# **The Runaway Asteroid**

## Michael D. Cooper



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#### THE RUNAWAY ASTEROID

#### THE STARMAN SERIES

by Michael D. Cooper

### MUTINY ON MARS THE RUNAWAY ASTEROID JOURNEY TO THE TENTH PLANET DESCENT INTO EUROPA THE LOST RACE OF MARS DOOMSDAY HORIZON

(The seventh book, THE STARLIGHT MANEUVER, and other volumes are in preparation.)

The short stories-The Flight of the Olympia, The City of Dust, SETI, A Matter of Time, and Return to Europaare available in the first five issues of the Inter\*Stellar, the fanzine for the Starman series.

A novelette outside the main storyline, The Lost Tomorrow, is serialized in "The Starman Chronicles."

All items may be ordered through the Starman web site at www.StarmanSeries.com.

David Foster Number Two

#### THE RUNAWAY ASTEROID

by Michael D. Cooper

Artwork by Nick Baumann

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The Starman Team dedicates this book to

Fred Woodworth

a rare and gifted individual who practices generosity in a world of acquisitiveness, courage in a world of indifference, honesty in a world of opportunism, and personal responsibility in a world of buck-passing; an artist and craftsman few in this era know how to appreciate; who has done as much as any and more than most to advance the cause of series books; and whose genius has abundantly proven that the books deplored by librarians of a previous age are treasures that shaped several generations and made their readers better people. To Fred Woodworth of Tucson, Arizona, the series book world owes a debt that can never be repaid.

#### ACKNOWLEDGMENTS

The Starman team wishes to thank

STEPHEN AVERY for coining the term "greegles." Though these remarkable beings will probably not reappear for several books, their place in the Starman series is an essential part of the saga.

TOM NARWID, amateur astronomer, for supplying the photograph which we used for the endpapers. The scene was taken through his backyard telescope in Cottonwood, Arizona.

KEVIN ANETSBERGER for preparing Tom's spectacular, multi-colored original photograph for publication by reducing it to two colors.

#### INTRODUCTION

The Starman Team dedicated its first book, Assault On Mars, to Joseph Greene, the late author of the Dig Allen series which was the inspiration for the Starman series. A complimentary copy was sent to his son Paul, who was moved by the

The number of fans of the Starman series is growing each day, and we appreciate the contributions many of them have made to the project. Their assistance, encouragement, and technical support have helped to improve the storyline and scientific accuracy of the Starman adventures.

tribute. We then asked Paul to write an introduction to The Runaway Asteroid. The following is his response-surely one of the most unusual introductions in any book anywhere, and one we are privileged to share with our readers.

#### Dear Dad,

A most remarkable invention is weaving the world together in a way we never anticipated while you were on Earth, and it netted your writing. Fans of your books for juveniles, The Digby Allen series, were able to connect to each other, share their enthusiasm for your novels, and were inspired to continue the voyage. Led by Jonathan Cooper, the intrepid mastermind of the creative crew, they made a commitment to write their own vision of the future. Thoughtfully, they credit you as having shoulders broad enough for them to stand on and see the centuries beyond. The invention that has made this possible is called the internet. There seems no need to explain what it is here, but part of its magic is that it can permit people to connect to each other independently of time and space.

The themes of Dig Allen from the 1960's have worked like the internet in that they functioned independently of time and space, only much more slowly. You presented your ideas in books as ideas are posted on the internet. The authors of Starman were drawn to the themes in your books and then each other in cyberspace, which acts as both the bookshelf and caf for today's ideas and authors. The creators of Starman saw value in your stories and tried to get the publisher to renew the series. Sadly, your old publisher ignored them and blocked the revival, as though they were so much space junk.

No one owns a theme. But the creators of Starman have shown that they share some of the beliefs that you express in your subjects. Their young men of the stars prove that they too are brave, adventurous and willing to sacrifice for freedom and justice. With a loyalty toward each other that would create envy in every generation, they test themselves against cunning scoundrels. As they conquer villains, they, and we along with them, learn whether they measure up. Will they prove themselves worthy as young people have done for all time? Young readers can have a chance to preview something about their own lives and the world they will live in. And just as you believed, somehow the human race survives. If the world of Starman is an accurate guess on the future, then the good guys, the ones in the white spacesuits, will continue to prevail and produce more young people to keep the dream alive. I hope that some of the next generation of courageous young people will read this series.

Your fans don't know that you started writing seriously relatively early in life, in the 1920's and '30's, first as a teen for your personal pleasure and then on your school newspaper at New Utrecht High School in Brooklyn, New York. Did having to learn the English language after speaking Russian until the age of seven help you become a better writer? Were your poems and letters to Mom valuable both to her and to your professional development? Did the comic books you authored during the Golden Age of comics give you a better sense of storytelling and dialogue or did it degrade your love of language? I know that writing television scripts and other creative projects supported the family during the difficult years of the 1950's, but how did it affect your later work with Digby Allen? So many of your themes are repeated and reworked in several of your creations right through to the late 1980's. Who would guess that you once wrote a paper on the use of the raven in several of Shakespeare's plays? Or that you wrote biology text to accompany a new medium, slides made from strips of 35mm film? Would admirers realize that you were most interested in world events, but read the sports section of the New York Times first, everyday? I'm certain your fans wouldn't have read the American Elsewhen Almanac, a compilation of bits of Americana and commentary that you published in the 1980's.

I want to thank the authors of Starman for giving me the opportunity to write the introduction to their second novel. If there is a way to communicate to you across the veil between our dimensional world and the one in which you now reside, then it must be through the pages of a book. After the love of family, I don't believe anything was more precious to you than books, so maybe this letter will be able to cross the divide. Just as I proofread the drafts of Digby Allen before you sent them to the publisher, your granddaughter and grandson proofread this. Perhaps that will act like a mystical booster rocket to get these pages to you.

And to future space pioneers, may the solar winds be at your back.

Love,

Paul

October 20, 2000

#### THE RUNAWAY ASTEROID

#### 1: Controlled Fury

"THEY'RE getting closer! They're almost on us! We won't make it into the Belt on time!" The navigator of the Silver Spear was on the verge of panic. His frenzied hands moved over the controls.

"Keep going! Keep up full speed! Make sure that we get there ahead of them!" Lurton Zimbardo's voice was even and controlled, but it was obvious that he was barely containing his volatile fury. His commands were not to be questioned. His nostrils flared, the muscles around his lips were taut, he kept his fists clenched and pounded a persistent rhythm on his ship's control panel. His breath sounded as if he could inhale and exhale the room's entire atmosphere. It was only his iron self-control that kept his crew from giving in to their fears.

Behind them just moments away Starman David "Zip" Foster's ship, the Star Ranger, was closing the gap. The pursuit had been going on for two days, since the Silver Spear had blasted off from Eagle City on Mars and escaped while the rest of the pirates were rounded up by Earth's forces. Zip Foster, accompanied by Starmen Mark Seaton and Joe Taylor and their companion Steve Cliff, had followed less than fifteen minutes later. The brief lead that Lurton Zimbardo's ship had was enough to keep the Silver Spear out of the clutches of their pursuers, but not by much. The crew of the Spear was suffering acutely from sleeplessness and mounting anxiety.

Only days earlier, Lurton Zimbardo had been second-in-command under Troy Putnam. Together they had organized over 500 men and attempted to take control of the capital city of Mars in a sudden attack. Had they succeeded, the pirates could have held the people of the Earth-Moon system hostage to their demands. The Starmen and their allies had thwarted the pirates' plan. Most of the pirates, including their leader, had been captured. Zimbardo, however, had escaped with a few others. With the Starmen in close pursuit, he was desperately trying to outrun them and return to the pirates' base in the Asteroid Belt.

The Belt loomed up. The first few chunks of rock were visible now to the unaided eyes of those on the deck of the Silver Spear. In seconds, they were among them. The navigator screamed as the ship whipped by a pitted rock a quarter of a mile long, missing it by a few yards.

"Fool!" shouted Zimbardo. "Turn on the automatic pilot!" The navigator's eyes were the size of saucers. Immobile with terror, he didn't respond to Zimbardo's command. The former second-in-command of the pirates pushed him out of the chair, took over, and activated the switch that cut in the automatic pilot. Lurton Zimbardo was not physically imposing, but more than made up for his slight build with an immensely strong will and a decisive nature that was merciless whenever it served him.

He knew they were going too fast even for the automatic pilot to keep the ship safe once they entered the thick sweep of the asteroids. He also knew that the Belt was their only hope of escaping the Starmen on their trail. Powered by adrenaline, his senses were functioning at their peak. With amazing alacrity and intensity, Zimbardo aided the automatic pilot and threaded the Silver Spear through the weaving asteroids. It almost seemed as if he were in a trance.

Soon a dark asteroid loomed ahead, roughly shaped like a potato, forty-five miles long and twenty-five wide, rotating slowly around its longest axis. It was nearly invisible both to the eye and to the instruments, but Zimbardo knew where it was. He barked out a command. The Silver Spear slowed quickly, and moments later a huge airlock door opened in one of the poles of the asteroid. Zimbardo piloted the ship into the airlock, through the stone tunnel that led into the interior of the asteroid, and then touched down.

The thin, wiry man raced for the control room as fast as he could run, pushing men out of the way and heeding no one who called out to him. Once inside, he quickly pressed a series of buttons and entered a numeric code. Once it was entered and confirmed, he made a fist and slammed it hard on a large red button. Immediately all the radar screens were covered with snow.

Zimbardo relaxed for the first time in days. He exhaled quietly and actually smiled. He took a deep breath and smiled more broadly.

"Sir?" asked one of the technicians who had watched the procedure.

"I detonated a hydrogen bomb on a neighboring asteroid a couple of hundred miles from here. Part of a backup plan for keeping this place hidden. It will clog all radar screens for a few minutes. By the time they clear, no one will be able to find us or this asteroid."

Zimbardo's relaxed state did not last long. He swelled up with energy again,

strode to another console, and tapped in a series of commands.

"Come here, Gene," he ordered as his fingers flew over the keyboard. The man he addressed quickly came to stand by the pirate leader. He was a well-built young man in his late twenties with short curly brown hair, finely chiseled features, and an obvious desire to please. He was well trained in the technology of space control systems. After he had proven his competence in the field, Troy Putnam had made him his chief control officer.

Zimbardo continued. "Follow these coordinates at this speed. Don't alter the course for any reason without my permission."

Gene looked at the planning board where the numbers were posted in a pleasant green light. "That course will take us out of the Belt, Mr. Zimbardo. Is that what you want?"

"That's what I want. It's time to move away from here. If anything out of the ordinary happens, let me know immediately. Find me by using my personal code on the communicator-no general announcement. Keep watch especially for any spacecraft-especially any spacecraft!"

"Yes sir!" Gene took his place and the others returned to their duties.

Once he saw that the crew members were well settled, he picked up the intercom and ordered his leaders to assemble in a meeting room in five minutes. From the few dozen pirates left, he had hand-selected five competent leaders to be his lieutenants: Gebbeth, Crass, Lather, Bolcher, and Slant.

In less than that time, Lurton Zimbardo was sitting at a table with the five other men. All but Zimbardo looked haggard. The pirates were demoralized and upset. Victory on Mars and beyond had been within their grasp, but it had all been blundered away. A band of several hundred men who had planned and worked for several years had been reduced to a few dozen. Their dreams of power and prominence, shaped and fueled by their captain Troy Putnam, had been utterly destroyed. Now Putnam was in custody on Mars, along with the rest of the pirates who had been captured by Earth's forces.

"Troy Putnam was a fool," Zimbardo announced in a quiet voice edged with steel. "His plan might have worked-might have worked, if I had had more part in planning-but he was no more than a conceited ignoramus! The Starmen walked in on him and took him completely by surprise! I can just imagine how his face must have looked as he realized his plan was over and he was led off to jail. A fool! We are better off without him!"

"Better off without him?" asked one man in a dull voice. "What do you mean, Lurton? Better off for what?"

"Don't be a fool yourself, Crass!" Zimbardo sneered. "You think we're finished here? We will still get what we want and it won't be very difficult! We don't need Putnam and we don't need a few hundred men, either! You can be thankful you're here instead of locked in a stone room in Eagle City eating square, plain, healthy meals off of a metal tray! The collapse of Putnam's big dream is the best thing that could have happened for us!"

A muscular, unsmiling man on Zimbardo's right swung his gaze to the speaker. "It sounds as if you have a plan, Mr. Zimbardo." The man was in his early thirties and resembled a street fighter. His carefully combed dark hair made him look almost strikingly handsome, but his eyes were black and humorless.

Zimbardo turned toward the man. "Yes, I have a plan. You, Gebbeth, will be my chief assistant and the pilot of the Tartarus, my personal ship. I can depend on you. Space Command's celebration on Mars will be extremely short-lived."

"You were always the strong one, Lurton," said another. "I kind of always figured you for the real leader, and I always wished it was you instead of Putnam."

"Now you got your wish, Bolcher. I've taken charge. I'm moving this asteroid out of its orbit into a place outside the Belt. Here's my plan."

Almost an hour later, the men left the meeting room, smiling, joking, and stepping lightly. Their fatigue was gone, their discouragement forgotten.

Lurton Zimbardo was the last to leave. Now that things were moving in the direction he wanted, he allowed his fatigue to take over. Encouraged by the support of his assistants, he felt he could rest at last. He walked down the halls, past various doors and entered an elevator. The display screen offered only the few floors in use by the pirates but Zimbardo had another destination in mind. Alone in the elevator, he punched in a special code which only he knew. When the proper sequence was displayed, he pressed "Enter." As the elevator began to

move, the new leader of the pirates relaxed even further. The others would not know where he was, and he would be undisturbed.

He could barely sense the elevator's motion. He didn't know how far into the asteroid's interior he was moving, but he knew what he would find when he reached his destination. The door opened and Zimbardo stepped out. A quick walk down a short corridor brought him to a double door. Embossed on the doors was a huge, rich, golden symbol-a lush planet with about 80% blue oceans, a few continents, and thick cloud cover. Three small moons were arranged at the upper left, set at the points of an equilateral triangle. Zimbardo had been intrigued by the design when he'd first found it, but now he hastened through the doors without noticing it. He was eager to get into the Chamber beyond.

As Lurton stepped into the room, he gasped. His dozen prior visits still had not taken the surprise out of the room. Each time he stepped into the Chamber he seemed to be setting foot into another world; he knew he was still inside the asteroid but his senses told him otherwise.

Lurton seemed to be standing on a high mountain overlooking a vast plain on some forgotten planet. A pale blue sky was overhead and a light wind was blowing. Down below on the plain he saw a river snaking its way through a green forest; if he listened carefully he could hear the water. In the distance he saw a fantastic alien metropolis of beautiful glass skyscrapers; he could just barely make out ships hovering over it and small vehicles driving around in the distance. Clouds sailed gently overhead; it was near dusk.

He knew that the room was actually no more than about a hundred feet square, but the display was seamless. For all the world he seemed to be standing on another planet on a late, peaceful afternoon. He had never been able to find out how the room worked or where the wind came from, but he suspected the display was generated by some sort of holographic projectors far in advance of anything he had ever seen or heard of.

Lurton guessed that the scene was from the home planet of the asteroid's builders; perhaps the distant city was their capital. He had spent hours watching the room and never tired of it, for the scene always changed. After a certain number of hours dusk fell and the city lights came on. He had watched different kinds of weather and seen glorious sunsets and sunrises. Occasionally he caught a glimpse of a huge alien starship. He had seen many strange things in the Chamber and he was sure that he had not seen them all.

Lurton liked coming here when he was upset or annoyed; the room had a peaceful air that rested and soothed him. He was certainly in need of that now. He hadn't slept in over fifty hours and could easily have lain down in what seemed like soft turf and fallen deeply asleep, but the ethereal beauty of the Chamber's vision was restful and he didn't want to close his eyes for an instant while he was inside.

He thought back to the day when he'd found the room. The asteroid had been drifting and uninhabited for who knows how many thousands of years when a solitary asteroid miner had found it and discovered that it was hollow. He had told a few others about his find and eventually Troy Putnam learned of it. Zimbardo grudgingly admitted to himself that Troy was a genius-a weak, impractical genius, but a genius nonetheless. Putnam had found the miner and persuaded him to bring him to the nearly-invisible asteroid. He had even learned how to use many of the asteroid's capabilities, and then had made it the base for his foolish attempt to take over Mars.

Shortly after the pirates had taken residence, Troy Putnam had directed Lurton to explore the asteroid beyond the few floors the pirates used and find out everything he could about it. It was a trying assignment. The first few floors comprised a connected unit and the elevator codes were easy to learn. Moving anywhere else was a matter of trial and error, and the access codes were complex.

One day Zimbardo had found the Chamber. There was very little that could arouse any kind of sensitivity in the wiry, energetic man, but the Chamber could do so. Maybe it was because no one else knew about it and no one could see him wrapped in the depths of the emotions the room could inspire. The Chamber was not the only secret of the asteroid which Lurton had retained for himself, but it was certainly the best one.

At last the peace and enchantment of the Chamber overcame Lurton's resistance to slumber. He sat down and rested with his back against a tree, gazing over the landscape at the alien city. The massive trunk was slightly rough but not uncomfortable. Huge roots spread out in all directions before disappearing into the grassy soil. Branches laden with broad leaves made a shadow-filled canopy over the pirate leader.

As he felt sleep coming on, he fumed one more time at the Starmen and the stupidity of Troy Putnam. He mulled over his plan and smiled a little. The Starmen would live to regret what they had done to him. His eyes closed and his breathing became deep and regular. At last the pirates' new leader slept.

Above him a few birds chirped peacefully. A short distance away a brook murmured in lyric gentleness. The sky over the city gradually turned from flawless blue through lavender into violet, and silver stars emerged.

#### 2: Sent to Ceres

THE SPLENDOR of the Asteroid Belt stretched away in all directions, and the piercing light of uncountable stars filled the background. Such a view was possible only in airless space. Starman David Foster was staring out of the window of his ship, the Star Ranger, but he was not really seeing anything. His brow was furrowed with an uneasy doubt.

"Still no sign of 'em, Zip," announced Joe Taylor. The lanky six-footer had eased naturally into the position of pilot under David's direction. Joe had flown everything from ancient biplanes to interplanetary rockets. He understood the principles of propulsion and flight, and with amazing facility could learn to fly almost any vehicle designed for traveling through an atmosphere or the vacuum of space.

Mark Seaton had naturally become the navigator and engine master of the Starman crew. He specialized in engines and large, complex machinery. He had always had a talent for understanding machines, and he knew the workings of the average rocket from stem to stern.

David Foster, like all Starmen, was able to navigate and fly his own ship, but had a specialty in Deep Space exploration and survival skills. Whenever he was faced with a problem, he could think it through and come up with a solution with the equipment available. He was a natural leader. He excelled at organization and decision-making, and Joe and Mark were glad to be a part of the Starman team under Zip's leadership.

Joe continued to relate his observations. "I've scanned as far as the instruments

can reach, and there's just nothing out there in any direction-except the Earth ships, of course. They should be here in about three hours."

"No debris?"

"No, Zip. I've found where the explosion took place and examined that more carefully than any other area. It was a violent blow. I think about a third of an asteroid was turned into dust when it went off, and that's powerful enough to vaporize any ship that was carrying a weapon with that kind of potential."

Zip shook his head as if warding off a buzzing insect. "All right. Nothing we can do about it." He turned to the third Starman on the crew. "Mark," he called out. "Would you send a report to Mars please and ask Commander De Koven what he wants us to do?"

"Okay, Zip."

Mark prepared the message and sent it off. The response would come through after a delay of several minutes. As they waited, Joe said, "You seem uneasy, Zip. What's there to worry about?"

"I just like completion. That ship we were chasing carried the last of the pirates from Mars, and I'd just feel a lot better if there were some debris, some evidence that they hadn't escaped."

"Zip," came a deep voice from the lounge next to the flight deck, "there's a lot of uncertainties in life, 'specially life in space. I been around a lot and believe me, the exception is when you really know everything that happened-and that's never."

"Sure, Steve," answered Zip, raising his voice. "I know. But I don't like it."

"You'll probably be uneasy most of your life then. C'mon, be like me. Lie down, relax, take a nap. You've been rushing for days now, especially the last couple when we were shooting through the void at top speed. Give it up now, boy. You can't do anything more."

Zip didn't answer, but he walked into the lounge. Steve Cliff was completely relaxed, with his feet propped on a table. His huge frame was sunk into the sofa deeper than Zip would have thought possible. Zip picked up a book that Mark had been reading, and lay down. In less than a minute, he was asleep with the open book face down on his chest.

"Up you go, Zip, it's dinnertime." Steve's normally boisterous voice was gentle and almost subdued. Zip took a deep breath and slowly opened his eyes. He sat up, put the book aside and ran his hands through his red hair.

"What's going on?"

"You've been out almost four hours. Figured I'd make myself useful so I whipped up some food. Here you go." Steve set a tray down on the nearby table. There were mashed potatoes, salad heavy on diced tomatoes just the way Zip liked it, and a few pieces of very thinly sliced roast beef in a luscious brown gravy.

"Looks delicious, Steve; thanks."

"Coffee's coming up in a minute, steaming hot with half a teaspoon of sugar." Zip reflected for a moment about how little time he had known Steve and how well he fit in to the group of three Starmen. Steve already knew how he liked his coffee-hot and fresh-and what his favorite meal was. While he was enjoying the aroma of the meal before tucking into it, Steve brought in the coffee.

Zip lifted a mouthful of roast beef and potatoes. "What's going on?" he repeated.

"Mark got hold of the big guys in Eagle City, told 'em what was going on out here. They told us to wait until the Earth forces showed up and then get on back to Mars. We've been under way almost an hour." Zip nodded.

"Mark says there's more and wants to talk to you whenever you're ready."

"Send him in."

Mark came in as Zip put a fork into a chunk of tomato and lifted it out of the bowl, dripping with dressing. "This really is delicious, Steve!" he called out as Steve disappeared onto the flight deck, leaving the two Starmen to themselves.

"Steve told you we're on our way back to Mars, I'm sure," said Mark by way of preamble. Zip nodded. "Commander De Koven also said that we are to report

directly to Mars Base. We drop Steve off at Eagle City and go right on to the Base without getting out of the ship." Mars Base was Starlight Enterprise's headquarters on Mars. It was a huge plant, covering several thousand acres of Martian desert near the north pole and far from any other settlement.

"What's up?" Zip's gray eyes peered over the rim of the coffee mug as he took a swallow.

"There's no danger of further attack on Mars-everything seems to be secure in Eagle City-but we're to be given an assignment with a 'significant time factor,' as the Commander put it. Too sensitive to put out over the radio even with scramblers and tight beam."

"They must've learned something from the pirates they captured."

Joe peeked around the corner. "No-I think they're going to give us a medal and a month off for liberating Eagle City!"

Two days later, the Star Ranger was cruising at a good clip a few miles above the Martian desert. Eagle City was behind them, and the course was set almost due north. Mark was reminiscing about the parting with Steve.

"Don't worry about a thing, boys-I'll make sure the little folk get back to the Moon safely enough." Steve was referring to Jack and Jill, the diminutive citizens of Titan who had played a critical role in rescuing Eagle City from the pirates during their assault on Mars.

Mark felt very badly that he hadn't been able to see the Titanians. Four days before, they had left Mars without notice to begin the frantic chase of the escaping pirates, and now they were urgently called to Mars Base with no time permitted to see their friends. Personal relationships were important to Mark. As the Star Ranger returned to Mars from the Asteroid Belt, he had made a recorded greeting and farewell for Jack and Jill and entrusted it to Steve. Mark was beginning to realize that for him, the life of a Starman would be marked with frequent partings and sorrows.

The always-ebullient Joe did not seem to be affected. "Don't worry about it, we'll see them again. They'll understand. Right now we're off on another adventure!"

As the Star Ranger approached the pole, Mark shifted his mood and hoped that Joe would be right.

"Oooh, yes! Look at that!" exulted Joe, pointing out of the front of the ship. A light came over the horizon like a flame too bright to be looked at comfortably. The sun was reflecting off the glass-sheathed buildings of Mars Base, Starlight Enterprise's primary headquarters on the fourth planet.

As the Star Ranger rapidly closed the distance, Mark radioed for landing clearance.

"Gorgeous!" said Joe. From the pilot's seat he could make out the airport, the hangar, the sprawling laboratory and research buildings and the manufacturing centers. Men, robots, and machines scurried around the plant. Security was very high; ever since the pirate attack SE had redoubled its efforts to keep out unauthorized personnel. This was the area from which Starlight Enterprise conducted its Martian operations.

Immediately after landing, the Starmen were brought into a spacious office. As they entered, a clean-shaven man with a rather long crew cut looked up.

"Mr. Konig!" exclaimed Zip as he led the little parade into the central portion of the complex. "I sure didn't expect to see you here!" Konig was in charge of security throughout the entire SE system.

"Welcome to the Base, Starmen!" Konig stood up and came around his desk to greet each of them with a warm, two-handed handshake. He was a genial man, large but by no means overweight, very strong, firm, and of almost regal bearing. He gave the impression of being always available and affable, but never to be taken for granted.

"Sit down," he continued. "What I have to say is of vital importance and I'm afraid we don't have time to do more than get you briefed on the situation. I can't even take the time to commend you for the outstanding work you did against the pirates. Richard is busting with pride over his newest Starmen! I can't say I blame him-you did marvelous work! You three are wanted on Earth for some special recognition, but unfortunately we have a brief mission for you first."

"Richard" was Richard Starlight, the head of Starlight Enterprise who had entrusted Mark and Joe with their Martian assignment. "Thank you, Mr. Konig," responded Zip simply.

"The pirates only had a few men placed here at the Base, but they were enough to shut down operations for the few days they needed to paralyze Eagle City. Frankly, it was a surprise for us and Richard wanted me to take personal charge of security on Mars until it was quite clear that the threat was past. Actually, I flew in with the invasion fleet. My most important assignment here is to set up a secret base for Starlight Enterprise, which will be a backup and defense unit prepared for any events such as the one we've just experienced."

#### "A secret base?"

"Yes. I'll be looking for the best site, recruiting the right people to man it, and drawing up plans for construction and the tasks it will have to perform. I don't need to tell you that the project is highly confidential. I'm only telling you about it because you're Starmen, and it will be a resource you'll need to become familiar with. Of course, there will be much more information coming your way later."

Oritz Konig spoke cleanly and clearly, but gave the [DB1]impression that his thoughts were racing faster than he could speak. He had had to discipline himself to speak so that others could follow him. There were few wasted words when he had to get a message across, but he was able to converse in a way that assured his listeners that he valued them as people and needed their cooperation. Konig manifested an extremely rare combination of being a "people person" as well as having a supremely disciplined and task-oriented mind.

"We interrogated the pirates while you were in the Asteroid Belt. We started with Troy Putnam, of course, but he won't say a word. He's got a strange kind of strength to him-genial in a lot of ways, but utterly inflexible and unbreakable when he doesn't want to cooperate.

"We questioned other pirate leaders, too, of course, and a lot of the rank and file. Not all of them cooperated, but enough did that we learned that they have a base in the Belt. It's no ordinary base. Most of the pirates don't know its origin but they can describe what it looks like.

"It's a fairly good-sized chunk of hard stone, mostly iron. It's hollow, and the base is inside. The access port is concealed. More to the point, it cannot be detected by radar.

"Some of the toughest of the pirates sneered that we'd never find it-that it couldn't be seen even if you were right on top of it."

Joe jumped in. "But sir, this technology is not new. There have been craft since the late twentieth century that were invisible to radar. There are other ways to find them-gravitational influences, to name one."

"Of course, Starman Taylor. This asteroid, however, appears to be the work of some advanced race, other than Earth. The pirates didn't create it-they took it over. Its sheathing system is highly effective, highly effective indeed. The pirates could be lying, of course, but once the word got out to them that we knew about the asteroid, most of them seemed to swell with a kind of arrogant pride, even welcoming the fact that we had the information. They were confident that we couldn't do anything about it."

"And that explains, I'm sure, why we couldn't find them in spite of an exceedingly thorough search of the area," concluded David Foster, feeling somewhat vindicated.

"So are we to go find the asteroid?" put forth Joe, leaning forward in his chair.

"No, Mr. Taylor. We want you to find the man who discovered it."

Joe leaned back into his chair, a puzzled look on his face. Oritz Konig continued.

"The asteroid was discovered almost twenty years ago by an asteroid miner named George St. George. He's a loner, like so many of the asteroid miners. He makes a good living, but has no fixed address. He's constantly on the move and spends most of his time away from settlements in the Belt. He'll disappear for months, maybe a year or two-then show up on Ceres or in Eagle City with what he has found in the Belt and turn it into cash and supplies. Then he's gone again.

"Apparently he discovered this remarkable asteroid the pirates took over. He's a trusting, almost naÂve, decent man. He spoke unguardedly about his find at one time and Troy Putnam learned about it. Putnam had St. George take him to the asteroid and paid him a good price for the knowledge. St. George showed Putnam where it was, and then disappeared into the Belt. Putnam went on to build his empire of pirates."

"And now you want us to find St. George so he can show us where the asteroid

is," inferred Zip.

"It's not that simple, Starman. We've also learned that the pirates who escaped are the most dangerous of the lot. Their leader is a very bad number named Lurton Zimbardo. The pirates were willing to obey Troy Putnam because he encouraged them. They liked him. He was a charismatic leader who gave them visions of grandeur and made them think that they could pull off the impossible. But they are afraid of Zimbardo-for good reason, from what we hear. He is a merciless, calculating spaceman, patiently willing to play second-in-command to Putnam while waiting for his chance to take over. That chance has now come.

"The pirates are greatly reduced in number now, but those who are left are extremely dangerous. They will be fierce, uncompromising enemies. St. George is the only person outside of the pirates who knows where the asteroid is, how to find it, and has some knowledge of how it works. Where Putnam was willing to let St. George go about his business, Zimbardo will certainly determine to eliminate him. Zimbardo will try hard to find St. George. You must find him first. Protect him, and learn from him where the asteroid is."

"What do we know about him? How can he be found?" asked Zip.

"He hasn't been heard from for over a year, and he could be anywhere in the Belt. But he has a friend named Montezuma Vly. If anyone knows where St. George is, Vly will know-and we know where Vly is."

"Why not just ask Vly where St. George is?" asked Mark.

"That's where your assignment begins," answered Konig. "Like St. George, Montezuma Vly is an asteroid miner. Unlike St. George, he doesn't wander far from his home. But Vly has a deep distrust of any authority figures. He lives on an asteroid he calls Montezuma's Castle. He claimed it over thirty years ago and enjoys his privacy. No government officials have any right to enter his domain. He is completely independent. We're hoping that where officialdom can't act, you young Starmen can. When he knows that George St. George is at risk, I'm sure he'll help you."

"Where do we find Montezuma Vly?" asked Mark, who was the navigator for the trio of Starmen.

"Montezuma's Castle is not far from Ceres. You can get to Vly in less than a day

from Yellow City." Yellow City was the major center on Ceres, the largest and most important asteroid in the system, with a population of around 100,000. It doubled as a spaceport, and was a stopping-over and refueling point on the long voyage between the Inner and Outer Planets.

"Go to Ceres first and check in there. Since the pirates will be searching for St. George, you'll have to conduct your search quietly-using the Star Ranger and wearing Starman's red uniforms won't do on this assignment. You'll need to change ships and clothes in Yellow City. The rest of the information you'll need will be provided for you in files which you can read as you travel."

Lurton Zimbardo called his five most trusted leaders to a meeting in one of the libraries on the pirates' asteroid. Each was dressed in the gray and black uniform that Troy Putnam had designed for the pirates for their failed mission to take over Mars. The meeting had been going on for several hours and had involved a lot of detailed organizational work. The men were tired and showing it. As usual, Zimbardo showed no signs of fatigue.

"Yes, gentlemen," said Zimbardo, "You know what to do now. We will need to get all of our men busy and you must drive them, drive them relentlessly! I don't want to take any longer on this work than we need to. We've been moving slowly out of the Asteroid Belt for almost three days."

His laser pointer made a few small red circles on a chart in the library. "This is where we were, and this is where we're going to be." The chart was nearly a full wall of smooth quartz, illumined from the inside and showing the nearby configuration of asteroids.

The table was strewn with large books opened to star maps, note pads, a couple of small computers and calculating machines, and a huge number of crumpled balls of paper. One man reached for a pitcher of water that was on the table and slowly filled his glass. Zimbardo continued.

"The manufacturing will begin tomorrow-that'll be for Stubb to oversee. Once the sheathing device has proven effective we can begin work on restoring and disguising our fleet. After that, Crass, you'll take care of the rest."

One of the men looked up. "What about St. George? If anyone discovers him he

could put a serious crimp in our plans."

Zimbardo looked annoyed. "St. George will be dealt with, Mr. Slant. I have not forgotten him; you can leave that to me. He will never speak to the Starmen or anyone else."

Another spoke. "Is it really necessary to silence him? It will take a large number of men to make a search-men we could use on the urgent projects at hand. Since you've moved the asteroid from its original site, he can't find us now or show anyone else how to find us."

"He can't find us, but he knows how this asteroid works-almost as well as I do. If the Starmen learn what he knows, it could be disastrous for us in the unlikely chance that they ever locate us. I don't like taking chances, and I don't like leaving any loose ends. St. George is a loose end we can't afford."

"Do you know where to find him? He doesn't have any fixed place he calls home."

"Our men have quietly inquired for him on Ceres and learned that he has a good friend, another asteroid miner named Montezuma Vly. We know where Vly lives, and Vly will know where St. George is. Vly doesn't receive visitors, but his resistance won't keep a small fleet from landing. One way or another, Vly will tell us where to find George St. George-and soon."

#### 3: Montezuma's Castle

A FEW DAYS later, Lurton Zimbardo decided to take a tour of the workshops and check on progress. Where Troy Putnam's organization had been large, easygoing, and confident, Zimbardo's was tight, highly-organized, and ruthless. Its high degree of efficiency was dependent almost exclusively on Zimbardo himself. Once Zimbardo had asserted his control over the organization, the asteroid and its crew had rapidly become an extension of his formidable personality.

He took an elevator from his suite down to the main floor of the organizational complex and stepped out into the hallway. He walked with a firm tread, and men stepped aside with a slight deferential bow. He passed through the great glass doors at the end of the passage into a huge foyer. Passing through, he entered a

courtyard, strode across it, and came into the working area.

About sixty men were working at various stations. The men felt that Zimbardo was a real leader and were glad to see their new commander. It was amazing how rapidly the sense of defeat had been changed to one of expectancy and pride.

Every day or two another ship docked and new workers came in to join the crew. Zimbardo had sent out a few trusted leaders to recruit men form noted asteroid bases and mining operations in the proximity of his asteroid. He could use more men, especially skilled workers in electronics and mathematics, but he wasn't eager to build up a large force. He chose carefully. The workforce was being built up gradually with men he could trust. He had also invited three smugglers he had known before to join the operation, with their men.

"Stubb," called out Zimbardo.

"Sir," responded the man so addressed, an eager man about thirty years old, with sandy blond hair and baby blue eyes. He hastened up to the pirate leader.

"Give me a status report. The ships first."

"The sheathing systems are easy to manufacture, thanks to the ample supplies from the warehouses. The men are able to put them together rapidly, even the unskilled workers, since they just need a master circuit to copy. I have forty men working on these, with the skilled electricians checking each plate. As you know, we completed work on ten ships six days ago; they were tested and went out on their assignments. They have not returned yet. These plates we're working on now are going on the remaining ships, and we have already finished work on four of them. That leaves just three to go, including the ship that just joined the crew yesterday. We should be finished by tomorrow afternoon."

"Good. And the power units?"

"These are far more complicated, sir, so I only have the most skilled workers assembling these. The same with the propulsion units. They won't be ready for at least a week, not even one of them. However, once we get the prototype finished the rest should follow rapidly."

"How long until you have all 85 completed?"

"I should have a good number of the unskilled workers ready for a new assignment once they have finished with the sheathing plates. Once the design has been checked by the experts, we can get them cracking on the power and propulsion units. Of course, each unit will have to be tested by the experts, so I would estimate that all 85 can be operational within ten days-unless we run into any problems."

"Good work, Mr. Stubb. I will check on progress every day."

"Very well, sir." The man went back to work and Zimbardo returned to the main complex.

Ceres was the hub of the Asteroid Belt. Nearly 600 miles across, it was the largest body in the ring of planetary debris that swirled and turned in a large swath between the orbits of Mars and Jupiter. It was the place where professional miners first arrived from Earth before their companies farmed them out to the mining centers on various asteroids. Independent asteroid miners came to Ceres once in a while for supplies, and corporations picked up equipment imported daily from Mars. Ceres, located several days' travel from the nearest sizable population center, was a buzz of activity.

The Star Ranger approached the large asteroid after a fast but uneventful journey of six days.

"Quite a cloud of starships!" remarked Joe as Yellow City came into view. A swarm of at least forty ships of an amazing variety of sizes, shapes, and vintages was moving over the port. Some were hovering, others were heading in toward the landing field and a few others were departing. None moved very fast since the space was as crowded as bees around a hive.

Yellow City was a well planned settlement, in spite of having been developed jointly by several different mining companies. Although the competition was fierce for the rich minerals of the Belt, cooperation was necessary to build the city, especially in the earliest years of settlement. The result was beneficial to all, as Yellow City could easily supply the needs of miners of all kinds as well as serve the traffic to the Outer Planets that almost always came by way of Ceres. Advancements in propulsion systems were making it possible for some of the newer ships to bypass Yellow City on their way to Jupiter and beyond, but Ceres was still a major stopping point.

Zip spoke quietly to Mark. "Mark, please let them know that we would like to land."

Mark opened the microphone. "Starman Mark Seaton on the starship Star Ranger requesting permission to land."

The response was immediate. "Yes sir, Starman! Ceres is proud to welcome you!" The operator went on to give directions for landing.

"Why is he so deferential?" queried Mark after communications had been completed.

"We're famous!" responded Zip. "We've been aboard ship since the end of the attempted takeover on Mars and haven't kept up with the news, but we've become household names. Oritz Konig told me that just as we were leaving the Base. We're the men who liberated Mars! The people in the Belt are especially pleased since the pirates had planned to blockade them once they had a strong hold on Eagle City. Why, you couldn't find another place in the Solar System that'd be happier to see us than Yellow City!"

The Star Ranger was given priority docking. Once its engines were shut down, a large crew ran to secure it and welcome the Starmen. As Zip, Mark, and Joe descended the ladder, eager hands reached up to help them down the last two or three rungs. Through the bubble helmets on their suits, the mechanics and service personnel were all smiles.

When Zip inquired about the offices of Starlight Enterprise, the Starmen were ushered to a small moonbus and driven directly to the site. The complex was a small two-story building set in a row of offices, workshops, and garages not far from the landing field. All buildings on Ceres were made of the gray rock native to the asteroid. Building material was cheap and solid, but plain.

Although the city itself was covered with an atmosphere dome, the SE office was located close to the landing field, not within the city proper. Entrance was through an airlock. Once through the airlock, the Starmen removed their helmets and placed them on the rack.

"Whoopee! This is fun, being famous!" exclaimed Joe, his eyes alight. "I hope it

lasts until we get back to the Earth-Moon system! I'd like to enjoy it!"

"I hope so, too, for all our sakes. Your exploits have given all the Starmen a good name!" Joe whirled.

"Kathryn Mullaney!" cried Joe. Mark and Zip smiled widely.

"What are you doing on Ceres, Kathryn?" asked Zip. "I haven't seen you since your last visit to the Academy at the beginning of our senior year." Kathryn Mullaney had graduated from Starlight Academy a year before Zip and his partners; her first assignment as a Starman was in the Outer Planets. She was twenty years old, wore her strawberry blond hair short, and had a few freckles spangled across her nose below blue eyes which had a touch of green in them.

"Finished my assignment on Ganymede and I'm coming back home for a leave which I hope will be very long! I spent eight months in the smallest population center in the Solar System, and can't wait to get back where there are crowds of people! I'm just staying here long enough for a quick once-over on my ship, refueling, and then I'm Earth-bound. In fact, I'm on my way out now."

There was a little more pleasant conversation, then Kathryn said, "I've got to be going, and Sim is waiting for you upstairs. Good luck!"

Zip, Mark, and Joe ascended the stairs and came to the landing. The stairway and corridors were very plain. There was no unnecessary ornamentation of any kind, and lighting was minimal. They found a door with a sign on it that read STARLIGHT ENTERPRISE in bold letters. A second line provided the name of SE's resident operations officer on Ceres: "Sim Sala Bim." Joe knocked.

"Come in," said a voice. The Starmen entered the door. The occupant, a tall, slender man of Indian extraction with black thinning hair, was already coming toward the door to welcome his visitors. "Welcome! So glad to see you! Welcome, please come in!" He ushered them into the room.

"Nice to see you again, Sim," greeted Zip. They sat down in a circle of chairs, Sim sitting near a table on which were placed all the makings necessary for tea. There were already two cups set out, which had been used recently. Sim took one for himself and set the other aside. "This was Kathryn's," he said as he produced three new cups for his visitors. "You probably passed her on your way in." The conversation continued as Sim poured the tea from a very large brown earthenware teapot. Before long, Zip brought up the subject of their visit.

"I wish we had more time to visit, Sim, but our assignment is extremely urgent. We must find George St. George as fast as possible, and Oritz has told us that only a miner named Montezuma Vly can tell us where he is. We're on our way to Montezuma's Castle."

"Ah, yes," said Sim Sala Bim, "Sabbath George. He is well known here, but we haven't seen him in almost a year, I think. Almost a year."

"Sabbath George?" asked Mark.

"George St. George is a devout man-genial, generous, liked and respected by everyone. Honest to a fault. He's called Sabbath George because of his beliefs. The nickname is intended to kid him a little bit, but is really meant as a term of respect and affection. But to find him in short order, you will indeed have to go through Montezuma Vly. Montezuma's Castle is not hard to find, but getting in will be difficult."

"We are familiar with Mr. Vly's convictions and we wouldn't bother him if there were any other way to find St. George. Given the time constraints, we have no choice."

Sim nodded. "Montezuma's Castle is easily recognizable by its unusual shape. It is a true crescent, a sliver of stone with Vly's operation in its very center." Sim went on to provide its coordinates and other information the Starmen would need to find it.

Zip continued. "On this assignment secrecy is of the utmost importance. It is vital that no one knows who we are or what we're doing. We obviously can't take the Star Ranger, as the news media have made that ship easily recognizable. We learned that when we landed on Ceres. I think we're going to need to use another ship."

With Sim, the Starmen made plans to leave the Star Ranger on Ceres while the Starmen, dressed in ordinary clothes, quietly departed for Montezuma's Castle in another ship.

"I'll let you have the Vigilant Warrior," said Sim. "It's a local ship, designed for

operating in the Asteroid Belt. We own it, but it hasn't been used in a while and probably no one will recognize it as an SE ship. It's the best I can do on short notice, but it should serve you well."

"I'm sure it'll be fine, if you say so," answered Zip.

Sim Sala Bim got right to work, and the Vigilant Warrior was ready for takeoff within two hours. As soon as it was ready, the Starmen lifted off from Yellow City. As Joe piloted the ship into the heart of the Belt, Zip looked back for a brief, wistful moment and saw the unusual dark red color of the Star Ranger, his ship, on the field of Yellow City.

"That's it," said Mark, as the navigation equipment locked onto the asteroid that was the home of the elusive Montezuma Vly.

"Hmmm. No wonder it's so hard to find," observed Zip, looking over Mark's shoulder for a moment. "Not far from major travelways but so unobtrusive you'd never notice it."

"It just hovers almost in the shadow of that large, worthless chunk here. Should be able to see it out the window before too long."

Joe was busy threading the Vigilant Warrior through the asteroids for the next few minutes. He kept the ship at a moderate pace and passed easily around the slowly turning asteroids. They were all moving at about the same speed and maneuvering was not difficult.

"Should be coming up on it about now," offered Mark.

"There it is," said Zip almost immediately. The Vigilant Warrior had eased its way around an oblong worldlet-the "large, worthless chunk" that Mark had just mentioned-bringing into view a crescent-shaped, stony asteroid about a mile long. It looked almost like a fat banana with the ends tapering into sharp points.

"Montezuma's Castle," breathed Zip. "Kind of looks like a moon for that large asteroid."

"I think it is," answered Mark. "It rotates around the larger chunk and the two

make almost a helix pattern in their journey through the Belt. They were probably a single asteroid at one time. One powerful impact must have split them, but the pieces haven't drifted far apart."

"Well, let's get down there. There's no mistaking the shape of the 'Castle.' Whatever odd shapes you can find in the Belt, that's got to be unique." The Starman brought the Vigilant Warrior slowly into the proximity of Montezuma Vly's refuge. "See if you can raise him, Mark."

Mark Seaton flipped on the communicator.

"Starman Mark Seaton on the starship Vigilant Warrior calling Montezuma Vly on the Castle, requesting permission to land." His voice was smooth, intimate, and confident. There was no response. A minute later, Mark repeated the message. The metallic voice of an automatic response system came on.

"This asteroid is private property and visitors are not welcome."

"We understand that, sir," Mark replied, "and we would not request permission to land if it were not a matter of urgent business of personal concern." A human voice came on.

"Yeah, like I haven't heard that one before! I don't want visitors! If I wanted a social calendar, I'd go live in a big population center like Ganymede. Keep going! Next services are 3,000 miles away."

"Mr. Vly, this is Starman David Foster, Commander of the Starlight Enterprise ship Vigilant Warrior," Zip broke in. "We understand and respect your reluctance to receive visitors and will stay no longer than necessary. We are calling on you because your friend George St. George has information we need which is vital to the safety of all the settlements on Mars and even the Earth-Moon system. We also believe it possible that he is in danger from violent men."

"Well, that's a new one. George in danger? What about it?"

"May we land, Mr. Vly? I don't want to take the slightest risk that our conversation can be overheard. We won't stay any longer than necessary."

"You've found me. May as well come in and state your business." The communicator was shut off from Vly's end.

Zip came up on the Castle. It didn't take long to find the landing site. There were two spacecraft in position in about the middle of the asteroid. One was a small ship suitable for local jaunts, and the other was a normal-sized craft capable of interplanetary travel. The name Sentinel was painted on the side of the larger craft. Both were very old and in places a little battered, but were clearly cared about and well kept up.

The Vigilant Warrior touched down about fifty yards from the closest of Vly's craft. Joe shut off the engines and pressed the security button. A slight shudder ran through the ship as bolts shot from the fins, securing the ship to the surface. The Starmen disembarked and descended the ladder.

"Over there," pointed Joe. The entrance to the airlock was discernible across the tiny landing area. The Starmen began walking toward it. The starfield swept away to right and left, with a couple of nearby asteroids visible to the eye. A great horn of stone rose up before them, sweeping to a point above. Behind them a similar horn curved up in the opposite direction.

The ground was uneven, with contours sharply defined. Jagged, broken rock comprised most of the terrain, with a few smooth ripples which rose about twenty or thirty feet from the plain. Shadows were utterly dark in the vacuum of space. The Starmen wore asteroid shoes, designed for walking in low gravity conditions. Their soles had an automatic "smart grip" function that gripped the ground when weight was placed on them, but released when the walker took another step. Without the asteroid shoes, the minimal gravity of "Montezuma's Castle" would have made walking a difficult, even dangerous, task.

The Starmen saw that the airlock was set into the side of a hill. The hill had been artificially cut away in front of the door. As Zip, Mark, and Joe approached the airlock, the outer door opened. When they had passed through, it shut behind them. Joe kept watch on the instruments as air filled the compartment. When the atmosphere had become normal, he removed his helmet, and Zip and Mark followed suit. They opened the second door and passed through. A dimly-lit stairway led down in front of them. About twenty-five steps brought them to the beginning of a short passageway. At the end was another door. It was solid.

Zip approached the door and paused. He turned his head to the other two, lifted his eyebrows and shrugged. Mark and Joe nodded. Zip knocked. The door was opened almost immediately.

A good-looking, clean-shaven man with dark brown wavy hair looked them over once quickly, then stepped aside. "Come in," he said, waving a hand while the other held the door. "I'm Montezuma Vly." He had powerful hands, obviously used to hard labor. His nails had grit under them. Strong as the hands were, they were also clearly the hands of an artist, capable of fine work. He shook hands with the Starmen as they entered.

"Wow!" said Joe, the last to enter. Vly shut the door. The three Starmen gazed about them. They were standing in a small room packed with machinery-oldfashioned machinery used for rock cutting, polishing stones, and mounting specimens. The heady smell of machine oil hung in the air, not heavy like that of an aircraft hangar but attractive and energizing, almost like a perfume.

The machinery was made of cast iron, with wheels and gears, rods and chains visible inside the cases. Mark noted that each machine looked lovingly maintained. The newest machine must have been at least fifty years old, but all were in top quality condition.

"They're made to be used," explained Vly, discerning their thoughts. "You can't get better machines than these today. The new stuff doesn't last and can't be depended on."

Mark, the engine master of the trio, immediately thought of the precision instruments produced by Starlight Enterprise. He opened his mouth, but said nothing. He knew that SE made quality machinery, but little of it was iron. He didn't want to make a fool of himself by talking about something of which he knew little. Instead he smiled and decided to take a closer look.

He leaned over the closest apparatus. His mild skepticism quickly turned to awe. "My goodness, Mr. Vly! This is incredible! These machines are beautiful!" Vly didn't smile, but his face softened a little.

Joe and Zip were looking around the room. On two walls were hung various hand tools. Several shelves held cans of oil and paint, boxes of supplies, and dozens of samples of minerals and crystals. The other two walls were lined with books, half of them behind glass.

Zip turned his head to the side to read the titles of some of the books. He saw The Complete Works of William Shakespeare; Kon Tiki by Thor Heyerdahl; Homer's Odyssey; and several advanced textbooks on mineralogy, metallurgy, engineering, and electronics. Zip's eyebrows lifted. He was impressed.

Mark was looking at the books on the other wall. Basic Watercolor, he read. The Stories of Edgar Allen Poe was next to The Life of Johann Sebastian Bach. Mark whistled. "Not what I expected, Mr. Vly," he said. "Not at all what I expected."

"Uh huh," murmured Montezuma Vly. "Let's get down to business. Follow me." He squeezed past Zip in the crowded little workplace, passed through a narrow door on the other side of the room, and through a passageway. The Starmen followed.

A small furry shape leaped through the air in front of Joe. "Ack!" exclaimed the lanky Starman, stumbling backward, knocking over a couple of small boxes as his arms flailed. Nuts and bolts scattered on the floor. Joe backed into another box and sat down hard on it.

"What-?" exclaimed Vly, turning.

"What was that?" cried Joe. "Something jumped across the corridor. I think it went into this recess here." He pointed to an opening between a few stacked boxes.

"One of my koalangs," answered Montezuma. "I've got four of them here. There are a few more in the living quarters. Good company. They can startle you, though, and they can make an awful mess. More than once I've threatened to make stew out of 'em and eat 'em for dinner." The Starmen looked at one another, wondering if he was joking. His next action showed that he was.

"Come on, Howard," said Montezuma gently, bending over and calling into the dark place where the koalang had hidden. "They won't hurt you. I know you're not used to company, but no one's gonna hurt you. Come on out. That's it, come on." He reached in gently and drew a small creature out of the darkness. It had a small furry face with large, frightened eyes, and snuggled up against the miner. Its fur was caramel and white. He folded it into his chest and covered it gently with both hands. He crooned to it lovingly for a moment or two, then said, "That's right. You're okay. Go play." Then he added with mock fierceness, "Just stay out of the paint!" He set it down and turned back to the door at the end of the corridor.

"In here," he directed, leading the way into the room beyond.

#### 4: Sabbath George

THE ROOM was smaller than the Starmen had anticipated. Its small size was accentuated by being packed to the ceiling with a variety of items. Hand tools identical to those used by rock hounds for centuries lay on tables and on shelves. Stacks of paper, most of which showed signs of being bound by hand, covered much of the remaining space. On one shelf was a large, clear sphere on an ornately shaped stand. The eyes of all three Starmen were drawn to it.

"Have a seat," offered their host.

There were three chairs. Montezuma sat in one placed before a desk and swiveled to face his visitors. Zip and Joe took the other chairs and Mark sat on a short stack of crates filled with rock samples. A thick book rested on a table in the center of the room. Mark glanced at the title, turning his head slightly to do so. It was The Flying Carpet, by Richard Halliburton. There was a bookmark about halfway through the book. The asteroid miner leaned forward. "What about George?" he asked.

Zip filled him in. Montezuma Vly paid close attention. His eyes never wavered from Zip's face as he spoke. When Zip was finished, Vly nodded.

"Mm hmm," he murmured. "This could be bad for George. I'll tell you where to find him. I expect that you'll be able to keep him out of the clutches of the space vultures. You've got an enemy to be reckoned with in this Zimbardo psychopath, but I believe you can handle him."

"You seem to know a lot about our recent exploits, Mr. Vly," said Joe, conversationally.

"I'm not the complete recluse people think, Mr. Taylor. People have a lot of wrong ideas about me. I don't want to be listed in the Register of Peoples, and I don't want people butting into my business or telling me how to live, but I keep up with the news. If I hadn't recognized you, you wouldn't have been allowed to land on my asteroid. You're not wearing Starman's red, you know."

"We're grateful to you, Mr. Vly," nodded Zip.

"May I ask-" began Mark, then hesitated.

"Yes, you may ask. Go on."

Mark turned his head toward the sphere. "The sphere..."

"Oh yes. It's pure crystal, all right."

The Starmen gasped. "Pure...crystal...?" stammered Mark. "Why, there can't be a larger one in the Solar System! It's priceless!"

"Next largest was in the Smithsonian Institution, a little more than twelve inches in diameter. This one's sixteen and three-quarters inches. Found it myself on Adamant-that's the parent asteroid from which this sliver I live on was busted off a few millennia ago." Mark knew he was referring to what he had called a "worthless chunk" before they landed.

Vly went on. "Shaped it myself in those old machines you saw coming in here.

Had to redesign some of 'em to fit a crystal this size, but we did it."

"It looks flawless!" breathed Joe.

"Looks it, but isn't. Its flaws are its greatest treasure. Watch this; you haven't seen anything yet." Vly picked up a small cutting tool with a laser guide at the end. He turned off the lights and then pointed the laser at the crystal sphere. The beam struck the surface and then scattered throughout the interior of the globe, igniting sparks of spectacular glory. Mark could feel tears come into his eyes from the unearthly beauty the light created. Many dozens of flakes, invisible to the naked eye, were revealed when the laser beam pierced the near-perfect sphere. They exploded in glorious colors-gold, orange, deep red, flaming yellow, silver; even a few brilliant green, deep blue, and violet sparks traced across the inner world.

The Starmen were speechless. They couldn't take their eyes off the resplendent glory of the sphere under the laser light. "Beautiful, isn't it?" asked Vly, gently. There was no need to answer.

"Where do the colors come from?" asked Mark. "Laser light has only one wavelength, so it can't be refracting in there."

"The crystal's impurities are almost invisible to the unaided eye," answered Vly, "but the laser hits the impurities and causes secondary emissions of light of all sorts of color-the more impurities, the more colors. It lights up better than a fire opal."

As he moved the laser beam slowly around the globe, the interior lights changedfirst one, then another "flaw" taking the light and surging into radiance.

All too soon, he switched off the laser and turned the room lights back on. It was almost as if a spell had been broken.

"C'mon," he said. "I'll show you just where George is on the chart." He moved back down the hall, the Starmen following. When they were back in the room they had first entered, Vly reached up into a recess where there were several rolled sheets of paper. "Move aside," he said quietly, pushing a reluctant koalang over and pulling out a large roll. He unrolled it over a rock polisher and gestured for the Starmen to take the corners. It was a map of a portion of the asteroid belt. "Here's where we are," said Vly, pointing to a spot on the map, "and here's where George is." His finger swept across the map to where a tiny dot had been placed. "It's a mining operation of moderate size called Z25. He runs it there with a fair-sized crew-maybe a dozen men." There were equations, sketches, and notes scribbled all over the sheet.

"I'm sorry, Mr. Vly," said Mark, "but I don't follow you. I'm used to plotting coordinates and thinking in three dimensions."

"See these figures?" asked Vly. "They're your coordinates. It is a threedimensional map, in a manner of speaking. If it weren't, I couldn't get around. I'll write down what you need. But you'll find George on that little plunk of a rock. He's been there several months now and won't be hard to find, once I point it out to you. I just spoke to him a few hours ago and I'll get ahold of him again and tell him you'll be coming." He began to write some notes down for Mark.

"Must take a lot of power to run your operation here, Mr. Vly," observed Mark while he waited for Montezuma to finish writing. "Don't you have to conserve energy?"

"Haven't had to conserve energy since I developed a new process for drawing energy directly from the sun."

"But out here the solar radiation is so weak. You can't get much energy from solar panels, no matter how efficient-certainly not enough to run your machines without some sort of supplement."

"I don't use solar panels any more, Mr. Seaton. I mine energy from the sun directly with an entirely new process. I can pull in and store about four gigawatts. Gives me all I need and plenty left over."

"Four gigawatts?"

"Four gigawatts. That's a four with nine zeroes after it."

Mark almost shouted. "I know how much it is! Mr. Vly! You amaze me! There's nothing like that anywhere else in the Solar System! Nobody has anything like that, nobody! Not even Starlight Enterprise! You could make a fortune if you sell your design!!"

"Really?" said Mr. Vly, lifting his eyebrows slightly, handing him the sheet with his notes on it. "Excuse me a moment while I write that down, so the next time I want to turn my whole life over to lawyers and businessmen I'll know just what to do."

"But, but..." Mark spluttered. Joe laughed and Zip smiled.

"Thank you, Mr. Vly," said Zip, extending his hand. "It has been a remarkable visit, and we appreciate very much your letting us drop in."

Montezuma shook Zip's hand. "Wait a minute, Starmen. Let me give you something to help you while away the long hours in space." He turned and rummaged through a box, then scanned a shelf behind him. After a moment he pulled out a gold disc in a flat, clear container.

"Take this," he said, handing it to Zip. "It's a recording of the entire works of Johann Sebastian Bach. That's more than 1,200 compositions. The music is so complex that some of its mysteries weren't even discovered until the computer age. Lily made this disk. She's an expert in the music of the Renaissance. Does research all the time."

"Lily?"

"Lily and I have been partners out here for over twenty years. Us and the koalangs."

Zip put the disk into his pocket. "Thank you, sir. Best wishes to you."

"You too. An occasional visit once in a while is welcome, especially when people respect my way of life. Most don't understand. I think you three do. Just protect George. He's a good friend, and they're hard to find."

About 56 hours later, the Vigilant Warrior came into the proximity of Z25. Joe eased the ship through a scattering of moderate-sized asteroids and then came into a space where there were relatively few chunks of stone and iron moving through space. On the far side of the open area was an asteroid nearly twenty miles long and half as wide.

"There it is," announced Joe. "Z25."

Zip gave a nod to Mark, and Mark opened communications.

"Vigilant Warrior calling Z25. We have arrived in your area and seek permission to land."

"You made good time, friends," came a voice instantly. "Come on in and welcome."

The Starmen had spoken to St. George once during their journey from Montezuma's Castle, but only briefly. The communications were encrypted, but even the encryption could be a tipoff to an enemy who might be listening in.

As they made their final approach, the Starmen had a good view of Z25's horizon near the time of local sunset. The surface was dark because of the oblique illumination, but several boulders caught the sunlight and appeared as bright sentinels on the landscape. The brightest of the boulders, just to the upper right of a deeply shadowed crater in the foreground, marked the landing area. A cluster of artificial structures was visible nearby, and several spaceships were parked in an informal array. A dome covered the buildings, and reflected the sun in a burst of brightness. Mark had a quick memory of dewdrops in the garden of his home on Earth when he was a child. He recalled thinking that each dewdrop held a small sun.

In moments the Starmen were sitting in George St. George's study. He was a man in his middle-fifties, of average height and weight, with a full head of wavy blond hair. It was obvious that he cut his own hair, but long practice had made him skilled at it. Though his eyes were ice-blue, he exuded warmth. He had a ready smile. The Starmen were sitting in a makeshift room under a temporary atmosphere dome on an isolated asteroid, but St. George's courtliness and genuine respect for his visitors made them feel as if they were in a manor house. On his desk lay a thick book with the title Commentary on the Letter to the Romans, and several sheets of paper and a pen were set beside it where he had obviously been doing some study.

"I hope you men won't mind waiting for refreshments. It's almost dinnertime and the crew will be coming up for a meal in about half an hour. Of course, you'll join us, won't you?" "Thank you Mr. St. George," responded Zip. "We'd be pleased to meet your men and see your operation."

"Monty tells me you three are real ripstavers, and he doesn't say that very often about anybody. You must have impressed him!" St. George was full of smiles.

"May we sit down, Mr. St. George? Our business is rather urgent!" Zip continued.

"Of course, of course. Please forgive me! We don't get visitors of any kind out here and I'm just not used to entertaining. Please forgive me!" St. George rushed busily setting out chairs, bringing in two from a room next door. "And please call me George."

Once they were settled, Zip began to tell George about the pirates and Zimbardo's likely determination to find and eliminate the one man who knew where the pirates' asteroid could be found. Before he got too far into the story, George lifted a hand and smiled. "Yes, yes, I know," he said. "Monty told me all about it."

The Starmen leaped out of their chairs, absolutely stunned. Before they had left Montezuma's Castle Zip had impressed upon Vly how vital it was for St. George's safety that they not communicate until his friend was safe. Zip had begged him to send just a quick, encrypted message that Z25 was to expect three visitors who had Vly's seal of approval-no more.

"George!" gasped Joe. "That message could have been intercepted by the pirates! They must be looking for you!"

"We told Vly not to communicate with you! It could mean your life!" continued Mark, suddenly heartsick with anxiety.

George chuckled. "Don't worry, Starmen! The pirates already tried to find me through Monty, but the greegles protected him, and the pirates'll never find me without cooperation from Monty-which they'll never get. There's really no need to worry. We're completely safe here. We'll have dinner, you'll stay here to sleep, I'll show you around the operation, and you can go back to Ceres."

The Starmen were speechless for a moment. Joe's eyes nervously scanned the room and Mark stared at George with his mouth agape. Then Zip spoke.

"What are greegles, George?"

George chuckled again. "You haven't heard of this 'asteroid miner's legend'? Most people think it's in a class with leprechauns and mermaids, the story of the greegles, but it's all true. The greegles are the inhabitants of the asteroids. Don't know if they're alive or not. They're made of metal-some kind of metal-or maybe they just wear a metal suit. They're about a foot high. Now, don't stare at me like that; you're looking thoroughly obflisticated, probably thinking I've been out in the vacuum too long, but I've seen them! They're little and they're old, very old, but they're powerful! No one can beat them! Usually no one ever sees them and they don't have any need to interfere with human beings. They don't mind it too much, though, if a solitary asteroid miner sees them once in a while."

"And wh-, what do they have to do with Montezuma?" asked Zip, keeping his voice steady.

"Why, a short time after you left the Castle, about five ships tried to land on the Castle by force-pirates, for sure. No doubt they wanted to force Monty to tell 'em where I am. But Monty knows how to contact the greegles. There's a lot of greegles on Adamant." George chuckled again.

"Those poor fellows-the pirates, that is! When the pirates told Monty they were going to land whether he wanted them to or not, why, he just called the greegles for help. They cut four of the ships into pieces in a matter of seconds, leaving the crew floating in their spacesuits. Then they grabbed them with some sort of invisible grappling beam or something and herded them toward the fifth ship. That ship gathered them in and took off."

Now George laughed out loud. "They got the message real fast! Go away and don't come back! And they scrammed! Never even set foot on Montezuma's Castle. Monty will make good use of the floating space junk the pirates left. Serves 'em right!"

Just then a gentle buzz sounded. "That's the call for dinner, friends. Come meet the others!"

Almost immediately another sound came through the communications system-an urgent clangor. St. George's face became taut and a look of surprise and anxiety came over his features.

"What's that?" asked Zip.

"It's the alarm," St. George whispered. "It's never sounded before." The alarm abruptly shut off and an excited, panic-stricken voice came through the intercom.

"Five ships approaching! Coming in fast! They're commanding all hands to come to the landing field and threatening to destroy the whole operation if we don't cooperate! They've already started to destroy the base!"

## 5: The Destruction of Z25

JOE dashed from the room and sped down the hallway to the control center of the mining base. Each strike of a laser beam colored the interior of the buildings with ruby red as the attackers' targets were vaporized, and the flashes were coming with disturbing frequency. He hurled himself into the tiny office where a frantic young man sat at a console.

"We're going to die!" cried the young man. Joe looked through the large window and saw five ships hovering over the base. Their laser cannons were rapidly destroying the outlying parts of the mining base. There were no defensive weapons. Joe glanced at the radar screen and his hair stood up as he saw that the screen showed nothing. To the surveillance system, the ships were invisible. The technician was babbling in abject, helpless fear, but Joe's pulse leaped when he realized that the frightened young man might be right. They could all be dead at any moment. The man fled the room crying.

Joe looked out the window again and saw that laser cannons had begun to destroy the ships. Through the horrifying, rapidly expanding concentric vapor shells, he saw the Vigilant Warrior crumpling into a heap. The other ships were either completely destroyed or well on the way.

"What is this? Who are they?" exclaimed Mark. He, Zip, and George had followed Joe to the control center and were watching the laser beams sweep the landing field. The ships were being indiscriminately reduced to molten slag.

"Their laser beams are immensely powerful, and they're operating at full capacity," observed Zip, grimly. Just then the lights went out and every apparatus in the control center went dark.

"They found and destroyed the power plant," whispered George, the tenseness evident in his voice. "But they're not touching the inhabited parts of the base."

Suddenly Zip turned to their host. "George!" he said urgently. "Do any of your crew know that we are Starmen?" George turned a distracted face to Zip and stared as if he wasn't comprehending what Zip had said.

"Do any of your crew know that we are Starmen?" Zip repeated carefully.

"I-I don't know. I didn't tell anybody, I think, but I didn't keep it a secret."

"Look! Gather them all together and tell them not to say anything about us to these invaders! Our safety may depend on it, as well as any chance we all have of eventually escaping!"

"Ah-all right," George stammered.

Since the power was out, there was no way to make an announcement through the communication system, but the rest of the crew was assembling anyway. The refectory was located not far from the control center and the men were coming together there, so the Starmen and George went to join them.

In a moment, there were about a dozen men in the room. Some sat on the benches, others stood. There was palpable fear in the room, as if they knew that sudden, violent death was near.

Zip asked George, "Is this everyone?" George took a quick glance around the room.

"I, I think so, yes."

Zip took charge. "Men, listen to me. We're about to be taken captive. I don't think anything worse will happen to us, or it would have happened by now. My friends and I have come to visit Sabbath George. Just got here from Ceres and sure didn't expect this!"

George took over. He was showing more confidence now. Alone of the Z25 crew, he had never shown fear, just shock. "We'll just wait right here, men, and see what's next. I don't know who these attackers are or what they want, but don't volunteer any information of any kind. You hear me? No information of any

kind, beyond the most basic."

The men were silent and collapsed in on themselves. They were afraid, but the panic seemed to have diminished somewhat. Outside, the five ships had landed and about twenty space-suited men had emerged. With weapons in hand, they were approaching the dome. The leader gestured to several of them, who spread out around the dome. The others remained at the main airlock and waited. Their feet were spread in an attitude of defiant power.

"They want the airlock open, Mr. St. George," said the young man who had fled from the control center. His voice was dry and squeaky.

George said, "Can't open it. No controls. Those fools destroyed the power center. If they're coming in, you'll have to get your spacesuits on because the atmosphere is going to disappear. Make it quick before they blow the airlock by force." The men scattered. George and the Starmen went to the airlock and looked at the invaders from the inside of the dome. George said to the Starmen, "Of course, there's a backup power system, but I don't feel a compelling need to make it any easier for these strangers."

When the leader saw that there were people coming, he kicked the airlock savagely and aimed his weapon at the mechanism. As was customary, the helmets were lined up on a rack on shelves just inside the airlock. George put on his helmet and the Starmen put on theirs. The rest of the mining crew began to show up with their suits on and found their helmets. When all were suited up and the intercoms were on, George told the mining crew to stand aside. Then he told the leader of the invaders that he could enter.

The man fired a stupendously powerful beam at the airlock that melted it like ice in a furnace. In seconds, the air inside the dome whooshed out into the vacuum of space.

"Get into the ship," growled the leader of the invaders, indicating the closest of the five spaceships. "No one is going to be hurt, but I'm not guaranteeing that that situation will last. I'm not a patient man and I don't like wasting time."

"What about our belongings?" asked George.

"You won't need them. Move to the ship. Now." The voice was even and quiet but as hard as iron. Zip started the procession. He slumped down as if completely disheartened and walked like a prisoner, his eyes pointed to the ground. The others followed. The invaders kept them surrounded as they walked the short distance to the pilot ship. Several invaders entered first and then kept watch on the prisoners as they ascended the ladder into the staging area. Once the asteroid miners were aboard, the other invaders entered their ships.

When the door was sealed, the invaders removed their helmets. The miners followed suit. The leader took a quick inventory of the prisoners, and then settled his gaze on George.

"You are George St. George," he said in a tone that knew he was stating a fact. "My name is Lather. You and your men are now prisoners of Lurton Zimbardo. I am taking you to him. As long as I've got you, I don't care about anything or anyone else. Don't make any trouble and I won't see any need to put anyone off the ship. It doesn't make any difference to me whether any of your men is in deep space or my guest room, but it might make a difference to you-and them."

Without turning his head, Lather addressed one of his crew. "Blaze, see that this base is melted into the bedrock."

"Yes sir," said the man addressed and left the room.

Lather addressed another of his crew. "Spelford, escort the prisoners to their quarters."

Spelford lifted his weapon and nodded in the direction they were to go. The prisoners went, under the guard of several armed men.

They were taken to a room set up to accommodate up to twenty passengers. There were niches with beds in them, and couches for use during acceleration.

"Prepare for lift-off," ordered Spelford. The prisoners sat down and strapped themselves in. Spelford and his men left, locking the door behind them. In a moment the warning signal for lift-off was given. The ship raised itself gently from the surface of the asteroid. The fierce glare of destructive laser strikes came through the quartz window for nearly a minute, and the prisoners knew that the living quarters of Z25 were being systematically destroyed.

"They're ramsquaddling the whole operation," said Sabbath George in a voice that sounded almost matter-of-fact. "Never had anything like this happen before.

This is a first."

When the glow ceased, the ships accelerated. The Starmen and their companions felt themselves pressed into the chairs.

The five invisible ships had been gone for over an hour, but the man in the shadow still did not move. He was on a neighboring chunk of floating iron, just a mile or two in diameter with a very slow rotation. St. George's asteroid would vanish below his horizon in a few minutes. The man pulled the telescope up to his face plate once again and scanned the area that had been the base on Z25. There had been no movement of any kind since the ships had rayed the site. He took a few more pictures for his files. The metal and quartz plating-all signs of human presence-had been completely destroyed, melted into the rock of the asteroid. The brilliant orange of superheated rock had quickly cooled in the near-absolute zero of airless space.

"Guess it's okay to go now," he thought. "Those space buzzards are not detail men-just grab and destroy without even looking around. Lucky for me."

The man went over to a small asteroid cruiser, built for speed in touring the Asteroid Belt. Stepping in, he sealed the airlock and pulled out a small recorder. He tuned in a complicated code and began to speak.

"Steve Cliff, reporting in to Oritz Konig on Mars Base." Steve went on to give the date, time, and location, and a brief but thorough report of what he had seen, from the time the Starmen landed on Z25 to the time the pirates' five ships had disappeared. He added to the file the pictures he had taken, and concluded, "Now returning to Yellow City. If you have anything else you'd like me to do, Oritz, contact me there. I don't have to tell you I'm pretty fond o' those boys and I was more'n delighted to keep an eye on 'em for you on this trip. Sorry this report isn't any better. I'll stop in and see Sim before I continue my trip back to Earth, just in case you leave a message for me there."

Having finished the recording, he put it into a small projectile with an automatic timer to release and send the message in three hours. Then he lifted off the small asteroid and headed toward Ceres. A few minutes after liftoff, he fired the projectile. When it sent its message, Steve Cliff would be far away and no one could trace the message back to his ship. On top of that, the message was

encrypted and designed to travel on the microwaves similar to those in the background of space. It was highly unlikely that this message would make anyone curious. After the message had been sent, the projectile would break down into its component parts and scatter them into the infinity of space.

The ships had stopped accelerating and the prisoners could talk easily.

"You don't seem too upset, George," suggested Mark.

"Naw," said George. "'Course I'm sorry to lose my stuff back there, and I'm sorry for the men, but most of our stuff is somewhere else. This was a temporary base and the mine wasn't producing too well anyway. Hardly worth our time. Besides, I've learned to be content just about wherever I am. I've been around the asteroids a lot and I've learned to depend on a Resource outside myself whatever the circumstances. I know what it is to be brought low, and I know what it is to have plenty. I've been thoroughly initiated into the human lot with all its ups and downs-fullness and hunger, plenty and want. Makes little difference to me. Wherever I am, whatever happens, I'm confident. And I'm a man of prayer."

"I'm sure sorry about your friend Montezuma," said Zip sympathetically.

"What do you mean?"

"Why, these ships must be the same five that attacked him. They couldn't have found you without getting the information from Vly. So it's a good guess that they destroyed his base the way they did yours."

"Nothing of the sort!" said St. George heatedly. "I told you that those ships were defeated and their crew sent back to wherever they came from with their tail between their legs!"

"But this story about the 'greegles'-" contributed Joe.

"The greegles sliced those ships up like salami!" insisted St. George. "These ships we're on are a different lot! And besides, Monty would never have told anybody how to find me-not by force or threat, anyway!"

"We're sorry, George," apologized Zip. "I didn't mean to upset you or cast any

doubt on Montezuma Vly. You're right-he's not the type to give in to any threat. I must be mistaken."

"You're forgiven," said St. George. He went off to see how his men were doing.

"Zip!" whispered Joe urgently. "You don't really believe that story about the 'greegles.' These have to be the same ships!"

"I think it's more important not to upset George. We don't know the whole story."

"But greegles!"

"What about the greegles?" asked Mark, with a slight edge of defensiveness in his tone. "Did it seem to either of you that Vly would betray a friend to save himself? And did you see any sign of advanced weaponry at Montezuma's Castle?"

"What are you saying, Mark?" asked Joe.

"I'm saying that we shouldn't discount an old tale just because it sounds foolish or superstitious. George knew we were coming. He couldn't have known unless Montezuma sent him a message, even though we warned him against doing so. If he sent George a message, he wasn't taken over by the pirates. These aren't the same ships. These are another part of Zimbardo's fleet sent out to find George St. George. They must have tracked him down through the message Vly sent-not because they landed on the Castle and threatened him."

Zip looked deeply thoughtful. Joe looked incredulous.

"Mark, you can't be serious!"

"It's not a matter of being serious or not, Joe; it's a matter of being openminded."

"George described it himself! He's been out in the vacuum too long."

"I don't think George strikes me as an unbalanced man. Unusual, for sure. But not unbalanced. Not unbalanced at all." Mark looked over his shoulder. George had his arms around two of his men and was talking to them in a low voice. The rest of them were gathered around, paying close attention to what he was saying. Already the atmosphere was one of peace. No one seemed afraid now.

Through the window beyond, a portion of the vast arm of the Milky Way spread out in its eternal beauty. The Starmen were silently wondering the same things: How long would it be before they met Lurton Zimbardo? Would he recognize them? Why did he want St. George alive?

## 6: Battle Lines

THE PIRATES' ASTEROID swung in a smooth, private orbit about a thousand miles beyond the farthest extremity of the Asteroid Belt. Lurton Zimbardo was in his private sanctum, a well-equipped workroom with precision astronomical equipment, sky charts, and an enormous inventory of computer files. As he turned his telescanner toward the Inner Planets, he saw the spread of the Belt before him.

Countless celestial bodies moved in an incredibly slow pattern like a stately dance. Reflected sunlight glinted from oblique surfaces into the light-gathering lenses of the telescanner. When the occasional crystalline surface or frozen lake on a passing asteroid caught the radiance just right, an intense but transitory sparkling brilliance was generated, and created a pattern of astonishing beauty on the scanner's computer screen.

Zimbardo entered a few more bits of data into the criteria of his search pattern and then said, "Enter." Within seconds several asteroids were marked in his files. He brought their profiles up one by one.

M253. SHAPE: OBLONG. MAXIMUM LENGTH: 0.683 MILES. MAXIMUM WIDTH: 0.307 MILES. COMPOSITION: 90.568% IRON, 6.443% TIN, 0.752% ICE, 2.237% TRACE ELEMENTS; CLICK HERE FOR DETAILS.

Other information was provided, including the asteroid's precise location and its speed of motion and rotation. Zimbardo hesitated a moment, then said, "Delete." He went on to the next entry.

M3366. SHAPE: ALMOST PERFECT SPHERE; VARIATION <5%. MEAN DIAMETER, 0.057 MILES. The other information was provided. Zimbardo smiled. "Ah-nearly solid iron and about 100 yards exactly!" he thought to himself. "That makes five." He told the computer to save that file, then opened the intercom.

"Gene," he said.

"Yes sir," came the immediate response.

"Contact Mr. Crass and tell him I want M3366."

"Right away, sir."

"Then call the five lieutenants up to my study at once, please. Get Kimball, Lorry, and Jenner also. Once you've called them, come up yourself." Gene nodded and activated the personal contact codes of the men Zimbardo wanted to see.

A quarter of an hour later, the ten men were in the lounge in Zimbardo's quarters. He was playing host, and pouring out a dark golden sherry wine into luxurious spun glass goblets.

One of the men lifted up the goblet so the illumination reflected from it, highlighting subtle rainbow whorls in the surface. He swirled his wine before he sipped it.

"Very nice, Lurton, and the glass here is pretty top stuff."

"The wine came from Earth but the glassware came with the asteroid, Jeff. This place has so much in it that I haven't found a hundredth of what it contains, but all of it is high quality."

The men relaxed in the comfortable chairs. The chairs automatically adjusted to the body weight and shape of whoever sat in them. Soft, almost imperceptible music was playing in the background. A light fragrance in the air eased tensions and sharpened minds for thought. Zimbardo had nothing to do with creating this atmosphere-these features came on automatically whenever anyone entered the room.

"Petty soft life you got here, Zimbardo," sighed the man named Lorry, easing himself down into his chair. "I'm not used to this kind of comfort."

"No, Lorry, I guess not. You don't find too many easy chairs aboard the kind of ships you pilot when you're transporting the Banjoman's flilox to his customers in the Belt. But when our plan succeeds, you'll be able to buy all the soft chairs you want. Let's get down to business."

Zimbardo stood before the assembled company. Behind him, taking up most of the wall, was a map of a large portion of Mars. "As I was saying when we met in the hangar assembly room yesterday, it is simply a matter of choosing an appropriate target to convince them we have the capability. What should our target be? Well here, gentlemen, are the five major atmospheric generation plants on Mars." He turned to the map and pointed out five places-two in the northern hemisphere, two near the equator, and one in the southern hemisphere. "Each is valued at two billion solars and would take several years to replace. The damage won't bankrupt the government, but the expense is far from negligible! Even more importantly, when they are destroyed, Starlight Enterprise's terraformation project will suffer a severe setback-possibly as much as three to four years. Now, data gathered from analysis has shown that these plants can be removed very easily by the proposal we have suggested. Mr. Crass, do you have anything to add?"

"No, Mr. Zimbardo. I've checked the specs on the asteroids you've selected and I've checked progress with what Stubb is doing. If he has the propulsion units ready in ten days, we can deliver our first package to Mars in precisely two weeks."

A muscular man in short sleeves spoke up. Since no one else wore short sleeves, everyone suspected that he wore his sleeves short to show off his biceps. "Lurton-what about the ships that went to interrogate Vly? We know five took off, and yesterday I only saw one return. No one else wants to ask about it, but I'm asking. If I'm going to risk my men and my ships on this venture of yours, I want to know what's involved."

As the man was speaking, Gene lowered his head and kept his eyes on the floor.

"All right, Captain Kimball. It's a fair question. You're right. Five went out and only one returned. None of the men was lost-the returning ship brought them all back. But four of the ships were destroyed before they could land on Montezuma's Castle." Zimbardo's five lieutenants were already aware of the setback. The visitors, Jeff Jenner and Lorry, were stunned. Kimball grunted, as if a suspicion had been confirmed.

"Well?" he pressed, his face hard and demanding.

"Gene," said Zimbardo, turning away. He didn't like to deliver news of defeat.

"The pilots of the ships tell essentially the same story," began Gene. "They came directly to Montezuma's asteroid, opened communications, and insisted that they were going to land. There was no response. But within seconds some kind of energy beam came forth from Adamant, the neighboring asteroid, and sliced the four ships into small sections. It was clear that there was no intention to kill any personnel-only to destroy the ships. The crews were left floating in space. Forces of some kind we are not familiar with pulled them into the proximity of the remaining ship, where they were taken aboard. Clearly, against forces like that we are helpless. The ship returned immediately. The men are badly shaken."

Kimball grunted again. "And Vly?"

Zimbardo answered. "They never talked to him. But we don't need him. A short time after this incident he radioed to St. George and we intercepted the beam. We'd been looking for it. Vly probably assumed that with the destruction of our landing party he was safe and so was St. George. But his call went directly to asteroid Z25. It was encrypted so we couldn't read it, but we didn't have to know what the message was to know where it went. Our other five ships were two days away from the location. They went directly there and picked up all the miners, including St. George, in a very neat operation."

The intercom buzzed. "Mr. Zimbardo?"

"Yes, what is it?" he responded with obvious irritation.

"Sorry to bother you, sir, but you asked to be informed as soon as the ships returned. The Silver Cloud and its four companion ships are expected to dock in approximately 45 minutes."

"Very good!" Zimbardo's initial irritation was instantly dispelled. "Tell Mr. Lather to put the prisoners into the cell block. I will deal with them later." The intercom went off and Zimbardo turned back to the gathering. "As you heard, St. George will be on the asteroid within the hour." There were nods around the table. Many questions were asked about the destruction of the four ships near Montezuma's Castle, but there were no answers. The issue was left unresolved; Zimbardo, however, was not saying everything he suspected. He was frightened, but determined that no one would know it. He had heard of the legend of the greegles and took it more seriously than anyone would ever suspect.

Richard Starlight's spacious office was located near the top of the highest tower on the Moon, the giant SE headquarters building located forty miles north of Amundsen City. Accessible only by two express elevators, his office covered nearly an entire floor of the tower-more than 3,000 square feet. Its walls were treated glass, harder than any metal alloy and impervious to the constant rain of micro-meteorites, with clarity which was nearly perfect. The office was the equivalent of 121 stories above ground level, and only an observation deck and various antennae were above it. The lunar landscape was visible for miles in every direction. The pass which marked the entrance to the Field of Obsolescence was barely visible ten miles away just a little east of north.

What he called his "office" was really a combination laboratory, resource library, work and communications center, and lounge. In one corner was a huge table, made of artificial material but, apart from chemical analysis, not distinguishable from highly polished mahogany. Its chairs matched its reflective sheen. Table and chairs rested on an intricately patterned carpet that measured at least twenty by twenty-five feet. Patterns in cerulean blue, silver, and gray, with flecks of green and violet beautifully complemented the lunar gray visible through the windows. Not far from the table was an immense, detailed globe of the Earth, about four feet in diameter and perfectly balanced. Equally detailed globes of the Moon and Mars on the same scale were nearby. In another corner were globes of Mercury and Venus and a few other celestial bodies.

"I'm sorry to put an end to the festivities this way, gentlemen," said Richard Starlight to the assembly. Around the table were the President of the United States and three of his advisors, among whom were Commander John Lewis of Space Command. Richard's second-in-command, John "Rock" Rwakatare, head engineer of the Advanced Design Department of SE was also present, as were Allen Foster, Keith Seaton, and Charlie Taylor, the fathers of the three Starmen. Robert Nolan, founder of Nolan Mining Enterprises and a friend and colleague of Richard Starlight, and his second-in-command Beowulf Denn filled out the number.

On two viewscreens were stationary images of Oritz Konig on Mars, and Steve Cliff en route to the Moon from the Asteroid Belt. The time delay for Konig was a little more than fifteen minutes, and for Cliff was about 22 minutes, so they could not actively participate in the discussion. Both, however, had vital reports to make and Richard was prepared to present them by videotape at the right time.

Richard continued. "We all expected that our three Starmen would be back with us in two days for the Reception of Honor. That will have to be postponed. Most of you know at least something of the reason why, but this urgent meeting was called to make sure that everyone is brought up to date and, more importantly, to take counsel on a course of action."

Richard summed up what had been learned about the pirates after the liberation of Mars up to the point of the Starmen's departure from Oritz Konig's office.

"Our conclusion is that, although we have 542 men in custody in Eagle City, including their captain Troy Putnam, several dozen pirates are still free. It would have taken a large facility to prepare the ships and house the men used in the assault on Mars, and it is virtually certain that a sufficient force for maintaining this operation was left at their base. We believe that this was probably a minimal number, but there may have been pirates in other locations in the Asteroid Belt or elsewhere. Moreover, as you know, one ship managed to escape from Mars during the liberation. Oritz Konig, now on special assignment at Mars Base, will make a report on what we've learned about Putnam's chief assistant, Lurton Zimbardo."

By pre-recorded videotape, SE's Chief of Security presented a brief report, similar to that which he had given to the Starmen.

At its conclusion, Richard continued. "Since the ship that escaped headed recklessly at its highest velocity toward a certain area of the Belt, we can reasonably assume that the pirates' base is situated on an asteroid not far from that area."

Nolan asked, "Why were the ships from Space Command not able to find this asteroid, or any trace of the pirates?" Robert Nolan was a man of early middle

age, slight of build, with thinning hair. He was noted for his analytical mind and incisive decisions. His hard work over a twenty-year span had built a small company into an influential corporation, and his achievements had brought him respect throughout the Inner Planetary system.

"This is what we are gathered here to reveal," Richard answered. "I'm afraid the news is quite disturbing. Steve Cliff will give us his report."

By videotape, Steve Cliff reported what he had seen in the area of Z25. He concluded, "So it is obvious that the pirates have a very effective radar bender. Their ships are, in effect, invisible to our standard radar detection systems."

When Steve's report was over, Richard added, "Steve Cliff was immensely helpful when we sent the two Starmen to Mars. He did us another favor by following them as far as Z25 when he preferred to return to Earth. He is on his way back to Earth now. Oritz asked him to keep an eye on the Starmen for their own safety, and as you can tell from his report it was a very good thing indeed that he did!"

The men at the table looked grim. The fathers of the Starmen wore especially troubled expressions.

"Our battle with the pirates is not yet over, I'm afraid," continued Richard Starlight. "Their radar bender is nearly perfect. The notion of developing a technique that makes an object invisible to radar is not new, of course, but in spite of several decades of effort even Starlight Enterprise has not been able to achieve the high level of effectiveness Zimbardo's men have available to them. From these observations we draw two disquieting conclusions.

"First, we learned from the pirates we captured on Mars that their base is probably invisible to radar; it can't be seen with normal methods. It's likely that the pirates have outfitted all their ships with the device that makes objects invisible to radar, not just the five Steve Cliff observed. If so, their ships can be anywhere without the possibility of any of our bases or centers of civilization being aware of them until they become visible to the eye. Since all our computers track ships and contribute toward strategic battle decisions based on radar data, it is almost impossible to guard against such pirate raids as Zimbardo's men are now able to carry out-and have already done on Z25." Richard sighed. "Second, and most alarming of all, it is almost impossible for the pirates to have invented the radar bender on their own. We had surmised this shortly after our first conversations with the captive pirates on Mars, but since then our computer has estimated the chance that they did so to be approximately 0.0001%. That kind of technology is beyond any earthly scientific capability. It is much more likely that they got it from some alien civilization-a highly advanced alien civilization.

"We don't have any solid information other than that, so we can only guess what level of connection there may be between any such hypothetical civilization and the pirates. At any rate, where the radar bender came from, other devices might come too-military devices against which Earth has no defense. And we have no idea when we will learn the pirates' next move, and we don't know where the Starmen are now."

The room was silent. Everyone was stunned. When Mars was liberated they had thought that the conflict was at an end. Now they saw that their situation was more desperate than they thought possible.

After a moment, Robert Nolan spoke up. His eyes were wide and his voice was high-pitched. "Wh-, what can we do? Can't we find these pirates? Can't we just send out ships and comb the entire area of the Belt where they disappeared? Can't we...?"

Keith Seaton broke in. "Robert, believe me, if there were anything we could do, anything we could think of that wouldn't be the equivalent of running around in circles, we'd be doing it! The Starmen are our sons! Richard informed us last night that they were captured, and we've done just about nothing else but try to think of something we can do."

Allen Foster joined in. His voice was level and determined, clearly being controlled with supreme effort. "It is impossible to do a random search of the Asteroid Belt-even if we restrict our search to the section where the hidden base must lie. We've done the math. We may as well be looking for a black marble hidden at night anywhere in North America."

"And invisible ships!" Nolan gasped. "The Solar System has no defense against anything like that. Why, they could come in anywhere and invade! They'd be invincible! We couldn't even see what hit us!" Commander Lewis spoke up. "And an alien civilization! They could have science beyond what we can imagine. Earth doesn't stand a chance against an enemy like that!" The men were scared.

After a moment when no one else addressed the gathering, the President spoke. "Our position is essentially the same as it was when Mars was still in the control of the pirates. Our strength does not lie in superior science or in superior numbers. Troy Putnam recently placed his trust in superior strength and technology; the unsoundness of such a hope is shown by his fall. David fought Goliath and won because his trust was in the right place. Zimbardo might have weapons and other technology of which we cannot even conceive and he might do great damage, but he is still in the wrong. Evil might have its day, but in the end it will always fall; the forces of light will overcome it as it decays from within. With that faith and that assurance, we can make our plans. Does anyone have a suggestion as to how we can meet this crisis?"

Allen Foster spoke again. "There are two issues here: finding and rescuing the Starmen and their companions, and defending our civilization from the pirates. For the first, well, we're very hopeful that they are still alive because they were taken aboard the pirates' ship before the base on Z25 was destroyed. They are resourceful young men-they are Starmen, after all.

"For the second, any solution I'm afraid will be long-term. We'll have to develop a detector that uses a process other than radar-perhaps something based on gravity or light absorption. But you can appreciate the obvious fact, I'm sure, that inventing such machinery will probably take a very long time. No, I think that our course now must be entirely defensive. We are, at least, forewarned. But I'm sure that the pirates will be making the next move before we can do anything about it."

7: Prisoners on the Pirates' Asteroid

"WHAT'S the word for 'walk'?" asked Mark.

"Gentrikian," answered Zip automatically.

"That makes forty-seven points for you," said Joe. "I need fifteen more just to catch up. C'mon Mark, give me an easy one-help me out."

"Okay. Do you want English to Titanian or Titanian to English?"

"Titanian to English. That's easier."

"K'intrishian."

Joe thought for a moment. Languages seemed to come easily to Mark-he could absorb concepts and find mental hooks to hang them on with no noticeable effort at all. Joe found languages far more difficult. He preferred engine diagrams and flow charts.

"I don't know!" The lean pilot blasted, exasperated. The Starmen, like the crew from Z25, were passing time as they entered the third day of their captivity aboard the Silver Cloud. Mark was teaching Zip and Joe some of the Titanian vocabulary he'd been working on for two years.

"This one should be easy for you, Joe, even if it isn't 'sleep' or 'eat.' The answer is just about all we've been able to do on this trip so far."

"Well, sleeping and eating is all we've done!"

"'K'intrishian' means 'wait."

Joe grinned. "We've certainly been doing a lot of that on this outing! The past couple of weeks have seemed about pointless! Just about all we've been doing is bouncing from place to place! We blasted off from Eagle City to the Asteroid Belt and then went right back to Mars. Then back to Ceres in the Asteroid Belt. Then to Montezuma's Castle and on to Z25, and we complete our mission just in time to get captured by the enemy! Now we're being taken to this 'secret asteroid' where Lurton Zimbardo has his base and I'll bet anything we're going right back to where we started-where we lost track of that ship we were chasing into the Belt!"

An announcement came through the intercom. "Prepare for deceleration in two minutes."

The Starmen looked at one another, then at the crew of Z25. St. George was already walking toward his acceleration couch. Each of them could feel his heart suddenly beating a little faster. They strapped themselves into their couches. Zip looked out of the window but saw nothing out of the ordinary.

A moment later, the rockets on the Silver Cloud ignited and the ship began to slow. About half an hour later, the had slowed to a crawl and the view of the stars disappeared. It became apparent to the prisoners that they had entered a tunnel. After a few seconds, the ship touched down and secured itself to the landing pad. The prisoners waited. No one spoke.

Minutes passed, then the door to their quarters opened. Spelford stood in the opening, with several other men behind him. All were armed.

"Time to go," Spelford announced. The prisoners were escorted single file through the ship and down the access ladder to the floor of the landing pad. They were under observation at all times by armed men in front of them and behind.

Joe reached the bottom of the ladder and turned to look around. To his right was an enormous clear wall which sealed off the landing area from the immense tunnel through which the ships had come. In front of him and to his left was a complex of charcoal-dark structures, lined with silver trim and glinting with many panels of glass. The entire area was powerfully lit by dozens of sources hundreds of feet above him. He was both impressed and intimidated at the same time.

As soon as the prisoners had debarked from the Silver Cloud, Spelford began giving orders.

"Move. This way. Stay in single file."

The line crossed the field and passed through a second airlock. Leaving the field behind, they entered a large manufacturing area. Several dozen men were working feverishly at massive tables and work centers. Sparks from welding areas were visible in the back parts of the area. Flashing lights from many desks lit up the faces of men with intent gazes, whose attention was fixed on close work on numerous small circuit boards. A few workers glanced curiously at the line of prisoners, but they didn't waste time on a thorough investigation of the newcomers.

Spelford and his detail escorted the prisoners through an immense double door, down a wide passageway, and into a large elevator. The elevator could accommodate fifty men easily. When all were inside, Spelford tapped a number into the control pad and the elevator began to descend. It stopped in seconds and the door opened into an area where several corridors came together. Two small elevator doors flanked the one from which the men emerged. The procession entered a dimly-lit corridor that extended for about a hundred yards. Many doors were set into the walls, but none was open.

Spelford led the way down the corridor. After covering about two-thirds of the distance, he stopped and slid open a plain, dark portal set into the right side of the passage. He glanced into the room beyond, then stepped back and said, "In here." The prisoners entered, and the door closed behind the last one.

George St. George broke the silence. "We're not going to be able to absquatulate from these pirate yaps very easily, that's for sure. Guess we'll have to make the most of our stay here."

Zip strode into the center of the room and looked around. Indirect lighting provided plenty of illumination. "Clearly a dormitory of some sort," he observed to no one in particular. Bunk-style beds were spaced around the walls. Through another door was a resting area with tables and chairs. In another room were washing facilities. On one side of the main room was a large window which overlooked the landing area and primary work center of the asteroid.

Joe and Mark strode over to the window and looked out. "The rotation of the asteroid provides the equivalent of gravity," observed Joe. "About what we're used to on the Moon-about one-sixth Earth. What do you think, Mark?"

"Feels like a little less to me," answered Mark. "We'll have to step up our exercises if we're going to maintain muscle tone."

"Nothing fancy, but everything we need," said one of St. George's men after a quick look around the rooms.

"For a long stay, maybe," said another.

"'K'intrishian' means 'wait,' if I remember correctly, Mark," said Joe.

"That's thirty-three points for you," responded the tall Starman.

Time passed. From the window in the wall of the asteroid, the three Starmen looked down and saw a buzz of activity. About two dozen ships were docked on

the field, and workers were still hovering around tables in the work center.

"Here comes another one," said Joe, as a spacecraft passed into view from the large tunnel that led to the outside.

"How many is that since we've been here?" asked Mark. "Six?"

"Yes, six in less than twenty-four hours," stated Zip.

The Starmen chafed under the burden of their powerlessness. They had already scoured the rooms carefully and found no sign of weakness they could exploit. Their food was delivered through an automated shaft that they could find no way of using as an escape route. They had neither seen nor spoken to anyone since Spelford had brought them to their prison.

Once again Zip looked out the window. "This place is amazing! This could not have been anticipated by anyone! It must have been quite a shock when you found this asteroid, George."

"Oh yes, I was awestruck, completely, absolutely electrified! Imagine stepping into a remnant of an astounding civilization like this. When I found it, it was abandoned. It seemed as if no one had been in it for probably thousands of years."

"Tell us everything you know about this place," ordered Zip, looking intently at the asteroid miner and drawing him over to the nearest table. Zip gently eased the miner into a chair, then turned another chair around and sat in it, folding his arms over its back and facing George. The asteroid miner told the Starmen the story of his discovery of the asteroid and how Troy Putnam had learned about it. They had already heard a brief version of the story from Oritz Konig back at Mars Base.

"Of course, I didn't know this Putnam was a bad egg at the time. He just seemed like a friendly, curious spaceman to me."

"What about the asteroid?" pressed Joe. "What have you figured out about the race that built it?"

"As I said, the asteroid was abandoned when I ran across it, but whoever built it couldn't have been too different from us. Same body type, same size, that's

obvious. Look around you-beds, chairs, everything, just the way we'd make them. Their language was quite different, though. Took me a long time to learn how to use some of their stuff."

"How'd you learn your way around here?"

"When I first came upon the asteroid, the airlock was open. A huge orifice, made for spaceships, as you can tell. I came through and landed. Went through one of the airlocks into the building portion here, where we are now, and just explored. Trial and error. It's not too difficult to get the basics down-opening and closing doors, and all that. Then figuring out the right mix of atmosphere. I had plenty of time. I got access to the first four or five stories, but I'm pretty certain the place is much bigger than that. At first, I couldn't get any further than the first few stories, but after a while I found my way around a couple of deeper sections."

## "And then?"

"What do you mean, 'and then'? I got bored with it and moved on. I'm a miner, not an explorer or a settler or a scientist. There's nothing here but iron. I told a few people about it but nobody much believed me or cared until this Troy Putnam fellow I met in Yellow City. He's the only person who got excited about it, so when he asked me to bring him here, I did it, as I said. Why not? He paid my expenses for the trip, and a little more besides for my time. He was impressed with the place, as was I. Then I went looking for uranium and he went back to Ceres. Never saw him again."

Zip pursed his lips, and his brow furrowed under his red hair-a common expression for the leader of the Starman team. "This has to explain why Zimbardo was looking for you," he said. "No one outside the pirates knows as much as you about his asteroid. That didn't seem to bother Troy Putnam, but Zimbardo must consider you a threat. But I can't understand why he has taken us prisoner. Zimbardo has no heart of mercy whatever. I would have expected him just to silence you for good. Obviously he is preparing this place for some new and big enterprise and is probably occupied, but now I think we'll be hearing from him before too long. Before that happens, I think we'd better be gone."

"Escape? You talking about escape, Zip? From here?" asked Joe with amazement.

Zip addressed St. George. "Tell us everything you know about how this asteroid

works. Leave out no detail whatever. Everything you can remember. Joe and Mark, pay close attention! We have to come up with a plan!"

A full day had passed since Richard Starlight had called the special meeting in his office in the towers of Starlight Enterprise. Now he sat silent and alone in one of the chairs around the great table. Suddenly he spun the chair around and stared through the clear wall in front of him. His gaze went far past the lunar mountains into the distant sky where Mars was just rising, a tiny red point.

The President had issued his commands earlier that morning. A secret communication had been issued to the commanding officers of all the bases of Space Command. A similar message had been sent to the heads of large commercial enterprises such as Starlight Enterprise and Nolan Mining Enterprise, as well as the local authorities of population centers in the Asteroid Belt and on Mars. The communication had provided what information was known about the threat that the pirates manifested. It ordered Space Command and urged the private parties to keep the information secret so as to avoid panic and to prevent the pirates from learning that their sheathing apparatus had been observed in action, and advised all parties to prepare for any attack the pirates may launch. They were put on high alert for visual attack and to be ready for instant defensive response.

In Amundsen City, Keith Seaton sat at his desk, scanning the Asteroid Belt with his telescope. His strong build filled the chair in which he sat.

"There's Ceres," he said quietly as the image of the Belt's largest asteroid came up on the screen. Charlie Taylor and Allen Foster, who were sitting next to him, nodded. The fathers of the three Starmen weren't conversing much that night, but all were greatly comforted by each other's presence.

On Ceres, Sim Sala Bim received the encrypted message on tight beam, and felt immense sadness come over him as he read it. "Where are those three young Starmen now?" he wondered.

In the laboratories of Starlight Enterprise's main center on the Moon, scientists were working around the clock to devise a method by which their ships could track distant objects by sight instead of radar. Additionally, under a very rare Presidential command, technicians were working frantically under Earth's preeminent astrophysicist, Stephen Hoshino, trying to devise an advanced means of detecting a ship that was invisible to radar.

The Inner Planetary system was waiting for a strike which its defenders knew would surely come-but not when, where, or how.

8: The Starmen Strike!

ALMOST an hour had gone by since George St. George had begun to tell the three Starmen what he knew of the asteroid. Zip, Mark, and Joe had listened intently, plying the asteroid miner with detailed questions as he continued his narrative. At last, no one had anything else to say.

"No more questions?" Zip asked. Both Joe and Mark shook their heads. Their energy level had gone up appreciably since they had sat down with George. They had become spirited, now that they were determined to find a plan of escape.

"All right, then. It seems to me that this may be easier than we thought," stated Zip.

"You have an idea already?" asked Joe, with a slight turn of his head.

"It seems obvious that this asteroid was not intended to house prisoners. This room we're in is not a cell block-it's a dormitory."

"Right," said Mark. "Therefore the locking mechanism is not original to the asteroid's design. Is that where you're going, Zip?"

Zip smiled. "Keep going," he nodded.

"Whoever made this asteroid was far in advance of our science and it'll probably be a long time before we, or anyone else, learn how to alter their design. But the locking mechanism was most likely put in by the pirates, probably on short notice. It can't be too sophisticated a system. Again, since this is a dormitory and not a cell, the wiring is probably on this side of the door rather than in the hallway. Let's find where the pirates rewired the door. Whatever they can do, we can undo." The Starmen leaped up and began to investigate the door and the walls near it very carefully. Now that they had some idea of what they were looking for, they hoped it would be easier to find an access panel of some kind which their previous general search had missed. Minutes passed with no result. The walls had no apparent seams, and the door was set into the framework so closely that there seemed to be no space between the door and the edge of the wall into which it slid.

"Try the floor," suggested Joe. Mark dropped down and scanned the floor minutely. Joe moved farther to the right and Zip to the left of the door, their fingers moving gently over the surface looking for some kind of irregularity.

St. George watched them with a mix of curiosity and amazement on his face. His men sat at the tables playing games, paying the Starmen little heed. Once in a while one looked up, then turned back to his game. Others napped on the sofas.

"Look here," said Mark. Zip and Joe came over to see what he had found. "What do you see?" he asked them, sitting back on his heels.

"Where?" asked Joe.

"You find it-see if I'm right," answered Mark.

Joe pursed his lips and squinted. Zip watched carefully. George appeared almost impassive, but inside his heart was beating faster.

"I see it," observed Joe after a minute.

"What?" burst out St. George, then looked almost sheepish for showing his excitement.

"The light reflects off this patch here just a little differently from the rest of the floor. It's a perfect square about, oh, fifteen inches on a side."

"Right," said Mark.

"How do we open it-if it's a panel, that is?" asked Joe. He pushed the corners, tried sliding the panel in every direction, bounced the square with his fingers, all with no result.

"Let me try," said Mark. He laid his hand gently on top. In a few seconds there was a click and the square lifted up an inch, supported by a small, spring-loaded shaft in the center. Mark lifted the panel off and revealed a recess filled with finely detailed circuit boards. Over and around them were a few dark wires that obviously did not belong to the original design.

Joe snorted. "How did you do that?"

"Well, I thought that it had to be some sort of radiation that would open it. There were no obvious signs of physical fasteners like screws. So I figured it had to be magnetism, or light, or maybe heat. I thought body heat would be the easiest to try, so I laid my hand on it, concentrated, and made it warm, and it opened!"

"Good work, Mark, but let's not waste time! We're in a hurry now," urged Zip. "What do you see in there Joe?" By now George and several of his men had come over and were watching over the shoulders of the Starmen. "Yeah, really simple circuit. I can disconnect it in a minute even without tools and we can be out the door." Joe reached in.

"Wait!" Zip grabbed Joe's wrist. "Is there any evidence that the circuit is tied into a larger system, like a master computer, that would tip anyone off that the door has been opened?"

Joe peered into the aperture and carefully traced the wiring.

"Sorry, Zip. Sorry, everybody," he said, chagrined. "You're right. There is. But I can fix that too." He reached in and twisted two wires together. "Okay, that should bypass the door circuit and tell the master computer that the door is still closed. I can open the door now. Are you ready?"

Zip stood up. "There are fourteen of us. We don't know where to go once we're free, so I'd like George to lead us. He's been through the asteroid. Take us somewhere, George, where we won't be found easily."

George shook his head in a big arc. "Now Zip, I haven't been on this chunk for over fifteen years. I'm not real sure where to go!"

"George, no one else has been on the asteroid at all. There's no one but you."

The asteroid miner looked down, dejected. "I don't like any of this. But you're right. Okay. We'll go out the door and back to the elevators. We'll take the one on the left. I'll take us to a floor one level down, then through a huge storeroom. On the other side are other corridors. I've been through there, and there are places to hide and more elevators to get us other places on the asteroid. After that I'm not sure. Maybe I'll remember when we get there."

"Everyone got that?" said Zip. "Stay together and move quickly." No one had anything else to say. Zip turned to Joe.

"Let's go," decreed Zip. Joe removed one end of a black wire and touched it to another terminal. The door slid open.

Outside was a scene that none of the Starmen had expected. Two pirates, dressed in their gray and black uniforms, were seated opposite one another at a small table on the far side of the corridor. The one on the right was a well-muscled, large man with dark hair, weighing well over 200 pounds; the other was blond, of medium build. He was leaning on his elbow, pondering his next move in a board game. When the door slid open, they both looked up, utter surprise written over their faces.

Both the Starmen and the pirates froze for a split second, then both sides moved at once. Mark charged for the big man and Joe for the blond. Simultaneously the huge pirate bellowed and threw the table toward the charging Starmen, scattering the game pieces. Mark stopped the flying table without slowing his pace and slammed it hard back at the pirates, legs first. The blond man managed to evade the table, but the big pirate took two table legs on his left thigh and upper chest. He groaned, and the laser pistol he had been drawing was caught behind the table. Mark quickly threw the table upside-down to his left, reached with both hands for the pirate's right arm, and pulled the man quickly down and toward himself. His right knee came up and caught the man in the solar plexus. The pirate went down with a whoosh of air and lay still. Mark picked up his pistol.

Meanwhile, the blond pirate had screamed for help in a panicky voice, turned, and was dashing down the corridor toward the elevators. Joe took hold of the table's leg nearest him and skated the table forcefully down the corridor after the escaping pirate. It caught the man behind his left ankle as he was running. In the low gravity, the pirate turned almost completely over, his pistol flying. Joe caught up with him and delivered a quick punch that rendered the man unconscious. The entire fight had taken less than ten seconds.

Zip stepped into the corridor calmly. "Did either of them have a chance to set off an alarm?"

"I think this one did," responded Joe, pointing to the fallen pirate at his feet and picking up his laser pistol. "He had about five seconds while he was running to send an emergency call."

Zip grimaced. "That was stupid. I should have thought that they would have a guard. I just didn't think of it, with all the electronic gadgetry around here and their obvious need of manpower. My fault. Sloppy thinking. But it's worse to stand here and feel badly about it. We've got to disappear fast."

"This way!!" shouted George and began to run toward the elevator. The asteroid miner who had previously been so sedate and hesitant now led the way. The

Starmen followed him and the ten others brought up the rear. George reached the elevator door and pressed the panel. In seconds a door opened and the men hurried in. Just as the last man rushed through the opening and the doors began to close, the elevator doors in the next shaft opened and a troop of pirates poured out, guns drawn. In front of them they saw their two comrades lying motionless in the corridor, table and chairs in full disarray.

"Come on!" commanded their leader, leaping forward and turning toward his men to enforce his order. His eyes opened wide as he saw the doors of the adjacent elevator closing on the escaped prisoners. The Starmen's last view of the scene was the pirate leader's shocked face, mouth agape, pulling his laser pistol up to fire. Then their doors sealed and they began to descend.

Almost instantly, it seemed, the door opened. The only light came from the interior of the elevator. It shone on an uncountable number of enormous crates, stacked three high and set in rows extending beyond the range of the minimal light. Though the walls of the room could not be seen, there was a distinct feeling that the open space was huge-larger than a gymnasium, perhaps larger than a stadium. No one said a word. No one moved.

Suddenly Zip grabbed the laser pistol that Joe was carrying and leaped out of the elevator. He whipped around and fired at the control panel next to the large central elevator. The panel flared red for a second and then sparked like fireworks. Zip released the activation trigger on the pistol and stepped back. A few pops echoed in the darkness against a background of the soft sizzling sound of molten metal dripping down the wall.

Zip ran to the third elevator, calling out, "Move away from the elevator! Mark, destroy the controls!" Simultaneously Mark and Zip demolished the control panels of the remaining two elevators. When the controls were obliterated, the lights in the elevator went out and the fourteen erstwhile prisoners stood in the utter darkness of the immense chamber. The sole illumination was provided by the fading red glow of the superheated panels that had been their targets and a few bright orange dots in the gaping holes that remained.

"I don't know if that'll prevent the pirates from stopping at this floor, but every elevator on Earth I know about can't move beyond any floor where the controls are inoperable. George! Where do we go?" Zip asked. "Does anyone have a light?" responded the asteroid miner. Just then a pale glow like early dawn rose around them and filled the chamber.

"What's that?" cried a frightened voice.

"Automatic lighting, probably," answered Joe. "When someone moves far enough away from the elevator, or when its light goes out, the automatic lighting goes on."

"Follow me," directed George. He led the procession to the right of the elevator shafts. On one side was a blank wall at least 25 feet high. On the other were row upon row of crates. Each box had a mark on it, but none of the Starmen could recognize its meaning. Far down the rows was the opposite wall of the chamber, at least 200 yards away.

George St. George was hurrying, leading the band of fourteen onward. There was no opportunity for conversation, but Mark stepped up close to Zip, who had taken the last position in the march.

"Think what this place is, Zip!" the mystically-oriented Starman breathed, his eyes alight with excitement. "This was made by an intelligent, extra-terrestrial race we've never heard of! The Titanians certainly didn't make it! And whoever made it was shaped just like us! As George said before, the controls, the beds, the chairs-all are designed for people like us! Same size! And imagine what must be in these storage units!"

"I have been thinking about it, Mark," answered Zip. "I'll want more time later to sift through my impressions, but there are too many questions here to deal with at the pace we're going."

"Of course, but think! Who made this place? How big is the complex? When and why did they abandon it? Where are they now?"

"Yes-and above all, what else will we find in here?"

Just then the screech of tortured metal sounded loudly throughout the chamber. Everyone turned and stared back at the elevators, where the sound was coming from. A spot on the left door of the central elevator began to glow red, then orange, then white. Iridescent metal began to spew forth in chunks. Then a spherical mechanism about the size of a basketball shot through the hole. A few bright green and yellow lights the size of small coins lit up its dull silver surface.

Zip's blood ran cold. "It's an airbot!" he cried. Zip had never seen an airbot before, but he knew what it was: an aerial reconobot, an armed robotic flying device which, among other uses, could be programmed to track down fugitives, drawn by their body heat. Zip and Mark lifted their laser pistols and fired simultaneously. Their beams lit up red dots on the surface of the flying ball but scattered harmlessly, as the Starmen assumed they would. The airbot quickly oriented itself to the escapees and began to fly toward them.

## 9: A Vision in the Night

"RUN! Go! Scatter! Move!" shouted Zip frantically. He ran forward to the closest aisle between the stacks of crates, wheeled right, and sped down the narrow space. He heard the quiet, efficient "zzap" sound of the airbot's disabling beam, but apparently not directed toward him yet. Desperation powered his legs and they pumped at peak speed. He didn't know where the others were or what they were doing. Someone else was racing behind him but he didn't stop to find out who it was.

It was not cowardice that inspired his flight, but the desire to preserve the team. Scattering and flying gave a slight hope that some of the men might escape the relentless search of the airbot-or at least put off the inevitable. The rotation of the asteroid provided artificial gravity, but it was low enough to enable the men to move quickly, covering a lot of distance as they ran.

"Zzap. Zzap," he heard again, more distant this time. He came to the end of the aisle and had to slow to keep from slamming into the wall in front of him. He reached out his left hand and grabbed the corner of a crate to help him execute the turn. As he made the quick right angle twist at the end of the row of crates, he glanced behind him with his peripheral vision. Joe was close behind him and several yards farther away were two of the miners. Even as he looked, he saw the airbot fly over the crates into the aisle he had just cleared, missing the ceiling by less than a foot. With the hated "zzap" sound, it fired one beam toward the miner at the rear of the headlong retreat, and the man went limp and collapsed. His momentum carried him forward several feet before he stopped moving.

Zip saw it all in a split-second as his inertia carried him out of view. He looked forward again and sped down the aisle; after passing a few rows he turned again

to the left. Far ahead of him he saw the elevator door with the bulging rupture through which the airbot had burst into the warehouse. Suddenly the airbot flew over the stack of crates to Zip's left and appeared about fifteen yards in front of him. A feeling of panicky horror surged through Zip as he saw the airbot reorient itself in his direction.

All at once every point of light on the airbot went out and it hung motionless in the air. Then it sped back to the elevator door as if jerked by a cable. It smashed through the hole it had made and flew into the shaft. Instantly there was a dull "whump," more felt in one's tissues than heard aloud. A bright light came through the opening like a spotlight, then faded.

"What happened to the airbot?" Joe's amazed voice behind him asked the question that was in Zip's mind.

"Let's go," said Zip. "Let's find out who's down and carry them away." Both the Starmen were breathing hard, but quickly returned to normal as they paced the aisles. In moments they had assembled those whom the airbot had not found. Only four men had been disabled by the airbot's beams.

"Take us out of here, George," ordered Zip. His voice was quiet but carried the authority of leadership that people welcome when there is a crisis. Using the fireman's carry, eight men easily transported the four who were unconscious.

George St. George turned without a word and led the way. Everyone followed. St. George came to the end of the walkway and turned to the left around the last row of storage units. On his right was a bank of elevator doors, some large and some small. He came to the first one and with his hand shaking pressed some numbers into a control panel. Nothing happened.

He looked up to Zip with a countenance marked with anguish and pleaded, "I can't do it. My fingers won't work. Mr. Foster, you press the numbers, please." Zip stepped up to the panel. As the asteroid miner called out the directions, Zip pressed the buttons.

"Top center. Right center. Top right. Top right again. Bottom left. Center. Sorry, I'm a little shaken up."

"That's okay, George. I think we'll be fine now." The elevator door opened and all the men stepped into the conveyance. The door closed. George reached out

and pressed one button. The elevator began to move-not down or up as the men expected, but away from the chamber where they had fought the airbot.

"What's wrong with these men?" asked one of the miners. "They're completely unconscious and their arms and legs are swinging around like they're puppets or something."

"They're just out temporarily, not hurt," answered Joe. "Airbots disrupt certain neural connections to bring on sleep and complete relaxation of all muscle functions. I'm not sure how high the airbot's beam was set, but I'd guess pretty high. They'll probably sleep for several hours but they'll be fine when they wake up."

"What did you do to that machine that was chasing us?" asked another of St. George's companions.

"I didn't do anything to it. I don't know what happened to it," answered Zip. "I suppose it malfunctioned. Lucky for us." Joe and Mark both glanced sidelong at Zip, then looked away. The Starmen knew that whatever had happened to the airbot, a malfunction was not one of the possibilities.

Another of the miners spoke up. "I've never been on an elevator that moved horizontally before. Where are we going, George? This transit is taking longer than just moving between floors."

"The elevators inside this rock can move in just about any direction except slantindicular. If I remembered accurately, this one'll take us to a control and information center of some kind. I don't know where it is in relation to where we started, but we should be safe there and if I don't forget where we come out, I can always get us back to the warehouse if we want to return."

The elevator came to a stop and the door opened onto darkness. As before, the elevator light illumined a small space, in which the men could see a few counters. When the first passenger debarked, soft lights went on. The illumination revealed a room of about 2,000 square feet, filled with viewscreens, computer stations, cabinets and shelves, tables and chairs, and a few sofas. At least a dozen doors led from the room. The four unconscious men were laid carefully down onto the sofas.

"What is this place?" Zip asked St. George.

"Haven't any idea, Starman. I don't mind pushing buttons at random when it comes to elevators, but you won't find me playing with any machine I don't understand. I don't want to find the ejection seat or rocket launchers by accident."

"What do you think, Mark, Joe? Let's look around here." The Starmen began to examine the keyboards and control systems spread throughout the room. There were symbols written beside most of the controls, but none of the writing was recognizable.

"Alien writing," observed Mark. "I'd sure like to know what it says."

Joe was at the next console, thoughtfully pressing buttons, but there was no response.

"We need to find food and water," said one of the others.

"Right," said Zip. "Everyone check through the shelves and cabinets. Open the doors, too, and look through, but don't go anywhere." Zip didn't speak aloud what was on his mind. The workings of the asteroid, no matter how technologically advanced, had been abandoned for probably thousands of years. There could be no water or food anywhere except where the pirates were. The Starmen and miners may have escaped captivity, but their freedom would do them no good until they found food, water, and a spaceship. Success in finding even one of those items without being recaptured was highly unlikely. And even if they could board a ship, escape from the asteroid was just about impossible. He wondered how long it would take before someone else realized these things and voiced them.

"There's nothing, Mr. Foster," said one of the men after everyone had searched thoroughly.

"Mm hmm," Zip nodded. "Well, let's sleep and start again in the morning. Maybe some of us can go back to the warehouse and open up a few of those crates. There may be food and water in some of them. Others can investigate some of the passages that lead away from here."

The men arranged themselves around the room and lay down. "I think I found the light switch, anyway," said Joe and pressed a button next to one of the doorways. The room became dark. "I assure you, Mr. Zimbardo, there was nothing wrong with the airbot," asserted a large man, standing before the pirate leader with a half dozen of his partners. "I don't know what threw it back into the elevator shaft and I don't know what made it explode-but there was nothing wrong with it. The prisoners must have done something to it."

"These prisoners are more than asteroid miners! None of St. George's men has the capability of knocking out two armed men the way those two were knocked out. None of them has the know-how to disable a airbot!" Zimbardo turned to his chief control officer. "Gene! Get me Lather right away. Tell him to bring up all information he has on the prisoners he brought in from Z25. Tell him to bring especially the video-record of the prisoners." He turned back to the others. "You're dismissed!"

Soon Lather appeared with a handful of records.

"Let's see the video-record first," said Zimbardo, and pushed his computer a little closer to his lieutenant. The man inserted the disk. In seconds, a view of the prisoners appeared on the screen, each one shuffling by as they entered the Silver Cloud.

When all the prisoners had passed by, Zimbardo turned his head down in disgust. Lather opened a file and brought out another disk. "I've got-" he began.

"You fool!!" spat out Zimbardo through gritted teeth. "I don't need to see any more! I know who we've got now! How could you miss seeing that the three Starmen who completely destroyed our plans on Mars were your passengers for three days! How could you miss it??" He was shouting now. "They've been on the news for two weeks! How-" Zimbardo paused and tried hard to get control of himself. "They were our prisoners! -and now they've escaped! They're loose inside this asteroid, and we don't know where!"

"But sir," inserted Lather when Zimbardo paused to take a breath and clutch the air. "There aren't many places they can hide. There's not much to the inside of the complex-only five floors."

Zimbardo turned to the ship captain. With words that smoldered, he said, "The complex of this asteroid is far larger than you think! I have barely begun to explore, and St. George knows more than I do!"

Back in control now, Zimbardo punched his desk communicator. "Gene! Get a search party together and have them scour every part of the asteroid they can find." He filled in the details about the Starmen. But he knew that neither the miners nor the Starmen would be found. With George St. George leading them, they could be anywhere-anywhere but where his men would be able to search.

Mark came out of a deep sleep into a light doze. He knew he was sleeping, but he was also mindful of his surroundings. It gradually washed through him that he was hearing voices. Two voices were conversing in very low tones, far away. He had a feeling that the air was thick and the sound had to struggle to get to him. He became aware of his eyelids, and they fluttered. Fully conscious but deeply relaxed now, he slowly opened his eyes. He saw only darkness, but it was not absolute.

He turned his head slowly to the left. Through an open door, about twenty feet away along a corridor were two tall, vaguely humanoid beings wrapped in shadows. Mark's heart leaped and began to race, but outwardly he showed no trace that he was alert. His eyes narrowed in an attempt to see more clearly. He knew instinctively that the creatures were alien. They walked in utter silence and stepped into the room. Mark lay frozen. They looked around for a few seconds, then went back into the corridor to the place where he had first seen them. They manifested no ill intent toward the sleepers.

The figures began conversing in low voices. Mark sensed a deep sadness in their tone. He strained to hear what they were saying, what their words sounded like.

Suddenly he heard something that sounded familiar. "A coincidence," he thought to himself. They couldn't have said "Zimbardo." After several more exchanges, one of the figures pressed a series of buttons on the wall, next to a blank screen. It came alive with a dull silver glow. Bright green lines appeared in the configuration of a map or blueprint. Mark strove to see as well as to hear. Slender fingers pointed to one part of the screen or another as the conversation continued.

Then he heard it again, this time clearly. "Zimbardo." Mark lifted his head a little and turned so he could observe the screen better. "A plan of the surface control center," he thought. He recognized the floor plan by its telltale great doors through which the prisoners had been marched. The scene changed as one of the figures pressed a button. A series of diagrams appeared, diagrams that indistinctly suggested a power plant to Mark. One of the tall figures began talking animatedly, pointing to various locations and repeating the word "Zimbardo" frequently.

Suddenly Mark understood what was going on: the aliens were talking about shutting down the power plant! Mark strained to get a closer look at the diagram they were examining. "The aliens!" His mind raced. "They must be the builders of this base! Shutting down the power plant-why, they must want to stop Zimbardo! They're on our side!"

Then the other figure spoke up. He seemed to agree with the animated one, but his voice had a sorrowful tone to it. He pressed a few buttons on the screen and a picture of a warship appeared. As the alien pointed to the ship and talked, all the life seemed to drain out of his companion and he began looking hopeless and despondent. He turned the screen off.

Mark didn't understand-what was that ship? Why did it bring such hopelessness?

As the panel went dark, Mark realized with a crushed heart that, for some reason, the aliens were not going to deactivate the power plant after all. He buried his face in his hands. Something was stopping them, something having to do with the spaceship that had appeared on the screen last.

Mark looked up and saw that the figures had vanished!

### 10: Both Sides Move

THE GREAT AIRLOCK on the pirates' asteroid opened. From the depths of the abyss five ships came forth. Emerging from the stone tunnel, they moved into formation and then headed for the Asteroid Belt. Lurton Zimbardo's lieutenant Crass held the authority over the small fleet. Each ship was sheathed with the radar bender, making it invisible to the normal means of detection used by Starlight Enterprise, Space Command, and other Earth-based entities.

As the ships came into the Belt, Crass gave the command to the other four pilots. "The target asteroid has been located. Proceed with the destruction of the sats." The sats were small, unmanned electronic satellite observers, distributed throughout the Asteroid Belt to aid in research and navigation. They monitored movement in the Belt and provided constantly updated information on the location, speed, and direction of major asteroids.

The four ships moved into pre-determined areas in the quadrants around a small, heavy, black, iron asteroid that was speeding smoothly along on its course.

Crass stood on the deck of his ship and gazed out at the small asteroid. He spoke as if to himself. "There it is, the first of five surprise packages for our beloved Mars." The pirate leader waited patiently for the pilots of the four companion ships to report back. He expected that their assignment would take about 45 minutes-maybe as long as an hour. The first report came in 42 minutes later.

"Mr. Crass, this is Slant. We located three sats in quadrant two and destroyed them all." The other reports came in only moments later. A total of fourteen sats had been located within 600 miles of the asteroid where Crass was waiting, and all had been destroyed. Crass opened the intercom on his own ship.

"We're clear. Go to it."

Over a dozen space-suited men spilled out of the airlock. They had been waiting for the order from Crass. Each carried a large crate, nearly weightless in the Asteroid Belt. They maneuvered easily through space and floated gently to the surface of the asteroid-a dark 100-yard wide clump of dirty rock. Immediately the men began to distribute the crates evenly over the surface of the rock.

The grim, forbidding, pocked asteroid became the site of frenzied work. The crewmen removed sheet after sheet of dark metal from the crates and fastened them to the floating chunk of iron. Tiny flames showed where the irregular metal of the asteroid was being shaped to fit the plates the pirates were anchoring to its surface.

In one hemisphere three other men were attaching power and propulsion units. They sank holes several feet deep and inserted tubes, fuel tanks, and a control mechanism. At one place near the asteroid's equator a technician was installing a communications unit.

The four companion ships had returned and remained on guard less than a quarter mile from the asteroid. In less than two hours the work on the asteroid was completed and the crewmen reentered their ship.

"Take us home," ordered Crass. The five ships left the Belt and began the quick journey back to their port. Crass smiled most of the way back.

On Mars in the communications tower of Eagle City, technician Mel Golden was puzzled. Some of his data had just dried up. Mel was responsible for monitoring the sats in a large segment of the Asteroid Belt, and a section over a thousand miles in diameter had gone dark. He called to his superior.

"Will, I've got something curious here." A slender, middle-aged man with long gray hair walked over to the console.

"What is it, Mel?"

"Look at this. You asked us to report anything out of the ordinary. Well, occasionally one sat will malfunction, but it looks as if at least a dozen have stopped reporting all at once. I haven't plotted out the details yet, but there's an entire section of the Belt where nothing's happening."

"When did it start?"

"Just a moment ago. So whatever occurred out there happened about..."-he thought for a second-"about eleven minutes ago."

"Thanks, Mel. This could be the surprise we've been waiting for. I'll report this immediately." Will went over to the master communicator in the tower and sent a top priority message to Space Command's headquarters on Mars, describing the situation. Space Command headquarters forwarded the information to its centers on Earth and the Moon, as well as to Oritz Konig, SE's Head of Security in Mars Base.

Konig's report to Richard Starlight included these words: "It looks probable that the pirates have taken some sort of action in the Belt. There are no population centers of any size within 10,000 miles of the place, and no known solitary miners. It's a completely dead spot, and sats are spaced very thinly there. Yet fourteen sats in a sphere at least a thousand miles in diameter were put out within a ten-minute period. No natural phenomenon can explain that. Space Command has the closest ship, but it won't get to the site for a little more than 22 hours. The nearest backup ship is more than three hours after that. SE doesn't have a ship of any kind at all within four days of the site, so we'll have to depend on Space Command for the first reports."

"Wake up! Everybody wake up!" Starman Joe Taylor was shouting.

"What is it? What's wrong?" Voices came from several men, jerked awake by Joe's outburst.

"Food! There's food here!" he burst out. "And water! Someone brought us food and water! Lots of it!"

Within seconds everyone was up and crowding around Joe. Now that he had roused his companions, he was bent over a half dozen large boxes, one of which was partially open. He reached in and took out a container filled with fruit. He handed it to one of George St. George's men, reached into the box again, and withdrew a vessel with water in it. It had a spigot on it as if it were made for traveling. The men began passing it around, drinking deeply. Joe dug in again and brought out another box. He opened it and held it up so that others could see. It contained several layers of items like large crackers.

"Where did it come from, Joe?" Zip asked.

"I don't know, Zip! I woke up before anyone else and noticed these crates. I jumped up, looked around but didn't see anybody. I opened the first one and saw the fruit. That's the whole story."

"You don't know it's safe! You took a chance, Joe!"

"What kind of chance, David? Where were we going to find water, much less food? We were done for without this."

"Not too much of a chance, I think, Zip," whispered Mark to the red-haired Starman. Zip turned his head and looked at Mark curiously. "The food's okay. Let the men distribute it and I'll tell you what I know."

"Okay," Zip nodded. He turned to George. "Let the men take the crates apart and see what we've got here. We'll eat and then we'll make plans." George took over operations while the three Starmen stepped aside.

"What do you know, Mark?" asked Zip. Mark told the other Starmen what he had seen in the middle of the night.

"Hmmm. Hard to credit it, that the original builders of this wonder are still here," mused Zip. "Why would they let Earthmen come in and take over? I gather from what we've learned and what we've overheard that the pirates have been active here for over a dozen years, and George found this place over fifteen years ago."

"The pirates haven't really taken over, Zip," said Joe. "It looks as if they haven't gone beyond the first few levels! Something's kept them out. Only George was able to get beyond the floor where the warehouse is. Maybe that's why Zimbardo wanted to find him and keep him alive. George doesn't know too much about this, this, I don't know what to call this place, but he knows more than any human living."

"Whatever the truth is, we have some friends," contributed Mark. "They don't want to be seen, but they'll help us. I'll bet a golden asteroid that they're the ones who destroyed the airbot. I think we need to be ready to see what happens next."

"You're right, Mark," said Zip. "We'll have to be prepared to move." The Starmen went back to the group. Everyone was seated on the floor or on chairs, eating a welcome and refreshing breakfast. The four men who had been rendered unconscious by the airbot had benefited from a good night's sleep and were back to normal.

Mark reached into one of the crates and took out one of the items that looked like a large cracker. He saw that several of the miners were eating them. Zip had also taken a bite out of one and was chewing thoughtfully.

"What do you think of these crackers?" Mark asked.

"Survival food," opined Zip. "The fruit is delicious, though."

When everyone had finished breakfast, George St. George asked, "What should we do now, Mr. Foster?"

"I was just going to ask you the same question, George," answered Zip. "Let's get the men together and make some plans." George called the miners together. Zip delivered a short speech, informing them that he, Joe, and Mark were Starmen and gave a brief summary of their assignment. With a nod, Zip asked

Mark to tell what he had seen during the night. Then a number of men began to ask questions.

All at once the room dimmed. The voices stopped suddenly. After a few seconds, one of the corridors lit up with a soft, pleasant light. "That's the way we go, I think," said Zip. "Pack up the food." The contents of the remaining cartons were distributed among the men and Zip led the way. He felt more hopeful than he had since the Starmen had landed on Z25.

The corridor extended for several hundred yards in a straight line. Many doors and other passages led off in different directions, each marked with one or more figures, none of which was familiar. The passageway was plain and utilitarian. After more than five minutes of walking, the men came to an intersection of passages in a large, faintly illuminated room. The lights in the corridor faded behind them. Across the room was a row of elevator doors. A row of lights lit up over one of them. Zip strode boldly across the floor to the elevator that had been indicated, and the others followed without a word. When he was within twenty feet of the door, it opened. After the men entered the compartment and laid down their burdens, the door closed.

On a control panel, one light gleamed and Zip pressed it. When he had done so, another light went on. He pressed that one. After he had pressed six lights, no more came on, and the elevator began to descend. After about a minute, the movement stopped and a door behind the men slid open, opposite to that through which they had entered. The men turned and inhaled sharply.

"Oh my! Oh my!" exclaimed Zip, but no one heard him.

In front of the men was a power plant of impossibly immense size, in dusky darkness. There were low murmurs as of engines pulsing far away or of winds passing through trees, but they were quiet sounds. The ceiling was out of view, lost in blackness above them. A seamless iron floor, perfectly level, stretched out before the men as far as they could see. The left wall was beyond their vision; the right wall was about thirty yards away. Lights were located sparsely throughout the facility.

Gargantuan tubes, gleaming silver in the lights and ribbed like a torso of a dragon, snaked through a heavy latticework of girders. Iron pipes a foot in diameter ran by the dozens through the open spaces. There were catwalks,

elevators, and enclosed spiral staircases in strategic places. Great metal containers bearing dials and lights of various colors took up much of the space.

"Go," said Zip. His voice came out as a whisper, which he had not intended. He swallowed and said it again, a little louder this time. "Go on, move out. It's okay." The men stumbled forward, filled with awe so overwhelming that it paralyzed their vocal cords.

Finally Joe caught his voice. "This is great! Wow! This is GREAT! FANTASTIC!!" He pushed through the miners in front of him and ran forward about twenty feet. He shouted as loudly as he could. "HEYYY!!"

There was no echo. His yell disappeared as if it had been damped. He suddenly felt chilled and afraid. He turned back to the others and rejoined the crowd. He sidled over to Mark. "This place is great," he whispered with a smile. Mark's eyes were upturned and shining with appreciative wonder.

Zip moved to the front of the company. In a quiet but determined voice he said, "Let's go. We'll just follow the main aisle, straight in front of us." He began to walk and the others followed. "Don't forget the food," he threw over his shoulder. Two men turned back to retrieve their supplies and then ran to join the others.

Joe moved up to the front and walked next to Zip. The Starman leader was setting a brisk pace.

"Isn't this place fantastic, Zip? Just think of the people who can build a thing like this!"

"I am thinking of them," answered Zip. His brow wore the characteristic furrow that showed he was not completely at ease.

"What's wrong?" asked Joe, as if he hadn't a care.

"Something bothers me. Our unseen friends, if they are the ones who built and maintain this asteroid, are highly advanced technologically-far in advance of anything we're likely to achieve for centuries. But from what Mark told us, it's obvious that they're afraid of something. I can't see that they'd be afraid of Zimbardo and his cronies. They're afraid of something else, something we don't know about yet-and that makes me afraid." He continued his fast pace and Joe kept up with him, but Joe's eyes glanced into the shadows as they walked.

### 11: An Asteroid is Missing

THERE was a breeze. A very light breeze, a mere breath. Mark could feel it on his cheek, just a slight chill that was pleasant. He had not felt air moving since he had been on Mars.

"Surely, the air cannot move in here," he thought to himself. He lifted his eyes upward. As he expected, the lights failed before they revealed the ceiling immensely far above. "How far?" he wondered. "A half a mile? A mile? More?" The lights looked almost like stars, placed in the strategic joints and balconied work areas of the monstrous iron latticework.

The refugees from Lurton Zimbardo's prison had been walking through the power plant for some time-long enough to have covered at least a mile, and probably closer to two. Though the surroundings were obviously nothing more than the power station of the asteroid, the men were as hushed as if they were in a cathedral. They were small figures in an enormous place, reminded of their smallness and overwhelmed with a sense of the numinous.

Mark sifted through his memories to a time when he was a child of about six, and his parents had brought him to Carlsbad Caverns in New Mexico. He had stood in an immense room below ground, large enough to contain several football fields. He had exulted then, identifying for the first time his restlessness inside, his search for something larger than himself, something that could fill a universe.

He spoke aloud to no one in particular. "When I was in Carlsbad Caverns about a dozen years ago, the ranger told us that the temperature inside the caverns was constant. This is like that."

"Sure," responded Joe. "This is a kind of cave. Look at the floor. Perfectly smooth, like glass. Artificially shaped, of course, and sealed, but it is the substance of the asteroid-no manufactured flooring. We must be in the deepest part of the complex here. I feel almost as if we are on the bottom of an ocean."

"Joe! Mark!" called Zip from the front of the procession. The men stopped

walking and the two Starmen joined Zip. "Look at that," said Zip, with a lift of his chin.

A computer screen about four feet square was set into the side of a huge, gray fabrication of metal, shaped like a cube at least fifteen feet on a side and made of thick plates held together with rivets. Dozens of pipes in a tremendous variety of sizes came into the cube and extended away, disappearing into the dark distance. Some were the diameter of soda straws and a few were large enough for a man to crawl through. Most were as thick as a man's wrist.

Mark stepped up to the screen at once. Below it was a keyboard without markings. He pressed the button which was located in the same place on the board as the button he had seen the midnight visitors press to activate their screen. A few buttons lit up with tiny green lights, but the screen remained black. He tried a few more buttons, but there was no response.

"Nothing doing. If you'd like to take a break here, Zip, I'll try a few more combinations. We're so far away from the surface of the asteroid, I'm sure Zimbardo will never find us now." When Mark said "Zimbardo," the screen flashed briefly on each syllable.

"Hey!" exclaimed the Starman. The screen flashed again. "Zimbardo!" he said again, and the screen repeated its performance. "It's voice activated! And it recognizes Zimbardo's name!" Mark tried a series of standard commands for voice-activated computers, but got no response to any words other than "hey" and "Zimbardo."

"Take your time, Mark; I don't think we're in a hurry down here," said Zip. For half an hour, Mark tried voice commands and combinations of keyboard strokes, but made no progress.

"This place is oppressive," said one of the miners, after a long silence. "I don't like being closed in by darkness."

"Right," said another. "On the asteroids we can see for thousands of light years, but inside here it seems as if life is swallowed. I feel as if I'm in something's stomach."

"Starman Foster," said George St. George. "I think we had better move on. We need to come to the end of this giant room and get back to light and living

quarters of some kind. With all this excitement we've had, I think the men are just about completely exfluncted."

Zip paused a moment and looked into the distance, then nodded. "Okay," he agreed. "This room can't go on forever. Let's find the end of it."

Lurton Zimbardo was in the control center of the asteroid. A small group of his most trusted assistants stood silently by. Through the wall of glass on his right he could see the cavern where the pirates' spaceships were anchored to the landing field. Five of them were out on assignment in the Belt. As the work crew on the asteroid was able to produce sufficient sheathing, power, and propulsion units, a space crew was assigned the task of outfitting the asteroids that Lurton had previously chosen.

The first, under the leadership of Crass, had returned that morning. Another had gone out almost immediately afterward and one more would depart the next morning. By the end of the following day, the last two crews would be launched.

Crass' assignment had included the destruction of the sats while he performed his task. Now that the pirates knew how easy and fast it was to complete the work, they did not bother to destroy the sats in the remaining four sites. Zimbardo knew that the destruction of the sats would alert Space Command, but the authorities would not be able to stop the project before his ships returned. Once they learned what he was doing they would expect that he had only one asteroid to command. The remaining four would be a shock to them and give him, Zimbardo, a powerful psychological edge. He would need it for his last demand. Even his most trusted lieutenants had no inkling of the enormity of his last ploy.

"Now in contact with G670," uttered Zimbardo, referring to the asteroid that Crass and his crew had rigged. The screen was lit up before him. "Two minutes and four seconds to go from right...now!" A countdown clock was set at his left. The pirate captain checked his figures one more time. He had plotted the orbit of Mars, the thrust and direction of the power units on G670, the speed of the red planet in its course and its rotation, the anticipated acceleration of the asteroid, and the time delay involved in making adjustments to its course. He had checked his computations half a dozen times and then commanded three others to do so.

Three, two, one... read the countdown clock. Zero. Zimbardo pressed the button.

He remained motionless for at least ten seconds. Then he sat back and exhaled loudly. He had not noticed that he hadn't been breathing. Then he turned and smiled broadly to his audience.

"Five and a half days from now, everyone in the Earth-Moon-Mars system will know who we are!"

Oritz Konig was making another report to Richard Starlight. "The Space Command ships came onto the site and found no sign of human presence. They quickly replaced the sats, got them activated, and then checked data. I don't know how to explain it, Richard, but an asteroid is missing. Other than that, there is nothing different in the area of the Belt that had gone dark, but obviously the pirates have done something with an asteroid. It's not a very big one-only about 100 yards in diameter, maybe a little more-but it's vanished."

The Starmen and miners had been walking more than three hours, and covered a distance of about ten miles.

"A wall," announced Zip. "We've come to the end of it at last."

"You'd think that a race that can make elevators go sideways could have come up with a way to traverse this gymnasium quicker and easier than walking," grumbled Joe.

"Didn't I hear you say that this place is great?" inquired Zip.

"It is. Back then, I meant 'great' like 'magnificent'; but now it just feels like 'great' as in 'really big."

The company came up to the wall. There was a bank of elevators in front of them and several sets of doors to their right. In a large open gathering place, there were many platforms like flat beds, with rods coming out of one end and sticking up perpendicular to the beds.

"Joe," said Mark, investigating one of the beds. "Here's your easier way to travel. These things must be some sort of dolly or truck. I saw a lot of them where we first came out of the elevator, but I didn't recognize them."

"And we didn't know how big the room is, either, so we didn't look for means of transportation," added Zip.

"No wheels," said Joe, peering at the apparatus, "and doesn't need them. Magnetic, probably, with this iron floor. Man," he said with exaggerated disgust, "we could have floated in comfort the whole length of the place."

"We're here now," said Zip, matter-of-factly. "What happens next? We'll see if our friends are still with us."

The men waited for some sign of guidance, but there was only silence. No lights were activated over an elevator. Minutes dragged on. "Try the doors," said Zip at last, and walked to the nearest elevator. He pressed buttons, but nothing happened. "Go on, try the other ones," he called out with a wave of his hand. Some of the men went to the other elevators and pressed buttons. Others went to the standard doors adjacent to the elevators, but they did not open.

"Well, I guess we have to go back," said Joe. No one laughed.

"This one's open," called one of St. George's men. They all turned and saw an open door-the tenth in a row of identical, unmarked doors along the wall. The man didn't go through it but waited for Zip. The leader of the Starmen went through the portal onto a metal deck. Stairs went upward. He began to climb, with the others following after.

Three flights up he came to another door, which opened as he set foot on the landing. He went through it into a room outfitted as a small hangar. Five spaceships of alien design were clamped to the floor. At the far end of the hangar was an airlock.

Walking gingerly, Zip stepped out a little farther into the hangar. The airlock was enormous and perfectly clear, revealing thousands of stars. Though it had been only a few days since he had seen a starscape, now it almost seemed as if he were perceiving the heavens for the first time. A feeling of awe coursed through him.

"We're almost free," he whispered.

### 12: First Impact

## "ALIEN SPACECRAFT!" murmured Joe, slowly. "Magnificent!"

He and Mark had followed Zip into the hangar. George St. George and his men came after them. They huddled close together and remained at the door while the Starmen strode across the floor of the hangar toward the spacecraft.

The five ships were sleek craft with a highly swept delta wing design. The hulls were a startlingly reflective deep forest green color. The craft looked identical to each other, each about 75 feet long with a wingspan of about 45 feet. The windshields were black and opaque. They lay horizontally on the floor of the hangar, all pointed toward the airlock.

"Beautiful! Just gorgeous!" exclaimed Mark. As he approached the alien craft he noted that the hull was not merely colored, but patterned. "Oh my! Look at this!"

Joe and Zip were right behind Mark and came over to see what the big Starman was showing them. The hulls were not only beautifully colored, but showed evidence of leaf patterns. Subtle gradations in color gave the impression that the ships were almost camouflaged-that they could land in a deep forest and become almost invisible.

"This is a work of art, a work of genius!" exclaimed Joe.

"How do you get in?" asked Zip, looking for a door. He was running his hands over the surface. There was no sign of a doorway, no seal or join anywhere he could see or feel. He could see his reflection in the side of the spacecraft as if he were looking into a still pool in a forest.

"So close, yet so far," said Mark. "Here are ships, there is an airlock, but we're not any closer to escaping than we were before."

"This'll take some time," said Joe, with a grimace. "It's probably voice-activated, like the computer screens below." The company had passed large computer screens regularly on their trek through the power plant. "All we need to do is learn the language of an alien race we don't know, have never met, and whose language we can't read. Then we can break free of here."

"Let's get busy," said Zip. "I like a challenge. We were led here by our hosts.

There has to be a way."

Zip went back to George St. George and his men. "We'll be working on getting into one of the spacecraft and learning how to use it. You can help by exploring this place and finding out what's here. George, would you please take an inventory of what we've got in the way of food and drink and make a plan for making it last as long as you can. We'll also need spacesuits. We can probably fly without them if we have to, but it's a bad risk."

"Okay, Zip. We'll do our part," responded George. His men scattered throughout the hangar. There was a lot to investigate. It was only about 200 yards long and 50 yards wide, but was lined with cabinets. There were shelves and racks with equipment of various kinds, some recognizable and some decidedly not. More than a dozen doors opened into the hangar. Zip went back to the spacecraft the Starmen had chosen for their escape vehicle.

Joe and Mark were at the closest work station, where there were tools of curious manufacture.

"What can you guess about the alien race that built this place?" asked Joe as he ran his hands across a set of tools, picking one up and putting it back down. "What do we know about them?"

"They're humanoid, definitely," replied Mark as he gazed at a rack of instruments. "We've already agreed on that. I assume that the two figures I saw last night are from the people who constructed this amazing facility. Can't guess why they're not out in force here, unless there are only a few of them aboard. Can't guess why they don't show themselves. Don't know how old this asteroid is or what it is for. But they're definitely humanoid. Even if I hadn't seen them, we could tell that by the shape of the tools and everything else we've seen."

"And the food they gave us is not too different from what we're used to. And think about this: they put fresh fruit in those food packages. They must have a hydroponic orchard somewhere in this asteroid. There must be a huge portion of this complex that no human has ever seen-and maybe can't get into! This place is big enough to house an entire city. Maybe there are thousands of them here! George said that he only explored a tiny part of the inhabitable region when he was here. Everything we've seen tells me that they're a lot like us."

"That might tell us something about the nature of the universe, Joe. I like to

wonder about things like that."

"And look, these spacecraft have wings. They're not just for travel in the void; they're made for flight on a planet with an atmosphere."

Zip came over the joined the conversation. "If they helped us get from the warehouse area to this hangar, why aren't they helping us get into the spaceships?"

"Maybe there're only two of them-the two I saw last night," suggested Mark. "Maybe they're caretakers or something like that, and not spacemen. Maybe they don't know much more than we do how to get into these beauties."

"Well, whatever the reason, I guess we're on our own, at least for the time being."

"Looks like some sort of laser here," said Joe, picking up an object that resembled a flashlight. It had two dials on it with signs of calibration, and a button that was probably intended to activate it. "If it is a laser, and if these dials move the power from low to high, who knows which end is which?"

"Take it into the power plant and aim it at the floor. An instrument that small can't have too much power and won't hurt a half mile of solid iron. See what happens," suggested Mark.

Joe shrugged. "Okay." He went over to the door through which they had come a half hour before. He was back in a few minutes.

"It's a laser, all right. This dial here changes the intensity of the beam from low to high, and this one-well, watch. There's a barrel of powder over here. Talcum or something." He reached in, took a handful of the dust, and dropped it back into the barrel. A cloud of dust rose up. He activated the laser through it. A bright blue beam appeared. He turned a dial and the beam became a brilliant green.

"Lasers of different frequencies, all in one tool!" Mark exclaimed.

"Yeah, and it's got red too!"

"Lots of possibilities with this," said Zip. "I'll bet it can be used to open the

spacecraft. The doors can't be only voice-activated, or they couldn't open the door in a vacuum. What else is there? Heat, magnetism, light? They used heat, body heat, on the panel back in the room where we were kept prisoner. Heat won't work in deep space. Let's try light. We've got the tool here."

The Starmen went back over to the spacecraft. Joe set the laser for blue light and ran the beam over the surface of the ship. For several minutes he tried various colors and intensities. When he set the laser for yellow light, there was a change in the surface of the ship.

"Ah!" said all three Starmen at once. The outline of a door appeared, with markings in several places. Joe experimented a little more, placing different intensities on the markings. In a moment he was rewarded. The door recessed a few inches into the ship, and slid aside with quiet efficiency. Joe immediately stepped through the portal.

The furnishings of the alien spacecraft were similar to what the Starmen were familiar with, but the control panel was more challenging. Some controls were obvious, since they were necessary for any spacecraft; others were completely unfamiliar.

After about an hour of looking around, Joe sighed, "Gonna need more time, Zip."

"I know. We'll just have to dedicate ourselves to it until we feel confident enough to take the ship into space."

"I'm making some progress here," announced Mark. He was at a side panel near the navigation station. As he worked the keyboard, various schemata appeared in quick sequence. "I can't read anything, but it's obvious that these are engines. I can't recognize everything that's coming up, but most of it I can. See, here is a circuit diagram, and this part here can only be a reaction chamber. I think this ship might use cold fusion for power, but I can't know for sure until I can read this stuff, or see it in action."

"You figure it out, Mark, and I'll fly it," said Joe confidently.

"Well, this stuff is you boys' specialty," said Zip. "I've got to think ahead to the next problem. Assuming we can get this rig to fly, and assuming we can open the airlock, we've still got to escape the pirates. I doubt this ship is one of the

invisible ones, and they'll have us spotted and speared in less then three minutes if we just fly out of here, saying, 'Thanks for the hospitality, sorry we have to leave so soon.'"

"You can figure it out, Zip! We'll get this grand machine ready!" Joe was enjoying the challenge. It was hard to keep him down.

After eight hours of work on the spacecraft and with dinner behind them, Joe said to Mark, "Let's go back into the power plant and see if we can't find some way to sabotage the system so that the pirates can't find us when we take off. You can bring up some files on those huge screens. Maybe we can even find some way to close down their whole operation."

"Sounds good to me," said Mark, picking up a glass of water. He took a sip and swished his mouth with it, then swallowed. "Best we can do without toothbrushes, I guess."

"If it were that easy," said Zip, "our hosts would probably have shut down the pirates long before this. After all, it's their plant and they know it better than anyone."

"You've got to be right, Zip, but I don't like sitting around. We've been in this room all day and I'm ready for a break. I really do like that huge plant. Man! Imagine a room ten miles long!"

The three Starmen descended the metal stairs and exited into the enormous plant. A few yards away was one of the large computer terminals. Mark went over to it and activated it.

"I can recognize a few things, now that I've been through so many of the files upstairs," he informed his partners. "This, I think, is the lighting system." He pressed a button. There was a loud "chunk" sound and the plant lit up brightly.

"Ow!" said the three Starmen and covered their eyes. They were not prepared for the sudden brightness. When they could tolerate the light, they looked above them. Without a word, Mark lay down on his back and just stared upward. Rank after rank of lights went up on the iron framework for nearly a mile. A ceiling the color of charcoal was barely visible, with what looked like rectangular viewports imbedded in it.

Joe and Zip remained standing and looked to their left. The lights blazed for about half a mile. Beyond that point was darkness.

"It will take a lifetime to learn everything there is to know about this place," said Mark dreamily.

"I think we'll be back someday," replied Zip. "What else can you do, Mark?"

Mark got up and turned the lights off. It took nearly a minute for their eyes to adjust to the dimness. While Mark looked through file after file, Joe and Zip wandered through some of the iron latticework. They climbed spiral staircases for a level or two before descending again, and examined the connections of tubes, pipes, and circuits.

"I've got something!" called out Mark. The others ran to him. He pointed at the screen. "See, this is the main power generator. I can tell because of the coils over here and the way the circuits are connected. There are about eight of these; they must be spaced in a row a little over a mile apart. They can operate singly or in combination. But look! They don't just power the life-support systems-in fact, I haven't found that part at all yet. But these are thrust systems! Do you know what that means? This asteroid is a spacecraft! It's made to travel!"

"Can't be!" said Joe, flabbergasted

"It is. Look." Mark flipped past a few more files, pointing out the connections and the diagrams of chambers, coils, and energy field generators. "I'm just barely getting a glance at this stuff, of course, and I don't understand it all, but I have no doubt about what I've seen so far."

"Why don't you look for that life-support file and see if you can turn off the pirates' energy or something?" Joe suggested.

"No, Joe," said Zip. "As I said before, if it were a good idea, our hosts would probably have done it already. I think that whatever they're not doing, we shouldn't try to do. Remember, even St. George didn't want to fiddle with something he didn't understand." "George is a real nice guy, Zip," said Joe, "but I still think he's breathed a little too much vacuum for his own good. You have to experiment in life, sometimes."

"I want to learn more about this power system! This is amazing!" rhapsodized Mark. "If I'm right, this button here will..." He pressed it. Almost at once a stream of paper began to feed out of a slot to the right of the terminal and fell down, sheet by sheet, into a gathering tray. Mark picked up the first sheet.

"It's printing out the diagrams of the thrust system. just like that. You're right, Joe-this place is great!"

On the northeast edge of the massive area on the surface of Mars called the Mare Hadriacum, stood a complex of domes and cylinders. Made of metal and glass, it stood on an open plain about 35 degrees south of the equator and 85 degrees east of the central meridian. The complex was one of five atmosphere-generating plants on Mars, and the only one in the southern hemisphere. In a small crater nearby was the settlement of New Emmaus, with a population of about 12,500.

The long process of terraforming Mars had begun when a meteor shower struck the fourth planet in 2009, significantly raising the temperature of the atmosphere and altering the weather systems. With this jump start serendipitously provided by meteorites, Earth had hastened the process of making Mars livable by scattering the surface with spores and seeds, introducing desert-hardy animals, and establishing the five atmosphere-generating plants. Thanks to Earth's efforts, the planet's temperature had continued to rise. Eventually water had emerged from below ground and from the ice caps around the poles, and the air was gradually thickening.

Terraformation had been taking place for almost 150 years, and it would be at least another two centuries before it would be possible to live anywhere on Mars without a spacesuit. The atmosphere-generating plants were critical to the process. The plants themselves were automated, with all systems operated and monitored by robots, and the major centers of population on Mars were located in craters not far from each plant. The complexes were on the open surface of the planet rather than in craters, but the air they created flowed first into the nearest depressions in the surface, and it was here that most settlements were located.

The plant located in the southern hemisphere was the most remote, but had been

filling the Mare Hadriacum, locally known as the Red Sea, for decades. This great depression was 2,500 miles in diameter. When much of the southern ice cap had melted, it filled the Red Sea with water up to about three-fourths capacity, making the region a delightful place for quiet living.

In the early morning of August 15, 2151, the cloudless sky was a brilliant violet, and the sun was rising like a bowl of molten gold. Marshal and Averette North, a retired couple, had climbed to the top of the crater wall to enjoy the sunrise. Six miles away was the atmosphere plant, gleaming in the newly-risen sun.

They were the only ones to see what happened next, but it happened so quickly that there was almost nothing to see. In the thin atmosphere, there was only a slight vapor trail and a short-lived but powerful whine; then with a dull, gutchurning thud a ball of black and orange flame slammed obliquely into the desert floor within a quarter of a mile of the atmosphere plant. An enormous wave of pinkish-ochre sand rose up in front of the impact site like a great wall. The shock wave quickly blew the wall of sand upward and outward, so that it sparkled like luminous rain until the sand particles became too scattered to be seen.

The shock wave struck the atmosphere plant and shoved it aside as if a giant, invisible hand were violently clearing a table of unwanted crockery. The crater wall where the Norths were standing rocked and heaved as if in an earthquake. The shock wave passed them, blowing their hair and rippling their clothing as if it were a pleasant breeze that died away as quickly as it had come.

The elderly couple stood frozen in shock and watched the cloud of dust gradually fill the entire eastern sky. After several minutes, the dust was thin enough to reveal a horseshoe-shaped crater almost a mile across. On the southwestern edge of the crater, where it trailed off into the desert without a sharp boundary, was the place where the atmosphere plant had been. Now the plant was broken into many thousands of pieces and the wreckage was scattered for three or four miles in a wide fan across the sand.

### 13: The Brink of Disaster

THE ALIEN SPACECRAFT was beautifully designed and well equipped. The Starmen had spent more than two days exploring it fully and tracking its electronics systems. It was planned for a crew of twenty. The galley was not stocked, but Zip assigned some of St. George's men to store their food in it. The storage area inside the ship included spacesuits for the entire crew. The suits were shaped slightly differently from what the Earthmen were used to. They squeezed a little in the chest and were somewhat baggy between abdomen and knee, especially for the shorter men, but they could be used.

Joe and Mark were working to the point of exhaustion, trying to figure out the controls in the cockpit. Mark had to trace innumerable leads from the panel through the walls of the craft back to the wings, tail, and especially the propulsion compartment. The Starmen found the work exhilarating but time-consuming. Mark estimated at the end of the second day that he had figured out about 80% of the control panel, including all the major systems. Joe confirmed his reckoning and, without even igniting the power, was learning to pilot the alien craft. Both Starmen kept Zip informed of their progress.

It was still up to Zip to find a way to escape from the asteroid. Even if they could pilot the ship, it was certain that the pirates would locate them by radar within seconds of their departure and the chances of their escape would be practically nil.

The atmosphere tanks supplied with the spacesuits were empty, so Zip had to fill them from large storage tanks of pure gases he found to one side of the hangar. Since Zip was unable to read any labels, he had to analyze the gas in each supply tank to determine which gases the tanks contained. Once he had succeeded in identifying nitrogen and oxygen, he was able to fill the tanks for the spacesuits with a mixture similar to that of air on Earth. This project was tedious and physically demanding, but St. George's men assisted him with the heavy work. Since the gravity was so low, two men were easily able to move even the largest equipment needed for the work. By the end of the second day, all the tanks had been filled.

That evening, Zip put on one of the spacesuits and practiced operating it and moving around inside the hangar. When he was satisfied that the mixture of air was breathable and that he could maneuver in the suit, he took off the helmet and walked over to where Joe and Mark were sprawled under the spacecraft with a panel open over their heads. The deep green of the highly reflective metal hull was marvelously soothing to the eye. For a moment, Zip paused and wondered about the race that had built the ships. Then he called out to the others. "Joe, Mark-I'm going through the airlock to see what's out there."

Joe skidded out from under the hinged panel. "Are you sure that's wise, Zip? We don't know where the pirates are."

"That's why I'm going out. I have a plan for our escape, but I have to explore a little bit outside to see if it'll work."

"Want some company?"

"Thanks, I do, but I'll take George. You and Mark keep up the work." Zip went over to where George St. George was sitting at a table with several other miners.

"George, could you come with me? I'd like to see what's outside."

"Sure, Zip," said the blond man, standing up. The asteroid miner suited up and the two men walked to the far end of the hangar. Zip was carrying a small iron plate. In front of them was a huge panel that could open to permit spacecraft to pass through the airlock, and on either side of it were sets of doors to allow men through. These doors entered a hallway that proceeded to the outside of the asteroid and allowed passage without the major airlock's having to be emptied.

"Ready?" asked Zip through the suits' intercom system.

"Sure. Let's go." Zip opened the door into the airlock and they passed through and closed the door behind them. Zip operated the controls that sucked the air out of the hallway. The two men walked about 50 yards to the far end of the passage and opened the door to the outside. They stepped out onto the surface of the asteroid.

They looked around, but could see no evidence that there was an airlock adjacent to where they were standing!

"Camouflaged!" said Zip.

"Whoever made this wondrous thing," commented George, "apparently had a reason for wanting to be hidden. Let's make sure we can still get back in. Can you open the door we just came out of?"

"No need to worry. I'm not about to close a door behind me for good until I know I can open it again." He took the small iron plate and used it to jam the door open. From the inside, the door was transparent; from the outside, it looked like the surface of the iron asteroid. Its hinges were completely hidden. "Now let's see what's out here."

For the first time, the two men gazed outward. The Milky Way blazed above and to the right, its countless stars bright enough to cast slight shadows behind the two men.

"I never tire of seeing that view," said George. "I've missed it, just in the few days we've been inside."

"Yes, it's inspiring," answered Zip, but he was already in motion, walking and scanning the ground on both sides of him. George followed. Their asteroid boots gripped the surface of the asteroid.

"What are you looking for, Zip?"

"Evidence of the pirates. I've got a plan for escaping them, but our exit point here can't be too close to their entrance."

"We've walked a dozen miles through the asteroid from their headquarters-they can't be too close."

"I'm sure you're right, but there may be other entrances. We found one, didn't we?"

"Even if there were other entrances, they're bound to be as invisible to the eye as the one we just came out of."

"Right again, I'm sure, George, but I don't want to take any chances. Our escape depends on our being unseen-at least for most of the time. Then I want to be seen."

"What do you mean, Zip? I- " George suddenly stopped talking, almost as if his communicator had been turned off. Zip looked over.

"What's wrong, George?" Through his helmet, George's eyes were opened wide and his mouth was agape. "What is it?" Zip repeated. "We, we, we're not in the Asteroid Belt," George stammered. "Look, there's the Belt over there." He raised his hand and pointed. The slow rotation of the asteroid that gave it its slight gravity had brought the Belt into view over the horizon. Motionless on the asteroid's surface, Zip and George were slowly moving into the dawn. A pale sun far away was coming into view, and a golden line of light began to grow over the 45-mile-long chunk of almost pure iron. The spacesuits' faceplates automatically darkened slightly. The sunlight came through a scattering of asteroids orbiting at least a thousand miles away.

"He's moved the asteroid. He knows more about it than I gave him credit for," Zip said grimly. "My plan will still work, but the situation has changed. Now we have to hurry. Let's go back."

Back inside the hangar, Zip called a meeting of the fourteen men and explained his plan for escape.

"Sounds good, Zip," affirmed Mark, and Joe agreed.

"What about food and water?" asked one of the miners.

"What's left?" responded Zip. "How many days can we go if we ration even more strictly?"

"About five until the food runs out, and there's about a gallon of water for each man left."

"We can do it. No choice anyway. Let's get some sleep and start things rolling first thing tomorrow."

Immediately after they awoke, the Starmen put Zip's plan into action. Joe opened another of the alien spacecraft. The Starmen had taken a quick look at the other ships in the hangar and found them to be identical. Quickly they made the ship look as if it had been abandoned in panic. When they were finished, two men carried a small tank of oxygen into the storage area. Joe then piloted the ship through the airlock to a point where it hovered just above the asteroid. Zip, Mark, and two miners stood outside on the ground. An explosion rocked the ship, and a panel was blown out from the wall of the storage area. Joe had detonated the oxygen tank to make it look as if some cargo had ignited and destroyed the ship.

Joe emerged from the main door and jumped to the ground. He had been tethered and the others pulled him in. They went back through the airlock and shut the door. They were still able to watch what happened through the immense window, transparent on their side. The ship began to drift away from the asteroid on a prearranged course Joe had set.

"The pirates should be seeing that on their radar in a few minutes," said Zip. "I figure the ship has to be at least a quarter mile from the surface for it to register on their screens."

But it was nearly ten minutes later that three pirate ships appeared. The pirates could easily see the ripped panel on the ship and took only a few precautions on approaching the derelict. Zip turned to a "reception only" channel on the communicator his suit provided.

"It's not an Earth ship, sir," said a voice, "and it's empty. Completely derelict. Must have been clamped to the surface of the asteroid and got shaken off when you moved it out of the Belt."

"Go inside! Make sure there's no one in it!" It was the commanding voice of Lurton Zimbardo. "Look for any sign that the Starmen had something to do with it!"

"Yes sir!" The orders were given and six men left one of the pirate ships and went through the open door of the alien craft. It took less than a minute to get a report.

"Nothing here, sir," said one of the spacesuited men to his officer. "The cargo area has been completely destroyed in an explosion, and the wall has been blown open into empty space. There are no suits, no signs of any habitation."

"It's an old wreck, sir, and so damaged that it can't be used," reported the pirate officer to headquarters.

"Probably left by the beings who built the asteroid," said Zimbardo. "Come on back to work. I'd like to take a look at it, but we don't have the men or time right now. Other matters are pressing." "Yes sir." The communication terminated. The pirate ship took back its six crew members and the three ships cruised over the horizon.

"Part one, the least risky part, successful," said Zip. "Let's get going on part two, right now. Joe?"

"Ready Zip," the lanky Starman responded. He stepped through the airlock and leaped off the iron surface of the asteroid toward the derelict. Powered by small jets of oxygen he sped to the ship and disappeared through the open door.

"Everyone else get busy," called Zip. They ran back through the airlock to the hangar. The others were already aboard their escape craft. Zip piloted it through the airlock and kept the ship close to the surface of the asteroid. The airlock closed behind them. In the meantime Joe had caused the damaged ship to drift back down toward the asteroid out of radar range. He and Zip brought the two ships together and made a link. Joe left the broken ship and joined the others.

"Ready, Zip" he announced, once he was aboard. Zip put the slightest possible power into the escape ship, then turned the power off. Both ships began to drift away from the asteroid, so slowly as to be almost unnoticeable. Zip was hoping that when the pirates saw the blip on their radar, they would conclude it was the derelict and pay no attention. He was ready to drift for as long as it took to escape the notice of the pirates before turning on the power and setting a course for freedom. But now that the asteroid was not in the Belt any longer, he knew that they would have to drift for much longer than he had anticipated.

They were free. But the tension was thick. It would not dissipate for a long time.

Forty-two hours later, Marshal and Averette North witnessed the impact of an asteroid that turned their atmosphere plant into rubble. Within an hour of the impact, Lurton Zimbardo opened a channel that allowed him to speak through nearly every communication system on Mars. Gene had previously discovered a method for entering and using all communication bands on Mars except those that were most closely guarded. He had surreptitiously placed automatic signal points into the Martian system without activating them until this moment. Now that the moment had arrived, the voice of the pirate leader was heard throughout Mars.

"This is Lurton Zimbardo. The atmosphere plant at New Emmaus has just been destroyed by an asteroid impact. You were not able to detect the asteroid by radar. It struck without warning. This is to prove that I am able to render asteroids invisible and send them wherever I wish. You cannot see them and you cannot stop them. Within a day the four remaining atmosphere plants on Mars will be similarly destroyed. This will convince you that I have more power than you can imagine, and that you are helpless to oppose me. After the last asteroid has struck your planet, I will announce my demands."

Lurton Zimbardo shut off the microphone in the control center of the asteroid. A crowd of at least forty men jammed the center where Zimbardo sat at the console. The rest of the pirates were standing in the factory or at their assigned work places in the facility. All had heard the broadcast. A feeling of immense power and invulnerability surged through them. A few men began to cheer, and within seconds the enthusiasm had infected the rest of the pirates and the cheer became a roar. It rang throughout the control center and along the corridors, and filled the factory. Zimbardo's smile was wide. He looked down almost modestly, as if he were reluctant to accept the men's accolades.

When the cheers had died down at last, Zimbardo said simply but so that all could hear, "And now for the last step in the plan." The room was quiet. He took out a set of notes from his pocket. The paper was marked with scrawls, lines, and columns of figures. His eyes flicked rapidly from the notes to the controls. His fingers began to fly over the keyboard. He punched in coordinates and set the power grid. He marked the timing of various operations.

Gene, Zimbardo's closest associate, was watching. Gradually his smile narrowed. His eyebrows creased. Then his eyes widened and his face drained.

"Sir!" he exclaimed in a quiet voice. "Those are the coordinates of Earth! If you use those, you'll take this whole asteroid directly to Earth!"

"Exactly," nodded Zimbardo. "In about 32 days, as I figure it." He was smiling widely again as he pressed "Enter" and activated the asteroid's propulsion system.

14: The Shield of St. George

THE CONVERSATION was very quiet, but the microphone picked it up. The words that passed between Lurton Zimbardo and Gene were heard by every pirate on the asteroid. There was complete silence. The pirates' enthusiasm and their complete trust in Zimbardo's leadership was instantly badly damaged. Though no one spoke, many of the men began to doubt their leader's sanity, and became afraid.

"But sir," pleaded Gene. "This asteroid is the key to our success, and we're all its passengers. If you program it to collide with Earth, I..." words failed him.

Zimbardo smiled indulgently. "Gene," he soothed, as if explaining something obvious to a confused child, "I'm not going to cause us to smash into the Earth. We want to control Earth, not destroy it, and how better to do it than from a close orbit around the planet in this magnificent flying base? I'm taking us to Earth, and there will be plenty of time to adjust our course once we get close. We will accelerate until about midway there, then decelerate until we achieve orbital speed.

"I will, however, inform Earth that I have sent an asteroid more than forty miles long on a collision course-an asteroid they can't see and can't stop! They will meet any demands I make! They will definitely meet any demands I make, after we destroy the five atmosphere generators on Mars with pinpoint accuracy. Relax now. In a month or so, we will be the undisputed masters of the third planet-and all without leaving home!" He laughed.

Gene grinned and also laughed, but while Zimbardo's laugh was deep and genuine, Gene's was a little forced. He was relieved, but his trust in Zimbardo's leadership had suffered a severe setback. He would be on his guard from here on. He looked up and caught the eye of Mr. Lather. His face was hard and unsmiling; it was difficult to tell what he was thinking. Gene turned and looked at Gebbeth. His expression was marked with merciless determination. He, at least, appeared convinced and prepared to follow Zimbardo all the way. But Gene was no fool; he looked around and surmised that the majority of those in the room were harboring secret reservations.

Gene didn't blame them. He felt the same way. He would stay with Zimbardo for the time being, but he would keep a careful eye on the situation and look for a way to ensure his personal safety if it appeared that the pirate leader had lost touch with reality. The pirates were looking for power and prestige, not a suicide mission.

For almost two days the Starmen and the miners had been drifting in space, not using power of any kind, afraid that even using lights might draw the attention of the vigilant pirates on the asteroid. The distance between the ship and the massive iron asteroid with its fascinating interior was increasing incrementally, but not quickly enough to please Zip. He chafed with impatience.

Mark's first duty once the fourteen men were aboard ship was to discover their location. Since the escapees were using no power at all, Mark could employ only observation and mathematics to get his estimate. He guessed that they were 1,023 miles from the nearest edge of the Asteroid Belt and drifting roughly parallel to it.

The Starmen's plan was to head for the nearest SE facility. If Mark's estimate of their position was correct, the facility closest to them was an unmanned Starlight Enterprise station on O344, a medium-sized asteroid coming their direction. As soon as it was safe to use power Joe would pilot the alien ship to the station.

"We'll be okay in a few hours, Zip," said Joe. "You got us out of the asteroid with food and a ship. We all thought that would be impossible. We ought to be able to turn on the energy and get blasting out of here before too long."

"I know," responded Zip, with his characteristic furrowed brow. "We're caught between taking a chance on being recaptured by the pirates and depleting the food. We'll run out of supplies in a couple of days."

"I know-and the closest base is roughly four days away, depending on how speedy this beauty proves to be. But we'll make it." Joe went off to visit with Mark, who was gazing out of the window at the immense spread of the Milky Way.

George St. George came up to Zip, who was sitting alone at a table, doing nothing but staring down at his hands. He sat down opposite him; when Zip looked up, the miner smiled.

"You've brought us back into the heavens, young Mr. Starman," he said, "so you've got no reason to be covered with gloom. You won't get us to safety now

any faster by worrying."

Zip pursed his lips and looked into St. George's eyes. "The man seems to be protected by a shield of innocence all around him," he thought. "His base was destroyed, he and his men were captured and taken into a massive iron asteroid by the Solar System's greatest enemy, and now he's floating in the void with only two days' food left, and he's still calm and trying to encourage me the way he encourages his men. Who is the real leader of these men? I make the decisions, but he strengthens their hearts. He even strengthens my heart."

St. George smiled. Almost as if he could read Zip's mind, he added, "Each of us has a gift according to the grace given us, which we are to use to benefit others. If it weren't for you, we'd still be locked up inside that room-or worse-under the control of Lurton Zimbardo. I have my gift, and you have yours, and we both employ our gifts well. We haven't come this far to fail now. Our success doesn't depend solely on you, you know. Relax and just do your part. There's still a lot to do, but the outcome isn't in doubt."

Zip smiled, and before he could say anything St. George had risen and strolled to the window where Joe and Mark stood.

All at once, Mark pointed and cried out, "Hey, look at that! Do you see what I see?" Several men came to the window and peered out. Zip Foster joined them. Joe answered.

"Yes! -the asteroid's moving!"

The dark bulk of the pirates' asteroid, which had loomed so close to them for two days, was gradually but visibly moving away. Its silhouette had been blocking half their view of the Asteroid Belt and the gleaming array of stars behind it, but now, even as they watched, its profile diminished and stars were winking into view around its edge.

"They're heading out somewhere-moving that entire asteroid! I wonder what's going on?" asked Mark.

"We'll be able to power up before too long, now! We'll be on our way ourselves," announced Zip, animatedly. "Soon we can get in touch with Starlight. It's been over a week since we've been in contact. We've got a lot to tell them." The shadow that had lain over Zip for two days had been lifted. "How long until we can turn on the power, Mark? When will we be out of the pirates' radar range?"

"Less than an hour, I'd say."

Zip raised his voice so everyone could hear. "We get under way in an hour, men!"

It was sooner than that. In 26 minutes, the asteroid was no longer visible to the eye. Zip waited a full 45 minutes then turned on the ship's power at its lowest setting. Using the radar, he scanned the quadrant where the asteroid had last been seen and turned up no object of significance. He hadn't expected to.

"That doesn't mean they can't see us," he mused to Mark and Joe. "That asteroid is probably sheathed just like their ships. But I think we're safe now-safe enough, anyway, to get moving."

"Right. Let's go," said Joe. "I'll jettison the derelict and power up! I've been looking forward to this moment!"

Zip ran the power switch up to maximum and commanded everyone to prepare for acceleration. Joe ignited the propulsion system. With the lanky Starman at the controls the alien ship began its journey toward the Asteroid Belt. As the ship began to cruise easily, Zip began to think of communicating with Starlight Enterprise.

"Mark, contact SE right away. Fill them in on our recent adventures and see if, by any chance, there's a ship closer to us than the base on O344."

George St. George spoke up. "What if the pirates overhear your transmission, Zip? Won't they know we've escaped and be able to locate us?"

"I think it's worth the risk, George. They probably think we're still inside the asteroid and won't be looking for us out here. Even if they do overhear the transmission, I doubt they'd send some ships after us. The distance between us is growing rapidly, and if we have to we've got plenty of time to hide in the Belt. I'm worried about our dwindling supplies; we need some relief soon, and SE needs our information as soon as we can get it to them. Go ahead, Mark."

"I'm on it," said Mark.

"Provide them with a concise but complete report," Zip went on. "Tell them about the destruction of Z25, describe the asteroid with an estimate of the number of pirates and their ships, and especially the asteroid's location. Don't worry about details of our escape, other than to say that we are in an alien spacecraft and heading for O344 with a minimum of supplies. Ask Sim Sala Bim to send someone to O344 with the Star Ranger and another ship to take St. George and his men back to Ceres or wherever they want to go."

"Got it," said Mark and began to prepare his report. In less than five minutes he had sent it, but due to the interplanetary distance he didn't expect a response for nearly half an hour.

"Sure wish we had that realtime transmission equipment on board," mused Zip out loud, thinking about how his encounter with the pirates had begun with the experiment in the control tower in Eagle City. "But I guess it'll be a few years before the miniaturization is worked out so that spaceships can carry it."

"We'll get to the base a little faster than we thought, Zip," said Joe. "This ship is cruising very efficiently. We can learn a lot from it, in time." The sleek, forest green cruiser sped through the vacuum, rapidly approaching the edge of the Asteroid Belt.

Six hours and 23 minutes after the destruction of the atmosphere-generating plant on the edge of the Red Sea on Mars, a small iron asteroid struck the plant located just south of the Oxia Palus on an open plain about five degrees north of the equator and fifteen degrees west of the central meridian. It was a few minutes past 4:00 a.m. local time. Six miles away was the settlement of Westcott.

Most of the local populace had not heard Lurton Zimbardo's radiocast, since it had come in just before midnight. The second asteroid followed a near-vertical course and slammed with tremendous force into the ground a half mile from the atmosphere-generating plant. The sun rose onto a land choked with dust. When the dust settled back to the surface about midday, the people of Westcott saw only a crater a mile and a half wide. There was no sign that any human artifice had ever existed on the spot.

Almost sixteen hours later, on an overcast afternoon in the empty northwest, the

third asteroid struck. Its target was the atmosphere plant located 51 degrees north of the equator and 141 degrees west of the central meridian-southwest of a small crater which was the home of a town called Morris. It was centrally located for miners, prospectors, farmers, arborists, and mobile scientists, who lived near or roamed throughout the locale.

By this time Zimbardo's message was known all over the planet and the utter destruction of the first two atmosphere generators had shown that his threat was to be taken seriously. Morris had been abandoned, and its 25,000 residents were in panicky flight to the northeast, opposite the plant. Few people saw the asteroid make a direct hit on the two billion solar complex.

Seven hours and 12 minutes later, the fourth asteroid demolished the atmosphere plant located nine degrees south of the equator and 167 degrees east of the central meridian. It was evening, and the resulting cloud of dust created a sunset of spectacular beauty, with colors rippling through the drifting sand like fire seen through a translucent curtain.

The final impact occurred in the early darkness hours. The atmosphere plant located northeast of Eagle Crater at 26 degrees north of the equator and 85 degrees east of the central meridian was instantly turned into rubble.

In a thirty-two-hour period, Mars had been scarred by five new craters, each one a mile to a mile and a half across. More than ten billion solars in damage had been done. Atmosphere generation on the red planet could not be restored for at least five or six years.

Much more satisfying to Lurton Zimbardo was the fact that the entire population of Mars was held inescapably captive by an hysteria of fear. No one doubted that Zimbardo had spoken his threat accurately. The five asteroids had arrived unseen until the last few seconds and had pulverized their targets with accuracy of less than half a mile of error. The fearful populace of Mars awaited the promised communication from the pirate leader, in which he would reveal his demands.

# 15: A Microwave Net

SPACE COMMAND and Starlight Enterprise were filled with intense activity. The previous day had been a roller-coaster ride of messages from Mars and the Asteroid Belt. First came the dismal news of the destruction of the Martian atmosphere-generating plants, one after the other. Then just before the tidings that the plant near Eagle City had been demolished, the message from the missing Starmen had come into Starlight Enterprise. The euphoria with which that word had been received was quickly dampened by the ultimatum Lurton Zimbardo had issued.

In words similar to those Troy Putnam had used weeks earlier, Zimbardo demanded control of Earth's wealth and resources, with specific demands for access to Earth's coded defense mechanisms, authority over major ports of travel, and power over the major decision-making processes and information systems. He closed his threat with the chilling announcement that he had already directed a sheathed asteroid more than forty miles long into a collision course with Earth. When his demands had been met and verified, he would then turn the asteroid aside.

Immediately after receiving the message, the President called a meeting in one of his maximum-security offices on Earth. Joining him at the table were some of his senior advisors as well as Richard Starlight, his chief assistant John Rwakatare, and other representatives of SE. Robert Nolan with his chief assistant Beowulf Denn and other representatives of Nolan Mining Enterprise filled out the gathering.

"Although he has demanded control of Earth's systems of communication, exchange, and security, I believe, ladies and gentlemen, that Zimbardo's real object is not clear." The President was drawing conclusions after a brief introduction of the facts. "It is impossible for one man simply to become dictator of the entire planet, no matter who he is or what engines of destruction he can call upon. I suspect that his aim is other than he has announced, and I am determined not to provide the access codes to our most sensitive systems."

There was a slight rustle of movement around the table. Whatever course of action was to be decided at this meeting, calling Zimbardo's bluff had not been considered by many to be a viable option. The President continued.

"His ruination of the atmosphere plants on Mars proves that he is able to direct asteroids to targets with high accuracy, and that we are unable to detect them. Although the loss of the plants is a severe blow, it is not crippling. They can be rebuilt in a few years. At worst, the process of terraformation will be delayed for that long. Replacement will cost about ten billion solars-obviously a huge amount of money, but an amount that Mars can afford. The plants were over a century old however, and in the long run replacing the plants will be more effective and probably achieve the goal of terraformation faster than if we had continued to use the plants that were destroyed. Frankly, there were plans already in the works for modernizing the plants.

"No, the real damage has been psychological: the people of Earth and Mars are terrified. This, undoubtedly, was Zimbardo's major goal in destroying the plants, and he has achieved it completely and thoroughly. His demands to us are clear, but it is difficult for us to perceive what he would achieve, even if we capitulated-which we do not intend to do."

Robert Nolan could not contain himself any further, and lurched backward as if he had been struck. "You don't intend to cooperate with him?" he almost screeched. "But he'll destroy the entire planet if we don't! There is no way we can detect an asteroid he's made invisible to radar!"

"Dr. Nolan," responded the President, "we believe that we have a method which will allow us to locate the asteroid that Zimbardo has directed toward Earth. We have a very good chance of locating it and destroying it."

"A chance? Mr. President, you're gambling with the very existence of life on Earth! If an asteroid forty miles long strikes Earth, it will not only cause the extinction of every life form on the planet, there is every likelihood that it will crack the Earth's crust! There will be no escape! No escape!! Don't you see that we have to cooperate with Zimbardo? It will be easier to meet his challenge once he has turned away the asteroid!"

The President responded in gentle tones. "You have not yet heard our plan, Bob. Believe me, I can sympathize with your quandary, but I am simply not going to deal with any evil force as if it had a right to negotiate. It doesn't. This has been the principle behind the decisions we have made in order to meet the threat of the pirates from the first day."

"Principle?" Nolan was almost shouting now. "For your principle you're willing to risk the destruction of all life on Earth? That's the evil we're facing here!"

"Bob-please listen to what Dr. Hoshino has to tell us. There is a plan. Dr. Hoshino?"

Robert Nolan leaned forward, placed his elbows on the table, and cradled his head in his hands. He was trembling. Richard Starlight looked over at his friend and colleague and felt very badly for him. He knew that Robert was under a tremendous strain. Richard agreed that the fate of the Earth was at stake and would probably be decided at this meeting. He was tremendously anxious himself, but he was eager to hear what Dr. Hoshino had to say.

Dr. Stephen Hoshino was a brilliant astrophysicist whom the President had commanded to work on a plan to counteract Zimbardo's chief weapon-the radar bender. He was a slight man of Japanese ancestry who, in spite of his compactness, exuded power. Even his smallest movements were made with precision. Although he was only in his middle thirties, from his late teens he had been granted virtual carte blanche in his research. Even at that young age, his genius had become known throughout the inhabited Solar System. His voice was calm and mellifluous.

"Thank you, Mr. President. My team and I have been working around the clock for eight days to develop a system for detecting an object which is invisible to radar. We have succeeded. The theory was not difficult to develop, but the method provided somewhat of a challenge. We have now designed a technique for locating a body as small as, very roughly, two-thirds the size of the average spacecraft, by detecting its gravitational field."

As he spoke, many of those listening to him felt the level of their anxiety diminishing slightly. Robert Nolan lifted his head. Though his expression was drawn, he was paying attention.

"We must manufacture millions of tiny probes and release these into space in a systematic fashion over many millions of cubic miles. Their design is quite simple. The laboratories and manufacturing centers of organizations like Starlight Enterprise, Nolan Mining Enterprise, and other companies can create these probes in vast quantities very quickly, using robotic techniques. Each probe will have gravity instrumentation. Using the microwaves naturally occurring in space, they will be connected by a vast neural network and thus act as a single instrument, with all data being fed back to various information centers.

"With the data from these probes we should be able to detect any massive objects in places where they shouldn't be. Certainly a large asteroid cannot be hidden. The very size of the asteroid with which Zimbardo threatens our planet will work in our favor, since detecting such a large object can be achieved easier and sooner than if he sent, for example, a number of small asteroids such as those that struck Mars."

"Where will the probes be deployed, Dr. Hoshino?" asked Richard. "Our time is short, very short indeed, if we have to manufacture, launch, and deploy the probes in time to locate and then destroy the asteroid. Even if we produce millions of probes, as you have said, we have millions of cubic miles of space to search through. In the time available, even trillions of the little probes can't help much. Theoretically, the asteroid can be anywhere. There are asteroids inside the orbit of Mercury and outside the orbit of Jupiter. But I suspect that you already have an idea where we are to search."

The President answered. "When Zimbardo sent his first message to Mars, evidence of his tampering with the Martian communication system was discovered. This allowed us to trace how his tampering was done and therefore where the signal came from-at least in a general direction. After he sent his second message, the one to Earth yesterday evening, the signal was traced again. We have learned that his base is moving toward Earth and we have an idea of the speed his base is moving and its direction. The information the Starmen provided confirms what we had learned through our investigations.

"Of course, our figures are somewhat imprecise, and we still have a lot of searching to do, but we have an excellent chance of locating him. It is highly logical that the asteroid he harnessed is from a place in the Belt close to his own asteroid. From what the Starmen reported, he just didn't have time to locate an asteroid as large as he claims to have launched toward Earth from any place too distant from his own base. The probes will therefore be cast in a net in the space between Earth and the area of the Asteroid Belt in which the pirates' asteroid was found."

Richard Starlight, Robert Nolan, and others had a number of technical questions for Dr. Hoshino regarding the manufacture and deployment of the probes and the time schedule necessary to achieve their goal. At the end of the discussion it was agreed that the two companies, with others, would begin to manufacture the probes according to Stephen Hoshino's design. Launch was planned for five days later, with deployment six to seven days after that. "O344 coming up on the screen, Zip," announced Mark.

"Not a moment too soon!" shouted Joe. "Food at last!"

It had been a week since the fourteen men aboard the alien spaceship had left the pirates' asteroid. They had been traveling under power for four days. Although they had been very sparing in their consumption of the food, they had run out two days earlier. A few ounces of water per person remained in the containers; it had been carefully measured and rationed to last the entire journey to O344. Everyone was thirsty but no one was in danger of becoming dehydrated. All, however, suffered from the pangs of hunger. Mark had a headache that blurred his vision and made his responses slow.

"If it's on the screen, we ought to touch down in a few minutes," said Zip. He was moving slowly and often sat down with his eyes closed. Of the three Starmen, Joe seemed to be the least affected by the two days' lack of food. The miners were lying down on their bunks. Other than Joe, only George St. George had exhibited much energy in the previous two days, coming forward to the flight deck every few hours to chat with the Starmen.

Zip asked George to prepare his men for touchdown. Deceleration had been gradual, so there was no need for the men to strap into the acceleration couches. However, they would need to be in spacesuits in order to leave the ship and enter the SE facility.

An asteroid about ten miles across loomed up on the screen. Joe circled it slowly.

"There it is," he said as a landing pad came into view. A small dome next to the pad was barely visible, since the landscape that had been artificially shaped was on the dark side of the asteroid, away from the sun. The site on O344 was one of dozens of such places marked on the navigational maps. They were unmanned stations stocked with supplies and maintained for explorers, scientists, and others in the employ of Starlight Enterprise. They contained large quantities of food, water, and other basic necessities, and provided rustic living facilities.

It didn't take Joe long to land the ship on the surface of the small asteroid. It settled down gently just a few yards from the dome.

"I'll need someone to go into the supply cache and get some bolts, Zip. This ship doesn't have any to keep it fixed to the asteroid-or if it does, I haven't found the controls for them. I'll have to stay aboard until the ship is secure."

"Okay, Joe," Zip responded. "Great flying. You pilot this ship as if you were trained in it."

"That's my job," said Joe. "Don't take too long, though. I'm hungry!"

The men went through the ship's airlock, made the brief walk across the surface of the asteroid, and entered the dome. The dome contained a small airlock leading to a ladder that descended about 15 feet into the asteroid. Zip asked two of St. George's men to locate bolts and go back up to clamp their ship to the surface. Within minutes the alien ship was fastened down tightly and all fourteen men were inside the supply station.

"Food! Toothbrushes! Showers! Clean clothes!" shouted various voices as the men scattered to look over the spartan facility.

"Food!" shouted Joe, and headed for the pantry where George St. George was already standing.

"Relax, Starman!" said St. George, placing his hand on Joe's chest. "You three men have worked without rest to get us here. Just sit down. Let us show our gratitude by fixing up the best meal this larder can make possible."

The three Starmen were only too ready to comply. They allowed their tired bodies to sink slowly into the rest sofas, the minimal gravity nestling them gently into the concave surface. The miners who were not assisting in the preparation of the meal lay down on bunks in the sleeping quarters.

"I don't know if I need sleep or food more," said Mark. He had been at the navigation and communications stations almost without respite for all of his waking hours-and he had slept little. Zip had relieved Joe at the helm some of the time, but the trip had not been an easy one. They had made the journey as quickly as they could in an unfamiliar ship, having to keep watch at all times against a surprise attack from any pirate ships. Their communications with SE had been limited only to those most urgent, to minimize their exposure to any possible enemies.

SE had made an immediate and joyful response to the Starmen's initial

communication. That had been followed within an hour by a report to inform them of Lurton Zimbardo's ultimatum about a large asteroid on a collision course with Earth. The latter message had draped the men in a somber mood. SE had also assured them that a rescue mission was under way from Ceres, and several ships, including their own Star Ranger, were due in nineteen hours. The Starmen and the miners planned to put that time to good use by resting.

Under St. George's direction, three of the miners put together a feast of canned goods. St. George made a blend of canned meat, potatoes, and vegetable soups, and warmed it to create a hot stew that was more than passable. Dried biscuits, rehydrated and quick-baked, were added to the feast. A huge pot of strong, brewed coffee soon added to the savory smells coming from the kitchen.

"It's ready!" called out Sabbath George. He and the others brought huge serving bowls to a large table that was situated in the middle of the room, adjacent to the kitchen. Places had been previously set.

Tired as the men were, it took them only seconds to assemble at the table. George said a few words of thanks and passed the first bowl to his right where Joe was seated. Joe grasped the large serving spoon. The bowl was steaming with the mixture and wisps rose lazily from the ladle as it made several trips from serving bowl to Joe's plate. After he had dished out at least two pounds of stew, he shoved the bowl on to the man at his right and took two biscuits from the central supply.

"Only two biscuits, Joe?" prodded Mark. "Has hunger made you too weak to eat?"

"I'll show you whether I'm too weak to eat. Watch this!" He shoveled a heaping spoonful of stew into his mouth. His chin lifted a notch, his eyes closed, and a satisfied moan escaped his closed lips. He slowly lowered the spoon to the table and lifted both hands as if he were about to embrace someone.

"Taste good?" asked Zip, reaching for the aromatic bowl as it came his way.

Joe chewed and swallowed. "Someone back at the Academy told me once that there was no such thing as a dumb question. He was wrong. That was one." Joe turned to George. "George, this is delicious! I've never tasted anything better!"

George glanced over at the food cans that had been in storage for several years.

"A hungry man will enjoy anything. A very hungry man will consider even canned goods to be ambrosia." But by that time the serving bowl had gotten around to George, and he stopped to fill his own plate.

## 16: A Dark Spirit

TO STARMAN David Foster, it was a soft, rainy morning. He had just awakened after a night on the SE supply asteroid O344, and the only sound was the faint hum of the operating system. He wrapped himself a little more snugly into his blanket and kept his eyes shut. His imagination easily turned the murmur into the soft sound of rain sifting through the leaves of the tree outside his bedroom window on his uncle's farm in West Virginia. With slightly more effort he could imagine a drizzle drumming lightly on the wooden shingles above and drifting out onto the empty fields in the early autumn days shortly after harvest.

His Uncle Francis and Aunt Clare were dear to David. Although he had been raised on the Moon, close to his father's work, he had been born in Clark's Bridge Crossing, the village near their farm. From the time he was old enough to show any notice of the world around him, David had loved the stars. Even now, he loved interplanetary travel, exploration, and adventure better than anything, but in his heart was an emotionally-intense place where he kept his memories of the West Virginia farm where he had spent so much of his childhood.

The small towns and family-owned farms had become indispensable to the rebuilding of America after the Collapse. In the United States the nuclear devastation of those horrifying years had been severe. Most major cities had been destroyed, but much of the outlying and rural areas had survived. In the latter half of the 21st century new leadership arose from these areas, and the American spirit, which for a hundred years had gradually been eclipsed by special-interest groups, lobbyists, fringe organizations, and major corrupt economic interests, was largely purified. The "old values" became popular again, if not always followed. A generation of leaders arose with an appeal similar to that enjoyed by the "log cabin" presidents. A candidate who claimed to have basic values and homespun philosophy was guaranteed to win support from the remaining American population.

With his eyes still closed, David smiled. He tried to imagine the aroma of his Aunt Clare's freshly-ground coffee coming from the kitchen, mingled with the smell of hot-off-the-griddle blueberry pancakes. The drizzle was stopping, and the dawnlight of the newly-risen sun was sending sparkles through the light rainy haze that shrouded the fields and crowning the eastern fields with the arc of a rainbow. The haze would soon burn off, leaving the dark earth sodden and leaves dripping. He smiled even wider. He could hear his aunt's voice now...

"Come and get it, Starmen!" pealed the voice of George St. George. "Got some more of that engine-oil coffee steaming away, and I managed to whip together some biscuits from some powdered stuff I found!"

Zip's eyes shot open and took in the neutral walls of the cubicle where he, Mark, and Joe had slept. The faint hum of O344's system was drowned out now with the rustle of human movement as the asteroid miners gathered around the table.

"There's some sort of orangy liquid I mixed up from some other powder, too! Probably has some good vitamins in it!"

In minutes the Starmen and miners were tucking in to the best that George St. George could do with the supplies at hand.

After breakfast, the Starmen sat in the lounge. Mark was poring over the printout that he had taken from the power plant on the pirates' asteroid. He had a digital copy of much of the layout of the asteroid, and information on the power plants, propulsion structures, and sheathing equipment. The papers were filled with charts, maps, and diagrams; a few sections were written in an unintelligible, alien language. He couldn't even tell which symbols were letters and which were numbers.

"I hope they didn't use a pictorial alphabet like Chinese," said Joe, looking over Mark's shoulder.

"No," the big Starman answered. "There are plenty of recurring symbols, so I assume it's a language like our own, with letters and words. Somebody will be able to decipher this without too much difficulty. It's far beyond my skill, though." He rubbed his chin. "But I can recognize a lot of the machinery."

Zip was sitting nearby. He hadn't spoken much during breakfast. The images of the farm pulled at him again. "Mark, Joe," he began. He hesitated a moment while they turned to him. They could see he was puzzling through something, and waited patiently for him to continue. "SE says that Zimbardo has targeted Earth with an asteroid over forty miles long. What'll that do to home?"

Mark was suddenly deeply saddened. Zip always referred to the Moon as home. He spoke softly.

"One of my professors at Starlight University talked about a study conducted in the early 21st century. Back then, scientists started becoming concerned about asteroid impacts, and they built a complex computer model to see what would happen if a large asteroid struck Earth."

"What did they find?" whispered Joe.

"Well, the model found that, depending on the angle of entry, the impact can produce a massive corridor of incineration ahead of the impact site. In that area, just about all life ends in minutes. But the model predicted other changes that destroyed nearly all life on Earth within a few years."

"Like what?" Zip's voice was dusky.

"I'm sounding like a textbook," complained Mark.

"Go on," insisted Zip.

Mark closed his eyes and tilted his head back. "A few hours after the impact, clouds of noxious gases billow up and block out the sun for months. Temperatures drop drastically all over the Earth and corrosive acid snow and rain fall. These short-term effects alone-intense cold, darkness, and acid rain and snow-kill the plants and photosynthetic plankton, the base of most food chains. Herbivores starve, and then the carnivores that feed on the herbivores starve. This is enough to kill most of the remaining human life on the planet. After the clouds clear, the atmosphere is thick with carbon dioxide from fires and decaying matter. Then the carbon dioxide contributes to global warming that lasts for ages."

Tears slowly escaped from Zip's closed eyes and made tracks down his cheeks. He remembered that when he was small his aunt and uncle had taken him on a two-hour flight in their small plane to the place closest to their home where there was a field of nuclear devastation. His first view of the terrain beyond the boundary had been indelibly burned into his seven-year-old mind. The cities and towns surrounded by fields, orchards, streams, ponds, and woods had rapidly tapered off below a slight rise into a land of gray, utterly lifeless, gasping dust that reached as far southeastward as the eye could see. The center of the field had been the nation's capital, the third of the great American cities to be destroyed in the holocaust of 2048.

"How big was the asteroid they modeled?" asked Joe.

"About six to ten miles across," said Mark.

"And the one Zimbardo has aimed at Earth is forty miles long?"

"Bigger. A little bigger than that," answered Zip quietly. "Bigger." He felt a chilling darkness come over him, almost as if he had walked into an inky refrigerator. He shivered uncontrollably for a moment, then sat up and took control of himself.

"Today we get the Star Ranger back!" he announced in a clear voice. "and we're heading back to Earth! Be ready for immediate departure!"

An immense metal and glass wheel, half a mile in diameter, rotated slowly in the jeweled heavens. It was the primary manufacturing and launching headquarters of Nolan Mining Enterprise. It orbited the Moon about 500 miles above the surface.

Robert Nolan was burning with a zealous flame of energy. Although often close to burning out, he never went over the edge. His apparently bottomless resources had allowed him to achieve remarkable things in twenty years. Now he was in the command bubble that lifted like an antenna from the heart of the space station. A tower two hundred yards long lifted out from the plane of NME's manufacturing and launching facility. At its end was a large observation and control center that commanded a view of every aspect of one side of the plant.

"Launch in forty-three minutes exactly," said an operative in the command bubble. Nolan stood, looking intently over the man's shoulder at the screen in front of him. Nolan's eyes shifted repeatedly back and forth from the screen to the actuality that lay spectacularly open to view before him.

"Sir?" said another technician, turning toward Nolan. "The Lux Mundi has now

completed docking." The Lux Mundi was Richard Starlight's personal spacecraft.

"Excellent, John," said Robert Nolan. "Please have Mr. Starlight sent up here without delay."

"Yes sir." The technician turned back to his station and issued commands. In less than four minutes, an elevator brought Richard Starlight into the center of the command bubble of Nolan Mining Enterprise. He stepped out onto the floor and looked around quickly.

"Over here, Rick," said Nolan, stepping toward his friend.

"Bob! Good to see you!" The men shook hands briefly. "All went well at our end," Richard whispered.

Nolan stepped back and spread his hands toward the launching arena of the space station.

"Terrific news," he said. "We'll be launching in about forty minutes."

The two men went into Nolan's office and sealed it. Though everything was visible through clear partitions, no one could hear what went on inside.

"I'm so sorry I fell apart at that meeting, Rick," Robert began.

"Don't give it a thought, Bob. You've done very well for the project since then. This is a great offering you're making."

"The least we can do, in addition to making as many of the microwave probes as we could, is provide these freighters."

"Ahead of schedule, too, by a little bit. All the companies pulled together and made the probes to Dr. Hoshino's specifications. I like his design. His plan should work very well, very well indeed!"

"It's a wonderful design, Rick! Dr. Hoshino is a genius to a degree above everyone else of this generation. We ought to be able to locate any asteroid that Lurton Zimbardo throws at us. But stopping it is a different problem." "If we find it in time, that shouldn't be too hard, either."

The two friends talked for a little longer, then went out to watch the launch. Seven unmanned NME freighters were prepared to carry Earth's hope into space. They would be accompanied by a dozen armed ships supplied by Space Command. The rendezvous of freighters and warships was only a half-hour's flight time from the space station. Then they would proceed on the eight-day journey to the site of deployment.

In a private office and laboratory below, Robert Nolan's chief assistant Beowulf Denn finished making a voice recording of the details of the launch. He included the number of freighters, the number and type of Space Command warships appointed to guard them, their course, hour of departure, and timing of the deployment of the probes.

When he had finished the recording, he inserted the disk into a computer independent of the NME computer system and speeded up its contents so that the entire message was less than 0.03 seconds long. He then encrypted it and transmitted the result on a tight beam communicator to coordinates in space which he kept only in his head. After the message had been sent, he destroyed the disk and removed all signs on his computer that the action had occurred. The message he sent could be read only one time and then would erase itself, leaving no trace at the receiving end that it had ever existed.

Seven ships had arrived at O344. The Starmen were outside, having sped through the airlock with the first news that the ships from Ceres were at hand. They stood on the edge of the landing zone and watched the ships come close to O344. Only the dark red Star Ranger and one other ship touched down. Sim Sala Bim was the first to debark.

"So pleased to see you young men are safe!" he spouted. "So much has happened in these three weeks! Here is your Star Ranger, ready for duty!" The Indian was excited. Zip had shaken off his own dark mood and was rising to the challenge. The other two Starmen were eager to lift off and get back into the battle against Lurton Zimbardo.

"Nice to see you, Sim!" cried out Zip, as he and the man from Ceres shook hands through their spacesuits. "George and his men will be ready in a moment. They

are wonderful people! Salt of the earth types, though I'll bet none of them has been on Earth for years!"

"We'll get them back to Ceres safely, don't worry about that!" advised Sim. "You just go on and stop this crazy fellow."

"Let's get going, Starmen!" urged Zip. They had already made their farewells to the asteroid miners, and had decided to leave the alien ship on O344 for research in a less anxious time. Joe had sealed it and seen that it was securely clamped to the asteroid's surface.

Within a few minutes, the Starmen were aboard the Star Ranger in their accustomed places.

Just before they lifted off, Zip turned on his communicator.

"George," he said. "Thanks for your friendship. You gave me a gift I don't think you're even aware of."

"Oh yes I am too aware of it, David." responded the cheery voice. "The gift of confidence. Do your Latin and find out what 'confidence' really means. Blessing and peace go with you men." A chorus of voices sounded in the background, also offering farewells.

Zip signed off. In minutes O344 was behind them.

When Lurton Zimbardo had first announced to Earth that he had aimed a huge asteroid through space on a collision course, the news of impending doom spread over the farthest reaches of the globe, bringing with it hysteria and despair. Pockets of unrest and violence sprang up but the phenomenon was short-lived. The memory of the Collapse was too recent, and the populace would not permit violence to prevail-but there was nothing to take its place. Cities, nations, and then continents ground to a standstill as people left their jobs and homes and wandered from place to place aimlessly. The thought of utter, unprecedented destruction for the whole planet, the home of mankind, struck at the very heart of the people. The very elderly, who remembered the worst days of the Collapse, felt their spirits quail within them. It was a time such as the world had never seen before. In the years to come it became known as The Day the Earth Stood Still. No one knew where to flee, how to flee, or even if fleeing could do any good. After a time the panic quieted down to a heartless agonizing despair, and a heavy, dark spirit fell over the planet.

"Crass, Lather, Bolcher! Get your men and go! The Earthmen have launched their detection equipment!" Lurton Zimbardo was giving orders over the intercom from the control center of his asteroid. Moments earlier the pirate leader had received a message which informed him of the launch time of Earth's freighters and other details of Earth's defense plan.

"There are seven freighters accompanied by twelve Space Command warships! Each of you take five ships. Find the convoy and destroy the freighters! At all cost, destroy the freighters!"

Zimbardo slammed down the communicator and watched his men scurry for their ships. At the speed they could travel, they should be able to intercept the convoy in about a week-a full day before optimal site for deployment of the microwave probes. Zimbardo had little doubt of the outcome of the encounter. Earth had no idea that the plans were known to him, and the pirate ships were invisible to their radar.

## 17: The Enemy Revealed

FOR NEARLY seven days, the convoy of seven NME freighters and twelve Space Command warships had sped away from the Earth-Moon system. The warships flew in a spherical configuration about five miles in diameter, at the center of which were the unmanned freighters in compact formation. The urgency of the mission gave the convoy no choice but to utilize the most direct route to the site of deployment, so that the probes could be put into action at the earliest possible time. There was simply no time to follow any evasive flight plan. On the success of the microwave net rode the hope of Earth's survival from the threat of impact with the enormous asteroid Lurton Zimbardo had unleashed.

"There they are!" announced Mr. Lather, pilot of the Silver Cloud, as he looked at the radar screen. He was followed closely by five other pirate spacecraft. Two other groups of six pirate ships were nearby, also searching the area of space in front of them for the convoy. "Inform Bolcher and Crass and give them the coordinates. Tell them that since I was the first to locate the freighters, I will attack first. Their ships will follow me according to our plan."

"Yes sir, Mr. Lather," responded the Silver Cloud's navigator. The communication was completed and the details of the plan agreed upon. Then the intership communications system was deactivated. The pirates' ships, being sheathed to radar, were equally invisible to each other as to the men of Space Command, but each pirate captain knew where the others were supposed to be. The ships usually communicated by closed-system radio and thereby kept in close contact with each other, but now they could not risk revealing their position by engaging in radio contact when they were in the proximity of other ships.

Moments went by without a word being said. Lather could feel the adrenaline surging through him. He was eager to give the command to attack.

"One minute!" he announced to his own crew. "All hands prepare for battle!" After the designated time had elapsed, he shouted, "Go!"

Followed by five spaceships protected by the radar bender, he sped undetected through the sphere of Space Command warships. On the screen before him the massive freighters loomed up. "Fire!" he shouted. "Fire! Fire!"

A laser cannon locked onto one freighter and ripped open its hull. In seconds the Silver Cloud was past it and through the other side of the sphere. Behind him came another pirate ship, and then another. As each passed through the sphere, it fired laser cannons at the freighters.

None of the lasers struck a vital point in any freighter's fuel system, but the potent cannons, each set on highest power, ripped into the unmanned ships and tore them open to the vacuum. Lather's six ships shot through the sphere of guard ships without being detected or even shot it, but none of the freighters had exploded. Lather cursed when he saw that the damage he had inflicted was not crippling.

The Space Command warships were immediately aware of the attack and began to scatter the freighters by remote control. Some freighters decelerated, others accelerated, still others moved away from the center. Now the pirates would have a more difficult challenge to destroy the NME ships.

As his fleet circled, Lather waited to see what Bolcher's ships would do. He knew where Bolcher was supposed to be but could not communicate with him without revealing his position to the warships of Space Command. Lather could only watch the screen.

Suddenly one of the freighters exploded into incandescent fury. The detonation destroyed the two freighters closest to the one that Bolcher's ship had hit. Within seconds a fourth freighter erupted into flame as its fuel system ignited. The three remaining freighters began to weave in a random pattern, and the Space Command warships began to close in, reducing the window of access to the center of the field.

Crass' ships began to zoom toward the remaining freighters, laser cannons ready. Being the most experienced pilot, Crass was confident that his team could eliminate the last three ships. Coming in at a fast clip, each pirate ship only seconds after its predecessor, Crass' crew strafed the freighters, scoring two direct hits.

With a grin of satisfaction, Lather saw that he would have one more chance to attack. The protective warships had drawn into a very tight formation to protect the last freighter. Its hulk was already torn with a long rip, but its engine still worked and it responded to controls. The freighter turned and twisted in a random, spiraling forward motion with the warships close around it. Lather brought the Silver Cloud in for the kill.

Shooting smoothly through an opening in the protecting ships' formation, he saw his target and fired. The last freighter blew up almost in his face. All seven freighters-and their contents-had been turned into diminutive pieces of whirling space junk. The Silver Cloud sped through the detritus and passed the far boundary of warships. As soon as he had passed the last Space Command ship, three of them fired at him almost at once. Though he was invisible to radar, he was visible to the eye at the moment he was close to the exploding freighter.

One Space Command laser pierced the Silver Cloud-a narrow but tight beam. The shaft of weaponlight punctured the crew's living quarters, and air began to escape from the pirates' spacecraft. Automatic seals quickly stopped the leak and Lather sped on. The exultation he had felt at having fired the final destructive bolt had instantly changed into a cold dread at his narrow escape. Followed by the other pirate ships, he sped on, back toward the great asteroid where Lurton Zimbardo awaited news of their successful mission.

Commander Benjamin Bennett of the Space Command ship Ignis sat motionless for ten minutes after the last freighter had blown up. He was a topflight career space pilot who governed one of the few standard Space Command Fleets of Twelve. His black hair showed no signs of gray. Because of his unspotted record and eminent trustworthiness, he had been given the responsibility for guarding the freighters. Usually looking much younger than his forty-one years, now he appeared much older.

No one approached him. Then he spoke, as if into the air.

"I suppose the pirates are gone now."

"So it would appear, sir," said a crewman.

"Obviously they weren't concerned with destroying us-just the freighters. I suppose in the long run it amounts to the same thing, though." No one responded. "Please raise headquarters and hand me the communicator." A crew member complied. Commander Bennett took the communicator. His message was terse but complete: pirates had attacked the convoy and all seven freighters had been lost.

Twelve minutes later the news came into Starlight Enterprise and was tranferred immediately to Richard Starlight, who was at work in his office. He finished listening to the message, then turned and looked out over the stark moonscape. Slowly, he smiled.

The next day, just after noon, Richard was again in his office. Joining him for lunch were John Rwakatare, Robert Nolan, Beowulf Denn, and Commander John Lewis and a few other visitors from Space Command. Though the food was delicious, the meal was a dismal affair. Long faces and few words expressed the atmosphere of the gathering.

Richard, however, and Robert seemed not to share the gloom. Richard was an attentive host, carefully seeing to his guests' needs. "A little more water, John?"

he asked, offering the crystal decanter. "Could you please pass the biscuits, Robert? Thank you. Good, aren't they?"

"Yes, Rick, they are, especially for biscuits made on the Moon," responded the head of NME. "Your chef is highly skilled."

Beowulf Denn couldn't take it any more. "You seem awfully lighthearted about everything, Richard," he said in a tone that verged almost on disrespect. Richard smiled but said nothing.

When the lunch things had been cleared away, Richard spoke.

"Thank you for coming, gentlemen. I apologize for not sharing your distress. Please forgive me for what must appear to be an appalling lack of empathy. When you learn why I have brought you here, you will forgive me, I think. I am expecting a message any moment now, and I wanted you to be here when it came in. It is coming from the commander of a large fleet of Starlight Enterprise ships." Richard glanced at Robert. The two friends shared a subtle smile.

"Encrypted message from Captain Marks-Owens, sir," came an artificial, mellow voice through the high-level communication system.

"Ah!" said Richard. "Transmit to my office."

The large screen on the wall behind Richard lit up. He turned his chair. The visage of a tall and slender woman appeared, with high cheekbones and honey-dark hair drawn back and held in place with a small circlet.

"Captain Mary Marks-Owens on the Starlight Enterprise ship Tempest, reporting on top security beam to Richard Starlight. Starlight fleet is in place. There were no incidents, and we are ready for your command, sir."

Richard smiled widely and said clearly, "Excellent work, Mary! Deploy the probes immediately!"

Beowulf Denn choked. "What is this?" he burst out.

"Surprised, eh?" said Richard jocularly, turning his chair back to the table. "Of course, she won't get the message for about ten minutes. But when she does, we'll be able to say, 'mission accomplished'!"

"What is this?" Commander Lewis echoed Beowulf Denn.

"It was Robert's idea, really," began Richard, "and he ought to be telling the tale, but he is too modest to do so. Robert and I cooked up the plan between us and told no one else. Just in case there was a leak somewhere-and apparently there was!-Robert made a fuss about wanting to offer his freighters to convey the probes to the deployment site. He offered rather expensive freighters for service. Robert felt badly about, well, about making a scene when we met with the President and wanted to make up for it." Robert glanced down at the table so as not to meet anyone's eyes, but it was evident that the success of his plan was deeply gratifying to him.

"The NME freighters were decoys. The real probes were sent out on SE freighters to different spots along the face of deployment. They were sent out without any fanfare whatever on the normal delivery schedule we follow for all shipments to Mars and the Asteroid Belt. It would never have done, anyway, to send the probes out in a tight bunch as the seven NME freighters; deployment must be simultaneously effected from several sites, and this is the command I just gave Captain Marks-Owens.

"If the pirates took the bait, then they would go back to their base believing that they had stopped us. And if they didn't know about our plans or the decoy, well, no harm done. Deployment would still go on as scheduled. That's about two minutes from now."

The visitors were stunned. "Why, that's terrific!" stammered Commander Lewis. "No one else knew about this? Not even the President?"

"No one," said Richard. "Only Robert and I. And it's a good thing we did it that way, too. Without the decoy, the launch would have gone as planned with everyone knowing about it. As it is, we're safe now."

"Not only that-" contributed John Rwakatare in his deep bass voice, "we've learned something of immense value. There is a leak somewhere. Someone informed the pirates of the launch from NME."

"Yes, there's that," said Robert Nolan with a sigh, finally speaking up. "But for now, deployment of the probes will take place successfully. We'll have to check for the leak, and I initiated a careful search as soon as we received news of the attack."

Richard turned back toward the screen. "Computer," he said. "Give me a tie-in to the master control aboard the Tempest." The screen showed a scene in space.

"There is a delay, of course, but the feed is continuous. Deployment of the probes is taking place about now, but we won't see the results for about ten minutes." Time passed.

"Coming up on the time now," announced Richard a little later, breaking into the light conversation that was going on around the table. All heads turned toward the screen.

"This is a map of the expanse of the site of the deployment. This is not the actual scene, of course; it is a computer enhancement, programmed to show us what is actually happening."

From twelve sites at once, scattered about evenly throughout the area, small points began to glow. The points marked the locations of the SE freighters that had carried the real probes. Simultaneously from every point emerged a starburst of lines, each one a fine, golden strand of light.

"Dr. Hoshino's design propels each probe at about one-twentieth the speed of light. Complete deployment should take about an hour and a half."

The men waited nervously. Some browsed Richard's books and others peered through his small telescope at the moonscape. Occasionally two or three would come together for quiet discussion.

On the screen, the golden lines gradually lengthened. From time to time one would burst into a flower of lines like summer fireworks, and then later each of those lines extended and burst again.

When deployment was complete, the entire screen was filled with a complex pattern of golden points, like dawn-illuminated mist hanging in a huge spider's web.

"Success!" said Richard quietly, but his voice trembled with excitement. "Captain Marks-Owens will now initiate the program that will unify the probes into a single system. At the same time, she will enter a program that will allow the system to read the gravitational forces attendant upon every object within its range. The known asteroids and other heavenly bodies and the scheduled flights of spacecraft will be filtered out. What will be left will be the positions of unknown craft and any uncharted natural objects." As he spoke, the web began to shimmer in dozens of places, each the site of an object with enough mass to ripple the gravitational-detecting field of the net.

"Ah! Now the known ships are being filtered out," Richard observed as many of the ripples disappeared. In a moment, he leaped to his feet.

"There it is! There it is!" he shouted. He ran to the screen. "Look! Here are the pirates' ships that attacked Robert's freighters yesterday!" He pointed to a small ripple in the pattern and scanned the readings at the bottom of the screen. "Yes, eighteen ships. Here are their masses provided down here. And over here," his finger swept across the screen to a large ripple in the upper center, "is the asteroid coming our way!

"Computer! Extrapolate the course of this object"-he gave the particulars-"and provide information on its trajectory."

In eight seconds the voice of the computer spoke. "Object is a natural body of approximately 20,625 trillion tons, currently traveling at a rate of approximately 280,000 miles per hour. If present speed and course are maintained, object will fly by the Earth. Closest approach will be attained in 15 days, 8 hours, 3 minutes, 14 seconds at a distance of approximately 10,689 miles."

There was silence in Richard's office for over a minute. Then someone said, "It's going to miss."

## 18: Collision Course!

EXHAUSTED with relief, the party broke up. The men from Space Command left the Starlight Enterprise plant and returned to their headquarters. Robert Nolan and Beowulf Denn lifted off from a launching deck not far from Richard's office and set course for the space station that was the central facility for Nolan Mining Enterprise.

Richard had already given orders that ships from Starlight Enterprise be assigned the immediate task of pursuing and capturing the eighteen pirate ships that had destroyed NME's decoy freighters the day before. The SE freighters that had actually carried the probes into space had been joined by SE ships gathered quietly from various sources during the previous week. They had converged during the journey so that many were in place throughout the area of the search, ready to respond to any orders that might come.

Inside many of them were the Firewasp fighters SE produced for use in the Asteroid Belt. The Firewasps were small, tremendously fast and amazingly maneuverable one-man ships that had been concentrated in several SE bases in the Asteroid Belt. They had been named after a menacing insect found in certain

hostile swamps on Mars. The tiny craft served mostly as a deterrent, since smugglers and other lawless types avoided any settlement that showed it was ready to defend itself against marauders.

Commander John Lewis was to issue similar orders to Space Command ships in the vicinity of the microwave net. There were enough SE ships close to the course the pirate fleet was taking that Firewasps could be launched to intercept the pirate ships within an hour.

John Rwakatare and Richard Starlight remained alone in Richard's office. They were seated on a sofa, looking out over the vast lunar landscape. An enormous dark gray field stretched out for several miles before breaking up at the far side into jumbled, light gray boulders.

"What do you make of it, Rock?" asked Richard. "Why did Zimbardo tell the entire planet that he was going to pulverize it, and then set his projectile on a flyby course?"

"I don't think he merely made a mistake," said Rock. "He's shown he can guide asteroids to near-pinpoint accuracy."

"Hmm, yes...but those were much, much smaller and were aimed at much closer targets. You don't think he could have just...aimed and missed?"

"Possible, Rick, but I'm not convinced. Consider this: where did the communications from Zimbardo come from? An asteroid base. The Starmen told us about this hollow asteroid and that it could be 'flown' like a great spaceship. We have seen only one large asteroid coming toward Earth. To be blunt, I think Lurton Zimbardo is a liar. The asteroid he aimed at Earth is his own base! His threat to slam it into Earth was intended to cause panic-and it did! He achieved that without actually having to carry out his threat. I think the real threat is what is inside this hollow asteroid."

Richard was listening intently. The relief he had previously felt was evaporating rapidly. He deeply admired and respected John Rwakatare. Rock had a remarkable and rare combination of a filing-cabinet mind and an ability to dream. He was eminently logical at all times, but could also come up with "leaps beyond logic" in which inspiration confidently answered a challenging situation. Now was one of those times.

Richard remembered when Rock had graduated from Starlight Academy fifteen years earlier. Richard was in his early forties at the time, and recalled the shock that went through the Starlight world when Rock was offered the position of Starman but had turned it down. He was the only person ever to have refused the honor. He had chosen instead to stay close to a young woman whom he loved; they had married and now had four young children. Rock rarely left his family, and Richard had placed him second in command of Starlight Enterprise.

Rock continued. "We already concluded that the ability to sheath spacecraft and even asteroids comes from an alien intelligence more advanced than our own race. I think it highly likely that the source-at least the immediate source-of that knowledge is the asteroid Zimbardo has taken over. We don't know what other capabilities this asteroid base has. But we do know that Lurton Zimbardo is bringing it to Earth-very, very close to Earth, and that he will be here in fifteen days."

Richard swallowed hard and looked away. "Oh my, Rock!-I'm sure you're right. In fact, what other possibilities are there?"

"But unless he has defenses or weaponry we haven't seen yet, we have an advantage. A slight advantage."

"What's that?"

"He doesn't know that we know where he is or that we have guessed what he's really doing."

Robert Nolan and Beowulf Denn made the twenty-six minute journey from the Moon to the space station. Robert had been full of chatter on the way back, but Wulf had responded only with short sentences, and after they had docked they went their separate ways. Robert went to his office to call the President. Richard had urged Robert to be the one to inform him that the probes had deployed successfully, that the microwave net had found the asteroid, and that Earth was not in danger of collision. Robert felt the honor deeply and was eager to announce the good news.

Wulf found his way to his own private sanctum, saying he wanted to take a nap. He set a "do not disturb" code on his communication system. Then he prepared another audiodisk, making a brief report of the luncheon meeting at Starlight Enterprise. He played it through twice, making changes until he felt comfortable with the message. Then he speeded it up so that the complete message lasted 0.027 seconds, encrypted it, inserted the disk into his personal computer, and transmitted it. After the message had been sent, he destroyed the disk and removed all signs on his computer that the action had occurred.

He stared out the window at the third planet, a beautiful blue and white globe, thinking nothing in particular. After a moment he stretched out and tried to take a nap. But he couldn't sleep.

A red light pulsed rapidly on the console near Lurton Zimbardo's chair. Seeing the flash from the corner of his eye, he jerked his head around and stared at it as if he couldn't believe that it was lit.

"What's this?" he thought. "There's no message due now." He pressed the button that deactivated the light, placed headphones on, dialed a few knobs on the console, and pressed "Play."

Fifteen seconds later he leaped up from his chair and bellowed. With both hands he jerked the headphone cord out of the control panel. The wires whipped through the air with a noise like a scourge. Zimbardo twirled, his eyes bulging, and flung the headphones from him with all his force. The set flew through the command center and collided with the opposite wall. Everyone in the room froze and turned to look at the pirate leader, and were appalled at what they saw. He was trembling with demonic fury. No one moved or said a word. Even Gene was afraid to speak.

"They found us!!" Zimbardo shouted. "They found us! The Earthmen know where we are! They've located the fleet!! The freighters those fools destroyed yesterday were decoys! The Earthmen deployed the real probes and they've already found us! They outsmarted us!" He cursed vehemently, then growled as if his teeth were grinding on gravel. "But I've never been outsmarted! I won't be outsmarted now!"

Zimbardo jumped back into his chair. "Gene! GENE!!" He screamed like a man possessed.

"Right here sir," said the young man, coming up quickly to the pirate leader's side.

"Crank up all the power this asteroid can give me! I'm going to create the biggest electromagnetic pulse this Solar System has ever seen, and BURN every last one of those probes out of the void!! And then when we are invisible again, we'll move this asteroid to a new course and continue our plan."

"But sir," pleaded Gene, almost desperately. "That would take a lot of power! It would be highly inefficient and might work against us! I don't know the power capacity of the asteroid! It could very well burn us out!"

Zimbardo stopped moving for a moment, then turned his head very slowly around and stared at Gene. His eyes glinted with an unearthly light.

"Do it," he hissed.

Gene stepped back half a pace, then pivoted swiftly and ran to the power breakers on the far side of the room. He began to pull switches, override safety indicators, and turn power dials to maximum output.

In a little less than three minutes, he turned and looked back at Zimbardo. The pirate leader had not taken his eyes off of his assistant for a second. With his mouth slightly open, Gene looked into Zimbardo's eyes from across the room and nodded with a quick jerk of his head. Zimbardo smiled, inclined his head slowly, and turned back to his console. He laughed out loud and pressed the switch that activated a general direction EMP.

There was a deafening sound like that of a huge metal block falling to the floor and then grinding along an uneven surface. A wailing screech filled the room and everyone but Zimbardo covered his ears. The screech increased in intensity until men fell to the floor and writhed, pressing their hands firmly to the sides of their heads. Then there was sudden silence and the lights went out. Men began to moan, and someone's voice quavered: "The atmosphere recycler has stopped!"

"Everything has stopped," said Gene from the darkness.

Twelve Firewasps came upon the eighteen pirate ships with a suddenness that

took the pirates completely by surprise. The small spacecraft moved so quickly that the pirates could get off only wild shots that never came close to any of the SE craft. The Firewasps used narrow but highly dense laser weaponlight with remarkable effectiveness. Skilled pilots and marksmen quickly disabled the pirate ships by piercing their power supply, effectively casting them adrift in space. The pirates' sheathing systems went down, rendering the ships visible.

The battle was over in less than two minutes. Captain Mary Marks-Owens and Richard Starlight received the news within minutes of each other, that the eighteen pirate ships were derelicts and their crews would no doubt be eager to be picked up by the nearest Space Command ships. Without power, their air would not last more than twenty-four hours.

Richard and Commander Lewis made the next order jointly. With a few exceptions, all Starlight Enterprise and Space Command spacecraft were to journey to the pirates' asteroid at once and prepare for battle. They would bring the attack directly to Lurton Zimbardo.

After issuing the order, Richard reset his communication system to contact the Star Ranger. Now that the need for secrecy was past, he wanted to bring the returning Starmen up to date and urge them to come to the pirates' asteroid with the others.

Inside the Star Ranger, Mark cried out, "Hey! Listen to this!" He directed the communication system to public announcement mode and restarted the message from Richard Starlight. In exultant tones, Richard related the events of the previous two days, concluding with the capture of the eighteen pirate ships and the coming attack on Zimbardo's asteroid.

The Starmen cheered. They all jumped up and danced. After a moment, Zip asked, "How soon can we get to the asteroid, Mark?"

Mark sat down and quickly figured. "We're only about a day and a half away."

"What are we waiting for?!" exclaimed Joe.

"Let's go!" said Zip. "We could use a little diversion on our way back to Earth."

Mark set a new course and Joe initiated it. The Star Ranger turned slightly to intercept the asteroid where they had been imprisoned nearly three weeks before.

As the power system aboard that same asteroid screeched into disruption and then silence, a massive electromagnetic shock wave was dispensed from its surface. A great pulse of destruction moved through space at the speed of light. Although it was not strong enough to harm spacecraft, the microwave probes were no match for its power. As the pulse swept past the probes, they winked out in flashes of golden light.

On the master screen aboard the Tempest and in Richard Starlight's office, viewers watched the golden net disappear. Although it was past midnight, Richard and John Rwakatare were wide awake with their eyes glued to the screen. From the center where the asteroid was indicated, an expanding circle of darkness went forth, gradually swallowing up all the probes. It was obvious to Richard that the microwave net was doomed.

"Computer," he said in a dull voice. "How much longer until the net disappears?"

"Four minutes, twelve seconds," came the mellow voice.

"The eighteen ships are adrift," Richard said. "We can't lose them. But if this asteroid is maneuverable, as it must be, Zimbardo can speed up, slow down, or change course and avoid our attack. He can disappear."

Richard's body tensed and he raised his voice. "How did he know about the probes?!" he exclaimed, with exasperation.

"The spy," responded John Rwakatare.

Aboard the pirates' asteroid, power was returning. An emergency backup system had kicked in, causing the lights to flicker back on and the atmosphere recycler to hum quietly back into efficiency. With covert glances back at Zimbardo, the men returned to their stations.

Zimbardo barked out a command.

"Status report!"

"Right away, sir," said Gene, taking his own seat. He attended to various dials and incoming signals.

Zimbardo stood up and walked over to the great window that overlooked the huge rocket pad outside. There were seven ships left-six belonging to the independent smugglers, Jeff Jenner, Lorry, and Captain Kimball, and his own personal ship, the Tartarus. Even the Silver Spear had been taken by Lorry. The asteroid was nearly empty of men; only his support crew, the smugglers and their crews, and a few others remained.

"Sir," spoke up Gene. His voice trembled. He spoke as one apologizing. "Mr. Zimbardo. Mr. Lather sent in a frantic message that all eighteen ships were under attack. The transmission was cut off in mid-sentence. I scanned their location, sir, and detected three large Space Command ships approaching our convoy. They are about to be captured, sir."

Zimbardo turned slowly and looked at Gene without a change in expression. "And?" he said. "There's more, I can tell. And..."

"And there is a large fleet of ships belonging to Space Command and Starlight Enterprise converging on our location. In less than three hours, fourteen ships will be arriving within minutes of each other. Approximately the same number again will join them over the next twenty-four hour period." Gene hesitated, then decided to deliver the last sentence. "Even if we are sheathed, sir, with that many ships so close, they will be able to find us before long."

Lurton Zimbardo turned his eyes obliquely to the floor and joined his hands behind his back. He rocked for a moment on his feet, almost as if pondering a challenging philosophical question.

"I see," he said at last. He walked quietly over to his console, sat for a moment without moving, then began to move dials and enter numbers into the navigational program. He consulted various tables of information and referred to a number of measuring devices whose sensitive detectors were on the surface of the asteroid.

Minutes passed. Zimbardo grew increasingly agitated as he worked. His men had stopped their own work and watched him. Where his hands had begun to move gently and carefully, they began to exhibit higher and higher degrees of animation. Soon he was pressing his keyboard vehemently and muttering under his breath. Once in a while he chortled.

Finally he shouted, "Hah! That will do it! I won't be outsmarted!" He pressed the

"Enter" button and then roared, "Yes! I win!" He leaped from his chair and lifted up both arms. "I win!" he screamed.

As the program Zimbardo had activated was engaged, the power it required began draining the emergency resources of the asteroid. The lights dimmed and the usual hum of the atmosphere recycler began to stutter.

"What did you do?" Gene asked with trepidation. "Even the backup power system is being strained."

"Just keeping a promise," said Zimbardo jovially. "I told Earth I had sent them an asteroid. I wasn't very truthful at the time, I'm afraid. But now I have kept my promise. I have redirected the asteroid so that it will collide with the planet! -and I've pushed the acceleration up to full!"

A soul-wrenching moan escaped from Gene's lips. He stumbled over to his chair and collapsed into it. He stared ahead, seeing nothing. The other men were frozen in their places.

Zimbardo strolled over to the wall-screen that provided a map of the Inner Planetary system and indicated their position. With the power drain, the images were going in and out of focus and numbers were fading from the screen.

"Hmm. About ten days to impact," he muttered. "Can't tell for sure with the images fading like this, but no matter. By that time we'll be long gone."

A few minutes later the insides of the complex began to screech as they had before. The screech did not rise in intensity but gradually turned into a groan. The light slowly faded and then went out completely.

"The power is out for good now!" Gene wailed. "and we're prisoners on the asteroid! Now it's a runaway! We can't stop it!"

"Why would we want to stop it? We'll take the Tartarus and leave to fight again another day! Pack up, get the men, and let's go. We've got less than three hours, I think you said."

Panicked, Gene fled from the room, feeling his way desperately through the darkness. "I've got to warn Kimball, Lorry, and Jenner! We've got to escape!" Fear unlike anything he had ever experienced or imagined filled his entire being.

19: Change of Guard

GENE FLEW down the corridor with his arms outstretched, not knowing exactly where he was going and not caring, as long as it was away from the control deck. He was breathing hard and fast, on the verge of hysteria. Realizing that he was in danger of losing his grip, he paused to catch his breath, and leaned against the wall.

A moment later he saw moving lights in the stairwell a long way ahead. In the growing gray illumination, he dashed forward and saw Kimball, Lorry, and Jenner coming up, carrying flashlights. When Kimball saw Gene hurrying toward him, he flashed the light directly into his eyes and roared, "What in blazes is going on in this place?"

Gene threw his hands up over his eyes, but continued to stumble forward. "You've got to get out of here," he choked out. "Get your men, get your ships, go!"

Jenner put a firm hand on Gene's shoulder, and Kimball lowered the light. "What's going on? Where's Zimbardo?" Jenner's voice was a little quieter than Kimball's but just as demanding.

Gene gulped and looked up. "He-, he's aimed the asteroid at Earth! It's on a collision course! He burned out all the power-all the power! He can't stop it! He doesn't want to stop it!"

There was a stunned silence. Jenner, his mouth opening and closing like a fish out of water, finally blurted out, "Why did he do that?"

"All the men in the fleets have been captured! We're the only ones left, and Space Command will be boarding us in less than three hours!"

The three smugglers gasped in dismay. Jenner pushed Gene away and the three of them shot back down the stairwell. When they reached the lower level, Gene heard them shouting for their men. The light gradually diminished until Gene was once again in complete darkness.

"Gene! Gene! Where are you?" came the voice of Lurton Zimbardo from far behind him. Startled, Gene quickly whirled and peered into the darkness. From far away came a sound as of scurrying feet. There were men coming-the men from the control center, with Zimbardo. Gene spun again and ran for his own room. He had decided what he was going to do. Frantically he rummaged through his belongings until he found his own flashlight. Without turning it on yet, he ran from the room and hastened farther away from the control center.

"Gene? Gene! Is that you?" came the voice of Lurton Zimbardo. Gene inhaled quickly and looked back. There was still no light. He hesitated for a moment, then answered,

"Yes, it's me." His voice was squeaky.

"Where are you?" echoed down the corridor.

"I'm not going with you! Go on without me!"

"What?" Zimbardo's voice had a note of complete incredulity in it. "Why not? Hurry up, Gene! We have to go! I don't want Space Command on my tail!"

"I'm not going!" Gene shouted. He turned and fled. He sped down the corridor as fast as he could go, came to its end, turned the corner, and kept going. In less than a minute he was many turns and twists away from the main level. He switched on his light, put it on its lowest setting, and slowed down to a walk. "He won't wait for me! He won't look for me! He'll want to go! Soon he'll be gone and I'll be safe!" These thoughts came through Gene's mind almost like a flow of clear water.

He came to a storeroom, pushed the door open, and flashed his light around. The room was crammed with stacks of boxes and various other items. Seeing there was no one else inside, he shut the door, crawled under a cabinet, and turned off his light.

After a short while, he felt the floor tremble slightly. He knew that a spaceship had lifted off. It was followed quickly by five others. "The smugglers are gone," he thought. "Just one more now. If I hear one more, I'll know that he's gone." He waited, desperately hoping he wouldn't hear the sound of the door opening.

After they left Gene, the smugglers Kimball, Lorry, and Jenner quickly gathered together their men and supplies and headed for the airlock to the launching pad.

There were thirty-seven men altogether. All had their spacesuits on and most of them carried lights.

"How are we going to get out of here?" asked one of the men as they approached the airlock. "The airlock won't open. Nothing's working."

"Portable power pack," said Kimball. He took a small box from another man, set it down by the airlock, and in seconds had established a makeshift connection. The airlock opened. In that fashion, the men boarded their ships without delay.

Kimball lifted off first and entered the vast, stone tunnel that led to the outside. As soon as the enormous airlock became visible down the shaft, he fired a laser cannon at it. Unable to resist an attack from within, the great door, thousands of years old, shattered into fragments. The atmosphere of the launching pad rushed out, hurling the shards of the airlock door into space. Kimball's ship then came through the tunnel and exited, followed in short order by the five other ships. They set a course for the Asteroid Belt and at top acceleration left the pirates' asteroid behind them.

After Gene had fled out of earshot, Zimbardo turned to the few men who were behind him. "I'm lifting off in the Tartarus in ten minutes. It's the only ship left on the asteroid. Meet me at the great doors. Tell everyone else you see." He swiveled and walked to the stairwell to go up to his own rooms.

None of the men said anything to each other, but scattered, each going to his own quarters.

Ten minutes later, arrayed in his spacesuit and carrying a few items, Lurton Zimbardo stood at the great doors. Behind him was the asteroid complex. In front was the manufacturing center and beyond that was the launching pad where the Tartarus stood in solitary splendor. Only five men had joined the pirate leader.

"So," said Zimbardo. "Only five of you. Five men left. Who are you?" He lifted his light a little so he could see their faces. "Ah, Mr. Gebbeth. I said before that I knew I could depend on you. I've always known it. You are the pilot. And Mr. Slant. Mr. Stagnum. Mr. Withers. And Mr. Poppy. No one else. Well, then, there are six of us altogether. Let us go." There was almost no talking. Each man seemed to know what to do without being told. They opened the airlocks to pass through the manufacturing center, and then into the airless launching pad. Without haste but without unnecessary delay, they entered the Tartarus, a gleaming silver and red ship that could support a crew of eighteen.

The six men strapped themselves into acceleration couches with Gebbeth in the pilot's position. "Take us out, Mr. Gebbeth," said Zimbardo. "I will tell you where to go when we are free."

"Yes sir," said Gebbeth, and initiated the launching sequence. In a short time, Lurton Zimbardo's spacecraft had left the asteroid.

"Top speed, Mr. Gebbeth," said Zimbardo. "Make sure the sheathing equipment is functioning. Head away from the sun."

"Of course, sir."

When Zimbardo burned out the asteroid's power, much of the energy needed to power its sheathing apparatus disappeared. The sheathing plates then only received power through the solar energy panels, and they did not provide enough energy to hide the asteroid completely. It appeared on radar as a faint blip, allowing the Earth ships to locate it without difficulty. About two hours after Zimbardo's departure, the fleet command ship Tempest came upon the asteroid. It was the first of fourteen ships from both Space Command and Starlight Enterprise that were expected to arrive within the hour.

The Tempest maneuvered carefully through the gaping orifice left when Kimball's ship had blown the massive airlock, and set down inside the airless docking arena of the asteroid. Captain Mary Marks-Owens descended the ladder first, followed by several members of the crew. All were armed. Only the lights of the spaceship lit up the cavernous hall of shadows.

"Eerie," observed Captain Marks-Owens as she set foot on the pavement. "Follow me. We'll see if the place is as abandoned as it looks." Nine space-suited figures fell in behind her as she approached the airlock into the manufacturing area. When she was unable to open it, she called for a portable power supply. Two additional men brought one from the ship, opened the airlock, and allowed the landing party to enter the complex. Once inside, the members of the crew were able to dispense with their helmets.

Slowly and carefully they made their way through the blackness, pushing it back with the radiance of the lights they carried. They were in awe of the huge, obviously alien place.

"The place feels almost haunted," observed one man in a quiet voice.

"Somewhat," agreed the Captain, "but there's more to it than that. There's something deeper. I don't think this is an evil place. It is a place that needs to be cleansed."

The party passed through the great doors. Before they had crossed the courtyard a man emerged from the far side, carrying a light. The members of the landing party quickly spread out, and the Captain ordered, "Halt!"

"Don't shoot!" came the voice from behind the tiny light across the room. "I'm unarmed. I've been waiting for you."

"Who are you?"

"My name is Gene Newman. I was the control officer for Lurton Zimbardo. He's gone."

"Come forward slowly, hands up." Gene walked forward cautiously with his hands extended over his head, holding his light in one hand. When he was a few yards away, Captain Marks-Owens ordered him to stop and directed two men to search him. When it was definite that he was unarmed, she called him to approach her.

"What's been going on here?" she asked.

Gene explained that Zimbardo had aimed the asteroid at Earth, burned out the power system, and fled two hours earlier. The Captain's face paled as he told the story.

"Radio the ships that are still en route and have them check the course of this rock," she ordered one of the men, who put on his helmet and contacted the ship. "And tell Mr. Madera to come here at once." The order was given. While they were waiting for Mr. Madera, Captain Marks-Owens quizzed Gene further. "Why did you stay behind?"

"I-, I joined Putnam's organization because it seemed a sure thing. He was captured, but Zimbardo took over and made it seem an even better proposition. But I could see him getting crazier and crazier! I'm not ashamed to say that he began to frighten me-and he frightened others, too! And when he aimed the asteroid toward Earth..." Gene's eyes widened and he began to tremble, "I knew there was something seriously wrong with him! I had to get away! I wanted to fix things-if I could!"

"Are there any others here?"

"I don't know. There may be. I haven't seen anyone else. Apart from Zimbardo and the smugglers, there were seventeen men left on the asteroid. I don't know how many went with him. There were also some prisoners-three Starmen and some asteroid miners, but they escaped from the room where they were being held and disappeared into the depths of the asteroid. I don't know where they are now. We never saw a trace of them after that."

"They escaped from the asteroid three weeks ago. In fact, we expect them to arrive here soon in their own ship."

Gene's face showed out-and-out surprise at this news. "They escaped? They got off the asteroid? How did they do that?"

At this point, they were joined by the young man for whom the Captain had asked. He was about thirty years old, with a full crown of thick brown hair and deep brown eyes. This was Jesus Madera-Cruz, Chief Ioneer for Starlight Enterprise. He was adept with engines and micro-electronics. Noted for a placid nature, nothing ever seemed to bother him, and his expertise in power systems had never failed the trust which Richard Starlight had placed in him.

"You asked for me, Captain?" he asked.

"Yes, Mr. Madera. We need your skills urgently. This is Gene, one of Zimbardo's men. Zimbardo has been gone for two hours. Gene tells us that before he fled he burned out the power. Before the power went out, he also redirected the asteroid on a collision course with Earth. I've asked our ships outside to confirm that. In the meantime, I'd like you to check out the power system and see if you can

bring it back up. Obviously, if what Gene says is true, this is a matter of extreme urgency, not just convenience."

"Yes, ma'am," answered the man with a brief nod. The Captain detailed several men to go with Gene and Madera to wherever Zimbardo's former chief control officer wanted to take them. Gene took them first to the control deck.

Captain Marks-Owens detailed the rest of her men to search the complex in pairs. As other ships landed, minutes apart from each other, she directed their crews to the search. After an hour, ten other pirates had been located. All had been eager to turn themselves in. They were taken into captivity and led to one of the Space Command ships where they were fed and kept under guard.

Soon there were over a hundred men searching the facility. Operations officers began connecting portable power systems to various parts of the complex to reestablish the lights and get the airlocks working again. The atmosphere recycling system was not yet accessible, but the air would last for a long time.

An ensign brought a report to Captain Marks-Owens during the search, confirming Gene's account that the asteroid was on a collision course with Earth.

"Details?" asked the Captain.

"The asteroid will collide with Earth in approximately eight days, at a speed of nearly 300,000 miles per hour," responded the ensign. "It was vastly accelerated for a few minutes before the power burned out, and the sun's gravity continues to increase the rate of acceleration. We have not yet determined precisely where it will strike, but we are forwarding the data to SE and that will be determined."

At that point, Gene and Madera came up to Marks-Owens.

"Captain," said Madera. "I have made a preliminary examination of the control system. Gene has been more than cooperative, I am happy to say. With his help, just by looking at the controls and hearing him describe what Zimbardo did, I can conjecture what kind of power we're dealing with. If we can get the power back on, we should not have any difficulty in changing the course of the asteroid. Restoring the power, however, will not be easy. Gene has never been to the power plant. In fact, it seems that no one has, even including Zimbardo. No one knows where it is or how to learn its location."

"Go back to the Tempest and contact George St. George and the Starmen. St. George is on Ceres and the Starmen are in the Star Ranger on their way here. These men have been inside the power plant and know how to find it."

"Yes ma'am." Madera bowed his head slightly and turned toward the airlock that led out to the launching pad. He showed no signs whatever of being ruffled. In sharp contrast, Gene was visibly anxious.

"Gene," said Captain Marks-Owens; "you've apparently been eager to cooperate. Mr. Madera is easy to get along with but hard to please. If he commends you, I am satisfied that you are not a threat to us. You go on to the Tempest also and get some food and some rest, as you need. We can't do more until we hear from the Starmen or St. George. We'll want you later, and you'll need to be rested."

"Yes ma'am," said the distraught man. He turned toward the SE flagship, swallowed hard, and stepped toward the airlock. He ran to catch up to Madera.

Captain Marks-Owens watched them for a moment, then turned her attention back to the activity of the men who were supplying the temporary power to the complex before her. The grandeur of the view impressed her.

"This place that seemed so menacing when we first landed is beginning to look a little less threatening now," she thought. "Hard to believe we are aboard a runaway asteroid that will destroy Earth in eight days, unless we can turn it aside somehow."

#### 20: Desperation

THE STAR RANGER sped through space toward its rendezvous point with the racing asteroid. Given the urgency of the situation, Zip had ordered the maximum acceleration that their bodies could tolerate. Mark had programmed their course to bring them as quickly as possible up to boarding speed with the asteroid. Having done that, he pored through the printed material he had taken from the asteroid's power plant. He felt hopelessness creeping over him since he didn't know what Zimbardo had done to burn it out.

Zip came over and stood near where Mark was seated with a dim lamp illuminating the papers in front of him. The lamp was designed to burn with a soft light tinged with the faintest trace of light green, to be easiest on the eyes. It was devised for periods of long study.

"Anything yet, Mark?" Zip asked, knowing that the question was pointless. If Mark had found even a tiny piece of information which could be remotely connected to the situation on the asteroid, he would have spoken up.

"No, Zip," replied Mark. "I can follow the diagrams pretty well now, and I think I understand how one part connects to another, but I can't envision how any part of it could have burned out. I've tried to calculate how much power Zimbardo would have needed to generate the EMP of the size he did, but I can only guess at it. Even at my highest estimates, I can't see how it would burn out the power supplies of a huge iron asteroid that can be used as a spacecraft. All I can imagine is that much of the power supply of the asteroid had been shut down before."

"You mean that its reserves were not in place?"

"Something like that. We have guessed that the asteroid was a huge spacecraft. We also know that it had been stationary and abandoned-or at least unused-for eons. I suspect that the asteroid's full power had never been accessible to Zimbardo. He was able to operate life-support systems, lights, airlocks, and so forth in his own section without drawing much power. When he tried to 'power up' the asteroid and move it out of orbit, he reached the limit of its available power. Then he suddenly initiated the electromagnetic pulse to fry the microwave probes, but he also fried his own system. But the asteroid must have more power than that to be able to do what it must have done in the past. You saw the power plant as well as I did! Did it look to you as if Zimbardo could have burned that whole thing out with one EMP, no matter how intense?"

"Makes sense, Mark. Where, then, is the rest of the power?"

Mark looked up at Zip with a wan smile. "If you want to find it, you can help me look through these papers, if you want."

"All right, I will," said Zip, and sat down. Mark handed him a stack of paper, showed Zip what to look for, and went back to his own study.

Joe remained on the flight deck, keeping careful watch on the instruments. He preserved the Star Ranger's course precisely so that there would be no unnecessary delay in meeting the runaway asteroid. Before him was a scattering

of white stars in the blackness. A few large ones stood out.

"Mark would love this," Joe thought, but he didn't bother his friend.

The best minds of Starlight Enterprise and Space Command had been working for more than twenty-four hours on the problem of diverting the runaway asteroid, and had not even been able to restore power. Twenty-five ships had docked inside the landing area, and more than 300 men were inside the facility. Some had been detailed to explore and take an inventory of what was found, others had been ordered to provide temporary light and power using portable equipment from the ships, and still others worked under Jesus Madera-Cruz in the desperate attempt to restore power to the asteroid.

From the communications center aboard the Tempest, Mr. Madera had been in contact with SE's best engineers and the Starmen. SE's best hope was in the Starmen since they had been aboard the asteroid and had walked through its power plant. By electronic communication, Mark had been able to provide some of the plans for the power plant to Mr. Madera, but the plant was simply too large and too complex for the plans to be of much use.

George St. George had given Madera the proper combination of buttons in the elevators to give him access to the warehouse, but even after the portable units had restored power to the elevators they could not deliver men to the warehouse. The elevators would not descend beyond a certain level since Zip had previously destroyed all the panels when the pirates were pursuing them. Consequently, Madera had had to detail men to descend manually through the shaft to the warehouse floor and repair the controls at the warehouse level for one elevator. That had taken nearly eleven hours.

Except for one brief nap, Madera had not slept since the Tempest had landed. Once the elevator had been repaired, he went with about thirty men through the same passages that the Starmen had traversed. Since the temporary lighting and power had been set up only in the facility that the pirates had been using, Madera and his companions walked in darkness as deep as the inside of a cave.

Madera hefted a huge but lightweight lamp for use in the power plant. To illumine their way through the warehouse and corridors, others carried personal flashlights. As they made their way through the facility, the lights they carried

cleaved the darkness. But behind them, the absolute darkness closed up again.

After leaving the warehouse, Madera had to use the codes the Starmen had provided to come to the immense power plant. Although the men had been told in advance what to expect, when the doors of the elevator opened, they were just as awed as the Starmen and miners had been when they first beheld the scene.

Though the power plant was completely dark and silent, there was a feeling among the men at the elevator door that they were at the edge of vastness. Madera activated his lamp and shone it into the iron cavern. Its light penetrated about half a mile; in its cone the latticework, panels, and tubing were revealed. When Madera saw the extent of the plant, he smiled with deep appreciation, then encouraged the men to get to work.

He assigned them to three groups. They were to spread throughout the plant and search for evidence of any burnout or other damage. The men went forth with lights, tools, and electronic equipment. Madera himself set out to study one of the power stations and try to learn its secrets by personal examination.

At one end of the asteroid was the huge landing facility that Troy Putnam had taken over. About two-thirds of the length of the asteroid away was the port through which the Starmen and miners had escaped. Between was an enormous complex of habitable space. At the lowest level was the power plant. Above the power plant was an immense compound, secure from any chance encounter by Earthmen. Access could be given only from inside, and no Earthman would be able to enter by force, short of taking the entire asteroid apart. Indeed, no Earthman even suspected it existed.

Inside this compound, several tall, slender, humanoid figures were working frantically at a panel. Endless banks of dials, screens, switches, and other electronic paraphernalia were set out in the huge room where they worked. The room was dark. Several portable lights had been set in a semi-circle around the panel where the figures were working.

Conversation was minimal and quiet, barely above a murmur. Tools were requested and exchanged. A light was brought over and placed so as to reveal the inner workings of a cabinet filled with circuits and connections. One figure walked slowly to the far end of the room, carrying a small light. He passed through a doorway, traversed a short corridor, and entered an enormous chamber. He paced along a catwalk. The power in this room was operative. Far above him was an indigo sky with silver stars. A pale blue dawn was showing at the horizon. To his left was an extensive mirror-smooth lake in which the sky and stars were reflected in unutterable beauty. In the lake, trees grew in profusion. It appeared to be an orchard in flood time, but it was apparent that the trees grew best in a watery environment. Heavy, thick, almost circular leaves covered the trees. Fragrant white blossoms promised fruit in the next season. On the shore were numerous small boats for skimming and a few large ones for working in the orchard.

The catwalk led for about a mile across one end of the lake and had several side passages, all on the right. At the fourth side passage, the walker turned and passed through an airlock. After he had come through the second door, he entered a lightless room that gave an impression of immense spaciousness. Revealed in the shadow of his light were many horizontal gold and clear quartz capsules about eight feet long and two feet in diameter, stacked in rows. Each capsule was connected to cables that led into a large box. Boxes were spaced about twenty feet apart and each was connected to about forty capsules.

The walker opened the top of the box and peered inside. He raised a small communicator to his lips and spoke into it. After receiving a reply, he reached into the box with a long tool. A moment later, dim lights went on in the room and a very low hum started up. The walker smiled broadly and closed the box. Then he retraced his steps.

Captain Mary Marks-Owens woke Jesus Madera out of a deep sleep.

"Mr. Madera," she said, approaching him gently where he had fallen asleep in his chair. He had returned to his office and workshop aboard the Tempest to study some diagrams he had made in the power plant. "The Star Ranger has arrived. The Starmen are waiting for you."

"Thank you, Captain," said Madera, lifting his head and rubbing his brown eyes. He ran his hand through his hair quickly, left his room, put on his helmet, and descended the outside ladder to the floor of the launching pad. He turned toward the control center and saw the Starmen on the other side of the wall. They all waved at him. Madera was one of the Starmen's favorite acquaintances from Starlight Enterprise. He strode across the tarmac and passed through the airlock and hailed the young men.

After he had removed his helmet and exchanged hasty preliminary greetings, he led them across the quad in front of the manufacturing center and through the great doors.

"What have you discovered?" asked Mark.

"I think I can power up the computer system, but it will take a lot of energy to do so. I used submicroscopic robotic probes to provide detailed maps of the computer in the power plant, and some of the wiring, machines, and selected other equipment inside this amazing facility. I've detailed men to take portable power packs down to the power plant and arrange them in sequence to give us enough power to jump-start the computer. When we do that, we ought to be able to get into the files you found earlier, Mark. Getting the power packs down there is not easy, but with dozens of men working, I estimated that we could get it hooked up in a couple of hours. That was the time I was taking to study some diagrams I'd made, but instead took an involuntary catnap."

"Why didn't you enter the power plant through the hangar from which we escaped?" asked Zip.

"We looked for the opening in the place you'd indicated, but found no evidence of any kind that there was an airlock. We even tried locating it with radar, but the entrance is concealed so effectively that we could find no trace of it. We needed the personnel at this end, so we abandoned the search. Getting to the power plant through the complex here is the long way around, but we knew that we could do it and just couldn't take the time to look further on the surface for the shortest means of ingress."

"We'll have to find some way to open the airlock from the outside when we're not so rushed," responded Zip. "We haven't kept up with the time limit. What've we got?"

Madera sighed. "If we can't move the asteroid, impact with Earth will take place on Thursday, September 8, at 2:33 p.m. That's about six days from now. It will strike in the Atlantic Ocean just north of the West Indies." "How much time have we got to turn it aside?"

"Just a coupla days. After that time, no matter what we do the asteroid will still strike the Earth somewhere. But we'll be able to move it."

"You sound confident, Mr. Madera," said Joe turning his head briefly as the four of them approached the elevators.

"Don't worry, Joe," said Madera. "Earth is not ready yet for its Judgment Day."

Somehow the Starmen believed him. He was not a Starman nor a reputed scientist, but he was a man of deep dignity who exuded confidence and easily won the affections of the people around him.

Moments later, they were at the site of the activity. The last portable power pack had been set up and connected to the closest console in the power plant.

"Set?" asked Madera of the technician who had overseen the procedure.

"Yes sir, Mr. Madera."

"Let's go, Mark." The big Starman stepped up next to the console with Madera. Mark felt a bit of stage fright. Anxiety coursed through him as he suddenly realized that there was so little time left and that the ability to turn the asteroid aside depended on him. Having an audience of more than thirty men daunted him.

"It doesn't depend entirely on you, Mark," said Madera, appearing to read Mark's mind. "Now let's power up."

Mark felt the anxiety drain away. He pressed the power button he had discovered before, when the Starmen had been escaping from the pirates. The computer screen surged into life. The men cheered, and Madera smiled. Joe stretched exultantly and appeared to grow two inches taller.

Zip's brow remained furrowed. He showed little emotion. For him the time to exult would be when the asteroid had been diverted. This was only a vital step in the process. There were others ahead.

Mark kept his eyes on the screen but spoke to Mr. Madera. "I have a theory, Mr. Madera. There must be power enough in this system, and far more than enough, to turn the asteroid aside. We don't need to find out what Zimbardo's burned out. We should try to get access to the rest of the system. The diagrams I sent you show that there must be plenty of power. We just have to find out how to turn it on!"

"That's sound reasoning, Mark," nodded Madera. "And probably easier than trying to locate whatever damage Zimbardo did."

For some time, Mark and Madera conversed quietly as Mark flipped through file after file. Diagrams appeared and Mark's fingers flew over the screen as he pointed out what he had learned while journeying on the Star Ranger. Madera nodded, and pointed out several connections Mark had not seen.

Once, Madera handed a small diagnostic pack to one of the technicians and sent him to climb the iron latticework. The man returned in a few moments and gave a report. Madera nodded again and turned to Mark.

Three hours went by. Joe's eyes were drooping, but Zip was still intent, his eyes on Mark.

Mark clapped his hands and turned to Madera. Madera smiled and raised his eyebrows. With an open hand, he gestured to the control panel. Mark nodded his thanks and pressed several buttons. The files changed rapidly at each new command. Then Mark made fists and clenched a few times as if massaging his fingers. Then he raised his hand and prepared to press a button off to the side of the panel.

Suddenly he leaped back a foot, his hands lifted as if he had touched a hot surface. His face was white, his eyes were wide open, and he was breathing hard. His body was trembling as if he were deadly frightened. Zip shot forward, pushing his way through the crowd to reach Mark.

"What is it, Mark? What's wrong?" His voice was urgent.

"The power plant-it's thousands of years old!" Mark wasn't looking at Zip-he was still looking forward, as if his eyes were being drawn to the controls. "Pressing this button..." he stopped and swallowed hard, and blinked twice. "Pressing this button is the last step in activating the rest of the power plant. It should give us the power we need, but-but it's clear that it hasn't been activated for thousands of years. There's no way to tell whether it's safe. This is a complicated system. If something is wrong," Mark slowly turned to face Zip, "If something is wrong, if a bolt has slipped into the wrong place, if Zimbardo bypassed a vital circuit somewhere, or if a conduit is stopped up anywhere, all the energy this plant can produce could blow back at us. The entire works could explode into a million pieces."

Zip looked at the floor for an instant, then looked up again and stared directly into Mark's eyes. "You're right, Mark; but there's no other choice. You have to do it."

Mark's exhaled quickly. "Oh, I know, Zip-I know. But as I reached out my hand, I had a sudden chill that our destruction was a second away. It just didn't feel right. And if this asteroid blows into fragments, then Earth will be peppered with hundreds of devastating impacts!"

Zip slowly turned and faced the silent crowd. Every face was marked with grave intensity. Joe stood at the back, his face drawn and tense.

"You all heard," Zip said. "But you all know that we have no choice." No one said anything. A few men dropped their eyes and shuffled their feet. Zip turned to Mr. Madera in silent appeal. Madera nodded very slowly.

Then Mark wiped both hands on his shirt and slowly reached out and pressed the last button.

A distant grinding noise as of gears engaging sounded from far away. There was a whooshing sound as of air filling a giant bag. The grinding sound leveled off into a bare hum. The lights gradually came on.

The men cheered. Mark looked relieved. The tension under which he had been operating quickly released. His face wrinkled up and tears began to flow down his cheeks.

Then the bare hum began to build. It turned into a whine, and then into a shriek. The floor began to shudder. Mark wiped his eyes and stared at the screen.

"The reaction is starting, but the energy level is climbing much faster than it should! Something's wrong! Something's wrong!!"

The men began to hear small explosions. There was a popping sound as a flexible tube burst a few yards away. Tinkling glass rained down in several places as light bulbs popped with the influx of too much energy. Mark began to flip rapidly through files on the screen.

All at once a panel a hundred yards away blew out in a monstrous explosion. A burst of brilliant white light blinded the men momentarily. As their eyes returned to normal a loud hiss cut through the air and continued to build. Yellow and orange sparks erupted in a spectacular shower from the damaged panel. Mark turned toward the site with a look of panic. Without warning a connector at the panel lit up with a coruscating orange color. Unable to handle the power surge, it began to melt and fragment. In less than a second, the damage shot through the connector and came to where it entered the computer terminal. There was a sickening, deep "brrzzz" sound, and the screen went dark.

Mark slumped toward the floor. Madera grabbed the Starman before he fell and eased him to the iron deck. Joe ran forward.

21: The Asteroid Over Vanuatu

ZIP was already hunched over Mark when Joe came to the front of the crowd. A few of the men hovered nearby, which others ran to the site of the explosion. Most stayed in place, looking around nervously.

"Is he...?" stammered Joe.

"He sustained a powerful shock," said Madera. "The energy was too much for that panel and it backed up to the terminal here. Mark had his hand on the keyboard."

Zip was taking Mark's pulse. Mark's right hand was blackened and his sleeve was frayed up to the elbow. "His pulse is strong. I think he's just unconscious. It must have been quite a blow!"

"Yes, it was," said Madera. "I could feel the power of it just standing nearby! But his heart is beating strongly! Let's get him back to the Tempest where he can receive some care!"

"What about the power?" asked Joe, getting to his feet.

"Look around you, Joe," said Madera with a wave of his hand.

Joe and Zip looked out toward the plant.

"Hey!" exclaimed Joe. "It's okay! It's leveled off!" The shriek had diminished to a gentle hum once again, and the sounds of popping conduits and breaking glass had disappeared. "What happened?"

"I think that the panel over there was a huge breaker for this part of the power system. Mark was right. There was enormous danger in starting the plant up after so long. The energy surged through it and even the breaker couldn't handle it very well. It blew up when it couldn't handle the strain any more, and diverted the energy it couldn't absorb back into the terminal here. Fortunately for Mark, by that time there was only a little left." Madera glanced down at Mark. "He's a brave man."

"Yes, he is," confirmed Joe with some animation. He and Zip picked Mark up. With the help of two others, they carried him to the elevator. In less than a minute, all the men were on their way back to the control center and the Tempest.

Within ten minutes they were back in the main hall. Through the great doors they could see more than two dozen spacecraft arrayed on the extensive launching pad.

Mark sighed deeply, then moaned. The four men who were carrying him kept up the pace. Joe called out, "Mark! How're you doing?"

Mark moaned again, blinked, then opened his eyes. He stared up at the ceiling, appearing not to see anything. Then suddenly he began to struggle.

"Hey! Hey, what're you doing?" he cried out. "Put me down!"

"Easy, Mark," said Zip. "You had a shock, but you'll be okay!":

"I'm okay now! Put me down! I have to fix the panel! Where are you taking me?"

"Everything's fine, Mark," said Mr. Madera. "The system leveled out and the power is back on and controlled."

Mark sank back with another sigh. "Great," he said. "Put me down, though. I'm all right." The men set him on his feet, but supported him as he wobbled, trying to get his balance.

"Wow! Am I tired!" he said at last. "Somebody help me to my bunk and wake me when it's over."

"I'll go with you, Mark," said Joe. With Joe trying to support the larger of the two Starmen, the two of them walked slowly across the quad to the airlock that led to the launching pad.

"We're still not finished," said Madera. "We have to steer the asteroid out of its collision course. For that, I think we'll need some help from an unlikely source."

"Gene," stated Zip.

"Gene," affirmed Starlight Enterprise's Chief Ioneer.

Jesus Madera reached for his communicator and asked that Gene be sent to him from where he was being held in the Tempest. Madera dismissed the men who had been with them in the power plant, then turned to the red-headed Starman.

"I'm sure that Joe or even I could pilot the asteroid if we had to, but it is best that Gene do it-best for him."

"Of course, Mr. Madera," said Zip. "I understand."

While they waited, the Starman gazed around. Far above was the roof of the great chamber like an iron sky. The natural lights of the complex once again blazed throughout the structures. The air seemed fresher.

He and Madera watched Gene descend the ladder and jump the last few rungs to the pad. Then he turned and paced quickly to the closest entrance in the great wall. He came through the airlock, discarded his helmet, and hurried to the small group that was waiting for him.

"We have restored power," said Madera.

"So I see!" said Gene with a great smile. "That's terrific! Do you want me to pilot the asteroid away from Earth?"

"That's exactly what I want you to do. Let's go."

The three men made their way along the corridors, hastened past open doorways, and took the elevator up one flight to the control center. They passed dozens of SE men and members of Space Command. Captain Mary Marks-Owens was supervising their work.

Once in the control center, Gene took his seat at the main console, glanced at the Starman and the other men in the large room, then stared at the screen before him. He scratched his head, then placed his hands on the keyboard and activated it.

"Whew!" he exclaimed a moment later. "Well over 290,000 miles per hour! It would be better to turn this asteroid aside and pass by the Earth rather than try to bring it into orbit, as Zimbardo had planned at first. We're going too fast for that!"

"My thoughts exactly," said Madera, seating himself on a stool next to Gene. "Let's see how you do it."

Gene plotted coordinates and tracked the trajectory of the runaway asteroid, then calculated the amount of thrust needed to pass the Earth at a safe distance. He figured how much he could slow the asteroid down without putting too much stress on the inhabitants. When he was finished, he turned to Madera.

"Okay?"

"Looks right to me!"

"Well, then...here goes." Gene entered the figures into the primary guidance system and activated it. Tears suddenly came into his eyes. "Oh, please let it be enough, let it be right, let it work," he whispered.

The Starmen woke after twelve hours of sleep aboard the Star Ranger. Uncharacteristically, Joe was the last one up. He found a note in the washroom that read, "We're on the Tempest. Join us for breakfast whenever you're ready." He washed up quickly and hastened to the SE fleet command ship. Readily admitted, he found his two colleagues in the dining area. Mark and Zip were just finishing a large platter of scrambled eggs and cheese, potatoes, freshly-squeezed juice, and hot coffee. "I'll have the same, but with tea," he announced, and sat down.

"Yes sir," came a voice from the galley.

"How're you feeling this morning, Mark?" asked Joe. "How's your hand?"

"Couldn't feel better, Joe! Had a good sleep at last, and my hand should be healed in a couple of weeks. It was a second-degree burn."

A few moments later, Gene came out carrying Joe's breakfast.

"Gene!" exclaimed Joe.

"Yes, Mr. Taylor. Just trying to help out a little," said the erstwhile pirate.

"He cooks as well as he pilots," said Mark.

"We're safe, then." Joe made it a statement rather than a question as he shook some pepper onto the steaming eggs.

"Yes," said Zip. "The asteroid will sweep past the Earth in a week, missing it by about 50,000 miles. It will be visible for almost the whole night over the south Pacific, like a fast-moving star. Should be quite a sight!"

"Then what?" asked Joe between gulps of juice.

"Then what, what?" responded Mark.

"Then where does it go?"

"As Gene said yesterday," explained Zip, "it's moving too fast to enter an orbit around the Earth, so Gene steered it into a course around the sun. It will take about seven months to circle the sun just inside Earth's orbit. Then it will catch up to the Earth and can easily be placed into an Earth orbit at that time. Scientists from Starlight Enterprise will live on it and try to learn its secrets. In fact, a ship will be launched from SE in a couple of days with a crew of them. They'll intercept the asteroid and start the exploration right away."

Mark continued bringing Joe up to date. "The Captain's got a team replacing the huge airlock on the surface of the asteroid, and the temporary power supply packets are being reloaded on the ships. We're in complete control of the asteroid now."

"Where's Madera?"

"He finally got a full sleep, then went back into the complex. He can't wait to find out how it all works. He's hoping that Richard will put him in charge of the exploration team."

Joe scooped a large helping of potatoes into his mouth, then talked around it to ask, "Well, when do we leave?"

"I'm excited about this place, and would like to explore a bit myself," said Zip, "but more than anything, I'd like to go home. We can leave any time we want to."

"I'd like to see Mr. Madera one more time before we go, and then take off for home."

A day later, the Star Ranger was well on its way to Amundsen City. The Starmen were relaxed, seated comfortably at a small table in the lounge, with the ship on automatic pilot. The strains of Bach's Little Fugue filled the ship.

Joe asked, "Is that the disk Montezuma Vly gave us?"

"No," said Mark. "That was destroyed when Lather melted the Vigilant Warrior. This is just part of our standard library. Beautiful piece. But I sure wish we hadn't lost that disk Montezuma gave us. What a tragedy!"

"Yes, well, Vly did say that we could visit him again. Maybe he'll give us another."

"I'd like to see him again, but not for a while. I don't want to leave home for a long time!"

At the end of their journey, the Star Ranger touched down gently on the tarmac at Amundsen Base, near the south pole of the Moon on the edge of the largest city in the Earth-Moon system-Amundsen City, with over eight million inhabitants. The Starmen debarked from their ship, crossed the field and entered the airlock that led into the receiving area. Through the second door, they could see an enormous crowd.

"Man! This place is jammed!" said Joe. "I've never seen so many people here!" As air filled the airlock, the Starmen removed their helmets and tucked them under their arms. Moments later they entered the public terminal. A roar went up from hundreds of voices.

"What's this?" yelled Mark to Zip and Joe. He could barely make himself heard above the clamor.

"Look!" cried out Zip. "Our families!" With a big smile on his face, he pointed to the front of the crowd. There were the boys' parents-Allen and Elizabeth Foster with Zip's eight-year old sister, Kathy; Keith and Barbara Seaton; and Charlie and Laura Taylor. All were smiling hugely.

"Wow!" exclaimed Mark. "All these people are here for us!"

Although the crowd was being kept behind a light barrier of stanchions and ribbons, as soon as the Starmen came through the airlock, Zip's sister Kathy ducked under the ribbon and ran toward them.

"David, David!" she yelled. When she was still a few feet away from her brother, she leaped and flew into his welcoming arms. "David, I missed you!" she cried, snuggling her head into his shoulder. "I was so worried!"

Zip smelled the little girl's hair and realized how much he loved her and his home. A lump came into his throat and he unexpectedly burst into tears, kissed her forehead and her cheek, and whispered, "Oh, Kathy, I missed you too, even more than I knew."

Zip's mother Elizabeth had the same red hair that he had, while his father Allen had dark hair, now turning a dignified salt-and-pepper. But Kathy had inherited the best of both hair colors. Her deep maroon hair shone with health. Zip picked her up and she wrapped her arms around his neck; then, pressing his cheek to hers, they came to where their parents were waiting for him. Joe and Mark, neither of whom had any brothers or sisters, were already greeting their parents.

On the evening of September 9, the asteroid streaked through the night sky, drawing the awed attention of people all over the planet. It was best seen from the island of Vanuatu in the south Pacific from just after dusk to the hour before dawn when its glow was overwhelmed by the dawnlight. Had the asteroid not been controlled, September 9 would have been the first of the last days of life on Earth.

The day after, the President presided at a worldwide celebration in honor of the Starmen-a celebration to honor them for their critical role in freeing Mars from the clutches of the pirates. The celebration had been postponed when the greatest threat ever to menace the Earth was engineered by Lurton Zimbardo, and then

turned aside.

The Starmen were the subjects of many award ceremonies, dinners and receptions, interviews, and parades. With them were Richard Starlight, Robert Nolan, Jesus Madera-Cruz, and others who had been instrumental in freeing the Earth from destruction. The three Starmen were delighted to see Steve Cliff again, for he was honored along with them for the part he had played in the liberation of Mars. Jack and Jill were also invited, but preferred to remain on the Moon out of the limelight.

The highlight of the celebration was a ceremony on the grounds of the capital in New Washington, when the President presented medals to the Starmen for their valor. The medals had been fashioned from plates in the Gloria, the spaceship that had taken Lee High Eagle to Mars in 2014, the first spaceship to carry human beings to another planet.

When it was all over, the Starmen returned to their homes in Amundsen City for a long and much-needed time of rest.

One afternoon, they were in Richard Starlight's office. Richard had not had an opportunity to hear the Starmen's entire story from beginning to end. He had invited them to join him, John Rwakatare, Robert Nolan, and Beowulf Denn for a relaxing afternoon so that the top four leaders of Starlight Enterprise and Nolan Mining Enterprise could hear firsthand the complete tale of the Starmen's adventures.

Tea and coffee were provided in a luxurious silver service that had been in Richard's family for generations-one of the few heirlooms that had been preserved through the Collapse. On the silverware was engraved the letter "R," the only clue to Richard's surname that still existed. Nearly a century earlier, before founding Starlight Enterprise Richard's father Thomas had changed his name to "Starlight" and destroyed all records that spoke of his past.

After the three Starmen had finished recounting their adventures, no one spoke for a long time. Joe poured himself a fresh cup of tea. Most of them gazed out of the panoramic window at the desolate beauty of the lunar landscape.

At length Richard said, "Starmen, you've had some exciting adventures, and in them you've gained something valuable and lasting: you are now a team. You've learned how to work together, how to think like Starmen and act like Starmen. You're experienced, proven Starmen now! You managed to escape from the clutches of the most dangerous, crazed maniac our century has ever seen. And you've had contact, however fleeting, with the second intelligent extra-terrestrial race that Earth has met-certainly ahead of the Titanians and far ahead of us!

"But as far as Starman's work goes, keep in mind that your adventures were the exception, not the rule. I know you've got exciting careers ahead, all three of you! You're three brilliant Starmen and you're a credit to Starlight Enterprise-but your next adventure could be as unglamorous as mapping geological samples in the canyons of Mercury."

"What will happen to Gene?" asked Mark.

"He will be tried with the rest of the pirates. His assistance in turning the asteroid aside and the intercession of Jesus Madera will probably stand him in good stead when his sentence is pronounced."

"What of the aliens aboard the asteroid, sir?"

"Well, maybe they're still there and maybe they're not. We saw no trace of them after your first encounter. My guess is that there were just the two of them, maybe a few more, and that they departed from the asteroid about the time you did. We have plenty of time now to explore the entire asteroid, and if they're there, we'll find them; and if not, we'll find whatever traces there are to be found!"

But Richard was wrong. Nothing and no one on Earth had the capability of finding and entering the inner sanctum on the asteroid. The revelation of the alien inhabitants would come only if and when the aliens wished it, and even Richard Starlight could not determine or predict when that might be.

Zip said, "But it's not over yet, is it, sir? Whatever or whoever the aliens were afraid of hasn't even been identified, much less overcome. And there are still six pirates who haven't been captured. Zimbardo is still free and we haven't any idea where he is. And the independent smugglers that Gene told us about disappeared without a trace."

Richard suddenly looked serious. "You're right, Zip-and there's still the matter of how Zimbardo knew our plans. Somewhere in our organization he has an ally-at least one."

Wulf Denn set his coffee cup down carefully and remarked, "But for now, things are peaceful. There is no danger anywhere, and no sign of any threat-and the amazing asteroid is ours to explore!"

"Right you are," agreed Rock, "and there are many secrets it can reveal to us. Time enough for us to face tomorrow's dangers tomorrow."

The Starmen were comforted. If even Rock was not on guard, they felt free to relax.

"What will you do now?" asked Robert Nolan.

"Well sir," said Mark. "David's uncle and aunt have invited all of us to go their farm in West Virginia-our parents and David's sister, too-for a long vacation. I love the stars, but frankly, spending time in the woods and fields, eating home-cooked meals at a large table with fifteen or so people, and sitting in front of a fireplace appeals to me more than I can say!"

"I don't blame you!" laughed Robert.

"But don't get too comfortable," warned Richard, with a chuckle. "Something will come along before too long!"

"Maybe mapping geological samples in the canyons of Mercury," suggested Joe.

"Maybe," said Richard.

A little more than two months later, as the Seatons, Taylors, and Fosters prepared to celebrate Thanksgiving dinner on the farm, the Tartarus was speeding through the void.

"We've just passed the orbit of Neptune, sir," announced the pilot.

"Thank you, Mr. Gebbeth. We're making good time." Those who had seen Lurton Zimbardo in his last hours aboard the runaway asteroid would have been surprised to learn that he could be a patient man. As he had done almost obsessively since he had fled the asteroid, he sorted through his thoughts. "Hundreds of us reduced to dozens, and then dozens reduced to this handful of six. The Superiors promised me power once I had obtained for them the access codes to Earth's primary systems. Access codes! That's all they wanted, and Earth was to be mine for payment! I did my best! But now I will appeal to them directly and they will push these Starmen aside without mercy!"

In the next book of the chronicles of the Starmen, JOURNEY TO THE TENTH PLANET, the threat to Earth will take new form. In the dark reaches beyond the orbit of Pluto, in the near-absolute zero of space, the Starmen will finally encounter the overwhelming power of the true enemies of Earth.

### THE END

Certain words used by George St. George are part of the backwoods culture of Davy Crockett, and come from the nineteenth century.

absquatulate depart, run away exflunct exhaust, beat thoroughly obflisticated bewildered, confused ramsquaddle demolish ripstavera first-rate person or thing slantindicular in a slanting direction

Future volumes in the Starman series will

- \* Bring Earthmen face-to-face with Zimbardo's Superiors
- \* Relate how the pirates are brought to their last stand
- \* Introduce the spine-tingling new villain, Banjoman
- \* Describe flilox, the new threat to Mars
- \* Reveal the thrilling secret of the pirates' asteroid

Here's just a sample of action from the next Starman book, JOURNEY TO THE TENTH PLANET:

The long journey was coming to an end. Pluto was about three and a half billion miles from Earth, and the tenth planet was more than two billion miles farther than that-but coming closer. Its figure-eight orbit around the brown dwarf star

Nemesis made it unique in the Solar System.

Now the Starventure was close enough that the tenth planet could be seen with the unaided eye. Everyone aboard was positioned at a window in the great cabin just behind the pilot's console to view the bi-stellar wanderer.

For moments no one said anything. The planet had been thoroughly described to all of them, but no scientific description, no matter how accurate, could have prepared them for the actuality.

"It looks as if it is made out of charcoal," whispered Joe finally.

"Or obsidian," contributed Mark in a subdued voice.

Before long, Joe brought the ship into a low orbit around the tenth planet. Over 4,000 miles in diameter, it was everywhere foreboding, sapping the spirit out of whoever looked upon it. The Starmen themselves were depressed at the sight.

Only about 20% of the planet's surface was anything near smooth, and the smooth parts were scattered into many different, small areas. More than half the terrain was comprised of jagged planes of crystallized material, heaped together as if at random. The planet was covered with sharp points and razor-thin ridges, scarred with tortuous narrow canyons, and marked with pits and shadows-darkness upon darkness.

"Surface temperature?" asked Zip.

"Minus 342 degrees, just as Dr. O said," answered Mark. "As we expected, it has no atmosphere. Whatever atmosphere it has is frozen on the surface of the planet."

A man behind them choked. The fear in the room was palpable. There was no logical reason for it, but the Starmen wouldn't quibble with the crew members.

"I don't want to go down there," said another in a hushed tone.

Now that the great ship had attained orbit, the time had come for Zip to announce the name of the tenth planet. The name had been chosen months earlier by Dr. O who had discovered it, and therefore had the right to determine how it would be known throughout history. Without any preamble, Zip retrieved the sealed envelope from the Starventure's safe. As he did so, the men gathered around him. He turned and faced the crew. Glancing into their faces, he could almost feel their apprehension.

"It's only a planet," he said, trying to sound normal. "It's just stone and ice such as we've seen in many other places of the Solar System." He tore open the envelope, unfolded the paper that was inside it, and stared at what Dr. O had written.

"Well?" asked Joe.

"The planet's name is Nyx. Dr. O named it after the Roman goddess of night."

"And somewhere down there we expect to find Lurton Zimbardo," declared Joe, more a statement than a question. He glanced almost casually out of the window again. Suddenly he stiffened.

"What's that?" he exclaimed.

"What's what?" cried out Mark. Everyone rushed to the windows once again.

"I saw a glint, down there, just beyond that high ridge. It's gone now."

"Check the video feed," ordered Zip. Instantly the cabin was filled with excitement.

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