agencies, universities under contract to the government, and so on."

"Do we apply inLas Vegas?" Scotty asked.

"Yes. Lomac's recruiting office is there. I'll give you the address. However, the base is some distance

away, so you'll need transportation. I suggest a jeep. You can pick one up secondhand after you arrive. I'll give you sufficient funds. Also, prepare to hang aroundLas Vegas for a while. It will take at least a week to process your papers."

"Are we supposed to know you once we get there?" Rick queried.

"Only casually, because of the Spindrift connection. You know who I am, but you don't know me well because you've never worked on a project of mine. I'll find occasion to talk with you privately as needed."

"Another question," Rick said. "Have there been any more sabotage attempts besides the two you mentioned?"

"No. Those first projects went off in fast order, but the next shoot isn't scheduled for about two weeks."

Scotty asked, "What's the name of this base? You haven't told us."

Gordon looked grim. "I hope the name isn't prophetic," he said. "The base was named for the dry lake where the rocket pads are located: Scarlet Lake."

CHAPTER III

Las Vegas, Nevada

Rick and Scotty picked up their luggage at the baggage counter, then paused to survey their surroundings. McCarran Field, the airport for Las Vegas, Nevada, was modern and attractive. But there was no mistaking that this was desert country. Beyond the airport they saw the barren mountains of the Charleston Range, and behind the motels clustered around the airport, they saw flat desert, thinly populated with mesquite and crossote brush.

"Welcome to the wildWest," Rick said with a grin.

"Not a cowboy in sight," Scotty commented. "Plenty of dudes, though." He gestured at a group dressed in loud sports clothes. "What now?"

"Let's take a taxi into town, register at the hotel, and then go to Lomac."

"Okay." Scotty hailed a cab from the front of the taxi line. They loaded their baggage and climbed in.

"El Cortez," Rick directed. John Gordon had suggested that hotel, since it was close to Lomac's office in downtownLas Vegas, and the food was good and not expensive.

The taxi rolled through the gateway of McCarran Field and turned toward town. In a few moments they began to pass the fabulous resort hotels on the famous "Strip."

"Wow!" Scotty exclaimed. "Some bunch of fancy shanties!"

The taxi left The Strip, traversed the long lines of motels on Fifth Street, and emerged on Fremont a block from the Cortez, A few minutes later they had checked in and were unpacking their bags in a comfortable room in the Cortez Annex.

Scotty picked up the telephone directory and leafed through it until he foundLogan and Macklin. "We have to go toSixth Streetand First Avenue .Any idea where that is?"

"Just a couple of blocks from here." While riding in the taxi, Rick had watched street signs and quickly figured out the simple street plan of the town. "Let's go-"

The Lomac offices were on the second floor of a building less than five minutes walk from the hotel. The boys received application forms from a bored clerk and sat down at a table to fill them out according to previous plan. In his application Rick emphasized his experience with electronic equipment and in wiring circuits. Scotty stressed his mechanical experience with standard machine-shop equipment, and with motor repair. This had been John Gordon's suggestion, since it would result in their being placed in different departments at the rocket base, thus enabling them to cover more ground. The clerk checked their forms, then nodded.

"Okay. We can use both of you, if you pass the security check. Ever been cleared?"

"We're both cleared for top secret," Rick told him.

"What agency?"

"JANIG."

The clerk glanced up but made no comment. Rick guessed that JANIG clearances were not common. He was a little surprised that the clerk knew the agency; not many people did, because JANIG's activities were never publicized.

"It will take anywhere from a few days to two weeks to get your clearances verified and your files transferred. We can't do anything for you until then. When we want you, we'll call you. That's all."

Rick hesitated at the door. "Whereare the used-car dealers located?"

"Fifth StreetandMain Street."

Rick thanked him and the boys walked out into the brilliant sunlight. "Feel up to getting the jeep?" Rick asked. The boys had taken off fromNew York shortly aftermidnight and had ridden all night on a plane that, as Scotty had said, "landedin every cow pasture west of Chicago." They had not slept much.

"Let's get the jeep," Scotty replied. "We can catch up on our sleep after lunch."

However, getting the jeep was not as simple as they had expected. Not until they reached the fifth used-car dealer did they find one for sale.

Scotty put the jeep through its paces, then drove it back to the car lot. He looked at it thoughtfully and shrugged. "I wouldn't call it a pile of junk, but that's only because I'm polite."

The salesman, a lean Westerner, looked pained. "What do you want for the price? A Jaguar?"

"No," Scotty said. "Just something that runs."

"This runs."

"Not exactly. It limps. Put a new timer in, replace the front-wheel bearings, grind the valves, and well take it."

Rick smothered a grin. Scotty's wink had told him the jeep would do. His pal was trying to get the price down.

The salesman sighed. "How are you going to pay for it?"

"Cash. Either repair it, or knock off the cost of repairs, and it's a deal."

"You named it. We'll knock off the repair costs."

In another hour the jeep was theirs and the boys had obtained a vehicle registration and Nevada driver's licenses. As they drove to the hotel, Rick asked, "Is it really in good shape?"

"Not bad. It does need some work, but we can do it in a few hours ourselves."

"Now that we have wheels, let's get cleaned up, have a nap, and then see the town," Rick suggested.

"I'm with you," Scotty agreed.

It was lunchtime when they returned to the hotel. They settled for ham and eggs in the Cortez Coffee Shop, then stopped on the way through the casino to watch the gambling. Even at noontime the dice table was jammed with customers, and the blackjack tables were nearly full. The roulette table was not getting much play, however, and they watched for a few spins of the wheel.

"At least you get an even break on this one," Scotty said. "The odds are thirty-five to one, and there are only thirty-six numbers."

Rick grinned. "How'd you like to have your life hanging on odds of thirty-five to one?"

Scotty chuckled. "Anyway, you don't have to play numbers. You can play black or red, or odd or even. That gives you fifty-fifty odds."

Rick shook his head. "You forgot something. The wheel has zero and double zero, and they'regreen, and neither odd nor even. That makes the odds less than fifty-fifty. You can't win, Scotty."

"Kill-joy. How about the one-arm bandits?" He pointed to several rows of slot machines.

"No help there, either. It depends on how they're set, but usually out of every four coins you put in, one drops out of play completely. The only one who ever sees it again is the man who owns the machine. So, if you keep feeding money in, eventually the machine will take it all. Sometimes the machines are set to take one coin out of every three, or even one out of every two."

"But people do win, gambling," Scotty objected.

"Sure they do. That's why people gamble-and hope. But the greatmajority lose." Rick waved at the luxurious casino. "If most people didn't lose, these casinos couldn't operate."

"Maybe I'd be the lucky one," Scotty said.

A deputy sheriff had been listening to the conversation with amusement. He tapped Scotty on the shoulder. "I said that once, son. I was going to be the luckiest ringdangdoo that ever hit Vegas. And what happened? I've been working in this hotel as a guard for two years, trying to make a stake big enough to go back home and start where I left off when the bug bit me."

"Tough," Rick murmured,

"The town is full of people like me. Besides, you lads can't gamble, anyway. The legal age is twenty-one. Come back in a few years if you feel rich and foolish, and try bucking the tiger. You'll see what I mean."

"Well take your word for it," Scotty assured him. "Come on, Rick. Let's hit the hay. I can use a nap."

If Las Vegas was spectacular by day, it was a neon nightmare after dark. The boys dined well, and more than sufficiently, at El Rancho Vegas, then got in the jeep for a ride around town.

Scotty loosened his belt with a groan. "For once," he admitted, "I overdid it. Did you ever see so much chow?"

"Not outside of a supermarket," Rick agreed. He let his own belt out a notch or two.

The boys drove to Fremont Street, past the incredible gambling halls with their elaborate signs and miles of neon tubing.

Scotty remarked, "I guess you and that deputy sheriff were right. It takes an awful lot of lost money to keep all these places going."

Tiring of the neon wilderness they turned north on Main Street and headed out toward Nellis Air Force Base. For a brief stretch the neon glow faded, then resumed again as they reached North Las Vegas.

Suddenly Scotty pointed. "Hey! We're on another planet."

Rick stared. Towering into the sky was a huge, illuminated figure clad in a spacesuit. The transparent helmet glowed red, then blue, green, yellow, and finally red again. In one colossal hand was a supermodern pistol. Colored flame spurted from the muzzle.

Rick laughed as he noticed another figure in front of the establishment. "Look! He's got a pup."

Acting as a doorman was another figure, human size, clad in a similar getup.

Across the building which served as a base for the giant spaceman was a glowing sign:

"What say we drop in?" Scotty suggested.

"Sure," Rick replied, falling into the role of a science-fiction spaceman. "We might pick up the latest gossip on that uranium strike on Venus, or the discovery of live prodsponders on Mars."

Scotty swung into the parking lot. "Tell me, Space Commander, what are prodsponders?"

"A subspecies of sponprodders . Your ignorance surprises me, Cadet Scott."

"I haven't been to the inner planets for a week," Scotty apologized. "I lose touch."

They walked across the driveway, noting that the customary shrubs and plants were replaced here by artificial ones, made in a form that represented someone's idea of what plants from other worlds must look like. The effect was actually pretty good. The place had been built with imagination.

The spacesuit-clad doorman nodded, and they saw that he was perspiring freely inside the transparent helmet.

"Who ever heard of a non- airconditioned space-suit?" Rick murmured. "Bet he couldn't survive the Venus-Mercury run in that rig."

Inside were the inevitable slot machines, in banks of fifty or more. Rick decided the objective must be one slot machine for each person in town. Behind the slot machines were the dice layouts, roulette tables, and blackjack tables.

Beyond the casino proper, however, was a pleasant lounge that included a snack bar and tables for dining. The boys wandered over to the snack bar and sat down on stools, looking around with appreciation. The walls were decorated with murals- photographic reproductions of a famous artist's conception of other planets.

"This is nice," Rick said appreciatively.

"Best place I've seen since Callisto Connie's joint on Jupiter," Scotty agreed whimsically.

A waiter, not much older than they were, wandered down the counter. He was dressed in a loose tunic that glittered.

"Howdy, fellas," he greeted them.

Rick and Scotty "howdy'd" back.

The counter clerk eyed them with interest. "Haven't seen you in here before."

"First time," Rick admitted. "Nice place."

"We like it. You fromScarletLake?"

The boys stiffened. "What gave you that idea?" Scotty asked quickly.

The waiter admired his fingernails. "Easy. You're not local folks and you don't look like tourists. So, you came here to work. Maybe the atomic test site, maybe Nellis, maybeScarletLake. I saidScarletLake because a lot of people from there come in to eat when they're in town. Some of 'em here right now."

"Where?" Rick asked.

"At the tables over against the wall. What are you going to have?"

Neither boy wanted any more food at the moment, and said so. They agreed on coffee.

"Here or at a table?"

"Table," Rick said. "Might as well move in with the people from Scarlet Lake, starting now." He led the way across the room and picked out a table next to two men in loud sports shirts. One man was big, nearly the size of Dr. Zircon of the Spindrift staff. He had red hair and a curly red beard. His eyes were dark and penetrating under bushy red eyebrows. He looked the boys over with slow deliberation, as though memorizing what they looked like.

The second man was big, too, although he didn't approach the redhead in size. He was slightly over six feet, Rick guessed. He was dark-complexioned and clean-shaven. His eyes, a light blue, were a surprising contrast to his dark hair and heavily tanned skin.

The redhead leaned over as the boys sat down. "I haven't seen you kids before. You from Scarlet Lake?"

"We hope to be," Rick replied civilly. "We've applied for jobs at Lomac, but now we have to wait for a security check."

The redhead turned to his friend. "Catching 'em kind of young these days, hey, Pancho?"

Pancho showed white teeth in a smile. "Looks like it."

"We can do a day's work," Scotty said shortly.

"Never doubted it for a minute." The redhead thrust out a massive paw. "I'm Mac McCline . Big Mac, they call me. This here is Pancho Kelly."

The boys shook hands and gave their names.

"Any idea what you're getting into atScarletLake?"Big Mac asked.

"Not much," Rick said truthfully.

Big Mac guffawed. "Well, I'll tell you. Heat, dirt, sidewinders, and crazy rockets. And if they don't get you, one thing will."

"What's that?" Scotty asked.

"The Earthman."

CHAPTER IV

ScarletLake

Rick and Scotty never found out what Big Mac meant by his crack about the Earthman. He evaded their questions, apparently feeling that he had said too much. Otherwise he was cordial enough. As the days of waiting to hear from Lomac passed by, the boys made the Spaceman Casino their headquarters, hoping to pick up information from the Scarlet Lake people who hung out there.

Men came and went, but Mac and Pancho were there every night. Once, Rick commented on their nightly presence at the casino and said jokingly that work on the base seemed to allow plenty of free time.

"We don't go back to the base every night," Big Mac said. "Pancho and I do our job when there's work to be done. Other times we do what we want. If anyone at the base needs us, they know where to come."

Rick thought that over. It seemed reasonable. He asked, "Is it okay to ask what you do?"

"Sure it's okay. We're radar operators. We track the rockets on a radar set from a field station." Big Mac pulled a red-checkered handkerchief from his pocket and blew his nose violently. "Good operators are scarce. That's why no one bothers us, so long as we're on the job when we're needed."

Scotty leaned over and picked up something that had dropped to the floor when Mac pulled out his handkerchief. "You dropped this, Mr. McCline."

Rick identified it easily. It was a tiny transitor, an integral part of modern electronic apparatus.

Mac took it in his big fingers. "Thanks. I must have stuck it in my pocket absent-mindedly while we were repairing the equipment."

"Where do you go when you're on a field radar job?" Rick asked. "Just tell me to mind my own business, if I get into anything classified."

"There's no classification on what we do," Pancho Kelly said. "Only the results. We go to Careless Mesa. Everyone knows that."

The boys let the conversation lag and ordered dinner. They didn't want to seem too inquisitive. Constant questions would only make Mac and Pancho suspicious.

Later, as they rode through the star-studded night in their jeep, Scotty suddenly asked, "What do you think of Big Mac and Pancho?"

Rick shrugged. He knew what had prompted Scotty's question. He had the same feeling himself. "They're friendly enough, but I think it's an act. What I mean, is . . ."

"That they haven't any real interest in being friendly, they're just cordial for the sake of appearances," Scotty concluded.

"On the nose, pal. I get the feeling they could switch from casual conversation to mayhem without batting an eye."

Scotty thought it over for a moment. "Mac's the driving force of the pair, but I'd say they're equally tough. I'd guess Pancho is a combination of Irish and Mexican, both from his looks and his name."

"Is Pancho a name? Or a nickname?"

"Nickname. Usually short for Francisco."

Rick thought back over the past few days, and their meetings with Big Mac and Pancho. "Funny thing, Scotty. The casino is usually pretty busy, and mostly with men from Scarlet Lake. But instead of getting acquainted with many of them we always seem to sit near those two."

Scotty gave him a sideways glance. "What about it?"

"I think we do it instinctively," Rick went on. "Every time we walk in, they're deep in conversation. There's a kind of atmosphere about them, as though the talk is always very secret. None of the other men seem like that. They're more-well, open. No secrets. Know what I mean?"

Scotty nodded. "Now that you point it out, I do."

"So I think we sort of gravitate toward them automatically. On a hunch that we haven't even recognized, so to speak."

"Because there's more to be learned from them than from the others?"

"That's it!" Rick was glad he had finally put his feelings into words. "We'll keep an eye on those two," he said emphatically.

On the sixth day of their stay inLas Vegas, Lomac called. The boys hurried to the office and were told they could report to the base personnel office at once. They were given a map showing the location of the base. ScarletLake, they learned, was about two hours' drive northwest of Las Vegas.

They packed hurriedly, checked out, and loaded the jeep. After a brief stop for gas, they headed out Route 95. Within a few minutes they had leftLas Vegas behind and were in open desert country.

The jeep was not capable of fast travel, and nearly an hour passed before they saw signs of civilization. It was the air force base at Indian Springs. They stopped for a coke, and topped off the gas tank. Rick bought a canteen and a desert water bag at the general store, and filled both.

A few miles beyond Indian Springs they saw the entrance road to the Atomic Energy Commission's Nevada Test Site, and the Sixth Army's Camp Desert Rock. After that, there was no sign of civilization for miles.

A few miles before the town of Lathrop Wells, Scotty spotted their turnoff. The sign was small and inconspicuous. It simply read: "Scarlet Lake," and an arrow was painted underneath the name.

The paving ended after a mile or two and became a very good dirt road. The jeep was climbing steadily now, and in a short time Scotty shifted to second gear.

"We must be nearly out of Nevada and into California," Scotty commented.

"Almost," Rick agreed. "According to the map, the base is right next to Death Valley." Suddenly he

leaned forward as the jeep rounded a turn. Far below and still many miles away was the pinkish gleam of a dry lake bed. Scarlet Lake!

"I see where they got the name," Scotty said.

Rick grinned. "ScarletLakemakes sense but some of the other names around here don't. Did you notice the town marked 'Steamboat' on the map? And not enough water to float a bar of soap."

"See anything of the base?"

"Not yet."

Five miles later they began to see signs that Scarlet Lake was occupied. Black strips indicated all craft runways. Then, tiny concrete squares came into view. But not until they were in the valley, only a mile from the base, could they see buildings.

The buildings turned out to be a few single-story administrative shacks clustered around a check-in point. A uniformed guard waved them into a parking lot and told them to report to Security for badges.

They walked into the building marked "Security Office, Badge Division" and found a counter with another guard behind it. He took their names and asked for identification, then directed them to stand with chins resting on a tray. He slipped plastic letters into slots and formed their names, then took pictures with a fixed camera.

"Sit down and wait," he said. "We'll have these for you in five minutes."

Rick looked his surprise. "Can you process the pictures that fast?"

"Don't have to. This is a Polaroid camera."

Rick joined Scotty on a wooden bench. "I expected a barbed-wire fence. But there's no fence at all."

"The whole desert is a fence, I guess," Scotty surmised. "The only access roads are probably guarded, and the only other ways to get into the base would be by foot or horseback. No one could make it on foot, and anyone on horseback would attract instant attention."

Scotty probably was right, Rick thought. Still, it wasn't at all what he expected.

In a few moments the guard was back. He handed them laminated plastic badges with their names and pictures. At the bottom of Rick's were the numbers one, two, and three. Scotty's badge had only the numbers two and three.

"What do these mean?" Rick asked.

"Those are the areas where you're allowed to go. AreaOne is the blockhouse. Area Two is the main base and firing pads. Area Three is the machine shop and maintenance depot. You can go anywhere. Scott can go anywhere but inside the blockhouse. Sign these, please." He handed them forms in which they agreed to be bound by all security regulations, under penalty of the Espionage Act. They signed, and returned the forms.

"Go through the gate," the guard directed, "and report to the reception desk in Building Five. That's

personnel. They'll take it from there."

They returned to the jeep and drove to the gate. The guard inspected their badges, compared the pictures with their faces, then waved them on.

"Taking no chances," Rick remarked. "There's Building Five."

The personnel office gave them another map, showing installations and buildings on the base itself, and assigned them to bunks nine and ten in Barracks Seven. Rick was told to report at eight in the morning to Dr. Gould in Building Twelve, while Scotty was told to report to Mr. Rhodes in Maintenance Building Twenty-three. They received a leaflet marked: "*Read*This."

They followed the map for another three miles, leaving the gate buildings out of sight behind a ridge of rock. Their map showed that the main cluster of buildings was three miles from the gate and nine miles from the blockhouse and the firing pads on the dry lake bed. Again, Rick began to appreciate Western distances.

The boys found their barracks without difficulty, and moved into a room containing four bunks. It wasn't elaborate, but it was adequate for a camp of this kind. It was clear that the other bunks were occupied, but at the moment their bunkmates were apparently out.

Rick stowed his gear in the locker with his bed number on it, then sat down to read the leaflet. It was a directory of camp facilities, plus a written lecture on security. He was allowed to say what kind of work he did, and that was about all.

"Let's look the place over," he suggested.

They located the mess halls, the base movie house, post exchange, and post office. There was also a laundry and a snack bar. Set off by itself was a recreation hall, equipped with TV sets, comfortable chairs, card tables, and pool tables.

Rick followed the map to the laboratory buildings, and was surprised to find that they were enormous sheds, like hangars. Most of the doors were wide open, and he caught glimpses of shapes that could only have been rocket sections. His pulse quickened. There was an atmosphere of excitement, of big jobs being performed. At least his quick imagination told him there was.

Then, in one shed he saw the broken remains of a rocket. From its size he concluded that it must be the Viking that had crashed. The sight brought sharp realization of the real job he and Scotty were here to do.

Rick checked his map. "Our barracks has space for eighty bunks. And, according to this, there are twenty-eight barracks."

"Interesting facts aboutScarletLake," Scotty declaimed. "What about it?"

"That's over two thousand men."

"A lot of men," Scotty agreed. "What are you getting at?"

"Needles in haystacks. Out of more than two thousand we're supposed to pick one-the Earth-man!"

CHAPTER V

Project Pegasus

Dr. Gerald Gould, known to the staff as "Gee-Gee," looked more like a high school football coach than a scientist. His blond hair was cropped short, and his face was boyish except for a beautifully waxed military-style mustache. His speech was a remarkable combination of slang and rocket jargon.

He asked, "Do you know vector analysis?"

Rick shook his head. "No, sir."

"Hmmm.Well, boy-oh, we'll plant you with the electronic cooks in the spaghetti department. It says in your job application that you've had plenty of experience in circuit wiring. Roger?"

"Yes, sir." Rick understood that he was to join the technicians in the wiring department. His eyes kept wandering into the huge shed that housed the project on which he was to work. He identified rocket sections, and pretty big ones at that. The rocket was not assembled, but apparently it would tower several stories into the air when assembly was complete. One thing puzzled, him, however. One section obviously had wings. They couldn't be anything else, even though they were tiny and thin as knives. He hadn't heard anything about rockets with wings.

Dr. Gould saw that he was staring with interest at the activity in the shed and grinned sympathetically. "Ever see a big rocket before?"

"Only in pictures," Rick replied.

"Well, you'll see plenty of them before we're through here."

Rick hesitated. "Sir, is it okay to ask what this is all about?"

"Sure it's okay. We have three projects underway at present. In the shed on the left is Orion, which is a two-stage rocket for deep penetration into the exosphere. It's about ready to shoot. In the shed on the right is Cetus, a sounding rocket for ionospheric measurements."

Dr. Gould paused. "If you don't get me, speak up and I'll scoop you the answers. Roger so far?"

Rick nodded. "I'm with you." He understood from the scientist's explanation that Orion was to travel far into the exosphere, actually beyond the atmosphere, while Cetus was a smaller, single-stage rocket for research in the ionosphere, the ionized layer of atmosphere just beyond the stratosphere. The projects, he realized, were named for constellations.

"In this shed we have Pegasus."

"Pegasus was a winged horse," Rick commented, "And aren't those airfoils on that rocket section near the back of the shed? Is that the connection?"

Dr. Gould chuckled. "Sharp-oh! Those are indeed airfoils. Wings for Pegasus. Now make with the reason, if you can."

Rick pondered. He knew rockets achieved stability through fins, or steerable motors, and that wings were no help. Furthermore, there wasn't enough air for wings to be of use beyond the atmosphere where the big rockets traveled. He could see no reason for wings, and said so.

"You're not looking far enough ahead," Dr. Gould said severely. "Put on your spaceman's helmet. Connect up and think. You're on Space Platform Number One and you want to come home to Terra. What are the wings for?"

Light dawned. Rick's chin dropped on his chest and stayed there. Finally he gasped, "You mean the wings are to turn the upper section into a glider in order to land it again?"

Dr. Gould put a hand on his shoulder and nodded gravely. "Ole Gee-Gee is pleased with you. You have demonstrated something between the ears besides strawberry Jello . You have just described the objective of Project Pegasus. We intend to shoot the beast into space and bring the top stage home again by drone control."

The scientist grew serious. "It's not an easy thing, young Brant. No one has yet succeeded in getting a big rocket down in one piece. If we can do it, we'll be one step through the biggest barrier to manned space flight.

"You will work on wiring in the drone control section. Just remember that every touch of your soldering iron is critical. Take no chances at all; everything must be perfect. Do your job anddo it well, and someday you'll be able to say that you made the big horse's wings work when it really counted. Now come on, and I'll introduce you to Dick Earle and you can get started."

Dick Earle turned out to be a bigger and darker copy of Gee-Gee. He had the same crew cut and mustache, but his hair was jet black.

Rick also met Dr. Carleton Bond, a tall, slender man of advanced years who was a consultant on drone controls, and Frank Miller, a studious, rather curt young man who was an electronics design engineer.

He began to make some order out of the organization. Gee-Gee Gould was electronics chief for all three projects. Dick Earle was electronics chief for Pegasus, under Gould, and there were also electronics chiefs for Orion and Cetus. Similarly, the projects had air-frame departments, propulsion departments, instrumentation departments, and administrative departments.

Each project also had a technical director, who was a sort of co- ordinator, trouble shooter, and general expert. The technical directors reported to Dr. John Gordon, on loan from Spindrift, who had the title of Senior Project Engineer.

Later, Rick explained it to Scotty. "Each project has its own staff, but there's a top staff that is responsible for all projects. I'm making a little sense out of it, but people keep showing up that I can't fit into the organization."

"They're probably support people," Scotty explained. "Seems the base is divided into two groups; the scientific gang and the support gang. I'm in support, in the vehicle maintenance section. Lomac runs the whole support group. Besides transportation, there's the tracking and monitoring gang-that's what Big

Mac and Pancho are in-the machine-shop gang, and all the housekeeping facilities like the fire department, the security force, housing and feeding, and so on."

The boys' roommates turned out to be a security officer named Hank Leeming and one of the janitors, an elderly man of Mexican descent named Maximilian Rodriguez.

On the second day of work Rick met another interesting character, although a nonhuman one, and got an additional duty imposed on him.

He was at work installing a tiny servomotor in the drone control unit when something landed on his head and gripped his hair firmly. Instinctively he started to swing at it, but Dr. Bond's voice stopped him in time.

"Easy, Rick! He won't hurt you."

Rick reached up carefully and his hands met fur. He lifted the little creature down and stared at it, his lips slowly parting in a grin. It was a tiny monkey no larger than a squirrel, with soft brown fur and tufted ears. The little animal pulled free, jumped onto Rick's shoulder and kissed him ecstatically, making happy chirrupy noises.

"What on earth is a monkey doing here?"

Dr. Bond smiled. "Prince Machiavelli is more than a monkey," he replied. "Actually, he is a true marmoset of the genus *Callithrix*. He is also a genuine spacemonk."

"A what?"

The elderly scientist smiled. "Spacemonk. The simian equivalent of spaceman. The Prince has been into space twice now. Fortunately, the nose section was parachuted down intact both times, so he survived. Other spacemonks have been less fortunate. He will be our surrogate for Project Pegasus."

Rick stared at the little creature with increased interest. The marmoset was to substitute, then, for human occupants of the big rocket. His life would depend on their ability to get the winged nose section down in one piece. He stroked the tiny space-monk gently, and got a contented series of chirps in response.

Dick Earle walked in and smiled as the monkey snuggled down happily in Rick's cupped hands. "Looks as if you've made a friend, Rick. Good. In addition to your other duties you can take over as the monk's keeper. He won't be any trouble. Sometimes I think he has better manners than some of the staff." Earle turned and walked out again.

Rick stared after him. "What was that last crack about?"

Dr. Bond smiled. "Dick has his problems. I won't gossip, but you'll soon see what I mean."

The elderly consultant's prediction came true in short order. The next day, Rick ran headlong into an unwarranted and particularly nasty dressing down at the hands of Frank Miller. Rick, annoyed with himself for having done a rather poor job of connecting up the servomotor, was busily ripping it out when Miller came over to see what he was doing. Without waiting for an explanation, the design engineer launched into a tirade. Rick's face slowly reddened and his temper grew frayed. It was so completely unjust that he was on the verge of swinging at the engineer when Dick Earle walked in.

Earle asked crisply, "What's this all about?"

Miller turned on him. "You're supposed to be in charge here, but you let sloppy work like this go on! What good does it do for me to designcircuits if-"

Earle cut him off. "Shut up, Frank. Rick, what's your story?"

Rick clenched his hands. "I installed this servo, and didn't do a clean job of it. It was pretty sloppy. So I pulled it out to do it over again. I won't settle for anything less than perfect work. But he came along and jumped on me without letting me explain what I was doing."

Earle nodded. "All right. Go ahead with your work. Frank, you are not this boy's supervisor. Let him alone."

Miller glared at the electronics chief, then turned on his heel and stalked out of the shop. Earle watched him go, his pleasant face sober. "I'm sorry, Rick. Frank is like that, and I don't know why. I suspect he has troubles of some sort and takes it out on us. Try to overlook it, because he's an extremely competent engineer. We'd have great trouble replacing him."

Rick nodded. "Yes, sir."

The work progressed smoothly. Rick finished the part he was working on and was assigned another. He met other members of the project, including Phil Sherman and Charlie Kassick who, like himself, were technicians at work on wiring and assembly. He met Cliff Damon, chief of the instrumentation section, who showed him the intricate devices used to track the big rockets and to record just about everything that went on inside them.

It was pleasant and exciting, and only the incident with Frank Miller marred the contentment Rick felt at being a part of Pegasus. Then, near the end of his first week on the job, Miller dropped in and watched Rick at work for a moment. The boy tensed, but said nothing beyond a civil good morning.

Miller cleared his throat. "Brant, I want to apologize."

Rick looked up in surprise.

"I'm known as a crank, and I guess I deserve the reputation. But just because I feel rotten doesn't mean I have to take it out on you. I'm sorry."

Rick looked at the engineer thoughtfully. Miller was apparently sincere. "That's all right," he said. "Why do you feel rotten, if you don't mind my asking?"

"Ulcers. The doctor says the only way to cure them is to get out of this business, and go into something with less stress and strain. But I can't. I've been a rocketeer ever since I graduated from college, and I can't leave. So if I snap at you, please forget it."

Rick nodded. "I'll play it that way if you say so."

"Thanks." Miller turned and walked out.

The design engineer was polite enough after that, and Rick discounted the few times when he appeared too curt. So, with pleasant working conditions all around, the work fell into an exciting routine. The days

passed and the drone control began to shape up as a complete unit. Meanwhile, other sections of the big rocket were readied, and the first two stages, now completely assembled, were loaded on their special trucks and taken to the firing area.

In the next shed, Orion was almost ready. The rocket stages were trucked to the firing pad assigned to the project and the staff vanished from next door. They had moved their base of operation to the blockhouse and the pad. Time for the Orion shoot was only two days off.

Rick saw little of Scotty. His pal was at work in the vehicle maintenance shed, and making friends of his own. The two met only at night, usually at bedtime, because the entire base was working overtime.

The work was so absorbing that Rick actually forgot for long periods the reason for his presence on the base. To be sure, he heard much about the mysterious Earthman, but it was all a rehash of the earlier sabotage attempts, mixed with pretty wild speculation. Scotty reported that among the mechanics, machinists, and housekeeping staffs, the Earthman was regarded with considerable fear and superstition.

Then, with shattering impact, the Earthman returned from the realm of legend to stark reality!

CHAPTER VI

Sign of the Earthman

Dick Earle handed Rick a series of requisition forms. "We're running out of parts. Take this to Warehouse Eight and get the requisitions filled. The clerk will lend you a hand truck to bring the stuff back."

Rick found the warehouse, handed the forms to a clerk, and waited at the counter for the supplies. The clerk moved from bin to bin, collecting the variety of electronic parts. The pile in front of Rick grew.

The clerk returned the last two sheets and scanned them. "All transistors. And not the cheap kind, either. Just a minute and I'll have them for you." He vanished behind the tiers of shelves. Rick waited.

The wait grew longer and the boy fidgeted. Couldn't the clerk find them? Rick hoped the base hadn't run out, because that would mean a delay on his project. Already he thought of it as "his," and he was impatient as any of the project staff to push the work to completion.

The clerk reappeared, a single carton and a sheet of paper in hand. The man's face was white and his eyes looked as though they were about to drop out. He grabbed the phone on the counter and dialed, missed because his hand was shaking so, and dialed again. This time he got the number.

"Security? Is this security? Get over here, quick! Warehouse Eight. Hurry! The Earthman has been here!"

Rick stared, popeyed. The Earthman! He asked quickly, "What happened?"

The clerk swallowed hard. Obviously he was scared stiff. "They were empty," he said. "All of them.

Empty! Honest! And in one I found this." He handed Rick the scrap of paper he carried.

Rick smoothed it out on the counter and his pulse speeded. It was a good sketch, done in ink, of a knight in full armor. Crushed under one mailed foot was a rocket. The knight carried a shield, and emblazoned on it were two words.

Homo Terrestrialis.

The mark of the Earthman!

Hank Leeming, Rick's security officer roommate, and an older man he identified as Colonel Tom Preston, Chief of Security, pulled up at the door in a jeep and hurried inside.

Prestontook over. "All right, Jimmy. What's this about the Earthman?"

The clerk silently handed him the slip of paper.

The Security Chief examined it. "His mark, all right. Where did you find it?"

The clerk was still shaky, and he had a hard time putting his discovery into words. Rick tried to help him out. "He found some cartons that were empty. Transistor cartons, I guess. This was in one of them."

Preston's eyes fixed on him. "Who are you?"

"My name is Brant, sir. I'm with Pegasus."

Preston's eyes acknowledged Rick's name, but he turned to the clerk. "Is that right, Jimmy?Transistors missing?"

Jimmy found his voice. "Yes, Colonel. At first I thought it was a mistake-a few empties put back on the shelf by accident. But they were all empty, sir. All of them! There isn't a transistor in the warehouse!"

Prestonnodded. "Take over, Hank. Shake the place down. Get one of the boys with a kit and check for fingerprints on the stacks and empty cartons. Jimmy, come with me. We'll check your inventory with Pat O'Connor."

Pat O'Connor was the base supply officer. Preston and the clerk departed. Hank paused long enough to say, "Better take the stuff you have, Rick. Looks as if you'll have to wait for the transistors."

Obviously there wasn't anything else to be done. Rick found a hand truck, loaded on the supplies, and went back to his shed.

By dinnertime the base was one solid mass of rumor. Rick heard variously that the Earthman had been found, that he had stolen an entire rocket assembly, that the warehouse had been loaded with dynamite triggered to explode, that he had killed the clerk, that the clerk had seen him just before he flickered into invisibility, and so on.

He phoned Scotty and found that his pal was hearing equally wild rumors. The boys set a time and place to meet, just outside the main project building at five-thirty. Scotty was there when Rick arrived.

"John Gordoncome out yet?" Rick asked.

Scotty shook his head. "Any news? I've got a million rumors more or less, but nothing solid."

Rick told him in detail of the incident at the warehouse, and concluded, "Beyond that I don't know a thing. But Gordon will probably know something if we can catch him."

"We'll wait. We can pretend it's the first time we've seen him here and talk for a few minutes about old times at Spindrift. That shouldn't make anyone suspicious."

Rick agreed. It would be natural enough, and if anyone came within earshot they could make the conversation sound harmless.

Scotty grinned. "How's your pal and special charge?" At least once a day he kidded Rick about becoming nursemaid to a monkey.

"Fine," Rick replied. "He asks for you every day. After all, he knows you're the only other ape on the base."

Scotty ignored the crack. "When do I get to see this beloved child of yours?"

"Come on over to tie project any time. He'd like to meet you."

"I'll do it, first time I can get away from those doggone trucks. Seems like they break down every hour."

At that moment John Gordon came out of the project building. Rick, who was facing the door, pretended surprise. "Aren't you Dr. Gordon," he called.

The scientist turned and hesitated. "Yes. You're . . . let's see . . . you were at Spindrift for a while. I'm afraid I don't remember your names."

Rick introduced himself and Scotty, for the benefit of a few men who were passing by, en route to the mess hall.

"Ah, yes. I remember now. Going to eat? Soam I. Come along and tell me where you're working now. Obviously you're employed on the base, but on what projects?"

They chatted idly as they walked slowly toward the mess hall. Then, when no one was in earshot, Rick said swiftly, "I was at the warehouse when the mark of the Earthman was found. Any developments we should know about?"

Gordon answered softly, "Yes. Inventory showed nearly a quarter of a million in transistors missing. Also, no one had called for transistors in nearly three weeks."

"Isn't that unusual?" Scotty asked.

"Not particularly. Each project has its own stockroom. Since we're a new base, the projects have been working from an initial supply."

"So the transistors may have been missing for some time?"

"They could have been missing since the last requisition, exactly nineteen days ago. But they probably

were stolen during the Viking shoot."

"Is the warehouse guarded?"

"No. A clerk is on duty at all times when the warehouse is open. At night it's locked. There was no sign of tampering, and anyway, the locks are tamper-proof."

Scotty said warningly, "Company coming." Then, in a louder voice, he continued, "Of course we worked for Dr. Zircon."

"Very capable man, Zircon," Gordon said, taking Scotty's cue. "We could use him here. Any idea where he is now?"

"No, sir," Rick replied. "We haven't seen him since we left Spindrift."

At the door of the mess hall Gordon left them with a polite handshake, explaining that he had to eat with someone else by previous arrangement.

During dinner Rick thought over the events of the day. But not until the meal was ended and he and Scotty wandered on foot toward the edge of camp could he put his idea into words.

"This business today puts a new light on the Earth-man, Scotty."

"I read you loud and clear. A quarter of a million bucks makes a little sabotage worth while, huh?"

Rick nodded. "We can't know, of course, but if you were a warehouse clerk and a big rocket went haywire, wouldn't you be out watching it?"

"I'd be out where the view was best. So would you," Scotty replied.

"Remember where we saw a transistor recently?" Rick asked.

Scotty reached in his pocket, brought out his sling, andunwrapped it. He picked up a stone, tested it for weight, then reconsidered and put the sling back. "I remember.Big Mac and Pancho. Mac said he must have stuck it in his pocket absent-mindedly while repairing his equipment."

"That's what he said," Rick agreed. "Only transistors aren't like radio tubes. They don't need replacing often."

"Meaning?"

"He might have been telling the truth or he might not."

Scotty tossed the stone away. "How much space would that many transistors take up?"

"Hard to say. We could find out, I suppose. But transistors are small, and they don't weigh much. Besides, some of the types used here are fantastically expensive. A couple of hundred dollars might pay for a transistor the size of a kidney bean."

Scotty whistled. "They must be made of diamonds! Anyway, a quarter of a million is a lot of money, and even at two hundred bucks each the transistors would make quite a bundle. The Earth-man would have

to hide them, and then get them off the base. And I'll tell you one thing: If Big Mac stolethem, he didn't take them off the base in his own car."

"How do you know?" Rick challenged.

"He's got a Porsche. There's about enough room in the luggage compartment for a spare handkerchief."

"I'll buy it." Another idea hit him. "But he has some other transportation, hasn't he? How about the radar unit he and Pancho run?"

Scotty snapped his fingers. "Now you're cooking! It's a panel truck, loaded with equipment, and they pull the radar antenna behind it on a trailer. There would be plenty of room in the truck. Only he doesn't take it into town, remember?"

"Would he need to? He could drop the transistors somewhere to be picked up later."

"CarelessMesa."

"What?"

"That's his station. Come on. Let's look at a map of the area." Scotty turned and led the way to their barracks.

One thing about the robbery was a major puzzle to Rick. He could see that a rocket shoot might provide the opportunity to commit the theft, and he could see how use of a radar van might get the stolen goods off the base. But the thief had carefully emptied cartons, leaving the cartons as camouflage. That took moretime than any thief would have. He considered various ways in which it might have been done and rejected them all.

Tacked up in the entryway of their barracks was a large-scale map. Scarlet Lake was marked with crayon. The boys studied the area, looking for Careless Mesa. Finally Scotty found it, almost due north of the base. "About twenty miles. Only one road to the mesa, but two roads lead away from it. Let's see where they go."

The first road from Careless Mesa ended at a point in the mountains marked "*Dry Spring*." The second road led to the town marked "*Steamboat*," where the road forked again. One branch eventually joined other roads in Pahrump Valley, the other led to Death Valley.

The boys looked at each other triumphantly. Rick said, "So you can get from Careless Mesa to state highways without returning to the base."

Scotty scratched his chin. "Any idea what's at Careless Mesa?"

"Not the slightest."

"Neither doI. Maybe we'd better have a look."

That was fine with Rick."When?"

"How about tomorrow?"

"I'll have to check. Suppose I wander over to the project? If Dick Earle is there, I can sound him out."

"Okay, and I'll check with my people."

The boys parted, and Rick walked to the Pegasus shed. Dick Earle and Dr. Bond were in the cubicle where the project paper work was done. The marmoset was with them, perched on top of the file safe. As Rick entered, the little spacemonk jumped to his shoulder and caressed his cheek.

"Come in, Rick," Dr. Bond said. "We're just having a gloom session."

"Gloom?What about?"Rick petted the marmoset, then put him back on his file-safe perch. "Is something wrong?"

"Transistors," Dick Earle stated flatly. "No transistors left on the base. That means we come to a grinding halt until we get supplies."

"The whole project?" Rick asked in astonishment. He hadn't realized a few parts would mean so much.

"Not all of it.Just our part. The air frame and propulsion people can keep on, because they don't use the gadgets. But we'll be tied up for a few days until a supply can get here."

Dr. Bond added, "An order has been placed, Rick.By telephone. But the supplier can't possibly make delivery until after the Orion shoot."

Dick Earle nodded. "Correct. So you might as well plan to loaf for a day or so, Rick."

The trip to Careless Mesa would be no problem now, Rick thought. He wouldn't even need to ask permission.

"Strange that anyone would steal a whole supply of transistors," he commented.

Dick Earle shook his head. "Not particularly. The transistor is still a critical item in electronics and production isn't up to demand, especially for special designs. That means the stolen transistors can be sold fairly easily, once the proper channels to get them into the market are found."

"What kind of channels?" Rick asked.

Earle shrugged."Anything to hide the fact that the transistors are stolen stock. The Earthman could make a deal with some jobber who handles electronic materials, and feed the transistors into regular trade channels through the jobber."

"But aren't they numbered, or trade-marked, or something like that?"

"Numbers and trade-marks can be changed," Dr. Bond reminded him.

As Rick walked back to his barracks he pondered over the meaning of the day's development. For one thing, theft of the transistors put a new light on the Earthman's activities. It added a profit motive to whatever else motivated the mysterious saboteur. Or did it?

How Big Mac and Pancho fitted into all this remained to be determined. Rick could easily imagine that the two would take considerable risk for big profits, but it was harder to imagine them acting from any

other motive. Somehow, he just couldn't believe that money was the underlying reason for the Earthman's actions. Sabotaging research rockets just to provide a diversion that would allow a theft did not make sense.

The Earthman's activities had become more than just a challenging puzzle, too. Rick's work on Pegasus had become important in its own right. He was excited at being a part of something so dramatic, and with such far-reaching consequences for the whole future of space travel and high-altitude research. He had become a part of Pegasus. Perhaps he wasn't an important part, but he was making at least a small contribution to the project's success. That made it *his* project, and the Earthman was interfering with it.

Somehow, he and Scotty had to find the Earthman-for personal reasons now, as well as official ones!

CHAPTER VII

CarelessMesa

The boys climbed in the jeep early the following morning.

Scotty shifted into gear and drove through the base. "The time is now zero minus twenty-two hours."

Rick looked at him. "What does that mean?"

"Firing time for Orion is tomorrow morning, twenty-two hours from now. That must be the reason for the balloon that we just saw go up. The weather group is starting to watch winds and visibility. Something else I picked up at maintenance, too. There's going to be a dry run today."

"Spell it out," Rick requested.

"As I get it, all hands go through the same procedures they'll follow tomorrow morning. The Orion group will fire a small weather rocket to check the circuits, and to allow the tracking and monitoring group to check their equipment. And do you know what that means?"

Rick saw it at once. "Mac and Pancho will be going to Careless Mesa!"

"Yep.But the dry run doesn't start until ten this morning. That gives us plenty of time to get there, look around, and shove off before Mac and Pancho show up."

"Suppose they get there early?" Rick asked.

"They probably will. We won't hang around, though. According to the control board in the vehicle shop their truck isn't supposed to be ready until eight, which is an hour and a half from now."

Rick thought that was cutting it fine, but he made no further comment.

Both boys had checked the map again, and knew the route to follow. Scotty drove through the base and onto the access road that led to the firing areas. In a short time they had a clear view of Orion waiting on

its pad, project personnel swarming over the gantry crane as they performed a variety of last-day chores. The sight filled Rick with excitement. Tomorrow he would see the big rocket go up.

"Pretty," Scotty said.

Rick nodded. Orion was a beautiful sight. Its lines were clean, and its paint job was colorful, mixing white with high-visibility colors to allow greater ease of visual tracking.

"Blockhouse ahead," Scotty pointed out.

It was the first time either of them had seen the blockhouse, the control point from which the rockets were fired. It was within a mile of the concrete firing pads, close enough to be in great danger from wild rockets that had gone out of control. For that reason it was made of heavily reinforced concrete, several feet thick. It could take a direct hit from even the biggest rockets without harm to the personnel inside.

Then the firing area was passed and the jeep sped along next to the miles-long black, oiled path of the airstrip. Soon the strip was behind, then the level floor of the dry lake bed became rough terrain and the jeep began to climb toward the foothills.

"Isn't there a guard post this way?" Rick asked.

"Should be."

There was, a few miles beyond, as the jeep mounted the foothills and went through a pass. The guard inspected their badges, then waved them on. They were outside of the base area now.

The dirt road led them across a valley and up a gradual slope to another pass through the mountains. This time, as they emerged, Rick pointed to a flat-topped mountain directly ahead. "That's a mesa," he declared. "Suppose it's the right one?"

Scotty squinted against the glare. "Probably. I don't see any others on the horizon."

"What are we going to do when we get there?" Rick asked.

Scotty waved a hand. "Look, and hope there's something to see."

"Okay. Let it go. We'll wait and see." Rick fell silent, watching the desert. It was odd, he thought, that most people thought of deserts in terms of sand. It was a fact that some deserts were sandy, but this one was composed of hard-packed earth and stones in which plants struggled for survival. It was more like smooth clay. Then, as the desert rose from smooth plain to mountains, the ground became simply broken rock, sparsely dotted with creosote bush and cholla.

Once or twice he turned and looked back at the road over which they had come. The jeep left a trail of dust behind it, but he could see no dust from any other vehicle. Apparently they were well ahead of Big Mac and Pancho. He hoped they would stay ahead.

"If Mac and Pancho do catch up," he said thoughtfully, "we can always say we just came out for the ride, to see a little of the country."

Scotty gave him a sideways glance. "Think they'd buy it?"

"Could be. They have no reason to suspect us. We're just a couple of kids who work on the base."

The road was steep now, and Scotty shifted into second to take some of the strain off the engine.

CarelessMesa loomed ahead. Rick wondered if the road led all the way to the top. Apparently it did, because the trail twisted and turned, climbing constantly. He closed his eyes and visualized the map. Somewhere up there the road split.

Suddenly Scotty pointed. "Look!"

In a shady spot just off the road two sidewinders were coiled on a rock, beady eyes watching the jeep's passage. The snakes were the color of mottled sand, the "horns" on their diamond-shaped heads clearly identifiable. Their tails were a blur, and he knew they were rattling a warning, but the distinctive buzz couldn't be heard above the jeep's engine noise.

Rick restrained a shudder. Although he had no particular fear of snakes, he had an inborn dislike of the creatures. He had read that the sidewinder, or "horned" rattlesnake, was common in the Western deserts.

Then the jeep rounded a turn with a sheer drop of several hundred feet on Rick's side, and the sidewinders were lost to view. Rick looked down at the steep slope and said, "Nice place to meet a car coming down."

"Let's not meet one," Scotty replied. He had to drop back into first gear now, because the climb was very steep.

The road cut through a notch and emerged onto a relatively level area. Rick tried to get his bearings. The road had twisted and turned so much he had lost his sense of direction. The sun's position helped him to get oriented again, and he realized they were high on the side of Careless Mesa, overlooking the road across which they had just traveled.

"Clearing ahead," Scotty said. "Bet we've reached the station."

He was right. The road led across a wide shelf, perhaps fifty feet below the top of the mesa. On the far side of the shelf the road dipped again. Scotty let the jeep roll to the edge of the dip and they looked down the roadway which twisted and turned and finally forked a thousand feet below.

Scotty put the jeep in reverse and backed to the center of the shelf. It was about two hundred feet wide, the road hugging the inner cliff. Toward the edge of the shelf the ground was disturbed by vehicle tracks.

"Stop here," Rick said.

Scotty killed the engine, and pointed to a pile of cans near the remains of a fire. "This must be where Mac and Pancho set up their radar gear."

Rick looked around him appreciatively. In the direction of Scarlet Lake there was a clear view for miles. Only the low ridges of intervening hills prevented them from seeing the base itself. A radar outfit could track the rockets from here with no interference at all, once the rocket had risen above the range of low hills.

Scotty indicated the scenery with a wave of his hand. "Plenty to see. But twenty tons of transistors could

be in plain sight and we'd never know it. How would you hide stolen goods, if you had to do it?"

Rick turned and surveyed the base of the cliff that led to the top of the mesa. "I'd probably hunt for a space between two big rocks, pack it in, and load rocks on top."

"And that ain't stuff and nonsense," Scotty agreed. "Come on. Let's start moving boulders."

Rick shook his head as his eyes encompassed the more than a hundred yards of strewn rocks at the cliff's bottom. "Shall we move them a ton at a time?"

Scotty grinned helplessly. "At that rate we'd be here six months." He kicked an empty beer can. "Maybe we'd better look in the cans instead."

As though by magic the can flew into the air, flashing in the sunlight. At the same instant they heard the spiteful crack of a rifle.

Scotty reacted instantly, and Rick was only a fraction of a second behind. They dashed across the road and dove for cover in the rocks behind the jeep.

The rifle cracked again. A slug whined into space a few feet from their noses, leaving a silvery streak of lead on a rock.

The boys moved again, closer into the face of the cliff, and took shelter under a slight overhang.

"Now what?" Rick asked.

Scotty surveyed the situation, estimated the line of fire from the lead smear on the rock, then shook his head.

"We can't get in the jeep and make a run for it, because we'd be right in the line of fire. He's on top of the mesa, whoever he is. He can't reach us here, but he can reach us if we move, or if he moves."

The rifle punctuated Scotty's estimate of the situation. This time the slug slapped rock close enough to spatter sandstone chips in their faces.

"We can't stay here," Scotty said grimly. "I'm going to see what I can do."

"How?" Rick demanded.

Scotty was busily picking up stone fragments, choosing them by weight and shape. "I can move along the face of the cliff, staying under cover. At least I think I can. If I reach the place where the road drops, I can get up to the top. With luck, I won't be seen. Besides, you can distract him."

"How?"

"I don't know. Put the Brant brain to work and figure out something." Scotty unrolled his sling, slipped the loop over his index finger, and gave Rick a tight grin. "Keep the boy busy, chum. Here I go."

Scotty moved rapidly but silently, across the bottom of the cliff, taking advantage of every overhanging rock. When Scotty was perhaps ten yards away, Rick moved into action. He picked up a rock, hefted it, then threw it into the pile of cans. They scattered noisily, bringing a rifle shot in reply.

Rick thought swiftly, then peeled off his shirt and wrapped it in a good-sized rock. He gauged the distance and heaved it in the direction opposite the one Scotty had taken, aiming for a niche under an overhang six yards away. He hoped the motion would be mistaken for one of them. Evidently he succeeded, because a rifle slug chipped rock a foot away from the shirt as it rolled under the overhang.

Raising his head cautiously, he saw a rock perched precariously on the steep slopes. Evidently it had come to rest there, or the rains had washed away much of its support. He found a rock to throw, sighted with care, and tossed it underhand. It struck directly under the balanced rock and dug away enough dirt to upset its equilibrium. The rock tumbled down, bringing a tiny landslide of other rocks and dirt with it. There was no response from the rifle this time.

Rick turned to see how Scotty was doing, but his pal was out of sight, behind some boulder along the way. Now what? His bag of tricks was almost exhausted.

He looked outward, across the road. A few yards to the right of the campfire and cache of canswas a rock pile. It was big enough to shield him, if he could make it. He took a deep breath. If he dodged and twisted fast enough, the rifleman probably couldn't hit him, and he would certainly have the man's full attention. That would give Scotty a better chance.

He chose a rock, hefted it, and got up into a sprinting position. He made sure of his footing, then simultaneously tossed the rock sideways to attract the rifleman's eye, and charged out of the niche.

Ten feet and he jumped sideways, took two forward leaps, and went sideways again. The rifle barked and dirt spurted where he had just been. But by then Rick was within reach of the rock pile, and he went over it in a headlong dive, rolling like a tumbler as he landed. Quickly he flattened out, as close to the rocks as he could get. A bullet whined off the top of the pile, and then there was silence.

Rick's heart pounded and his breath came in gasps. He had made it!But how about Scotty? He risked a push-up that brought his head to the level of the upper rocks in time to see Scotty fire his first sling stone. His pal had reached a position just below the top of the mesa, where his stones would clear the top without exposing him. As Rick watched, Scotty put another stone in the pouch and let fly. The stone smashed into rock on top of the mesa. A thirdstone, and Rick suddenly caught a glimpse of motion on the mesa top, directly above him. The rifleman was changing position! Evidently Scotty's stones were coming too close!

"Watch it!" he yelled. "Watch out, Scotty! He's moving!"

Three closely spaced shots sent Scotty to the ground as slugs whined off the mesa rim directly above him. Then there was silence. Rick heard, as though from far off, the clatter of rock. He waited. Scotty was waiting, too.

Minutes ticked by. Then, faintly, Rick heard a sound that could only have been a horse whinnying.

Scotty stood upright and climbed to the very top of the mesa. Rick started to yell, then choked it back. Scotty must know what he was doing. He saw his pal walk leisurely out of sight. Rick stood up, watching. In a moment Scotty reappeared, climbing down the incline he had used to get to the top. In a moment the boys were face to face.

"He's gone," Scotty announced. "Had a horse staked out below the opposite side of themesa. I saw him ride off. He was too far away for me to get a good look at him."

"Mighty strange," Rick said with a sigh of relief.

Scotty nodded. "Strange is right. You know what? He saw me standing there on the rim. He turned and looked at me, and he waved."

"Waved?" Rick asked.

"Yep.It was a real jaunty wave."

Rick shook his head in bewilderment. "My, that was friendly."

"I thought so," Scotty agreed. "Come on, boy. We've got to make tracks out of here. Time is running out."

Rick collected his shirt and jumped into the jeep. Scotty backed around and headed toward the base as fast as the road allowed. Not until they were down on relatively level ground did they try to converse.

"The rifleman must have read about David and Goliath," Rick said. "Why else would he run off?"

Scotty chuckled. "He was helpless. He was in deadly peril, as the storybooks say. Seriously, I think he was helpless."

Rick stared at his pal. Scotty could mean only one thing. "Then he had no intention of hitting us?"

"I doubt it. He was shooting at short range, and even a poor shot couldn't very well have missed as often as he did. Besides, I don't think you'd find many poor shots with rifles in this country."

"Then he must have been trying to scare us off," Rick said thoughtfully. "When you started heaving rocks at him, he knew we weren't scaring very much."

"Not much," Scotty said ruefully. "I don't know about you, but my innards turned to custard."

Rick grinned. He knew exactly what Scotty meant. "If things had happened a little more slowly, I'd have dropped dead from sheer fright. But I didn't have time. Anyway, when you started with your sling, he had a choice of shooting for keeps or getting out of there. So he got. Is that how you figure it?"

"Exactly right. What other explanation is there? Stones against rifle slugs isn't much of a contest. I only tried it because there wasn't anything else to do."

"We could have stayed under cover until Mac and Pancho arrived," Rick pointed out.

"Negative. All he had to do was shift position and he'd have had a clear shot at us."

That was true, Rick realized. "But why did he try to scare us off?"

"It beats me. He wasn't a guard, I'm sure. If he was guarding something, he wouldn't have ridden off and left us there. And there wasn't anything personal in it, because he waved at me like an old pal. It was a kind of humorous wave. You know?Real jaunty."

Rick asked the obvious question. "Was it the Earthman?"

And Scotty made the obvious answer. "I didn't have a chance to ask him. Anyway, he didn't wear armor."

Rick had been keeping his eye on the road ahead. "Pull over," he said quickly. "Let's get out and be looking at cactus or something. I think Mac and Pancho are coming."

Scotty complied quickly and shut off the jeep engine. The boys got out and walked quickly into the desert, found a barrel cactus, and began dissecting it with Rick's scout knife.

The dust cloud that marked an oncoming vehicle grew larger, and in a few minutes they saw the panel truck and the trailer with radar dish mounted on it. As the truck drew nearer they stood up, Rick holding the cactus impaled on his knife. It was a natural action; simple curiosity would require that they pause to see who might be in a passing vehicle.

The truck drew abreast and slowed. Big Mac was driving. Pancho leaned out and waved. "Hiya, kids!"

They echoed him. "Hiya, Pancho." Then the truck was past, en route to the mesa for the day's dry run.

Rick drew a deep breath. "In the clear," he said with relief. Suddenly he grinned. "This is what I call progress. We go to Careless Mesa. We find nothing. We get shot at. We add to the mystery without adding a single thing to the puzzle. One more day like this and we'll have to put our Junior G-man badges back in the cereal box where we got 'em."

"I beat you," Scotty said unhappily. "I left mine under a rock at the top of the mesa."

CHAPTER VIII

Project Orion

There was an air of anticipation everywhere at the Scarlet Lake rocket base. Rick, who was sensitive to such things, felt it keenly. He also recognized that under the anticipation, like thick, stagnant water under the bright surface of a pond, there was fear.

The anticipation was spoken; the fear was not.

By mutual agreement, Rick and Scotty parted soon after their return to the base. Each went back to his own unit, more on guard then ever before for the slightest hint of irregularity in personnel or equipment.

The electronics group of Pegasus was just about at a standstill. Dick Earle and Frank Miller had gone to the firing area, to lend the Orion group a hand. Dr. Bond remained, along with Kassick and Sherman. The three were amusing themselves with a game of three-handed bridge, while the marmoset occasionally made things lively by stealing cards.

Rick watched for a few minutes, then wandered into the empty Orion shed, abandoned now that its crew and rocket had moved to the firing pad and blockhouse. As he stood looking at the complex test

equipment a sedan pulled up and Gee-Gee Gould got out. The electronics chief waved at him and trotted by into the project office. He returned in a moment with a portable tube and circuit tester under his arm and paused to ask, "What's up, boy-oh?"

Rick answered briefly, "No transistors, no work."

"Bored?"

"Not exactly, sir. But I wish I could do something useful instead of just hanging around."

Gee-Gee stroked his magnificent mustache. "I'm with you," he said finally. "Jump in."

Rick needed no further invitation. He took the tester from the scientist and climbed into the sedan, holding the gadget on his lap. "Where are we going?" he asked.

"Pad. Work todo, and you can help. Do a good job with me and I'll give you a special reward. Check?"

"Check," Rick agreed, grinning. "What's the reward?"

"Watch Orion from the blockhouse with me.Good?"

"Plenty good," Rick said, pleased. "What's the work?"

Gee-Gee drove the way he talked, at high speed and with a flourish. Rick held his breath as the sedan skidded around a gasoline truck, then leveled off. Gee-Gee gave him a long glance and almost went off the road in consequence.

"You're fairly new, Rick. But you know about this Earthman?"

"I've heard plenty of rumors," Rick agreed, "but I can't say I know many facts about him. He's a big, noctilucent mystery to me." He thought, "Now he's got me doing it!"

"I like that," Gee-Gee said appreciatively. "High, rare, and mysterious. Like noctilucent clouds high above the cirrus belt. I can use it."

Rick chuckled. "You were talking about the Earthman," he prompted.

"Yes. You weren't here for the first two shoots, so you are not this Earthman. And I'm not. No one knows this but me, on account of everyone suspects everyone. So far, only the Earthman knows who he is. But I'm telling you, it's not me. You don't have to believe this, of course, but, young Brant, I'm going to check every electronic circuit in Orion myself. And you're not only going to help me, you're going to check what I check. Roger?"

"Roger," Rick replied grimly. "How long will it take?"

"All night. We'll live on sandwiches and coffee and get no sleep. But when we're through, well bothbe satisfied that all electronics in Orion are correct and functioning."

"But hasn't the rocket been checked already?" Rick asked.

"Twice. Every circuit in it. The critical circuits have been checked a dozen times. But is ole Gee-Gee

satisfied? Negative, young Brant. Gee-Gee is not going to be satisfied until he personally rechecks and locks all access doors and ports himself."

Rick sat back in the seat, smiling to himself. He had no doubt that Dr. Gerald Gould meant every word of it. If Orion failed tomorrow, it would not be the fault of the electronics department.

The sedan pulled up at the pad and Rick got out, staring at the great rocket. Myriad cables dripped from various parts of it, and he thought of Gulliver tied down by the threads of the Lilliputians. There was something magnificent about the clean, towering shape that stirred his imagination. In the jargon of the rocketeer the great missiles were called "beasts" or "birds." The former was because they sometimes acted "beastly." The latter was a tribute to their beautiful flight when they ran true.

Rick thought, "How could anyone sabotage a thing like that?"

Gee-Gee brought him back to earth. "Ever climb a gantry?"

"No, sir."

"Well, start flying, young Brant. We go to the top and work down."

Rick went. He was too excited to be afraid. The first stage was by elevator. Then he and Gee-Gee climbed thin steel rungs to the very tip of the great rocket. Not until he reached the shaky, wind-blown, postage-stamp-size platform at the top did he take time to look down.

The thin steel web was no barrier to vision. He was on top of the world, at the doorstep to space, looking down on fantastic activity below. The rocket curved sweetly away below him, down to the sharp lines of the great stabilizer fins. He noted the breakaway zone where the first stage and second stage were joined. He could see, as one perched on a cloud, the tiny, busy forms of men below.

For an instant, as the nose access port yawned before him, Rick had a vision of himself in pressure suit and plastic helmet, mounting the rocket as a pilot mans his plane, anticipating the signal for blast-off.

Gee-Gee brought him back to earth with a prosaic, "Let's get at it, boy-oh."

It was the beginning. The picturesque but highly competent and efficient electronics chief hadn't exaggerated. The fabulous world of rocketry narrowed to a maze of wiring, circuit after circuit, checking, testing, and calling for test signals from the blockhouse. Rick checked and rechecked, following closely on Gee-Gee's heels. He missed nothing, took nothing for granted. Once he snapped, "Wait a minute! You didn't check that circuit properly. Check for polarization as well as contact."

Gee-Gee looked at him in astonishment, then slowly grinned. He thrust out a grimy hand. "You're my boy, young Brant. Who taught you about polarization?"

Rick was about to say, truthfully, "My father." But he caught himself in time. "A boss I had at Spindrift."

"He taught you well, and you're right. I did goof on that one. I'll check, and you recheck."

They went at it again, inch by inch through the incredible maze of wiring in the rocket's innards. By very accurate analogy, they were probing the rocket's brains. The circuits, like nerves, carried messages to and from the central rocket control. One would signal "Rocket starting to yaw," and another would reply to the servomotors that activated the gimbal -mounted motor, "Compensate! Two degrees

correction azimuth 350!" and the great rocket would steady on course again. There was a circuit to carry the heartbeats of the monkey caged in the nose cone, and another to carry his skin temperature, and dozens more.

Rick didn't even notice when it grew dark. Sometime during the night someone thrust ham sandwiches and a cup of steaming coffee into his hands and he ate and drank without taking his eyes from Gee-Gee.

Then, what seemed only minutes later, someone yelled, "Zero minus three hours!"

Gee-Gee looked up. He glared at Rick from red-rimmed eyes. "Quick! What's left to check?"

Rick stared at smudged, much-handled circuit diagrams through eyes that refused to focus sharply. "Only the control circuit for the pumps."

They were low on the crane now, working at the last access port. These were the electronic nerves of the great pumps that would force fuel into the rocket motor. Gee-Gee checked them, spoke into a walkie-talkie he had carried through the night, and Dick Earle's voice came back from the blockhouse. "The board is green."

Rick took over and checked again. And once more Earle's voice sounded, harsh and definite. "The board is green."

Gee-Gee slammed the access port door and locked the patented fasteners with a few turns of his screw driver. "We're done," he said flatly. "Come on down."

Rick followed, jumping to the ground from the lowest platform. He looked around, dazed. The sky was pink in the east. It was dawn. Where had the night gone? He stared amazed at grotesque figures that waited, silent, patient, like beings from another world. Then he realized it was the fueling crew dressed in protective clothing, swathed like strange cocoons in plastic that would keep their vulnerable human skins from the harm of corrosive liquid and fumes.

Gee-Gee led him to the blockhouse, and the walk across the barren plain cleared the mists from Rick's head. He knew, as clearly and finally as anyone can ever knowanything, that the electronic circuits were all in order and functioning.

The massive door of the blockhouse was open. Inside were two dozen men, each withhis own place and his own job. Rick knew some of them by sight, but he knew few names. This was the Orion crew. He looked at them with respect. They had made the great rocket on which he had worked all night. They had created it from sketches on paper, followed it through all the stages of construction until now it was ready.

A loud-speaker crackled, then boomed, "The time is now zero minus ninety minutes."

They were the fastest ninety minutes Rick had ever spent. He was enthralled by the activity in the blockhouse, and, careful to keep out of the way, he walked from station to station. Now and then he looked through the thick glass ports, and he saw the green mist of boron hydride as fuel throbbed slowly into the rocket's tanks.

A thin, bald scientist in a scarlet sports shirt picked up a microphone and spoke into it. "Tracking stations, report your readiness. Stand by. Lathrop Wells, report."

A loud-speaker over his head replied instantly. "Lathrop Wells ready and tracking."

Tonopah, Indian Springs, Mercury, Death Valley Junction, Shorty's Well, Chloride Cliff, Jubilee Pass: All ready and tracking. Then:

"CarelessMesa."

Big Mac's voice boomed forth. "CarelessMesaready and tracking."

The time: "Zero minus thirty minutes!"

One by one red lights on the main board winked out and green lights came on in their places, showing circuits and controls in operation. Only a few red lights remained now. Rick looked through the glass ports and saw the gantry crane being wheeled away. Jeeps, trucks, and private cars were moving out of the area, haste evident in their spinning wheels and hunched drivers. The movement was like a scurry of ants. Rick watched, taking in everything. He didn't even notice when the massive door was swung shut, closing against its airtight cushion with a sibilant hiss.

"Zero minus five minutes."

At last the frenzied activity ceased, and the rocket stood alone, clean, beautiful, and awesome, only the instrument cable tying it to earth.

Rick couldn't tear his eyes from the rocket, even to watch the last of the red lights flick out, the green glow showing readiness.

Then, zero minus five . . . four . . . three . . . two . . . one . . .

FIRE!

A steady hand threw the final switch.

Green flame stabbed from Orion's tail, grew to white intensity. The instrument cable dropped from the rocket's nose and writhed to the ground. Even through the thick walls of the blockhouse Rick heard the mighty rocket's voice, an ear-shattering roar of triumph that sent lancing pain through his head. The rocket shuddered, eager to be away. Thrust built up, and up, and up, and the exhaust light grew until it was like staring into the heart of a green sun. Then the great voicefaltered, the shuddering increased.

A yell of pure horror burst from Rick's throat. High on the rocket's side, metal slowly peeled back like obscene steel lips opening, and green fire gushed forth. The shuddering ceased, and he knew file rocket was dead. The gash opened wider . . . wider . . .

The blockhouse door swung open and men poured out-silent, horrified men, helpless to do anything but watch, oblivious to the danger. Rick went out with them.

The desert was alive with sound now, with the roaring torch of rocket propellant and the scream of sirens. Speeding down from the base campcame the fire engines, to save what could be saved, to help still the flames so the Orion crew might find out what had gone wrong.

Behind the fire engines were jeeps, trucks, and cars, loaded with grim men who carried picks, shovels, anything to help still the holocaust.

Scotty arrived right behind the fire engines and ran to where Rick stood, still stunned by the shocking turn of events.

"What happened to it?" Scotty asked hoarsely.

Rick shook his head. He couldn't talk.

The firemen were already at work. Crews from the trucks, protected by asbestos and plastic, carried hoses to the very edge of the roaring propellant and began to smother it with mounds of foam. The men who had followed with shovels and picks were also at work, hastily digging a trench to prevent the spread of the fiery liquid.

Someone yelled, then another yelled. Rick looked up in time to see the rocket split wide open and most of the remaining tons of propellant gush out. The firemen saw it, too, saw that they would be engulfed. They turned and ran.

Horrified, Rick saw a fireman, clumsy in his protective suit, trip and fall before the oncoming flood of flaming boron hydride.

Scotty moved, instinctively, his finely trained body responding with perfect co-ordination. Straight toward the oncoming flood he ran, into the edge of the flames, leaping the rapidly widening trench. Rick ran, too, but Scotty's fast reaction had carried his pal beyond reach. He saw the husky ex-marine stoop into the flames, pick up the fallen fireman, and literally throw him across the trench to safety.

Then Rick was at his friend's side, slapping at the burning places on his clothes, rushing him away from the spreading propellant. But Scotty wasn't through. He helped the fireman to his feet and pulled at the protective suit. Rick saw instantly what had happened. The suit had been torn in the fall, and some propellant had gotten in through the rents. The fireman was burning under the protective cover.

Other hands came to help and they got the man out of his cover, out of his burning clothes. Then the first-aid squad moved in.

Not until the fireman had been cared for did Scotty say, almost apologetically, "Any of that stuff left? I've got a couple of burns."

Then Rick noticed for the first time that his own hands were scorched and in need of the soothing unguent. By the time he and Scotty were smeared with the ointment, the fire was out.

The boys watched as water was sprayed over the white-hot wreckage until at last the safety officer pronounced the torn remnants cool enough for inspection. Then John Gordon and the senior staff moved in.

It was pastnoon before they emerged from their inch-by-inch examination of the rocket, but no one left to eat, to change clothes, or even to sit down. No one thought of it.

John Gordon motioned to Dr. Albert Hiller, the Orion project officer. Hiller nodded. He spoke quietly, but not one of the hundreds watching missed a single word.

"Apparently a fuel-pump bearing froze at the critical moment. With an unstable fuel like boron hydride, that made the difference. Internal pressure was too much for the shell to take."

The engineer paused, and the tense, waiting silence became almost too much to bear. Hiller knew what the men were waiting for.

"We found no pictures," he said. "We'll continue the examination in the laboratory, of course. But as of this moment we cannot say whether it was the kind of accident that rocketeers always have to expect, or whether someone tampered with the pump. By someone, I mean-the Earthman."

CHAPTER IX

Ghost Town Clue

Rick refused point-blank to go to bed. He wasn't tired, he insisted, and he meant it.

Scotty yielded. "Okay. I see your point. It's hard enough to sleep in the daytime anyway, but when you're all keyed up, it's impossible. Didn't lunch make you sleepy at all?"

"A little, but that shower and change of clothes woke me up again. Scotty, I'll never forget that horrible instant when I realized that Orion wasn't going to take off. Honest, it was like watching something beautiful die. It . . ."

Hank Leeming, their security officer roommate, came into the bunkroom in time to hear Rick's last comment. Hank was young, usually smiling. He wasn't smiling now. "I was in the blockhouse when the first one blew. I know how you feel, Rick. It makes you want to lay violent hands on the man responsible."

The security officer changed the subject abruptly. "Luis Hermosa wants to see the boy who saved his life, and the one who helped."

"You mean the fireman who fell in the propellant?" Scotty asked.

"That's the one. He's in the infirmary. Can you both go?"

Scotty shrugged. "Sure.If he wants us to. But he doesn't owe us anything. Someone else would have dragged him out if we hadn't."

"If you hadn't," Rick corrected. "I didn't move fast enough."

"Neither did anyone else," Hank pointed out. "Don't be overmodest about it, Scotty. Go and see him."

The infirmary, operated by Lomac, was only a block away. Rick and Scotty walked over and checked in at the reception desk.

The infirmary clerk directed them to one of the four rooms in the little base hospital. "Go right in."

Luis Hermosa was awake. Rick knew he must be in pain from his burns, which were extensive, but his

smile gave no evidence of it. It was a warm smile that demanded a smile in return.

"This morning there was no chance to give you my thanks," he greeted them. "I asked for you to come so that you may know how I feel."

Scotty put a hand gently on one of the bandaged ones. "No thanks are necessary."

Luis shook his head. "It was a brave thing. You might also have been caught by the fuel, and you did not even have a suit such as I wore. When I and my family light candles to thank God and to ask His blessing for you, we will want to give Him your names."

They told him their names, and his lips moved as he repeated them. Then he waved them to chairs. "Please sit down and talk with me for a few minutes. This is not a place where one can extend the hospitality of his house, but I can at least offer you chairs."

Keen brown eyes surveyed them. "You are both very young, eh? What are you doing here?"

"Working," Scotty answered. "I'm in vehicle maintenance and Rick is in Pegasus electronics."

"So? It is an exciting place in which to work. Even I, a fireman, feel this excitement. Tell me, do you think this *hombre de terra*, this Earthman, was the cause of the tragedy this morning? I call it a tragedy, because it was so. So much work, so much love went into that rocket I *Sangre de* Cristo! It was a terrible thing."

"No one seems to know for sure," Rick replied. "The project officer couldn't say. But there was no Earthman picture."

The bandaged hands spread expressively. "A picture could have been burned. Now perhaps we will never know. You understand, I have thought much about this thing. Once I believed this Earthman made the rockets go bad because he must think such things are against the will of God. But when I heard of the thefts, I no longer thought so. I thought about how a thief could take his stolen wealth from this guarded place."

"We've wondered about that, too," Scotty said.

"You decided something?"

Rick leaned forward on his chair. Luis Hermosa had started him thinking again.

"The thief couldn't get his stolen goods from the base if he went through a gate in his own car, could he?"

"He would not dare," Luis replied, "because he knows the guards check the trunks of cars, and sometimes even look under seats. He might be unlucky. He would know this."

"Spot check," Scotty nodded.

Rick hadn't known about the spot check, but it made sense. He continued, "So there's only one way. The thief has to take the stolen supplies from the base in an official vehicle."

"Such vehicles are not checked," Luis agreed excitedly. "But also, such vehicles are not taken far from

this camp. If a truck, say, were gone too long, would it not be noticed?"

"It certainly would," Scotty stated.

"There must be only a few places where the thief could go," Rick said thoughtfully. "When he reaches one, he must hide his stolen goods and leave them. Later, by traveling a long way to reach the spot from the main road, he could get the stolen stuff with his own car. Or, maybe someone from outside who doesn't work on the base at all could go to the hiding place and pick them up. Can you think of any other way?"

Luis and Scotty couldn't, and said so.

Rick asked, "What are the possible places?"

"What would such a place need to be like?" Luis asked, then answered his own question, "It would need to be on a road, not only leading from the base, but to the outside. Also, it would need to be a lonely place, would it not? And it would need to be a place where the things could be hidden and not be seen, but where a helper from outside could find them easily. You see, I follow your reasoning. Where is such a place?"

The boys waited. Luis knew the area. He might have a good idea.

"There is one which is perfect. It is called Steamboat."

"But that's a town," Rick objected. "People would notice a truck from the base."

Luis chuckled. "People, yes.Ghosts, no. An evil man like this Earthman would not care what a ghost saw, would he? Ah, but you are new here, and you do not know. Steamboat is a town without people. No one has lived there for forty years."

"A ghost town," Scotty said in surprise. "But don't tourists go to ghost towns?"

"They do," Luis agreed. "They go to Searchlight, and to Rhyolite, and to Calico, and other ghost towns near here. But they do not go to Steamboat. It is on bad roads, many miles from the nearest good highway. Besides, who has heard of Steamboat? No newspaper writes about it, and no one advertises it. You cannot even buy a souvenir at Steamboat. There is no one to sell them. Ghosts do not peddle souvenirs."

Luis chuckled at his own joke. "You have a good head, Mr. Brant. I will think about this. Perhaps you will think some more, too, and we will compare notes later. Will you come to visit me again?"

"We'll come," they promised.

Outside in the brilliant sunlight, Rick said to Scotty, "You bet we'll go to see him again! How did you like his idea about the ghost town?"

"It can be reached from Careless Mesa," Scotty pointed out. "I wish we'd known it was a ghost town. We could have explored it some afternoon."

Rick said what had been on his mind since Luis made his suggestion. "I think we'd better pay it a visit." "When?"

"What's the matter with right now?" "Nothing, I guess.But why the rush?" Rick wasn't sure himself. "Maybe there isn't any rush. But on the other hand, maybe there is. Look, we've kind of assumed Mac and Pancho are in on this, haven't we? Well, their movements must be pretty well known, at least while they're at work." "They have to check their truck in and out. Why?" "Let's talk about it over a coke. It's hot." They hiked to the recreation hall and got cokes from the automatic dispenser. Rick set his thoughts in order.

"I'm not so sure about Mac and Pancho. They were at Careless Mesa this morning. At least I'm certain Mac was, because I heard his voice when he checked in by radio. And probably Pancho was, too, because it takes two men to handle a radar unit. One of them might have been able to sabotage a rocket, although I doubt it, but how could they take advantage of the confusion to steal the transistors when they're not even on the base?"

Scotty finished his coke and banged the bottle on the table for emphasis. "Okay. They couldn't. But why are you so sure they couldn't sabotage a rocket?"

"I'm not sure," Rick replied. "But now that I've seen how the base works, it seems to me that only someone who works on the rockets could sabotage one."

"Careful," Scotty said with a groan. "You're dumping the only suspects we have."

Rick grinned ruefully. "I know it. Anyway, we have to keep moving, even if it means starting all over again. So let's start at Steamboat."

"Okay. And just for the fun of it, I'll check the vehicle board. It won't hurt to know how much time Mac and Pancho have spent off the base in their truck. Suppose I gas up the jeep and meet you at the barracks?"

"I'll check out with Pegasus. Will you have any trouble?"

"No. Everything just about closes down the day of a shoot. I'll be there in ten minutes."

The boys parted at the door of the recreation hall and Rick started back to the barracks. As he passed the main administrative building, John Gordon fell in step.

"If I knew you two, I'd be mighty proud of both of you," the scientist said whimsically. "You for the job you did with Gee-Gee lastnight, and Scotty for pulling that fireman out this morning."

Rick smiled his thanks."Anything new?"

"Not so far. Tom Preston is having the warehouses checked, just in case. But it's a terrific job going through an inventory item by item."

"Can you find out if the clerks leave the warehouses during a shoot?" Rick asked.

"Tom has already gone to work on that. I'll find a way to let you know. Keep in touch, Rick."

Rick continued on to the barracks, mind churning with confused thoughts. If only they had a few hard facts to work on! There wasn't *a* single definite clue to anyone. And, after last night, how could he suspect any of the dedicated, hard-working rocketeers ?Impossible to imagine that anyone who had

worked so hard on one of the projects could deliberately sabotage it. Yet, there was no other answer. No one outside the technical and scientific staff would have the opportunity or knowledge.

"At least," he concluded ruefully, "if we assume it's someone with ready access to the projects, we've cut down the size of the haystack. We're looking for one man out of only about five hundred!"

CHAPTER X

Stranded in Steamboat

The road to Steamboat led by Careless Mesa, then through a series of twists and turns down to comparatively level country again. According to the map, the ghost town was in a valley next to a dry lake bed.

Rick glanced at his watch. "It's going to be late when we get there."

"Maybe that's good," Scotty returned. "If anyone is in the town we'll see lights. This country is so wide open it would be hard to sneak up on the town in daylight."

"It would, if there was anything to sneak up for. Haven't you got the feeling this is a wild-goose chase?"

Scotty dodged a deep hole in the road. "It could be. But we can't just sit around waiting for the Earth-man to hand us a calling card. Besides, Mac and Pancho were gone long enough to reach Steamboat and return to base this morning." That was what the vehicle-control board had shown.

"They might have been just waiting at Careless Mesa" Rick pointed out. "We have no evidence they went to Steamboat. Besides, if anything was stolen during the shoot this morning, they couldn't have been in on it."

"That's true. But we can't lose by looking the town over. Besides, I've never seen a real ghost town."

Rick watched the desert go by, his mind busy with the problems. As Scotty had said, if Mac and Pancho weren't in on the thefts, someone was. That someone had to get the stolen goods off the base and to a location from which it could be carried to civilization. He toyed with the idea that the stolen transistors might simply have been destroyed or hidden by the Earthman in order to hold up work at the base. That didn't seem likely.

The facts of time and distance certainly eliminated Mac and Pancho. During the shoots they were miles away. They had little or no opportunity to get close to the rockets. It was only reasonable to cross them-and all other radar-tracking teams-off the suspect list. Yet, Rick couldn't forget his initial feeling about the pair.

Scotty pointed. "Isn't that a town?"

The jeep had topped a gentle rise. Below lay a small, dry lake bed. At one edge of the dry lake, nestled in low foothills, were gray, weathered buildings. It was almost certainly Steamboat.

Scotty stopped the jeep and they surveyed the countryside with care. There was no sign of movement, no sign of a dust cloud from any other vehicle.

The sun was low in the west. In a short time it would be out of sight beyond the mountains, then darkness would close in. Rick reached into the jeep's glove compartment and found the flashlight he had stowed there. He checked it, then asked, "What are we waiting for?"

"Ideas," Scotty replied. "What say we roll right on through the town without stopping, then turn and come back through that wash at the base of the hills?"

Rick looked to where the dark-haired boy pointed. He saw the shadow of a gully that followed the foothills closely.

"Think it's necessary?" he asked.

Scotty shrugged. "Probably not. But it's better to be careful than sorry later."

"Okay with me. Let's go."

Scotty put the jeep in gear and they rolled swiftly down to the level of the dry lake bed and toward Steamboat. A few minutes later they entered the town.

Rick inspected the buildings with care. It looked like the setting for a Western motion picture, except for the lack of people and horses, and the lack of paint. He identified a pair of stores, a two-story building that could only have been a hotel, a livery stable, and several buildings without identification of any kind. There was only one street, and they were on it. Nowhere was there a sign of life. Then they were through the town, and the road climbed gently toward the foothills.

Scotty held the jeep at a steady speed for over a mile. As the road gradually curved around a rock outcropping, he said, "Look behind and tell me when the town is out of sight."

Rick turned in his seat in time to see Steamboat vanish behind the outcropping. "Now."

Scotty brought the jeep to a halt. "The road should fork pretty soon, shouldn't it?"

"That's right. Left fork to Pahrump Valley, right fork to Death Valley."

"Let's hit the ditch." Scotty reached down and put the jeep into four-wheel drive, then turned left off the road.

The bottom of the dry wash was alternately sandy and studded with boulders. Scotty picked his way with care, but it was a rough ride. Once or twice he stopped while Rick climbed the slope of the wash for a survey of the situation. Finally they pulled to a halt and both boys reconnoitered ahead, to find a good way out of the wash and onto the road. Satisfied that getting from the wash onto level ground would pose noproblems, they turned off the jeep engine and settled down to wait.

Again, Rick felt the futility of what they were doing. They might wait for weeks without ever seeing another human being.

"There's going to be a moon," Scotty remarked.

Rick looked up at the slim crescent. "Yes, but not much of a moon. I'd rather depend on a flashlight."

Scotty stirred restlessly. "Maybe we should have explored the town."

"Maybe.It's too late now, except to explore by flashlight. We can always come back during day-light."

They fell silent while darkness settled in. Rick began to feel drowsy now that the excitement was at an end. He let his head droop. Presently he slept.

Suddenly he realized Scotty was shaking him. "I'm awake," he whispered. "What's up? What time is it?"

"Nearly nine.I was going to let you sleep for a while before starting back." Scotty's voice was low. "A car came along the road. Not from the base. The other way. It was traveling without lights. It stopped in town."

"Let's go," Rick whispered. He got out of the jeep, Scotty on his heels. They moved carefully up the slope of the wash and emerged on the open desert behind the town.

Scotty took his arm. "Follow me." The dark-haired boy moved into the lead.

They moved in a bent-over position, making their way from bush to bush, careful to move silently. Rick's pulse began to hammer. Why should anyone come to the ghost town, especially in a darkened vehicle? For the first time he felt hope. They might find out something of importance after all!

Scotty led the way, taking advantage of every bit of cover, and in a short time they emerged from the desert behind the row of ghostly, abandoned buildings. Rick recognized the hotel, the only two-story structure in the town. It was directly in front of them.

"Wait here a minute," Scotty whispered. He moved quickly and silently into the shadow of the livery stable. Scotty was skillful at this kind of work, and Rick knew it was best to let him reconnoiter alone.

Presently Scotty materialized from the shadows and moved to Rick's side. He whispered, "They came in a sedan. I couldn't see any lights, but I heard voices. They're in the hotel."

"Let's get closer," Rick replied softly.

Scotty plucked at his sleeve and Rick followed, moving swiftly into the shadow of the livery stable. Scotty moved slowly along the wall, then crossed the narrow alley between the stable and hotel with one long step, hesitating at the hotel corner. Rick followed silently. There was a window. Scotty crouched, so he would be below the window, and scuttled past it. Rick was right behind him.

The rear door of the hotel was next. Scotty's gesture told Rick they would stop there and try to listen. Scotty moved a few steps and stopped once more. He was in position. Rick crowded close behind him, then moved out from the wall a little so that he, too, could hear directly through the door.

From almost under his footcame a strident, warning buzz, and an icy ripple moved down his back. A snake! And he couldn't even see it! He froze where he was, muscles tense for the shock of needle-sharp fangs. He waited an eternity, not even daring to breathe. There were voices from within the hotel, but he didn't hear what they were saying. At that moment he couldn't possibly have cared less.

Then, his probing eyes saw the faint outline of the creature, half coiled, flattened head weaving. It was barely beyond striking distance. He watched it, not daring to look away, not daring to move.

Had Scotty heard the snake? But of course he must have. Rick reached with infinite caution and tugged at his pal's sleeve. Scotty would have to move first. Then Rick could move slowly to a position tight against the wall, where Scotty was now. Only by moving into the wall could he get away from the snake.

But in that moment the rattler apparently decided it had waited long enough. The evil head moved slowly toward Rick's foot.

Rick couldn't help it. He let out an involuntary yelp and jumped sideways, into Scotty. Scotty had no place to go but through the hotel door. He crashed into the rickety, partly hanging door, Rick on top of him.

Rick tried to get to his feet, sensing sudden noise and movement within the hotel, but he wasn't fast enough. A hand grabbed him by the arm and hauled him upright, and a fist glanced off his cheekbone, snapping his head back.

Scotty, underneath, gathered his feet under him and charged like a plunging fullback, directly into the hotel. There was a grunt as the boy's head met yielding flesh, then a powerful arm circled his neck and he was lifted off his feet, fighting for breath.

A hand yanked Rick forward. His arms were twisted behind him. A pencil flashlight flicked on briefly and a voice muttered, "It's a couple of kids!"

Rick struggled, but subsided when it became clear that he could do nothing but wrench his arms out of joint.

A man muttered, "Rope in the car trunk."

Feet sounded on the boards of the hotel. Rick tried to pierce the gloom, to see his captors, but there wasn't enough light to see more than vague shapes. He had never heard the voices before. The feet came back. The voice said, "Lash 'em tight."

Rick was dumped face down on the dusty floor. Expert hands tied his wrists and ankles tight and lashed them together, with his knees bent at an acute angle and his shoulders pulled back. Next to him he sensed that Scotty was getting the same treatment.

A voice whispered, "Wonder who they are?"

"Doesn't matter," the first voice said. "We'll be out of here in fifteen minutes, if the others keep to schedule, and we won't be back. We can't use this place again."

A third voice broke in. "I didn't see a car. They must have cached it somewhere."

"You're right," the first voice agreed. "Find it, and fix it. Where'll we put these kids?"

The second voice had a suggestion. "The old jail across the street. We can lash 'em to the bunks."

Rick felt himself lifted like a sack of grain. He swayed as the man lugged him through the front of the

hotel, across the porch, and into the street. His captor rounded the car that was waiting there and Rick strained to turn his head, to try to see the license plate, but couldn't catch a glimpse of it.

A creaky door was swung open and he was carried into an inner room and dropped face down. It knocked the breath out of him for a moment. When he recovered, he was tightly lashed to a rusty iron frame. His groping fingers felt the frame and the rope, but the knots were beyond his reach.

A voice asked, "Will we turn 'em loose later? We don't want 'em to die in here."

"They won't. They can get loose, but it will take a while and we'll be long gone. Come on."

The door creaked again. Rick listened to the sound of footsteps across loose boards, then there was silence.

Scotty whispered, "What do we do now? Wait for the Lone Ranger and Tonto?"

Rick had to grin, in spite of their plight. "Looks like it," he agreed. There was something ridiculous about being bundled into an antique Western jail. "Anyway, we didn't get bitten by that blasted snake."

"That worried me plenty," Scotty agreed. "Can you move at all?"

Rick's fingers hadn't stopped exploring. "Not much. How about you?"

"There's a sharp end of wire under my hands. I'm going to see if I can loosen the knots. Keep working"

"Don't worry," Rick whispered fervently. "I will."

Silence fell, except for an occasional scrape as they struggled. Rick's arms began to hurt, and his neck felt as though it would never straighten again. Gradually he worked the rope end into reach and began to move it, hoping to loosen the knot. Then there was a soft exclamation of triumph from Scotty.

"Are you free?" Rick whispered quickly.

"No. But I pulled the rope between my wrists and ankles loose enough so I can move. Just a minute."

Scotty got to his knees, balancing precariously. "I'm going to try to slide my hands down the frame to yours."

Rick strained his neck trying to see if there were any obstacles in the way, but he could see nothing. Scotty grunted. "I think I'm hung up on a bolt that's sticking through the frame." There was silence for a few moments while the boy struggled. "Made it," he muttered. "The ropes loosened a little."

Presently Rick felt Scotty's fingers and moved his own, seeking the ropes around his pal's wrists. He probed, trying to find the key to the knots. Finally, his right forefinger touched a free end, and he followed it into a twist of rope. His first two fingers could just reach the twist, and he set to work on it, moving the rope back and forth, trying to pull on it. Suddenly it gave.

"One," he said softly. There was another knot immediately under the loop he had just untied. It was tougher than the first one, but eventually he made it.

"I think you loosened it a little," Scotty said. "Maybe I can slide a knot over that bolt and pull loose."

Scotty moved away from him, sliding his hands along the rusty frame. The boys worked insilence, Rick tackling his own knots again while Scotty tried to use the rusty bolt as a lever.

Rick had to give up for a while. His hands hurt too much, and he knew that Scotty's must be hurting, too.

"Listen!" Scotty said suddenly.

A car, or a truck, was approaching the town, from the direction of Careless Mesa!

The boys tackled the knots with desperation and suddenly Scotty fell forward as his hands loosened.

Outside, the car braked to a stop. Rick wondered if Mac and Pancho had come to keep arendezvous? He couldn't get rid of the feeling that those two were involved somehow.

"A few minutes more," Scotty gritted. "The knots are loose." Then, "I got it."

Moving swiftly, Scotty untied his ankles and knelt at Rick's side.Long minutes later Rick felt the ropes fall from his wrists. It didn't take long to get his ankles free, and he stood up, rubbing circulation back into his hands.

Scotty went to the doorway of the old jail and Rick joined him. "See anything?"

"No," Scotty whispered. "We'll have to go outside."

"We can't go out the front," Rick murmured. "They'd see us. That car stopped right in front. Let's see if there's a back entrance of some kind."

He led the way to the rear of the jail building, walking carefully in the darkness. There were windows but they were barred. He carefully felt his way past the jail's only cell, and along the back wall.

Outside, a motor spun into life.

Rick whirled. "They're going!"

Another motor started.

The boys turned and hurried to the front of the building. They were in time to see a sedan shift and speed away from the hotel, following the road toward civilization.

They hurried into the street and Scotty pointed in the opposite direction. The road back to the base was a dim, pale ribbon in the faint moonlight. Along it a dark shape was speeding.

"That does it," Rick said aloud.

Scotty turned to watch the departing sedan. "It didn't take them long to complete their business, whatever it was. I didn't hear any talk, did you?"

"Not a word. Do you suppose that was Mac and Pancho that came from the base?"

"No way of knowing, but it could have been. Come on. Let's find our jeep."

The jeep was where they had left it, but the hood was up. Scotty hurried to look, while Rick went to the glove compartment. The flashlight hadn't been touched. He got it and joined Scotty, throwing the beam under the hood.

For a moment everything looked normal, then Rick saw that the distributor cap and rotor were missing. The question was, had the men simply hidden them? Or had they taken the parts along?

Scotty put his thoughts into words. "If the parts are here, we'll find them in the morning. If they aren't . . ."

Rick finished, "We'll be here until someone finds us!"

CHAPTER XI

Deadrock Ogg, Mayor

At dawn's first light Rick and Scotty began the search for the distributor cap and rotor. The boys searched methodically, taking in the area far beyond throwing distance, on the assumption that whoever had taken the two essential parts might have walked a distance away from the jeep before throwing them as far as he could.

"It's not here," Rick said positively.

Now all that remained was the town itself. They walked back to the town, Rick carrying the water bag and Scotty the canteen. At least their water hadn't been dumped.

Scotty paid careful attention to the vehicle tracks in the dust of the road.

"It's pretty clear," he pointed out at last. "Here's where the sedan was parked. And here's where the other vehicle parked. See how this area is scuffed up? They made quite a few trips, carrying something from the side of the vehicle to the rear of the sedan, probably stowing the stuff in the luggage compartment. And, from the tire tracks, I'd say the vehicle from the base was a light truck."

"Like Mac's truck?" Rick asked.

"Maybe.Anyway, whoever it was had to go through the guard gate, and the run might even be chalked up on the board. Not to here, of course, but maybe to Careless Mesa or Dry Spring."

"We can check when we get back," Rick said. "Come on. We'd better take the town apart and see if the rotor and distributor cap are here."

It was midmorning before they gave up the search, and both of them were exhausted.

"Now what?" Rick asked wearily. He had never in his life felt so badly in need of sleep. Except for a few

brief catnaps in the jeep, he had been awake continuously for forty-eight tense hours.

Scotty scratched his head. "There are a few buildings we haven't searched yet."

"No, but they wouldn't be in those. If the men were going to leave them here, they'd drop them nearby and not hide them in one of the distant buildings. But I suppose we'd better look, anyway."

"We'd better. I'm fresher than you are. Go stretch out in the hotel lobby and I'll look."

Rick was too tired to argue. He walked into the comparative coolness of the rickety old hotel and found a section of undamaged floor. He removed his shoes, stretched out, and was asleep almost at once. In a short time Scotty joined him after an unsuccessful search.

When Rick woke again it was dark and Scotty was stretched out beside him, sound asleep. He turned over and went to sleep again.

Both boys woke up, stiff and bleary-eyed, as dawn light flooded the hotel. They grinned at each other.

"I must have slept for two days," Rick said.

"Not quite. Just about sixteen hours. But you needed it, and there wasn't anything to do."

"We're okay so long as the water lasts, but then what?" Rick knew without even putting it into words that they could never walk to civilization. Their water would run out and heat exhaustion would get them before they were halfway to anywhere. The base was closest, and it was over thirty miles away, across desert and waterless mountains.

Scotty walked over to what had once been the hotel desk and held up a can. "Want some breakfast?"

Rick was at his side in an instant, examining a can of tomatoes. "Where did you get it?" It was shiny, the label unfaded.

"Down the street.In one of the houses.Someone comes here now and then, I guess. There are blankets, a sleeping bag, and a small supply of food."

Rick's brows knitted. "Shouldn't we have been standing guard?"

"I thought about it," Scotty admitted, "but I figured there wasn't much sense to it. We'd welcome friend or foe at this point. Anyway, I don't think whoever hangs out here is part of the gang."

"Why not?"

"Wouldn't the gang have been at his hide-out instead of here in the hotel? Besides, this looks like a cache for just one man."

Rick had to admit that made sense. "Do you suppose he's here now?"

"I doubt it. I'd have heard a car if one came into town last night. I wasn't sleeping that soundly."

"Well, I'm grateful to him, whoever he is. Let me at that can." Rick searched in his pocket and found his scout knife. He opened the can-opener blade and got to work. In a moment they were taking turns

drinking the slightly acid, refreshing juice and pouring whole tomatoes into their mouths.

An amused voice spoke from the doorway. "Looks good."

Standing on the porch was a figure in worn but clean denims and miner's boots. His face was weathered from years in the desert sun. His hair was grizzled where it could be seen under an ancient and disreputable flat-topped, broad-brimmed hat. His eyes, under shaggy brows, were a clear, twinkling blue. The man held a rifle; the muzzle pointed unwaveringly at the boys.

"That your jeep in the wash?" he asked.

"That's ours," Scotty affirmed.

"Mislay a few parts?"

"You might say so," Rick agreed. "Who are you?"

"I'm the mayor of Steamboat."

The boys started. "The mayor?" Rick echoed.

"Yep.Likewise the sheriff.As mayor, I welcome you. As sheriff, I want your names and business."

The boys gave their names, then Scotty asked, "How did you get into town? I didn't hear a car."

"Good reason. I didn't drive. Now, what are you doing here?"

"What are you doing here?" the man demanded

"Waiting to be rescued," Rick said on impulse.

"Reckon that can be arranged. You drove in, hey? But you didn't drive into town. Instead, you parked in the wash. Now, as sheriff, I find that mighty interesting. You wouldn't have parked there unless you didn't want to be seen. Only I suspect you were seen, and whoever did the seein 'walked off with your distributor cap and rotor. Unless you have 'em, which I doubt. If you had 'em you wouldn't need rescuin'. Correct?"

"You're telling it," Rick replied courteously.

"Yep.Also, you're fromScarletLake, and you're nosy. Day before yesterday you got nosy at Careless Mesa and nearly got pinked. Are you busy-bodies, or have you got a right to snoop?"

Rick stared at the man. He had a strong suspicion they were looking at the mysterious rifleman. Since the man hadn't come into Steamboat by car, he must have come by horseback. The rifleman had departed from Careless Mesa by horseback, too.

Scotty spoke up, in response to the man's question. "You might say we're busybodies. We're curious about everything."

"Uh-uh. Toss me your badges."

Rick's eyes met Scotty's. He shrugged. There was no reason for not complying. Both boys detached their badges and tossed them across the floor. The man picked them up, examined them closely,then tossed them back.

"All right.Come on with me and we'll have some breakfast." He tucked the rifle under his arm, turned, and walked out. As the boys followed, they cast puzzled looks at each other. The man led them to the cache Scotty had found. A saddled horse was standing in front of the house.

"I've seen that horse before," Scotty said. "It was nice of you to wave at me up at Careless Mesa."

The man grinned.

Rick asked bluntly, "Why did you shoot at us?"

Twinkling blue eyes surveyed him. "Didn't. If I'd shot at you I'd have scored a few hits."

"You were warning us off," Scotty said. "Were we getting too close to something?"

The man tilted his hat back and chuckled. "Mighty curious pair, I'd say. No, son. But if you stayed around, I wouldn't get close to what I wanted to get close to. What's more, I figgered you weren't just tourists. You had a purpose in being at Careless Mesa. Your actions told me that, and I didn't want you there."

"We might have reported the shooting," Rick said carefully. "You could have gotten into trouble. Why didn't you just ask us to leave?"

"That would have brought questions I didn't want to answer. Why didn't you report it?"

That stopped Rick. They might have reported it, if there had been more opportunity to go into detail with John Gordon.

Conversation lapsed. The man filled a coffeepot from a water bag, brought out a propane-powered single-burner camp stove, and started the coffee going.

In a short time a simple breakfast of fruit juice, crackers, cheese, and coffee was ready. Then, as he juggled a hot mug of coffee, Rick said, "We're mighty grateful, sir. But we can't thank you properly when we don't know your name."

The man studied them again, over the lip of his coffee mug. "When did you boys get toScarletLake?"

Rick told him. There was no reason to conceal it.

"Uh-uh. I figgered you were pretty new. Now tell me exactly what happened here last night."

The boys hesitated.

Rick asked, "Are you just being curious?"

"No. I've got a reason, and it's a good one."

Instinct told Rick that the man was more than he seemed, but that he was in no way a thief or

lawbreaker. Briefly he sketched the events of the previous night without going into the reasons for their own actions. Scotty filled in a few details.

"All right.I'm Deadrock Ogg. Besides being the mayor and all the other city officials of Steamboat I'm a prospector. Last night I was doin 'a little pros-pectin' and I came up with pay dirt. You saw what happened here. Well, I kind of figgered in advance what was going to happen, and I waited on the turnoff toPahrumpValley . A sedan went by me pretty fast, but not so fast I didn't get the license number. Mostly because I was lyin' at the roadside waitin', and interested only in that."

"But the sedan traveled without lights."

"Not past the turnoff it didn't.Road's too curvy, and in too much shadow. That's why I was there. I knew they'd have to turn on lights."

It was Rick's turn to give Deadrock Ogg his own question back. "Who are you, Mr. Ogg? Are you a busybody? Or do you have a right to snoop?"

Deadrock Ogg chuckled. "The answer you gave me is good enough. Now, I'm going to lend you a distributor cap and rotor."

"Where are you going to get the parts?" Scotty asked.

"My own jeep.I've got one cached just above here. Now, when you get back toScarletLake, you see Tom Preston right away. You know who he is. Tell him exactly what you told me, and what I told you. And give him the number I'm goin' to write down for you. Then you ask Tom to send a plane back to drop off my cap and rotor. And tell him to send a walkie-talkie, too.

"Now, I got a real good idea what game you boys are playin' andit's fine by me. Only don't get into my game. Stay on the base. You mean well, but you could cross me up when it would hurt most. Some day, after we have the one we want, we'll compare notes. Now let's get goin'. You kids are goin' to have a long, long drive. I'm sendin' you home by way of Pahrump Valley."

"It's shorter directly back to the base," Scotty objected.

"Sure. And you'll attract more attention that way. Go through the valley and back to Route 95, and you'll enter from the front gate. Then who'll know you didn't spend the night in Vegas?"

It took only ten minutes to get the parts from Deadrock's jeep, which was parked in a ravine, invisible to anything except a low-flying plane. They said good-by to the "prospector" at the edge of town.

"Got the map in your heads? You won't get lost?" Deadrock asked.

"We'll be fine," Rick assured him.

"All right.Get goin'. And, boys-look out for sidewinders!"

CHAPTER XII

Servomotors Missing

Rick and Scotty took time to shower and change, then left on their prearranged errands. Scotty headed for his own department, to check all travel to the north since the Orion firing. Rick set out to find John Gordon.

The Spindrift scientist was not in his office, nor could Rick find him around the base. Finally he took the jeep and headed for the firing area.

There was considerable activity down on the lake bed. At a pad close to the blockhouse a tower was under construction. That was the launching tower for Cetus. But of even more personal interest to Rick was the presence of a gantry crane at a third firing pad where one of the special rocket-transport trucks was just putting the first stage of Pegasus into place.

It was at the Pegasus pad that he found Gordon, in conversation with Gee-Gee Gould, Dick Earle, Frank Miller, Cliff Damon, head of the instrumentation section, and Lars Jannsson, head of the Pegasus propulsion section.

"We'll start security immediately," Gordon was saying as Rick walked up. "Tom Preston will arrange for a guard around the clock. We'll also arrange an exchange-badge system, so no one gets inside the fence without handing in his own badge and getting a special one. That way, we'll have absolute control on who comes and goes."

Gee-Gee Gould saw Rick and dropped a hand on the boy's shoulder. "Rick and I will do the final electronics check, just as we did on Orion."

Rick looked at Gordon. "Did you say something about a fence, sir?"

"I did. Look over there." Gordon pointed to a crew with a mechanical pesthole digger that was just starting work, then gestured to sticks with red flags that formed a huge box around the pad. "That's where the fence will go. And there will be only one gate."

Rick took advantage of the brief exchange with Gordon to wink at the scientist. Gordon picked up the cue quickly. "Can I ride back to the base with you? I rode down with Dick, but he's not ready to leave yet."

"Glad to have you, sir," Rick replied.

On the way back to the base Rick told his story in detail, starting with Scotty's and his own first suspicions about Mac and Pancho and ending with their rescue by Deadrock Ogg.

John Gordon remained silent for long minutes after Rick had finished. Finally he said, "You've certainly stirred up something, Rick, but I don't know how it fits into the over-all pattern. You and Scotty meet me in thirty minutes in my quarters and we'll see."

Rick dropped the scientist off at his office, then went to find Scotty. His pal was just emerging from the big maintenance shed. "Anything new?" Rick greeted him.

"Mac and Pancho took their truck out last night," Scotty reported. "The timing was right. They could

have been driving the second vehicle that arrived while we were getting loose in the jail."

Rick looked at him curiously. "Funny. Why would they take a truck out? I mean, what legitimate reason could they have?"

"They made one. Mac told the dispatcher they'd left an important piece of gear at Careless Mesa."

So their hunch about Mac and Pancho had been right! But Rick still couldn't figure out how they were involved.

"How did you find out?" he asked.

"Easy. I checked the board. The dispatcher was sitting right there, so I just kind of wondered aloud what a tracking team would be doing off the base at night. He's a talkative sort, anyway, so he just handed me the dope."

Exactly twenty minutes later Rick and Scotty walked through the door into the barracks in which John Gordon had his quarters. They hadn't been inside before, although they had taken the precaution of locating it in advance. It wasn't like their barracks. Instead, it was divided into a series of individual rooms, occupied by the chief executives of the base.

Gordon was waiting, and with him was Colonel Tom Preston. Preston shook hands with them.

"Apparently John was right," he greetedthem., "You two do have a knack of sniffing things out."

Rick looked at the thin partition. "Is it okay to talk here?"

"It is now. I've checked. The occupants of nearby rooms are out. We'Ube able to hear if anyone comes in."

Rick immediately launched into a recital of their activities since arriving inLas Vegas. Now and then Scotty elaborated. A few timesPreston interrupted to ask for clarification on a point or two.

"Good," he said when they had finished. "I'll see that Deadrock gets his parts back."

"Who is Deadrock Ogg?" Scotty asked.

Prestonsmiled. "Quite a character, isn't he? Normally he's a Forest Ranger. At the moment he's on loan to me, serving as my outside security officer. He did a good piece of work, getting that license number. We'll hand it to the FBI bureau inLas Vegas and they'll take it from there."

"He must have had advance information, to be at the right spot to get it," Rick observed.

"No more than you had," Preston told him. "We reached the same conclusion that you and Luis Hermosa did, about how stolen goods could get off the base. We've been watching from the inside, and Deadrock has been watching at the Steamboat end."

"Then you already knew about Mac and Pancho leaving last night," Scotty stated.

"Yes. But we really don't know any more than you two have found out. We're no closer to finding out who sabotaged the rockets-or who stole the transistors and the servomotors."

"What?" the boys exclaimed in unison.

Tom Preston's eyebrows went up. "You haven't heard? But of course you haven't, because you weren't here when we finished inventory. We're missing ninety thousand dollars' worth of servomotors."

"Suffering spacefish!"Rick groaned.

Scotty asked quickly, "When did it happen?"

"During the Orion shoot.Project Cetus had drawn servos the day before, and they were on the shelves then."

"The stock clerks . . ." Rick began.

"Ran out to see Orion," Colonel Preston finished. "They've gone out to see every shoot since the first one. But all of them swear no unauthorized personnel got into the warehouses. Of course they can't be sure, because none of them kept eyes on the doors."

"Could any of the clerks be in on the thefts?" Scotty asked.

"If so, we have no evidence of it.But we have so little evidence it doesn't count for much anyway. Of course we have some ideas, and I suppose you do, too."

Rick and Scotty nodded.

Prestoncontinued, "The thing that's clear to us is that there isn't just an Earthman. There's a gang. Someone sabotages the rockets. Someone else steals the stuff from the warehouse. Someone else-and it looks like Mac and Pancho-takes the stuff to Careless Mesa, or Steamboat, or both. And someone else-the gang that captured you-gets it at Steamboat and takes it to Vegas. Then, I suppose, still another man or group gets rid of it through trade channels."

John Gordon had been listening without comment. Now he spoke up. "The pattern seems to indicate sabotage, in order to create a diversion for thieves. I can't buy it."

The boys and Preston waited for his reason.

"The thefts are peanuts. Oh, not in terms of ordinary thefts. But it doesn't seem reasonable that anyone, no matter how greedy or crooked, would destroy ten million dollars' worth of rocket to steal goods only a tiny fraction of that in value."

Gordon's comments were an echo of what Rick had thought when the theft of transistors first came to light. He simply couldn't believe theft was the only reason. He had also rejected theft as a means of hampering operations. While loss of parts was a nuisance, it wasn't crippling.

"Then the Earthman-I mean the Earthman who sabotages the rockets-has to be a part of the technical staff," Rick said.

Gordon and Preston nodded. "Because only the project people have ready access to the rockets," Gordon agreed. "Have you found out anything suspicious about any of them, Tom?"

Prestonshook his head. "I've studied their security background investigations until I'm half blind. There isn't a thing that has even a remote connection."

Gordon added, "Maybe finding the actual saboteur is the toughest part, but there are some things about the thefts that aren't clear to me. For instance, how did Deadrock Ogg know the car would be traveling without lights? He told the boys how he planted himself at the Pahrump Valley turnoff because the sedan would have to turn on lights there. How did he know?"

Rick had figured that part out. "At night, car lights can be seen for miles. The last thing in the world the thieves would want would be to attract attention to Steamboat. The only way to be sure would be to travel without lights. Turning them on during the run through the twisting roads into the valley wouldn't be too much of a risk, because the road can't be seen for long distances there."

Scotty asked, "But why did the men handle us so gently last night? They didn't rough us up, especially. And one of them said we could get loose."

"You didn't see them, did you?"Preston countered. "It was too dark. So there was no danger of your identifying them. Why add murder or mayhem to the list of charges when you gain nothing?"

John Gordon stirred restlessly. "We'd better end this meeting. If the boys are associated with us, and especially with you, Tom, it will mean an end to their usefulness."

"You're right, John." Preston looked at the boys. 'The biggest value you have is as free agents. I won't try to keep you posted on all my activities. And don't bother trying to contact me, or John, about what you're doing. It's too dangerous-unless you turn up a definite lead. Meanwhile, go on as you have been. I'd say you were doing fine. Just be careful. These men may have been gentle last night when they had nothing to lose, but that doesn't mean it's a way of life with them. Now scoot. And try not to be seen leaving."

The boys shook hands and started out, but Rick paused at the door and said something that had been on his mind since the Orion disaster.

"There's one thing. Let's hope that when the Earthman finally trips up, it won't be in front of everybody, especially after a shoot that he's just sabotaged. Otherwise, we'll never get a chance to question him. He'll be dead-lynched on the spot by the rocketeers!"

CHAPTER XIII

Fly the Winged Horse!

Rick held a servomotor in place while Phil Sherman, one of the other technicians, bolted it securely.

"There you are," Phil said. "Anything else?"

"That does it. Thanks, Phil. I can wire it up now." Rick got to work, connecting up the newly installed servo. Like other servomotors it was tiny and powerful, translating electronic signals into mechanical

actions. This particular one was no larger than a spool of thread, but it would actuate control tabs on the wings of Pegasus. Other motors ranged in size from even smaller to quite large ones about as big as a gallon can. The small ones were terrifically expensive, probably the reason they had been attractive to the Earthman and his gang.

When Rick was finished with the simple connections, he called Dr. Bond. The elderly scientist checked carefully,then nodded approval.

Phil Sherman stuck his head in the door. "Dick Earle wants everyone out front. Staff meeting."

Rick and Dr. Bond hurriedly disconnected soldering irons and went out to the main shed.

The Pegasus staff was gathering around Dr. Gordon, who was using a large packing case for a podium. Rick saw the section chiefs conversing in low tones next to Gordon's perch, and his heart pounded. Had the Earthman appeared again?

Then, as the staff finally collected and Dr. Gordon began, Rick relaxed a little. This wasn't about the Earthman, apparently.

"We are about to make a major schedule change," Gordon began. "However, until we consult with the Pegasus group, we will not know if the change is feasible."

"The Cetus group has run into a major roadblock. One essential piece of apparatus cannot be delivered on schedule, because of trouble at the factory where it's being made. In all probability Cetus will be held up about three weeks. Now, as some of you know, the Cetus staff had already begun work at the pad, and in the blockhouse. The question is,does Pegasus wish to take over the Cetus schedule?"

Gordon held up his hand as a murmur swept the Pegasus crew. "This does not mean you must shoot on their firing date. It merely means that you must be out of the way by the time they are ready to move in again. If you can, we will switch the schedule around and put you next. If you can't, it will only mean that your firing date must be delayed. It's up to you-specifically, it's up to your chiefs. However, we wanted you all to know about Cetus just to spike any wild rumors that might get started. The delay is not due to anything but a factory failure to deliver."

Dr. Gordon yielded his improvised speaker's stand to Dr. Howard Bernais, the project technical director. Dr. Bernais was administrative and technical head of the entire project. Presumably he met with the section chiefs fairly often, but he had an office near John Gordon in the main administrative building and seldom came to the project.

The technical director was a gray-haired, gaunt, bespectacled man who surveyed the staff through thick lenses. His voice filled the great shed, not that he spoke loudly, but because he had that indefinable something known as "command presence." Rick was impressed.

"We sometimes forget, we technical people, that we live in a democracy," Dr. Bernais began. "We're so used to taking orders that when someone offers us a free choice we're rather surprised. However, when John Gordon spoke to me about a change in schedule, I felt we should talk it over. If you, as the people who will make Pegasus live up to its name, are eager and willing, the change will work. If you have doubts, it may not."

The technical director peered through his thick lenses and located Lars Jannsson. "You have some difficult problems with the third-stage motor, Lars. Can you be ready?"

Jannsson turned to his crew for confirmation, then nodded. "We will be ready whenever you say, Dr. Bernais."

Robert Bialkin, head of the air-frame section, spoke up. "We're just about done anyway, Doctor.

We have a few minor modifications of the airfoils, then we're finished."

"Good. Where is Cliff Damon? . . . What shape are you in?"

Before Damon could reply, Prince Machiavelli put in an appearance. The little spacemonk had apparently decided it was too lonely in the workshop. Now he jumped from head to head, ignoring the surprised cries of the staff, until he landed on Rick's shoulder.

Amid the laughter, Cliff Damon said, "Here's one of our chief instruments to speak forhimself. I think he's ready."

Dr. Bernais peered at the marmoset, then nodded gravely. "Just one suggestion. He will undoubtedly be man- or monk-of-the-week on the cover of a news magazine. Perhaps you should give him a crew haircut, so he'll look more like one of the staff." He held up his hand and the chuckles subsided. "Then you can be ready, Cliff? . . . Good. Dick Earle It's now up to you. How say you?"

Dick hesitated. Rick watched him, anxious to see what his chief would say. He cuddled the space-monk in his arms and stroked the silky head.

"We'll have to put in plenty of overtime," Dick said finally. "I think we can make it all right, but it will put a load on the staff. What do you think, boys?"

Rick joined in the chorus of yeas! If every other section could be ready, electronics would be, too.

"There's your answer, Doctor," Dick Earle said.

"Thank you. Now I ask for a unanimous opinion.

Can we fly our winged horse on this new schedule?"

The shout sent Prince Machiavelli skittering up to Rick's neck and down inside his shirt.

Pegasus was committed to flight!

The problem of the Earthman was looming larger, Rick thought. The next target for the saboteur would be his own project. The very idea made him a little ill. Pegasus was too big, too important to be sabotaged! But he recalled ruefully, Orion had also been too big and important. Of course no trace of the Earthman had been found by the Orion staff, but the servomotor theft seemed to tie the Earthman to the disaster.

"I'm going to be up to my neck in spaghetti," Rick told Scotty when they met for supper. "I don't see how there'll be much chance to look for the Earthman."

"It should be better than ever," Scotty objected. For the first time, you'll be right on the target."

That was true, Rick agreed. He hadn't looked at it in quite that way. "What are your plans?" he asked.

"I'm going to concentrate on the warehouse. Remember what Colonel Preston said about the clerks? They swore they hadn't seen any unauthorized person entering while they were watching the shoot."

"But they couldn't have kept an eye on the warehouses," Rick objected. "Anyone could have sneaked in."

Scotty shook his head. "I don't think so. Of course they watched the shoots, but you can also bet they were turning pretty often to look at the warehouses.

They must have seen some activity. Otherwise, why would they say *unauthorized* persons?"

"I can't imagine," Rick admitted. "What's your idea?"

"The onlypeople who could go in and out without being noticed particularly, or challenged, would be members of the service staff."

"Like the postman?"

"Yes. Or telephone repairmen, or power men, or janitors, or plumbers. There must be a dozen different kinds of people who have the run of the base because of their duties. I'm going to keep an eye open to see who goes in and out regularly-and Luis Hermosa is going to help."

"Luis? How can he help?"

"The fire station has a good view of the warehouses. You know how firemen are. When they're not cleaning or making repairs, they like to sit out front. Luis is out of the infirmary and back on limited duty, and another pair of eyes will help. Once we establish who has free run of the warehouses, I'll try to see which of them have any connection with Mac or Pancho. Okay?"

"Sounds good," Rick agreed. "And I'll keep my red-rimmed eyes wide open down at the pad, too. Well get something on this Earthman yet!"

CHAPTER XIV

Check Pilot

Rick had joined in the enthusiasm for moving up the date of the Pegasus shoot, but as he gazed around the project he began to wonder if they hadn't all been carried away. There were parts and pieces everywhere. He couldn't begin to make heads or tails out of all the confusion.

Fortunately, he didn't have to. Now that zero hour was closer, the confusion turned into order like a miracle.

Rick continued to work on the drone section. The drone mechanism was actually in two parts. The part

on which Rick worked was to be installed in the rocket. The other part would be installed in the blockhouse where it would be operated by the drone pilot.

Dick Earle maintained a constant check on the work, and Frank Miller was always on hand. Miller had designed the drone system, based on principles developed by Dr. Bond and other pioneers. As Rick worked, he learned how the system operated. The drone pilot in the blockhouse sat at a panel on which normal plane controls were duplicated in miniature. In front of him were elaborate radar screens. The drone pilot watched the radar screens and "flew" the rocket. As he moved the controls, code signals were transmitted and picked up by the unit inside the rocket where they were translated into mechanical movements of the rocket's control surfaces by the number of servomotors.

Rick had to consult with Frank Miller several times, and he began to grow apprehensive about the design engineer's health. Miller's face was gray with pain most of the time, and he often held both hands on his stomach when he thought no one was watching. Rick mentioned it to Dick Earle.

"I know," Earle said. "I've tried to get him out of here, at least to see the doctor, but he won't go. He says there'll be plenty of time when the shoot is over."

Then, in the coolness of aScarletLake dawn, Lieutenant Colonel Jerry Lipton, one of the Air Force's crack pilots, arrived in one of the latest jet trainers. The staff of Pegasus greeted him and got to work at once. The jet trainer would take the place of the rocket for testing purposes.

This was the field test of the drone system-the only time it would be checked in actual flight until the day of use. While Rick, Dr. Bond, and Dick Earle installed the flying portion of the system in the plane, Gee-Gee Gould, Phil Sherman, and Charlie Kassick installed the control section in the blockhouse.

The installation took all day. The sun was dropping behind the blockhouse when final checks were made.

A guard arrived at Dick Earle's summons and mounted watch on the plane. Another guard was always on duty at the blockhouse, andstill another at the now fenced-in pad where the sections of Pegasus were being assembled.

The staff secured for the night. Test flight was scheduled for midmorning. Rick had asked, and i been given permission, to see the test from the blockhouse. Jerry Lipton would run the blockhouse controls. Another test pilot, who was driving up from the big test station at MurocDryLake, was due in the morning to serve as check pilot in the drone-controlled jet trainer.

Rick went back to his barracks filled with excitement. The flying horse was about to try his brains, if not his wings. Zero hour was getting close.

When Scotty asked how things were coming, Rick described their activities in enthusiastic detail. But Scotty only grinned. "I didn't want a connection-by-connection description of each circuit in the rocket. What I meant was, is there anything new on the Earthman?"

Rick shook his head. "I've kept my eyes open, but everything's normal as Sunday at home."

Scotty got serious. "Better be alert every second. Don't forget, boy. You're now sitting on the target."

"You're dead right," Rick agreed, somewhat subdued. "How are you doing?"

"Not bad. I have a list of eight people who go in and out of the warehouses regularly. They go in and out so often none of them would even be noticed. Also, I think I know how the transistors and servos were taken out."

Rick stared. "Honest?"

"I think so. Ever notice how the cleaning men work? They have carts. Bigones, made of metal. At one end is a kind of well, for brooms, mops, and the vacuum cleaner wand and tubes. But most of the cart is just a metal box. The sides open. They carry rags, soap, that sawdust stuff for the floor, and so on. Get the picture? The warehouse janitor could have had empty boxes all ready inside his cart. Then, in about two minutes flat, he could have changed them for full boxes."

"You've got something there," Rick said with excitement. "Any idea which janitor?"

Scotty nodded. "The one who gets the warehouses to clean most often is a character named Dusty Rhoads. He's in and out a dozen times a day, pushing his wagon. He empties the waste cans and sweeps up and generally puts things in order. No one even notices him."

"Have you reported this toPreston or John Gordon?"

"No. It's only an idea so far. No evidence at all. There's nothing to connect him with Mac or Pancho."

"Well," Rick said, "you're sure making faster progress than I am. There's absolutely nothing suspicious at the project, and, believe me, I'm watching closely."

Morning brought trouble, but not of the suspicious kind. Lieutenant Colonel Jerry Lipton walked into the project shed with a note in his hand.

"Test is off," the pilot said. "For today at least."

Dick Earle motioned to Rick. "Get Dr. Bernais."

Rick rushed to the phone and called the project technical director. Dr. Bernais promised to come over at once. He wasted no time, arriving almost before Rick had a chance to report back to Dick Earle. With him was John Gordon.

Jerry Lipton greeted them. "I'm sorry, gentlemen. The other pilot cracked up in his car last night on Route 66 just west ofBarstow . He's not in bad shape, but he won't be flying for a week or two. We can get another pilot, but it will take a day."

"We can't spare a day," Bernais said forcefully. "Surely there must be something we can do!"

John Gordon rubbed his chin thoughtfully. "You've controlled drones many times, Colonel. Is there anything unusual about this job?"

"There is nothing unusual about the test we're going to run. There will be plenty unusual about the actual rocket flight," Lipton replied.

"Then the pilot who sits in the plane doesn't necessarily have to be what you might call a 'hotshot'?"

Lipton shrugged. "Not particularly. He only takes over if the drone control goes out."

"Then any pilot would do?"

"Any pilot who could handle the jet."

Rick wondered what Gordon was leading up to.

"Then why can't we find a check pilot here on the base?"

Rick now understood what Gordon was leading up to!

"We could do that," Lipton agreed. "Do you have any pilots on hand?"

Gordon turned suddenly and looked straight at Rick. "Don't I recall that you were flying your own plane when you worked on that job at Spindrift?"

Rick gulped. "Yes, sir. I fly my own plane. But it isn't a jet, sir!"

"What is it?" Lipton asked.

Rick named it.

"Ever fly a jet?"

Rick had, and for the moment he was sorry. Thanks to his friends at JANIG, he had been given an opportunity to try out a Navy jet trainer after the case of *The Wailing Octopus* in the Virgin Islands. Steve Ames had made special arrangements at the Naval Air Station when Rick wistfully said he would like to fly a jet just once.

Lipton studied him. "Hmmm. This jet is hotter than those trainers by a factor of three, except in landing. Since landing is the critical factor, I'll buy it. First, though, we'll take a little ride."

Rick was filled with mixed excitement and apprehension.

"I'll be glad to try, sir," he said, with more confidence than he felt.

The test pilot rode to the lake bed with Rick in the jeep. On the way he inspected the boy critically. "You're pretty young," he said at last.

"Yes, sir," Rick said, thinking that Lipton wasn't very old himself, especially for his rank.

"Remember the first rule of flying?"

"Yes, sir.Keep your nerve and your flying speed."

"Correct. Remember that, and follow it, and you'll have no trouble."

Lipton followed with a rapid-fire description of instruments, controls, and procedures that left Rick's mind reeling. Finally the test pilot produced a check list. "Think you can follow it?"

Rick swallowed hard. "Can I sit in the plane for a few minutes and study, sir?"

Lipton smiled. "Sure. Call me when you're ready."

Rick climbed into the pilot's seat and took the stick, put his feet in the stirrups, and started getting acquainted with the feel of the controls while eyes and brain concentrated on the incredible clutter of instruments that every pilot has to know better than the working of his own hand.

More study wouldn't help. It was now or never. He called to the pilot. "Ready, sir."

Lipton climbed up on the wing and motioned to Rick to put on the helmet and plug in his phones. There was a spare helmet-and-phone set in the rear seat for the Air Force officer. Rick switched the radio on and heard the soft hum of dynamotors. He cleared his throat and asked, "Do you read me?"

"All right, Rick. Follow your check list and start the blowtorch going."

Rick mopped sweat from his face and went through the starting procedure. The jet flared into sudden life with a roar.

"Ready to taxi," he said.

"Roger. Proceed when ready."

Cautiously Rick fed throttle, aware of the tremendous power under his hand-power that could be deadly if misused. Using the brakes he turned the jet and then let it roll forward to the edge of the black strip that marked the runway.

"Ready to take off, sir," he said.

"Roger. Fire away."

He made a quick survey of the sky to be sure no other aircraft were in the vicinity. There was no control tower with which to check out. Now! He made himself relax a little and pushed the throttle to takeoff position.

Fast acceleration snapped him back against the seat. The jet began to wander a little and he corrected automatically, and almost overcorrected! With infinite care he straightened out again, just as the plane was air-borne. Eyes riveted on the horizon, he felt for the switch that pulled up the landing gear and felt the plane spurt ahead as the drag of wheels and struts was removed.

Lipton's voice came through the phones, relaxed and a little amused. "No need to treat this bucket of bolts like a baby, Rick. You've got power to burn. Go, man! Make like a bird!"

Rick had to grin. He was flying automatically, as he flew his own Sky Wagon. But Lipton was right. This was a jet, not a low-powered sports plane. Suddenly exuberant he cracked the throttle and stood the jet on its tail. It climbed vertically, an amazing sensation for Rick. Power to burn!

The altimeter read ten thousand feet. He asked, "Can I sort of toss it around a little?"

Lipton chuckled. "You're flying, and I have a strong stomach."

Rick kicked the plane over and let it drop, saw the Nevadamountains rushing up to meet him. He leveled

off and pulled into a tight turn, much as he might turn the Sky Wagon. G forces slammed him into the bucket seat and the world went gray as blood drained from his head.

"Let up," Lipton snapped.

Rick corrected groggily. Wow! He had forgotten that power had its limitations, too. A tight turn meant pulling too many G's-too many times the force of gravity-for safety. "Sorry," he said huskily.

"It's all right. Feel your way."

Rick did so, for an ecstatic ten minutes, then, realizing that time was moving and he was burning fuel at a terrific rate, he asked reluctantly, "What now, sir?"

"Let's go home," Lipton said calmly.

Landing was the tricky part. He hurriedly read through the landing checkoff list, then started in. Flaps, throttle setting. Then, wheels down and locked. Air speed correct.

"Better keep flying speed," he thought grimly. "This bucket has the gliding angle of a brick."

For a moment habit almost fouled him up again, as he waited for the plane to "sell out," then he remembered that he had to fly it in. With an anxious eye on his air-speed indicator he gave it a little more throttle, then felt the struts compress as the wheels hit. He chopped the throttle and tried out the brakes with tender care. He didn't intend to flip them over through carelessness now. Gradually he brought the jet to a halt, reset flaps, and then rolled the plane back to their starting point. After he had killed the engine he just sat there, too limp to move. Then, slowly, and with vast relief, he started to get up.

Jerry Lipton, who had climbed out on the wing, reached over and put a hand on his shoulder. "Where are you going?"

Rick looked up in surprise. "I was getting out, sir."

"Stay put. I'm getting out. You're going for another ride."

He asked weakly, "Right now, sir?"

"No time like the present," Lipton said. He grinned. "How did you like it?"

Rick returned the grin. "I guess you know the answer to that."

"I guess I do. It was a good flight, Rick. You only let your normal habits get in the way twice, and you corrected fast both times. Keep your helmet on now. I'll be talking to you from the blockhouse in five minutes."

It was less than that. Apparently Dick Earle and the staff had the control circuits warmed and ready.

Lipton's voice came through the phones. "Visual take-off, Rick. The radar will pick you up at five hundred feet. I may over control a little until I'm used to the equipment, but don't let it bother you. Do not take control yourself unless I give the word. There is one exception. If we lose communication in anyway, take over at once and bring it in. Now, repeat back."

"I will not take over controls, except on order from you. If communications fail, I will assume control at once and land the plane."

"Correct. Now, switch on. Start 'erup."

Rick did so.

"Release all controls and sit back. I am now controlling."

"Roger. Controls are all yours."

Servomotors held the brakes and advanced the throttle. The plane turned and taxied to the end of the runway. Rick sat there, trying not to feel uneasy. Just the same, it was weird to realize that Jerry was handling the plane from within the blockhouse.

"Take off. Here goes."

The roar increased and the plane picked up speed. Rick marveled as it lifted smoothly and the wheels retracted. Then, almost before he realized it, the plane had climbed and the earphones emitted, "I have lost visual contact. You are now under control by radarscope."

The jet climbed rapidly, then started through a series of maneuvers. Rick began to enjoy it. But the flight was almost over. "I'm bringing you in," the pilot said.

The plane turned, leveled, and the throttle was retarded. The nose dropped, in perfect alignment with the runway.

"You're off the scope and I have you on visual contact. Have faith, boy. You're almost home."

Rick braced himself and waited for the shock of landing. There was none. The jet skimmed along the runway, touched wheels, and settled so smoothly he couldn't have said exactly when the plane touched down.

Lipton, Earle, and the staff came hurrying from the blockhouse. Rick climbeddown, pulling the helmet off hair that was swimming-wet with perspiration.

Now the brains for winged horse had been tried and proved. Rick looked at the great rocket, almost hidden by the crane and its equipment. Soon, he thought. Soon Pegasus would make the payoff flight!

CHAPTER XV

The Open Hatchway

Pegasus was ready.

The dry run was over and only the final checkout remained.

At zero minus sixteen hours Rick stood at the base of the huge rocket and looked up, studying every inch of it. He knew he would never have the opportunity again.

About fifty feet up he could make out the smooth, stainless-steel connecting ring where the second stage joined the first. Explosive bolts, set off by one of the electronic circuits, would blow the stages apart. The second stage, still carrying the final stage, would accelerate away on its own motors until they, too, had consumed all available fuel. Again, explosive bolts would destroy the connection and the final stage would be on its own. The motors would flare briefly, providing less than a minute's acceleration, then the final stage would coast on its momentum to maximum altitude nearly three hundred miles above the earth.

Not until the final stage started its downward plunge would Jerry Lipton take over. His job, then, would be to control the plunging flight, to use up the excess of energy by maneuvering the rocket into the atmosphere and out, to prevent its burning up like a meteor. In slow, careful stages, he would let it come lower and lower, until most of its energy was used up. Then he would try to land it. The landing speed would be terrific-nearly a thousand miles an hour.

Gee-Gee Gould came up and stood beside him. "It's a beautiful thing, Rick. And it's ours. Yours, mine, Dick's, Frank's, Charlie's-it belongs to every one of the crew."

Rick knew. It was *his* rocket. If it worked, it would be because of the care and devotion with which he had done his job. He knew others felt the same, and they were equally right. All of them had built part of themselves into Pegasus.

If it worked ... Of course it would work! He sought reassurance from Gee-Gee.

"It's going to be okay, isn't it?"

"Yes." Gee-Gee had no doubt. "Every piece of it has been checked and double-checked. Even the inner workings of the critical parts have been run and rerun. This is one rocket the Earthman never had a chance to sabotage."

Rick nodded. He felt that way, too. The entire rocket had been checked out by teams of never less than two. Each man checked the other's work and both had to agree that all was in perfect order before the piece was accepted and checked off. Each man had to account to a guard before he could go to work. The system was foolproof. Now only the ultimate steps remained, the final checks, the fueling, and at the very last, the placement of the tiny spacemonk in his specially designed carrier.

"Let's go," Gee-Gee said.

They mounted the elevator and were whisked upward to the final stage. Gee-Gee picked up his walkie-talkie from the rack. "Do you read me, Dick?"

"Go ahead, Gee-Gee."

"Tell Jerry to go through checkoff."

Rick and Gee-Gee stood on the ramp and looked down at the ridiculously tiny wings and watched the control surfaces move in response to Jerry's gentle touch on the controls within the blockhouse. The drone control was working perfectly. Rick felt a surge of pride. This particular part of Pegasus was his.

The two went into the confined space in the nose. It was circular, the structural members rising to a near-peak overhead. A radar unit blocked out the tip of the nose cone. Under the unit a heavy steel channel ran down to the side of the drone control. Fixed to the channel by heavy springs was a tiny chair, complete with straps. The chair was festooned with wires, unconnected for the moment. The wires terminated in instruments that would sense every action, every response of the spacemonk's body. The chair channel was pivoted, so the monk would always be upright.

At Gee-Gee's order, Jerry Lipton ran through the check procedures again. This time Rick and Gee-Gee carefully watched the functioning of each servomotor. Finally Gee-Gee announced that he was satisfied. Next step was to check the spacemonk's instruments' circuits.

Rick picked up a tiny stethoscope. It would be taped to the monk's body, held tightly to his heart. He traced the circuit to where it disappeared into the oscillator switch, then took the walkie-talkie. "Display on? Checking the stethoscope."

"Go ahead," Earle replied.

Rick held it to his own heart for a few minutes, then tapped on the bell with his forefinger.

"Looks good on the display," Dick's voice came back. "What did you hit it with-a hammer?"

"Finger," Rick said. "Let's take a temperature next." He found the thermocouple that would be attached to the marmoset's body, traced the circuit to the oscillator, then called, "Watch my own body heat." He tucked the sensing element under his arm-pit.

"Hotter than a pistol," Dick said.

"Why? Do I have a fever?"

"Not unless you're a monkey. Next?"

"Sphygmomanometer. And don't worry about the pronunciation. The blood-pressure cuff." He traced the circuit, then inflated the rubber and fabric cuff.

"You just had heart failure," Dick reported.

They continued work, checking the radar equipment, the photon counters, cameras, the temperature-sensing devices, and myriad other instruments. Each instrument would feed its information to the oscillator, through the measurand transmitter and into the telemetering circuit, traveling by radio circuit back to the blockhouse. In the blockhouse it would appear in several forms. The information from the marmoset's instruments would appear as a series of waves on continually moving strips of special paper, in a machine called the display.

Finally Rick and Gee-Gee left the nose section and started to work down. It was already dark outside. The nose section was finished. The cameraman had arrived and loaded the cameras and departed. Now it remained only to place Prince Machiavelli, which was among the very last things to be done. Rick had hoped to carry the little monk to his seat, but Frank Miller and Dr. Bond had been given that job. He and Gee-Gee would be too busy with last-minute checks.

Gee-Gee was hard to satisfy. He told a guard, "Watch the nose section. No one is authorized to enter now until the monk is placed at zero minus thirty minutes." Then he led Rick across the desert to the

blockhouse.

There were sandwiches and coffee on a table near the door. They helped themselves, then went and stood behind Dick Earle, who was paired off with Charlie Kassick.

"Punch up the nose section," Gee-Gee requested.

Dick ticked off the circuits as he pressed the buttons. One by one the red lights switched to green. All were operating. Only then did Gee-Gee nod his satisfaction. "Okay, Rick. Let's get back to work. Most of it's done, but we still have some checking to do in the first and second stages."

As they mounted the crane again Rick looked up at the festooned cables that terminated in the nose cone. At the moment of firing, the cables would drop off. After that, Pegasus would be on its own.

It was after dawn when the two emerged from the final check. The fueling crews were already at work. The loud-speaker on the crane emitted, "The time is zero minus twenty-five."

Gee-Gee departed for the blockhouse. Rick started after him, then as he cleared the gate he saw Scotty. His pal was waiting patiently in the jeep.

"Just wanted you to know I'm standing by," Scotty said. "You'll be in the blockhouse, I suppose?"

"That's right. Where will you be?"

"Watching the warehouse.Luis is watching it now. I suppose some of the security boys are, too, but I haven't seen them." Scotty's eyes traveled up the great rocket. "It's a honey. Suppose the Earth-man has got in his licks?"

Rick shook his head. "Positively not. It's been checked out from nose to fins, and guarded every minute."

Scotty started the jeep motor. "I'd better get out of here. Good luck." The jeep roared off.

Rick turned for a last look at close range, and his eyes traveled up and up, from the stabilizing fins past die wings to the nose cone. Pegasus was ready. Then, he suddenly realized, the nose hatchway was still ajar.

That was strange. Prince Machiavelli should be installed in his seat by now and the hatchway buttoned for take-off. Rick ran to the gate, exchanged his badge for the special badge, and hurried to the crane. He half expected Dr. Bond and Frank to appear in the hatchway, but neither did.

"I'd better see," he muttered.

"The time is zero minus fifteen," the speaker stated.

Rick went up the elevator, hurried up the last few steps, and swung the hatch open. He took the flashlight from his belt kit and swung it around the interior. Prince Machiavelli blinked at him from a cocoon of tapes and straps. The light hurt the monk's eyes. Rick clicked it off and moved to the little marmoset's side. He stroked the tiny head. Why wasn't the hatch locked? Someone must have forgotten something. He walked over and peered through one of the two thick glass ports, expecting to see someone coming up the crane, but there was no sign of Dr. Bond or Frank.

Then, as he turned, the hatchway swung shut. For an instant Rick thought it had closed of its own weight, then he heard the scrape of metal as it was dogged down. Suddenly frightened he crossed the little room and banged on it, but the thick metal gave no sound under his fists. He had to make more noise! He lifted the flashlight to bang it on the door, and in that moment there was a scream of metal from outside as the crane was pulled away. He was locked in! Locked in the rocket! And it was ready to fire!

CHAPTER XVI

The Board Shows Green

Even through the rocket's walls the sound of motors and the creak of metal could be heard, and Rick knew that any slight noise he could make would never be noticed.

Frantic, he ran to the thick port and looked out. Surely there must be some way he could attract attention! The flashlight in his hand reminded him. He aimed it through the port and flashed a rapid SOS, SOS, SOS . Someone would see it! Someone must!

Frantically he flashed his SOS through the port, then ran to the other port and began flashing there. Why didn't someone respond? Everyone carried a flashlight. Why didn't someone think of signaling him that he had been seen?

He knew the answer. He hadn't been seen.

The flashlight picked out his wrist watch. It was now zero minus five! He stood at the port and kept flashing, his mind racing. Apparently whoever had closed the door hadn't known he was inside. His light hadn't been on at that moment. But it didn't make any difference now, because he was locked in from the outside. There was no way of opening the hatchway from inside.

Four minutes.

He had to think of something! Everyone was so occupied with last-minute details that probably no one was even looking at the rocket. Besides, it was light outdoors. His flashlight would be only a dim glow in the rising sunlight.

There had to be another way. He forced himself to calmness. Approach it logically, he told himself sternly. The way to do it is to signal the blockhouse.

He studied Prince Machiavelli, looking for a clue in the spacemonk's draping of instruments. He could tap on the bell of the stethoscope. But then he realized the display would not yet be rolling.

He had a quick vision of Dick Earle and Gee-Gee watching the master board, checking the circuit lights as they flicked from red to green. The board must be nearly all green now, he thought-and in the same instant he knew how he could attract attention.

Rick jumped to the center of the tiny room and crouched over the drone control. He removed the cover.

There was one circuit that served only as a feed to the board, to show that the control was operative. Break that and the board would show red.

His flashlight probed the maze of wiring and he located the signal wire. Fishing into the spaghetti with his fingers, he got thumb and forefinger on it and tried to break it. The wire held.

He fumbled in his belt kit and found a pair of side cutting pliers. They would do. He reached in and snipped the circuit wire, then he slumped down on the deck and mopped rivulets of water from his face.

Close! He glanced at his watch.

Zero minus two.

He grinned foolishly. This would be something to tell his grandchildren. Once, because of a silly mistake, he came within two minutes of being the first spaceman!

Prince Machiavelli was looking down at him, the furry little face serious, like that of a very wise old owl. In the irregular light through the ports the tufted ears made the spacemonk look even more owl-like.

"At least I got you a little reprieve by saving my own skin," Rick said aloud. "Poor little guy."

The marmoset chirruped happily, glad of the human companionship.

Zero minus one minute.

Rick wasn't worried about the passage of time. Not until the drone circuit was thrown into operation in another thirty seconds would Gee-Gee and Dick realize that it wasn't functioning. A yell would stop Dr. Bernais, and the gantry would be wheeled back into place. Gee-Gee and Dick would probably come personally to check the circuit and find out why the board had shown red instead of switching to green.

Rick chuckled. What a surprise they'd get!

Fortunately, it would only take a few minutes to repair the signal wire and clear out. Pegasus would be a little late-perhaps fifteen minutes.

Again his thoughts turned to the awful moment when the hatchway closed. Now that he could think more calmly, he decided that whoever had closed the hatch hadn't known he was inside. The interior was gloomy, and he had switched his light off to keep it from shining in the marmoset's eyes.

He still couldn't be sure why the hatchway had been open, but in all probability Frank or Dr. Bond had simply gone down the gantry without closing it, not realizing until they were down that the team responsible for installing the spacemonk was also responsible for buttoning up.

There was no evidence of sabotage that he could see, so the open hatchway was nothing but the kind of mistake people make when working under extreme pressure.

Again he wondered about the identity of the Earthman. It was curious that no evidence of sabotage had been found in Orion, even though the theft of servomotors had taken place. Maybe, as Dr. Hiller had guessed, the picture left by the Earthman had been burned. Anyway, Pegasus was proof the Earthman wasn't infallible. This was one project he hadn't been able to sabotage.

His eye caught the glimmer of white on the bulkhead behind the spacemonk. He didn't remember that. He got up and walked over to it, peering to see in the dimness. Then he remembered his flashlight and focused the beam on the paper.

The blood drained from his head and he gasped. It was a sketch of a knight in armor, lance upraised, thrust through a winged rocket.

Rick let out a hoarse yell.

In the same instant he heard a whine, a rapidly accelerating whine. The pumps! The fuel pumps! The starting sequence had begun!

He looked at his watch, and saw that zero time was many seconds past. But surely his watch was wrong. The board was red! Wasn't anyone watching? He ran to the port and looked out at the deserted desert. He was alone in the great rocket, and the fuel pumps were going. He could almost picture the stream of boron hydride blending with the oxidizer and flowing in an ever-increasing stream toward the combustion chamber. He heard the scrape as the instrument cable dropped away outside.

Pegasus roared!

And Rick knew. He knew that somehow he had failed, that the board showed green!

CHAPTER XVII

Weight, One Ton

Rick had no time to think. He reacted. He pulled off the jacket he had worn against the chill of the desert night, and rolled it tightly. He dropped to the deck and stretched flat on his back, the jacket tucked under the back of his head and neck.

He put his hands flat on the deck and sensed the increasing shudder of the great rocket. It was building thrust! Fuel poured into the combustion chamber and fantastically hot exhaust gases flared from the motor exhaust. And with each passing second thrust built up inside the motor chamber.

When the thrust exceeded the rocket's weight, Pegasus would take off!

He knew it wouldn't be long. Seconds more.

The entire rocket screamed as vibration ran in torturing waves through its metal skeleton and skin. It passed the point of discomfort and became unbearable. Rick rocked his head from side to side, as though to get rid of the shattering howl, but it tore at his head, at his stomach, at his very skin.

He closed his eyes for a moment, and when he opened them again he saw that Prince Machiavelli had moved, downward. The powerful springs that held his little chair were lengthening.

Air-borne!

Rick became conscious of weight. He was being pressed into the metal deck by a mighty hand. It was hard to breathe.

Pegasus was not designed to accommodate humans. No attention had been paid to limits of human endurance. It was all right for the marmoset; his spring chair would take up much of the G forces. But Rick had no padding at all, except for the thin jacket under his head. He had no support but the metal deck, and before this was over his body would be terribly distorted as forces many times gravity rammed him relentlessly into the metal.

In spite of the horrifying scream of the rocket and the increasing pressure, his mind was clear. The rocket was programmed to reach twelve G during first-stage flight-twelve times the force of gravity!

First-stage flight would last slightly over three minutes. By then, Pegasus would be nearly thirty miles up.

The painbegan, the pain of tortured muscles and organs pressed slowly, inexorably toward the deck as acceleration built up. Rick wanted to turn over, at least to change the direction of pain, but he couldn't even do that. He was spread-eagled on the deck now, his muscles unable to move his increased weight.

Consciousness began to slip from him, and he fought against it. He had to remain alive! He was going to!

For a brief moment he succeeded, then the gray-ness moved in like an all-encompassing curtain.

Pegasus climbed into the blue sky, arrow-straight, still accelerating. The seconds ticked away. For an instant, the accelerometer hovered at twelve G, and slipped toward thirteen.

Rick was five feet, ten inches tall, and his weight was a constant hundred and sixty pounds. The rocket reached maximum acceleration, 12.6g, and for that instant Rick weighed 2,016 pounds-slightly over one ton!

Then ... all burnt, fuel exhausted, the first-stage motor stopped.

The explosive bolts went into action. There was an explosion that madeitself felt in the skin of the rocket, and the grinding of metal as the first stage detached.

Rick's battered brains swam back to consciousness. For an instant he couldn't recall what had happened, then he realized he had survived the first-stage acceleration. He was in bad shape, he knew. The salt taste in his mouth was blood, and he was breathing bubbles of blood through internal damage in his nose or lungs. But there wasn't time for inventory. The aching silence was lost as the second stage fired. Acceleration built again. This time Rick slipped into the enveloping grayness almost at once. The acceleration was less, and the time of burning was less. Had he not been put through the torture of first-stage acceleration he could have taken the second stage without more than great discomfort. But now he had little resistance left.

He came back to consciousness again as the second stage cut off. In the welcome silence he found time to be thankful he was still alive, even though it might be a temporary thing. He looked up at Prince Machiavelli through bloodshot eyes and couldn't see the little monk. For a terrible instant he thought he was blind, then he saw a glimmer of light through the port. It was the sun. The rocket was in the wrong position to catch it directly, however, and the atmosphere was far too thin to scatter light.

He heard the second stage explode off and tried to brace himself for the final acceleration. He made

himself think. He was in a spot, a very bad spot. The Earthman had sabotaged the flight.But how? The first two stages had worked. Even if the third-stage motor never fired, the rocket was high enough to prove out the project objective.

There was only one answer. Even to his fogged brain it was clear that the drone control had been sabotaged by the Earthman. Otherwise cutting the signal wire would have kept the board from showing green. Somehow, the signal wire had been bypassed, to keep the operators from knowing the drone control was inoperative.

The final stage fired and acceleration began once more. Rick fought it. He tried to ignore the pain of the crushing, distorting weight and tried to keep his mind on the problem. He failed.

Pegasus was no longer traveling straight out from earth now. The gimbaled rocket motor swung slightly to one side and the rocket's trajectory flattened. As it swung on the new course, sunlight glanced in through the open port and into Rick's open, sightless eyes.

It was raw sunlight, unfiltered by the atmosphere. It was sunlight no human had ever seen before. Even in his semiconscious state Rick realized the danger and managed to shut his eyes. The sunlight seemed to burn through the lids, to scorch the insides of his head. Then the rocket moved along its new trajectory slightly and the merciless beam shifted, blazed on the sketch of a knight in armor impaling Pegasus with his lance.

Rick realized dimly that the terrible light was gone. He opened his eyes and saw the spacemonk. It was as though someone had drawn layer after layer of gauze between the boy and the marmoset, but he understood that Prince Machiavelli was still alive, and in far better shape than he was.

The vibrating, paralyzing scream of the rocket suddenly cut off. Silence flooded in.

End of burning for stage three!

Pegasus had altered course slightly, in response to its pre-set mechanisms. Now it was on a course that would take it to the maximum point into space, but at the same time would keep it overScarletLake . For a few minutes more it would coast on its momentum, slowing constantly until it reached maximum altitude. Then, briefly, it would hesitate.

Momentum used up, earth's gravity would again assume control. The rocket would slip back, tail first, slowly, slowly, then faster and faster, beginning the long, final plunge to the ground.

CHAPTER XVIII

Out of Control!

Rick came back to painful consciousness. He realized that the acceleration was at an end. The torture of G forces was over, and whatever happened from here on wouldn't compare with the past few minutes.

He tried to sit up, and strained muscles reacted. He groaned with pain and lay down again. Suddenly he

realized he was no longer on the floor!

He hung in the air, as though by some weird magic, and tried to figure out what had happened to him. Of course he was weightless! The rocket was now in free flight, its inertia counteracting gravitational pull. He would continue weightless until gravity took over again.

It was comfortable, after the racking acceleration. He could have gone to sleep easily, and almost did. Then the spacemonk chirruped at him uneasily. The marmoset was feeling the odd weightlessness, too.

The chirrup brought Rick back to his senses. He wasn't in some marvelous bed, he was in space! But natural forces still bound him to earth, and mother earth would reclaim him with crushing, final impact within a very few minutes.

Rick hung in the air, as though suspended by some weird magic

He tasted blood. The Earthman had done this! His death would be on the Earthman's head. He knew the drone control couldn't function, but he didn't know why. He was only sure of one thing. The Earthman was a member of the electronics department. Only someone who knew the drone system intimately could have bypassed the control by wiring it so the board showed green even when the control wasn't working.

Rising anger stirred him. With one trembling hand he reached out and managed to hook the channel on which the marmoset's chair was hung. He pulled himself erect. He had forgotten he was weightless. He kept right on going until his head banged painfully on the bottom of the nose-cone radar unit. The shock of pain, unlike the throbbing from the acceleration, cleared his head and made him angrier.

Carefully now, he hauled himself down again. He patted the spacemonk as he went by, an absent-minded, comradely gesture. He was intent on the drone control in the center of the floor. The Earthman hadn't had much time. Whatever he had done to sabotage the control must have been done in a very few minutes.

Rick got into position, kneeling on the deck, steadying himself with one hand. With the other he searched for his flashlight and found it hanging from his belt. His head sagged, and had it not been for the weightlessness he would have fallen forward onto the drone control. He was in worse shape than he realized. Then, some inner warning signal sounded, and he came back to consciousness with a start.

The startled reaction was enough to move him away from the drone control and break his loose grip. He slid through the air back against the bulkhead wall and felt the warmth that had not yet drained off into space. It was the heat of rapid passage through the atmosphere.

He thought grimly that the heat would be much worse when the rocket re-entered the atmosphere. Unless Jerry Lipton could somehow get control, the plunging rocket would flame like a meteor.

He moved back to the drone control, using his hands as paddles. His wrists were limp and his control was poor, but he made it. He had the flashlight now, and he shot its beam into the maze of wiring.

The cut wire dangled, its end gleaming redly in the light beam. Cutting the wire should have broken the circuit, but it hadn't. Why?

If the cut wire hadn't interrupted thecircuit, that meant the circuit had been bypassed. Rick was sure a signal had gotten to the blockhouse somehow, showing that the drone control was operating.

He had it. Look for other cut wires. It didn't matter whether he found the bypass circuit or not. The signal to the blockhouse wasn't important for the moment, but getting the control back into operation was. He knew the board must still show green down where Earle and Gould were sitting, almost three hundred miles below.

Tracing the visible wires wasn't easy. There were dozens of them, and they all looked alike. His head wasn't working and his eyes kept seeing gray fog. Why, he knew this gadget by heart! He'd practically built most of it, and he'd checked it out half a dozen times.

Something was wrong inside the control box, but he couldn't put his finger on it.

He checked carefully, tracing the wiring with blurred eyes. Then, in a moment of clarity, he saw it! Someone had put an alligator clip in the box. It was clamping a wire to a terminal post. He shook his head. Pretty sloppy work. It made no sense at all to use a clip on a permanent wiring job. Who had done it? Didn't he know the clip was apt to vibrate off during the flight?

The grayness slipped away again and he recognized the circuit. Of course! He had found the bypass. The wire ran from the main, incoming signal circuit into the master control circuit. The Earth-man had done this! What he had done was to feed the signal from the blockhouse right back to the blockhouse over the check-signal circuit, completely bypassing the drone control, which was still in operating condition but which now could not get the signals to activate it.

Rick studied the control carefully. He had to restore the circuit, but he couldn't for the life of him figure how to do it. Normally, before the crushing acceleration, he would have recognized the difficulty in a flash. Now his confused mind had to labor through steps that sometimes took him off on a wild tangent.

The rocket was slowing rapidly now. It reached maximum altitude and hesitated briefly.

One side of the rocket was brilliant with sunlight -raw, unfiltered light not meant for human eyes. The other side was black. On the sunny side, the rocket was heating from absorbed solar energy. On the dark side, the heat was radiating off. But the radiation was less than the absorption of energy, and the rocket was growing appreciably warmer.

For an instant the rocket paused, nearly three hundred miles above the earth. The space frontier was below-almost halfway back to earth. Out here was the vacuum of space.

Rick wasn't conscious of this. He wouldn't have cared. His whole attention was focused on the problem of the drone control. He didn't even realize the rocket had started the downward trip until he found himself floating upward. Then, frantically, he hauled himself back down to the control box, ignoring the stabbing pain in his stomach as he bent over again, one leg wrapped around the small pedestal that supported the control.

Strength was coming back to him slowly, his normal resilience overcoming to some extent the beating his body had taken. The grayness had thinned somewhat. He was less inclined to slip off into semi-consciousness.

Again he examined the circuit. The essential wire that fed the drone control the signals from the blockhouse was clipped to the terminal post. All he had to do wasunclip it and reconnect it to the drone-control input.

He couldn't control his fingers accurately yet, and he made several attempts to pull the alligator clip off the terminal post. Finally he made it, and sank back exhausted from the physical effort.

Far below, in the blockhouse, the indicator light on the control panel changed from green to red. Circuit not operating! Those in the blockhouse had no way of knowing that it had been out of operation since before the take-off. To them, the sudden switch in signal meant something had gone wrong in flight.

Rick vaguely realized that the light must have changed, but he didn't think about it. Now he had to find the proper terminal for the input wire. He should know where it was. He had wired this circuit himself. But try as he would, he could not find the contact.

The rocket was accelerating rapidly now, and its flight pattern was changing slowly. Instead of dropping tail first, it was canting to one side. In less than a minute it would be entering the outer fringes of the atmosphere, in the region where friction against air molecules and atoms would start heating the rocket.

Rick's flashlight beam probed the innards of the drone control. The place from which the input wire had been ripped must be within easy reach. Otherwise, the Earthman couldn't have disconnected it in what must have been a short time. For another thing, it had to be within the length of loose wire, because the Earthman had simply disconnected it, then reconnected it in another place.

He was thinking more clearly now. He poked the loose wire around, careless of possible shorts, and his luck held. A dozen times the bare wire tip brushed within a tiny space of terminals that would have shorted out the whole control.

He found the terminal.

The wire had been soldered into place. The Earth-man must have used a pair of needle-nose pliers to reach in and jerk it loose. There was a channel in the solder where the tip had rested.

Rick tried to replace the wire, but the area was too small for his hand. When he had wired the contact originally, the chassis had been sitting in the open on his workbench. Now it was encased in aluminum, except on the top where he had removed the cover plate.

He was conscious suddenly of a faint hiss. It was so faint that he didn't even notice it at first. Then, with sudden horror, he realized what it was. The rocket was striking the atmosphere! There wasn't yet enough air to act on the control surfaces. But soon the rocket would enter the denser layers of air and the airfoils would take hold. The rocket would turn over and plunge nose-down.

With the renewed energy of fear, Rick started to work again. He thrust his hand into the box, tearing the skin on the metal edge. He couldn't reach the terminal.

If he could only open the box in some way. But he couldn't do it with his bare hands. He needed a tool of some kind. He started to search his pockets and his hand brushed the kit at his belt. The pliers! He had completely forgotten them. He shook his head, and sweat ran down the sides of his face.

The rocket continued its rapidly accelerating fall, and heat built up, even from the thin air at a hundred and twenty miles. At the rocket's velocity of fall, Rick had less than two minutes to live. Pegasus was approaching dense air that would heat its skin to incandescence.

With the pliers he tore at the side of the box and managed to chew out a piece of the thin aluminum. Then he bent back the jagged edges and tried again. The wire touched the terminal.

Now to hold it in place!

He searched through the tool kit again, but found nothing that was useful for this purpose. The wire had to be locked in place fairly tightly, or it would tear loose just from vibration.

Again he flashed the light around, noting absently that he could seebetter. Light was diffusing into the cabin now that Pegasus had reached lower altitude.

The light fell on Prince Machiavelli. The space-monk was taped tightly. Instruments were held to his shaven skin by surgical tape. Rick pulled himself to the monk's side and found an end of tape. It held the stethoscope. He pulled it free and the monk chattered at him excitedly.

"Sorry, boy," Rick muttered. The side-cutting pliers weren't the best tools, but he managed to chew off a piece of the tape. It was ragged, but it would have to do. Holding the piece of tape in the pliers, he pressed it down against the wire, forcing the wire tip into its tiny groove. Then he rubbed it with the blunt end of the pliers, trying to get a good bond between the tape and the solder of the junction.

He drew back and waited. The connection was made. He knew that the rush of air outside was louder, and he suddenly realized that the cabin was very hot. Jerry Lipton would have taken over control long ago! Why wasn't the control responding?

Rick fought down the fear that gripped at his throat and made breathing hard. He couldn't panic! There must be something still wrong. But what was it?

The flashlight beam moved over the maze of wiring, then stopped on the coppery gleam of a cut wire.

Of course! When he had pulled the alligator clip, the board had showed red. Jerry didn't know the controls were working!

Rick tried to reconnect the wire he had cut. The ends barely touched; the wire had been tight. He couldn't hold contact.

Jerry had to understand that the controls were working. If only he had a microphone, a key-anything with which to signal.

The heat was increasing rapidly. The temperature must surely be over a hundred. Pegasus had reached the air again, and was falling out of control!

CHAPTER XIX

The Unyielding Ground

Prince Machiavelli began to cry. He let Rick know he didn't like the heat in a series of sobbing yelps.

Rick glanced up, surprised at the sudden noise, and flashed his light on the monk. The little animal was

suffering from the heat, the fur of his head matted and his eyes staring. Dangling from his little chest was the stethoscope Rick had ripped away to get the tape.

Rick stared at it.If only . . .

He fought his body's tendency to fly to the top of the rocket and got a firm grip with one leg around the channel under the spacemonk, then he took the stethoscope bell and began to tap in Morse code:

T-A-K-E C-O-N-T-R-O-L T-A-K-E C-O-N-T-R-O-L.

In the blockhouse, Charlie Kassick was watching the display with an anxious eye. Suddenly the straight line-a reading of zero-that had begun when the stethoscope quit functioning began to break up into a regular pattern.

Charlie couldn't read Morse code. He only knew there was something strange going on. He let out a yell that brought John Gordon jumping to his side.

Gordon studied the strange pattern, a square wave shape, a blank, then a peak followed by a square wave shape, a blank, then a square wave, peak, and square . . .

Rick was still tapping when he heard the sudden whine of servomotors. The rocket tilted but continued its fall, rushing toward earth while its nose swung slightly upward. Then the airfoils took hold and Pegasus began to climb once more.

Rick was flat on the floor, thrown there for a few seconds when gravity became normal. He climbed to his feet again, fighting pain and weakness. Jerry Lip-ton was flying Pegasus. It was a reprieve. The boy and the marmoset had a chance after all, if the heat didn't get them. Rick could feel his skin tighten, feel the moisture baking out of him.

He held on to the channel with one hand and found the stethoscope with the other. Concentrating, he tapped out a message.

E-R-T-H-M-A-N I-N E-L-E-C-T-R-O-N-C

G-R-P H-E O-N-E O-F L-S-T T-O

E-N-T-R R-O-C-K-T. He signed his initials.

The rocket was dipping toward earth again, in accordance with the landing flight plan. It was traveling nearly ten thousand miles an hour. The speed had to be lost, and the only way to lose it was by friction against the air. But uncontrolled friction would turn it into a meteor, so Jerry was letting the heat build up bydiving the rocket, then turning it upward again in a long glide, where it could cool in the outer fringes of atmosphere. Little by little it was losing its excess of kinetic energy.

Pegasus went into the atmosphere again in a long, shallow, turning glide. The heat built up until Rick's tense, weakened condition couldn't tolerate it any longer. He slid to the floor, unconscious.

Jerry Lipton had flown everything from small private planes to the latest jet. He had directed drone planes into atomic clouds and on trial bomb runs. But never in his career had he been faced with a piloting job like Pegasus.

It had been difficult enough, with just the rocket to worry about. But with Rick's life in his hands . . .

John Gordon and Gee-Gee Gould were standing by, relaying information to the pilot. Jerry watched the shape on the radar screen climb to higher altitude and asked, "What's his velocity?"

Dr. Bond was doing the calculations, based on the rocket's travel through the radar beam.

"Just above five thousand miles an hour."

Jerry shook his head. "I can't keep him up there all day. How's the temperature?"

Gee-Gee Gould consulted the temperature trace on the display.

"Cabin temperature is 105 Fahrenheit. The monk is in trouble, too. Skin temperature is just about the same as the cabin. That means Rick is running about the same."

"I'm going to cool 'em off." Jerry worked the controls and the angle of ascent steepened. He asked, without taking his eyes from the scope, "How much can he stand?"

The base physician was standing by. He had been summoned hurriedly. "It depends on the time of exposure. He could take quite high temperatures for a very short time."

"I'm worried," Gordon said bluntly. "He hasn't sent a signal since the last one. He must be badly hurt. According to Cliff's calculations, he pulled nearly thirteen G's on the ascent."

"He can't be in very good shape," the doctor agreed. "Can't you bring him down any faster?"

Jerry Lipton shook his head. "The faster the descent, the higher the heat. If the boy's already badly hurt, running his temperature up won't help his condition any. I'm no doctor, all I can do is try to bring him down in one piece, and that's tough enough for me. Decide, and I'll try to follow your plan."

The doctor went into a consultation with John Gordon, Dr. Bond, and Gee-Gee Gould.

"I see what Lipton means about bringing him down as slowly and smoothly as possible," the doctor said. "True, he's probably in bad shape, both physically and mentally, but we've no reason to assume any condition that might be more dangerous than the high temperature."

John Gordon nodded. The Spindrift scientist wanted to assure himself that the boy was all right. But that wasn't reason for taking a chance. "I agree," he said.

Bond and Gould nodded agreement, and John Gordon passed on their decision to Jerry Lipton.

"I think you're being wise," the pilot said. "Okay. Stand by, and I'll do the best I can."

Rick returned to consciousness slowly. He shook his head to clear it, but the grogginess persisted. It was light inside the cabin. He could see reasonably clearly, and he thought dimly that something was wrong. Then he realized what it was. He was plastered against the side of the cabin!

He realized that Pegasus was no longer a rocket, but a glider, traveling in a horizontal position. One part of the wall had become the deck when the rocket changed from vertical to normal flight. He saw the marmoset, still upright, riding smoothly. The channel supporting the spacemonk's little chair had moved

as it was supposed to, changing position as the rocket's aspect changed.

The port window nearest Rick was within reach. He hauled himself up. It was like being in a plane. He looked down at the earth from an altitude of about thirty thousand feet. He was almost there, and the rocket was under control!

A wave of relief swept through him, and he sat down. He was going to make it! The cabin was hot, like a closed attic on a hot July day, but it was bearable. He got back to the port again and watched as Pegasus turned in lazy circles many miles in diameter. The earth was coming closer at a pretty good clip. He was almost comfortable now, knowing that Jerry Lipton had the rocket under control.

Rick closed his eyes, for just a moment. But the moment stretched ahead as his weakened body betrayed him. He didn't realize how much time had passed until he opened his eyes again just as Pegasus pulled up into a bank that sent the blood from his head and almost caused him to black out again. But in that instant he knew he was on the landing approach, and that his speed was far too great for comfort.

He had just enough sense left to take the proper precautions. He stretched out on his stomach, feet to the nose of the rocket, and cushioned his head in his hands.

Pegasus flashed low over the hills at the end of Scarlet Lake and touched earth at twelve hundred miles an hour. It bounced, then hit again on the tricycle landing gear. The brakes were applied, gently at first, then with all the strength of the servomotors. The deadly velocity dropped off, but not fast enough. The runway was miles long, but the rocket went over it and into the desert beyond. There was nothing anyone could do.

Rick vaguely felt the smooth runway change to rougher terrain. He felt the impact when Pegasus struck a hummock and tore off the landing gear. He felt the rocket slow. Then it stopped-too fast! He went flying forward, and he brought his arms up to cushion his head. He smashed with stunning impact into the bottom of the nose radar set, and dropped into infinite blackness.

CHAPTER XX

The Earthman

Rick came back to life briefly. He saw a patch of something white overhead, and after much staring decided it was a ceiling. He turned his head an inch and saw a festoon of rubber tubes and hanging bottles. Thinking was too difficult. He closed his eyes and drifted off again.

When he again awoke the rubber tubes and bottles were gone. Grinning faces were grouped around him. Some he recognized, others were strangers. That was Scotty, and that was John Gordon, and that was Tom Preston. The others were doctors and nurses. Rick said, "So we got down in one piece." Not exactly one piece." John Gordon smiled. Scotty asked anxiously, "How do you feel?" Rick thought about it. He didn't really know how he felt. "Sort of ... light. I'm floating." Probably he had been asleep for some time. "What time is it?" he asked.

John Gordon gave a relieved chuckle. "Time sense returns. He's improving. You should ask what day it

is, Rick. You've been asleep a long time. Pegasus went up three days ago."

"I must have needed sleep," Rick said weakly. Questions crowded into his mind. He asked the most important ones first. "How's the spacemonk? Did you get the Earthman?"

"The Prince is fine," John Gordon answered. "Yes, Rick, we got the Earthman. He gave himself away when we realized you were in the rocket. Now, no more questions. We'll be back again tomorrow and the doctor says we can talk more."

"Just one more question," Rick pleaded. He couldn't sleep without knowing. "Who is the Earthman?"

"Frank Miller."

And that was it, for the time being. Not until he was improved enough for Scotty and Gordon to spend most of the day with him did Rick get the whole story. They brought the spacemonk. The little creature petted Rick, then snuggled down and went to sleep against his side.

The landing had been cruel misfortune. The brakes were not strong enough to take the strain put on them. Worried because Rick had not signaled for a second time, Jerry had brought the rocket in faster than planned. Pegasus had buried its nose in the foothills.

Rick had suffered an amazing variety of bruises, coupled with internal damages, three broken ribs, and a dislocated right shoulder. On his right arm he had a permanent scar as a memento of the landing. A metal projection had given him a bad wound and cut an artery. He had lost considerable blood by the time the first-aid team was able to get him out and apply a tourniquet. He had also suffered concussion.

John Gordon described what had happened in the blockhouse.

"I just yelled your first message out loud. Jerry was staring at the radar screen at the time. He reached over and switched the equipment back on, then took control. At first we didn't know who was in the rocket. Then we took a quick nose count. You and two or three others were missing, but none of you had definite assignments, anyway. I was pretty sure it was you, knowing your ability for getting into trouble, but it wasn't until we got the message about the Earthman with your initials that we were really sure."

"When did you find out Frank Miller was the Earthman?" Rick asked.

"Then and there. He let out a sort of funny cry, grabbed his stomach, and fainted dead away. We brought him to, and he started crying that he hadn't meant to hurt anyone.

Dr. Bond asked him bluntly if he was the Earthman, and he was so shaken I guess he didn't even think of trying to get out of it. He just nodded. Gee-Gee Gould had him by the throat in a minute, and I think he would have strangled him. But we got him off Miller and persuaded him to let the law take its course.

"After Dr. Bond and Miller finished putting the monk in place and started down, Miller said he had left his tool kit, and went back to get it. He must have changed the circuit then. I suppose in his excitement and fear of discovery he forgot the door.

Later, he must have remembered and went back to close it, not knowing you were inside. Dr. Bond blames himself because he didn't stay with Miller."

Rick shook his head. "I can't understand it. Why would Miller do such a thing?"

"Obviously, he isn't a normal human being, in our sense of the word."

"You mean he's insane?" Scotty asked.

"No. Not insane. He's what some people call a psychopath. He is not morally responsible. In other words, he can't distinguish right from wrong, as most people understand the terms."

"That explains why he was able to do those things," Rick agreed. "But it doesn't explain why he became the Earthman and sabotaged rockets."

"We have a good explanation of that," John Gordon said. "It goes back to some time ago when selection of personnel for the projects began. Both Frank Miller and Dick Earle were professionally qualified to be electronics chief of Pegasus. But of course professional qualifications aren't everything. Miller was not well liked. Earle was given the assignment because it was thought he could do a better job of getting along with the staff."

"And Miller resented it," Rick said.

"Yes. That was natural enough. But because of his warped personality, he went from a natural reaction to a psychopathic one. He decided to take revenge. We don't know why he decided to call himself the Earthman, except that he apparently saw himself as a shining knight in armor, setting to rights the earth's wrongs-of course he meant the wrongs supposedly done to him. Being a design engineer he was naturally something of an artist, although his record didn't show any special talent."

"But," Scotty objected, "ifhe doesn't know right from wrong, why should he break up when he found Rick was in the rocket?"

Gordon shrugged. "Again, we can't be sure. My own opinion is that he had a shock reaction. The reaction was partly physical, and he was in poor physical condition. For another thing, Rick spoiled his beautiful design for destruction."

"Where is he now?" Rick asked.

"In custody at Nellis Air Force Base, awaiting trial."

There was still much Rick wanted to know, but his conversation with Scotty and John Gordon was interrupted. Gee-Gee Gould, Dick Earle, Dr. Bond, and others from the project stopped by. Gee-Gee brought him a medal, which he presented with proper ceremony. The staff had made it from *a* scrap of ribbon and the name plate of Pegasus.

"We salute you, young Brant," Gee-Gee proclaimed. "You will be forever recorded in our annals as the first, involuntary spaceman."

"Involuntary is right," Rick said, grinning.

"But, nevertheless, the first. Young Brant, we wish to bestow this small token of our esteem. We regret only that the world can never cheer you with us, on account of this being a classified project."

Dr. Bond shook hands with him. "Now that our hearts have come down out of our throats, Rick, we're

pretty proud of you."

Dick Earle shook hands, too. "You certainly saved the project, Rick, even if by accident. If you hadn't been locked in, and able to get the control operating, Pegasus would have crashed."

Later, when he had a chance to talk with Scotty alone, Rick asked, "How about Mac and Pancho? Was anything stolen?"

"Mac and Pancho are *still* at large. Tom Preston hasn't let them know they're in any way under suspicion. And, yes, stuff was stolen. This time it was ionization chambers and photon counters."

Scotty had stayed in his position in the maintenance shop, where he could watch the warehouses. Luis Hermosa had also watched, from the firehouse. The janitor, Dusty Rhoads, had wandered casually into a warehouse, pushing his cart. On orders from Preston the clerks were on the job, instead of watching the shoot.

Then, fire had suddenly broken out in a small tool shed across from the warehouse area. Luis had to abandon the watch to go to the fire, and the clerks had all run out at the sound of the sirens. Whereupon, with Scotty watching, Dusty Rhoads had emerged, pushing his cleanup cart in front of him. He had even stopped to watch the fire being put out.

Scotty followed him, and watched Rhoads unload the stolen instruments from his cart and dump them into the base rubbish pile. The janitor covered them with other, noninflammable junk and went on about his business.

"So you got the stuff back," Rick commented.

"Nope." Scotty shook his head. "It's still there."

"What?"

"Under day and night guard. From a distance, of course. Rhoads doesn't know he was seen. Now Tom Preston is waiting for the next step."

"What's that?"

"Project Cetus shoots in two days."

The light dawned. "And you expect Mac and Pancho will get the stuff!"

"On the nose. Think you'll be around for it?"

"I wouldn't miss it," Rick said firmly.

He didn't miss it, although he was still too weak to be a participant. Instead, with arm in sling and ribs still taped, he was allowed to listen to the action in Tom Preston's office.

It started when Mac and Pancho picked up their radar unit in the maintenance shed. They drove to a dark area behind the shed where Dusty Rhoads was waiting with his cart. The stolen material was quickly transferred, and hidden behind the equipment racks in the truck. Then Mac and Pancho drove off, en route to Careless Mesa.

Dusty Rhoads put his cart away and started back to his barracks. Security officers fell in step on either side of him. Dusty was finished.

The gate reported by phone when Mac and Pancho went through, then there was a long wait. Tom Preston, John Gordon, and Rick had an early breakfast in the security chief's office. Just as they finished breakfast, the communications outfit on Preston 's desk buzzed.

"Playboy One to Playboy Base. Come in."

Prestonthumbed his microphone. "This is Playboy Base. Go ahead."

"Deadrock here, Tom. They're coming up the mountain."

"Roger. Keep us advised."

The waiting again, then Deadrock called once more, excitement in his voice. "Tom, there's another vehicle of some kind coming in from Steamboat."

"Good! How are you fixed?"

"We can handle a regiment. Scotty is going down around the mesa to cut them off in case they try to run for it. Hank is going down on the base side. How important is it for Careless Mesa to track the shoot?"

John Gordon gavePreston the answer. "Not important enough to risk not catching all of them. The other stations are tracking."

"Get 'em," Preston ordered.

"Right. Soon as it's a little lighter. We don't want one wriggling away in the dark."

Rick looked outside. Dawn was just breaking. It would be light enough in ten minutes. The ten minutes took an hour to pass. Then he had to wait ten more, until Deadrock came back on the air.

"They're all yours, Tom. I fired a shot and they looked up. Then Scotty and Hank fired over their heads from each side and they saw they were trapped. They upped hands, polite as you please, and we moved in to put the cuffs on."

Scotty elaborated later. Deadrock had waited until some of the stolen goods had changed hands before firing his warning shot. That was for purposes of evidence.

Pancho and Mac maintained a stony silence, but Dusty Rhoads was eager to talk. The other two had threatened to kill him, he claimed, and had forced him to steal. No one believed this, but Dusty's tale at least showed the connection between Miller and the thefts.

Pancho had stumbled across evidence that Miller was the Earthman, Dusty said. Dusty didn't know what the evidence was, and Pancho refused to tell him. But when Big Mac heard about it, he accused Miller, and promised to keep silent in exchange for co-operation. He demanded to be told when a shoot was to be sabotaged. Miller agreed, in exchange for part of the profits. Mac, Pancho, and Dusty had not participated in any way in the sabotage.

The other men, who had captured Rick and Scotty at Steamboat, proved to be well-known thieves with prison records. One admitted they had depended on Mac and Pancho to tip them off to any trap that might be waiting, but of coursePreston had made sure no inkling reached Mac and Pancho that they were under suspicion. For that reason, the thieves had driven without hesitation to Careless Mesa to pick up the latest batch of stolen equipment -and had received the shock of their lives.

Rick thought that the trail of the Earthman had been a pretty devious one, complicated as it was by a gang of thieves as well as the saboteur himself.

He wondered briefly if Miller's identity would ever have come to light if he hadn't been trapped in the rocket. But the next moment he realized it would have, eventually, because the thieves were known, and at least the janitor would have talked.

Rick and Scotty still had their jobs. Both had done well in their assigned work, and could have stayed on indefinitely. But in spite of the temptation to remain for a while, the call of Spindrift was strong.

As Rick said, "It's nice to travel, but one thing that makes it nice is that we can go back home."

A letter from Barby had made him a little homesick. Everyone was fine. Dismal was lonesome. Jan Miller was back, with her parents. Dad was worried because he hadn't heard from Tony Briotti and Howard Shannon, but that was probably just the slowness of mail. Barby urged them to hurry back and hoped they were finding life dull enough so they would. She and Jan needed instruction in sailing, because they had just bought a new Comet-class sailboat.

The boys said farewell to their friends at Scarlet Lake, not forgetting Prince Machiavelli, and returned to Spindrift two days after the successful Cetus shoot.

Back at Spindrift they spent their time instructing the girls in proper sailing technique, but Rick still had to avoid exertion, and he couldn't swim because his arm was still bandaged. Then, one day the Brants family doctor announced that he was fine, and a bandage was no longer needed.

Barby looked at the scar on Rick's forearm and her eyes opened wide. "Rick! That was a terrible cut, How on earth did you get it?"

He couldn't tell her the real story. He had been instructed by his father not to mention it, even to Barby. "It was pretty exciting," he said. "It happened when they let me fire a rocket."

"You fired a rocket?" Barby gasped.

"Sort of," Rick said. "I lit the fuse. I didn't jump back far enough, though. The tail fin clipped me as it went by."

For a long while Barby wasn't sure whether Rick's story was true or not. She didn't know whether the big rockets had fuses. When she found out by questioning Dr. Zircon, she asked Scotty to remind her not to talk to Rick for twenty-four hours.

But before the day was over, Rick was packing, in company with Scotty and Dr. Zircon, for an emergency trip to the SuluSea. Their mission: find two missing Spindrift scientists!

What happened during the search will be told in the next exciting book of Rick's adventures: THE PIRATES OF SHAN

THE END

The ScarletLakeMystery

A RICK BRANT SCIENCE-ADVENTURE STORY, No. 13

BY JOHN BLAINE