To Regina, with love and hope for a better tomorrow.

Book One

1

The glass was cold.

Linc rubbed at it with the heel of his hand and felt the coldness of death sucking at his skin. His whole body trembled. It was chill here in the darkness outside the Ghost Place, but it wasn't the cold that made him shake.

Still he had to decide. Peta's life hung in the balance. And before he could decide, Linc had to know.

Wiping his freezing hand against the thin leg of his ragged coverall, Linc peered through the misty glass into the Ghost Place.

They were there, just as they'd always been.

More of them than Linc could count. More than the fingers of both hands. Ghosts.

They looked almost like real men and women. But of course no one that old still lived in the Wheel. The adults were all dead—all except Jerlet, who lived far up above the Wheel.

The ghosts were frozen in place, just as they had always been. Most of them were seated at the strange machines that stretched along one long wall of the place. Some of them were on the floor; one was kneeling with its back against the other wall, eyes closed as if in meditation. Most of them had their backs to Linc, but the few faces he could see were twisted in agony and terror. He shuddered as he thought of the first time he had seen them, when he had been barely big enough to scramble atop an old dead servomech's shoulder and peek through the mist-shrouded window at the horrifying sight beyond.

It doesn't scare me now, Linc told himself.

But still he could feel cold sweat trickling down his thin ribs; the smell of fear was real and pungent.

The ghosts stayed at their posts, staring blankly at the long curving wall full of .strange machines. The strange buttons and lights; the wall screens above them were just as blank as' the ghosts' eyes—most of them. Linc's heart leaped inside him as he saw a few of the screens still flickering, showing strange shadowy pictures that changed constantly.

Some of the machines still work! he realized.

The ghosts had been people once. *Real people, just like Magda or Jerlet or any of the others*. But they never moved, never breathed, never relaxed from their agonized frozen stares at the dead and dying machines.

They were real people once. And someday... someday I'll become a ghost. Like them. Frozen. Dead.

But some of the ancient machines were still working; some of the wall screens still lived. *Does that mean that the machines are meant to keep on working? Does it mean that I should try to fix the machine that Peta broke?*

His whole body was shaking badly now. It was cold here in the darkness. Linc had to get back to the living section, where there was light and warmth and people. Living people. Maybe it was true that the ghosts walked through the Wheel's passageways when everyone was asleep. Maybe *all* the frightening stories that Magda told were true.

It was a long and painful trek back to the living area. Many passageways were blocked off, sealed by heavy metal hatches. Other long sections were too dangerous for a lone traveler. Rats prowled there hungrily.

Linc had to take a tube-tunnel up to the next level, where he felt so much lighter that he could almost glide like one of the bright-colored birds down in the farming section of the Living Wheel. He stretched his legs and covered more paces in one leap than he had fingers on a hand.

Here in the second level it was fun. The corridors were empty and dark. The doors along them closed tight. There were strange markings on each door; Linc couldn't understand them, but Jerlet had promised long ago to someday show him what they meant.

He was alone and free here, soaring down the corridor, letting his muscles lift his suddenly lightened body for long jumps down the shadowy passageway. He forgot the ghosts, forgot Peta's trouble, forgot even Jerlet and Magda. There was nothing in his mind except the thrill of almost-flying, and the words of an ancient song. His voice had deepened not long ago, and no longer cracked and squeaked when he tried to sing. He was happily impressed with it as he heard it echoing off the bare corridor walls:

"Weeruffa seethu wizzer Swunnerfool wizzeruv oz____"

Then he sailed past a big observation window and skidded to a stop, nearly falling as he braked his momentum, and turned to look through the broad expanse of plastiglass.

The stars were circling slowly outside, quiet and solemn and unblinking. *So many stars!* More stars than there were people down in the Living Wheel. More than the birds and insects and pigs and all the other animals down in the farms. More even than the rats. *So many*.

Was he right about Jerlet's teachings? It seemed to Linc that some of Jerlet's words meant that the Living Wheel—and all the other wheels up at the higher levels—were actually part of a huge machine that was whirling around and carrying them from one star to another. Linc shook his head. Jerlet's words were hard to figure out; and besides, that was Magda's job, not his.

Then the yellow star swung into view. It was brighter than all the rest, so bright that it hurt Linc's eyes to look at it. He squinted and turned his face away, but still saw the brilliant spot of yellow before his eyes, wherever he looked.

After a few moments it faded away. And Linc's blood froze in his veins.

For he saw stretched across the scuffed, worn floor plates of the passageway a vague dark shadow stretching out, reaching up the far wall across the passageway from the window.

His own shadow, Linc realized quickly. But that brought no relief from fear. For the light casting the shadow came from the yellow star.

It really is getting closer to us, Linc told himself. The old legends are true!

Keeping his back to the window and the yellow star, staring at his slowly shifting shadow, Linc felt panic clutching at him.

The yellow star is coming to get us. It's going to make ghosts of us all!

2

Linc had no idea how long he stayed, nearly paralyzed with fear, at the observation window. His shadow crept across the floor and up the far wall of the passageway, faded into darkness, then reappeared again. And again, And again.

Finally he pulled himself away, muttering, "If I tell the others about this, they'll go crazy. But Magda... I've got to tell Magda."

His voice sounded odd, even to himself. Shaky, high, and unsure. "I wish Jerlet was still with us."

He stalked down the passageway purposefully, no more playful lightweighted leaps. Into the next open hatch he ducked, then stopped at the platform that opened onto the longspiraling metal stairs of the tube-tunnel. Jerlet was upward, in the far domain where legends said there was no weight at all and everything floated in midair. Downward were the others, his own people, in the Living Wheel, where there was warmth and food and life.

And fear.

"Jerlet. I've got to find Jerlet," Linc told himself sternly, even though he had no idea of how far the journey would be, or how difficult.

Linc placed his slippered foot on the first cold metal step leading upward. But he heard a scuffling sound—faint as a breath, but enough to make him freeze in his steps.

Again. A faint rustling sound in the darkness. Something soft padding on the metal steps in the shadows below.

Rats? Linc wondered.

There hadn't been any rats in this tube-tunnel for along time.

although it had taken the death of four of Linc's friends to clear the tunnel of them. The little monsters fought fiercely when they couldn't run or hide.

Linc gripped the hilt of his only weapon, a slim blade that had once been a screwdriver. He had ground the working end down until it was a sharp dagger. Holding the plastic hilt in a suddenly sweaty palm, Linc peered into the darkness of the tunnel, looking down the spiraling steps for the glint of red, beady eyes.

If there's too many of them____

The shadows seemed to bunch up and take shape. A person.

"Petal" Linc shouted; and his voice echoed off the tube's cold metal walls.

The kid jumped as if sparks from a machine had seared him.

"Peta, it's me, Linc. Don't be afraid."

"Linc! Oh, Linc___" Peta scrambled up the steps and

grabbed at Linc's outstretched hand. He was breathless, sweaty, wide-eyed.

"What are you doing up here?" Linc asked. "I thought you were waiting for Magda to...."

"I've got to get away! Monel and his guards... they're after me!"

Linc thought of Peta as just a kid, although all the people in the Living Wheel were exactly the same age, of course. But Peta was small, his skin pink and soft, his hair as yellow as the star that was coming toward them. He looked more like a child than a young man. Linc, whose face was bony and dark with the beginnings of a beard, towered over him.

Linc held the slim youth by both shoulders. "Listen. You're supposed to be waiting for judgement by Magda. You can't run away."

Peta's hands were fluttering wildly. "But Monel and his guards... he said I'd broken the pump on purpose. He said they were going to cast me into outer darkness!"

"He can't do that____"

"But Magda can. He said Magda told him that's what she was going to judge."

Linc shook his head. "No, Magda wouldn't make up her mind before hearing your side of it."

Peta glanced back over his shoulder. "I was hungry. And tired. I'd been working in the tanks for a long time... everybody

else had a chance to eat, but Slav said I couldn't stop until I finished weeding my whole tank."

"Slav knows what's right," Linc said. "He's fair."

Even in the shadowy light of the tube-tunnel, Linc could see Peta's normally pink face had gone completely white with fright. "I know... but I stuffed the weeds I had pulled into the water trough."

"Oh no____" Linc could feel the back of his neck tensing.

"And they clogged the pump...?"

Peta nodded dumbly.

"And that's why the pump broke, and now half the farm tanks can't get water," Linc finished. "Half our food supply is ruined."

Peta's voice was a miserable whine. "Monel came to my compartment with his guards. They took me out... said they were taking me to the deadlock to... to cast me out."

"He can't do that!"

"I ran away from them," Peta babbled on. "I grabbed the stick that Monel carries and hit the guard that was holding my arm and ran away."

"You what?"

"I... hit... the guard." It was a tortured whisper.

"You hit him? You really struck him?" Linc sank down onto the metal step and let his head droop into his hands. Peta stood fidgeting in front of him, his mouth opening but nothing coming out except a barely audible squeak.

Looking up at him again, Linc asked, "How could you do it? If you had deliberately tried to break every rule Jerlet's given us you couldn't have done worse."

"They were going to push me into the deadlock," Peta cried.

Linc shook his head.

"Help me!"

"Help you?" Linc spread his hands helplessly. "How? Half the people will starve because you were lazy. Maybe I can fix the pump, but you know Jerlet's laws about touching the machines. And you *hit* a guard. Violence! All the tales about the wars and the killings... didn't they mean anything to you?"

"They were going to cast me out!"

"Not even Monel would do that without Magda's judgement," Linc snapped. "I'm no friend of his, Jerlet knows. There's

a lot about him I can't stand. But he'd never hurt you with anything except his tongue. He and his guards were playing with you, and you were stupid enough to believe they meant what they were saying. Only Magda can give punishment, you know that."

Peta dropped to his knees and clutched at Linc. "Help me, please! They'll take me back for judgment—"

"That's just what you deserve."

"No! Please! Hide me... help me get away from them."

Linc shook his head. "You can't hide away, all by yourself. You'd either starve or have to steal food; MonePs guards would catch you sooner or later. Or the rats would."

"Please Linc! Do something. Don't let them get me. They'll...."

Linc pushed him away and stood up. "Come on, I'm taking you to Magda."

"Noooo," Peta cried.

"The best thing is to give yourself up. Maybe she'll make your punishment easier then. I'll ask her to go easy on you."

"Very well spoken!"

Linc wheeled around. From out of the darkness above him, Monel and three guards came down the metal stairs. Two of the guards held Monel's chair, grunting with each step they took. Another three guards appeared out of the shadows on the steps below them.

Monel was smiling. Once he had been as tall as Linc, but since the fall that ruined his legs and forced him to stay forever in his chair, his body had seemed to shrivel and dry out. Now he was a twisted, frail knot of anger and pain. His eyes burned in the darkness. His voice was as brittle-thin and hurtful as a bare high-voltage wire.

"Don't look so surprised, little Peta," he said in his thin, acid-bitter voice. "Once we saw you scramble into this tunnel it was a simple matter to set a trap for you."

Linc bent down and, as gently as he could, lifted the wordless Peta to his feet.

"I thought for a moment," Monel said to Linc, "that we would catch you in the trap, too. But you turned out to be a loyal friend of Magda."

Linc said nothing. He could see in the dimness a dark welt along the cheek of one of the guards. *Must be where Peta hit him*

Monel's smile was blood-chilling. "Let's go see Magda now. She's waiting for her little Peta."

3

The meeting room was filled. All the people were there; many more than the fingers of both Linc's hands. More even than the knuckle joints on each finger.

Magda sat in the center of the meeting room, as she should. She sat on the old desk with its tiny, dead viewing screen and the pretty colored buttons alongside it. Everyone sat on the floor tiles around her, as they should. All eyes were on Magda. Even the empty shelves that Lincd the walls of the big room seemed to be staring at her. There were only a few ancient books left on the shelves, dusty and crumbling. They were being saved for an emergency, for a time when the cold seeped so deeply into the Living Wheel that even this last precious bit of fuel would be needed. All the other books had been used for warmth long ago, before Linc could remember.

Magda sat on the desk, her back straight, her chin high, her eyes closed. Her slim legs were folded under her in the correct manner for her duty as priestess. Her dark hair was carefully combed and glistened in the shadowless light from the ceiling panels.

She wore her priestess's robe, and although it was threadbare and patched in places, the strange signs and lettering on it still stood out boldly: ELCTRC BLNKT, II0 v, AC ONLY. In her right hand was the wand of power and authority, which the ancients called a sliderule; in her left was the symbol of justice and compassion, an infant's skull. Around her waist was the golden chain of the zodiac, with its twelve mysterious signs.

Linc sat at Magda's feet, close enough to the desk to reach

out and touch it. Which no one in his right mind would dare to do. The desk was sacred to the priestess, and not to be touched by ordinary hands.

He looked up at Madga's face, framed by the huge silver-gray wall screen behind her. When she was serving in her office as priestess and meditating, as she was now, Magda seemed to be unable to see anyone, so fiercely did she concentrate on her duty.

Still she was beautiful. Her eyes were darker than the eternal night outside the Wheel. Her face as finely cast as the most delicate tracings of the golden zodiac signs. Yet there was strength and authority in those high-arched cheekbones and firm jawLinc. And wisdom came from her lips.

She stirred and opened her eyes. The crowd sighed and shifted uneasily. Her meditation was ended.

Magda's deep black eyes focused on the people. She swept her gaze across the room and smiled.

"I'm ready," she said simply.

Monel started to push his wheeled chair forward, but Linc was faster and got to his feet. Peta, sitting flanked by two of Monel's guards, didn't move at all. He seemed petrified, too terrified even to tremble.

"We have a problem," Linc said in the time-honored words of custom. "Peta messed up his work at the farm tanks and one of the main pumps is broken because of his carelessness____"

A gasp went through the crowd. Most of them already knew about the pump's breakdown, but still the thought of losing half their food shocked them.

Magda glanced at Peta but said nothing.

"And then when Monel and his guards threatened him," Linc went on, "Peta hit one of the guards and ran away."

The crowd sighed again, louder this time. Whispers buzzed through them.

The priestess's face went cold. "Is this true, Monel?" she asked.

Monel wheeled his chair up to where Linc was standing and motioned his bruised guard to step forward. "The evidence is clear to see," he said. The guard turned slowly so that the whole crowd could gape at his bruised face.

"Peta was frightened," Linc said. "Monel told him they were taking him to the deadlock."

"A lie!" Monel snapped. "Peta was running away and we tried to stop him."

Linc shook his head. "Peta has decided to give himself up to your justice, Magda. Monel and his guards came on us in the tube-tunnel just as he agreed to return to you and ask for mercy."

Magda tapped her wand against her knee for a moment. "What do you have to do with all this, Linc? Were you there when it happened?"

"No. I was off duty." *No sense telling everybody about the Ghost Place. Or how close the yellow star's getting. It would only scare them.* "Peta and I met by accident in a tube-tunnel." Monel edged his chair slightly in front of Linc. "Peta is a lazy clod. And stupid. His laziness and stupidity ruined half the farm tanks. Ask Slav if it's not so!"

"Are they really ruined?" Magda asked. "Yes," came Slav's heavy voice from the rear of the crowd. She looked down at Peta. "All that food—ruined. How can we live without food?"

Before the frightened youth could answer, Linc said, "I brought Peta to you for justice. And mercy."

She almost smiled at Linc. For an instant their eyes were locked together as if no one else was in the room with them. Linc could feel his own lips part in a slight grin.

"But worst of all," Monel shouted, "is that Peta is *violent!* He attacked my guard. He could attack anyone, at any time. Any one of you!" He waved his arm at the crowd.

They muttered and stared at Peta. He hung his head so low that no one could see his face. The guards alongside him tensed and watched Monel, not Magda.

"We all know the punishment for violence," Monel went on, still speaking to the crowd rather than the priestess. "Violence is the one crime we cannot tolerate."

"Cast him into outer darkness!" someone shouted. "Cast him out!" one of the guards echoed.

"Yes... yes____" The crowd picked up the vibration.

Monel turned back toward Magda, his thin face flushed with success, his crooked smile triumphant.

Magda raised her arms for silence, and the crowd settled down to a dull murmur. She waited a moment longer, staring

the people, and they became absolutely still. Peta sat unmoving, his head sunk low.

"Peta," she said softly. "What do you have to say for yourself?"

He raised his face high enough to look at her. With a miserable shrug he let his head droop again.

"Peta," Magda said, but now it was avoice of command, "get to your feet."

He slowly stood up.

"Is it your fault that the pump is dead?" she asked.

He nodded dumbly.

"Did you strike the guard?"

"He.. .they said____"

"Did you strike him?"

Peta's voice broke. He nodded.

Monel rubbed the wheels of his chair. "He admits it."

"He came here for justice and mercy," Linc said.

"The punishment for violence is to be cast into the outer darkness!" Monel raged. He turned back to the crowd again. "Everybody knows that. Right?"

Before they could respond, Magda raised her slim arms.

"The punishment for violence," she said in a steel-cold voice, "will be decided by the priestess, and no one else."

"Give me a chance to look at the broken pump," Linc said. "Maybe I can fix it."

"Fix it?" Monel almost laughed. "You mean—make it work again, so that the crops won't die?"

"Yes," Linc said.

"Madness! You know it's against Jerlet's law to touch such a machine. And even if you could, how would you fix it? It's not like a cut finger that can be healed____"

"Or a bruised face that will be normal in a little while?"

Monel's face darkened. "That's something else again. But the farm pump is a *machine*. Once it's dead, it's dead. It can't be healed, or fixed."

Turning to Magda, Linc said, "Let me try to fix the pump. Maybe we can save the crops. I've fixed other things before... wires, some of the electrical machines. Maybe—"

But Magda shook her head. "It's forbidden to touch that kind of machine. You know Jerlet's laws."

"But...."

"It is forbidden."

And she closed her eyes for meditation. Everyone in the crowd did the same. Linc sat down on the floor and shut his eyes.

He tried to squeeze out all thoughts and let his mind float free. But he kept seeing the frozen ghosts at the Ghost Place. He shuddered. The cold is getting worse; it's coming into the living section. Even some of the crops in the farm tanks are dying of the cold. Then he remembered the yellow star approaching. Strange that we'll all die in fire. If only we could use that star to warm us and drive away the cold....

But such thoughts were not helping him to meditate. Linc tried to get his mind free. *The world is only a temporary illusion*, he chanted to himself. *The world is—*

"I have decided," Magda announced.

Everyone looked up at her.

She pointed the wand at Peta. "No one has committed the sin of violence among us since Jerlet left us, back when we were all children. We must ask Jerlet for judgment, because the punishment for violence is too heavy even for the priestess to bear alone."

Peta's thin chest was rising and falling in rapid, choking gasps. Magda touched the colored buttons on the desk top where she sat. The big wall screen behind her glowed to a silvery-shimmery gray.

Jerlet's face filled the screen, huge, dominating the whole assembly, bigger than Linc's own height, mighty and powerful.

He was old, far older than anyone in the Living Wheel. His face was strong and square, with deep creases around the eyes and mouth. His hair was long and thick, streaked with gray as it curled over his ears and down to his shoulders. His voice was a thundering command, saying the words of the law just as he always said them:

"I've tried to set you kids up as well as possible. The servomechs ought to last long enough for you to grow up enough to take care of yourselves. There's nobody left now except me... and all of you. I can't stay any longer, but I

think you'll be okay. You can make it. I'm sure of it."

Most of the people sitting on the floor were mouthing the

ancient words along with Jerlet's image on the screen. Everyone knew the words by heart, they had heard them so often since childhood.

"I'll come back whenever I can to see how you're doing... and I'll watch you on the TV intercom. But I've got to get up to the *zerog* section now. My heart can't take any more of this load."

Linc had to shift his position on the floor to see around Magda. She sat transfixed on the desk top, her slim body a dark silhouette against the massive presence of Jerlet.

"Now remember," Jerlet was saying, "all the rules I've set down. They're for your own safety. Especially, don't mess around with the machines that I haven't shown you how to handle. Let the servomechs take care of the machines; that's what they're for. You'll only hurt yourselves if you touch the machines. It's going to be tough enough for you, alone down here, without fooling around with the machinery.

"And above all—don't hurt each other. Violence and anger and hate have killed almost everybody on this ship. You're the only chance left for survival. Don't throw everything away... everything that we've worked for, for so many generations. You have a tough road ahead of you. Violence will make it tougher... you could easily wipe yourselves out. So..." his eyes squeezed shut, as if he were in sudden pain, "... above all... don't hurt one another. Violence is the greatest enemy you face. Never hurt one another. *Never!*"

The image disappeared, leaving only an empty glowing screen. Linc heard a few of the girls crying softly in the crowd.

"Jerlet has spoken," Madga said.

"But___" Peta found his voice. "But, that's what he always

says—"

Magda nodded gravely. "He has not changed his rules for you, Peta. There is no forgiveness for the sin of violence. You must be cast out."

Peta tried to scramble to his feet. The guards grabbed him roughly and he screamed out, "No! Please!"

Linc yelled at Magda, "Show him mercy!"

"He deserves none," Magda said, her gaze flicking from Linc to Monel and back again. Peta was standing now, no longer

struggling, head down. The two guards had a firm grip on his arms.

"But," Magda went on, "we have never seen the sin of violence before, and it would take even more violence to cast Peta into the outer darkness. That is the nature of the sin; violence breeds more violence."

Linc wondered what she was leading up to.

"Therefore," she said, "Peta will not be pushed through the deadlock into outer darkness. Instead, he will be given enough food and water for three meals, and sent into the tube-tunnel to seek Jerlet's domain. Let Jerlet take him and make the final judgment."

The crowd was stunned. No one moved.

Magda uttered the magic words that made her decision final:

"Quod erat Demonstrandum."

4

Slowly everyone left the meeting room, leaving only Magdaand Linc there.

He walked up and stood beside her. She touched the control button that turned off the wall screen, then put down her

symbols and let her robe slip off her shoulders.

Linc didn't try to touch her, even though she was now no longer acting in her office as priestess.

"Are you all right?" he asked.

Nodding. "Yes...."

"For sure?"

"Well," she smiled and the room seemed to glow brighter, "it always shakes me when Jerlet speaks to us. His voice... I have dreams about it sometimes."

"That's why you're the priestess."

With the two of them alone in the big empty room, with no one and nothing there except the few remaining books on the bare shelves, Magda was less the priestess and more of a normal human being.

She looked up at Linc, her dark eyes questioning. "Are you angry with me?"

"Angry? Why?"

"You wanted me to show mercy to Peta."

Linc felt his teeth clench slightly. Peta. I'd nearly forgotten about him. A few moments alone with her and I forget everything.

"Jerlet will take him." Linc said.

"But you think I should have gone easier on him."

Is she trying to start a fight? "You could have, if you wanted

to. Peta isn't really a violent person."

"No; I could see that he acted out of panic."

Linc felt puzzled. "Yet you sent him out into the tubes. He might never make it as far as Jerlet's domain. The rats, and who knows what else___"

"Do you know why I had to send him away?"

Linc shook his head.

"Because of Monel," Magda admitted.

"You thought he was right and I was wrong."

She laughed suddenly, and reached out to touch Linc's cheek. "No, you silly fool! And stop looking so grim. I wanted to let Peta go free. It would have been fun to watch Monel turn purple. And besides____"

Linc waited for her to go.on. When she didn't, he asked, "Besides...?"

She walked away a few steps, toward the room's big double doors. "Besides, it would have pleased you."

Linc rocked back on his heels. Magda turned away from him and hurried toward the door.

"Hey... wait. Magda!" He raced across the worn floor tiles after her. His long legs gobbled the distance in a few strides, and he jumped in front of her, leaning his back against the closed doors.

"You wanted to please me?"

"Yes."

Truly puzzled, he asked, "Then... why didn't you? Why cast Peta out? Why ask Jerlet to speak? You knew he'd just

say the same old things... he never says anything else."

Her smile faded and the troubled look returned to her eyes. "Linc.,. Monel wants power. He's a bully. I'm sure he frightened Peta terribly; why else would the poor boy strike one of his guards? Peta never harmed anyone in any way before."

"But then___"

She put a finger over his lips, silencing him. "Hear me. The *real* reason why I'm priestess is that I'm sensitive to the way people think. Monel wants to rule. He wants to be the leader and tell everyone what to do. He would make a terrible leader; he would hurt people. So I've got to stay ahead of him. I've got to make sure that he doesn't gain more power."

Linc felt as fluttery inside as he did up on the second level,

where the gravity was lower. But now it wasn't a happy feeling.

"Monel wants... how do you know... ?"

She shrugged her slim shoulders. "I know. I can hear him thinking about it. I can smell his hunger."

Linc muttered, "Monel likes to boss people around."

"He's made it clear that he'd love to have an alliance with me. I stay priestess and he tells me what to do."

In his mind, Linc saw himself facing Monel, and for the first time in his life he wanted to be violent.

"You're shaking!" Magda said.

He grasped her shoulders. "I haven't liked Monel since we were all children together and Jerlet lived with us. When he had the fall and his legs were crippled, well... I tried to forget that I didn't like him. But now... now____"

"It's all right," Magda soothed, stepping close enough to Linc to lean her cheek against his chest. "I know how to handle Monel. Don't fear___"

"It's not fear that I feel," Linc said tightly. His arms slid around her. Then a new thought struck him. "But... why did you do what Monel wanted? Why did you send Peta away?"

She pulled away from Linc slightly and looked up into his eyes. "Suppose I let Peta go free. And suppose somebody was attacked afterward? What then?"

"But Peta wouldn't "

"No. But Monel would. And then say that Peta did it."

The breath nearly left Linc's body. "Now I understand."

"I couldn't let that happen; I couldn't take the chance. It would mean that Monel would take charge of everything and everyone—even me. *I will not have that.* I am the priestess and I'm going to stay the priestess, no matter what Monel tries."

"So Peta had to be sacrificed."

"Punished," Magda corrected. "He was lazy, and stupid, and violent. Showing him mercy would have been playing into Monel's hands."

For a long moment Linc said nothing. Finally, "I hope he makes it up to Jerlet's area. It's a long climb. And dangerous."

Magda turned slightly in his arms to glance at the wall screen. "Let's get out of here. I have the feeling that he sees and hears everything we do in here."

"Jerlet?"

"No. Monel."

They were walking down the corridor toward the living area when Linc told her about the yellow star.

"It's bright enough now to cast shadows. It's getting so close that you can't look at it without hurting your eyes."

"How long do we have?" Magda asked.

He shrugged. "Who can tell? Maybe only a few sleeps. Maybe so long that we'll all grow as old as Jerlet."

"No one could ever get that old!"

They laughed together.

Then Linc said, "Want to go up and see it?"

Magda hesitated only a moment. "Yes. Show me."

They were almost at the hatch that led into the tube-tunnel when one of the farm workers called out to them. Magda and Linc waited at the hatch as he hurried along the passageway toward them. The overhead light panels were mostly dead in this section of the passageway, so the worker flashed from light to shadow, light to shadow, as he approached.

"Magda," he puffed as he came to a stop before them, "Monel... wants to see you... right away."

"He can wait," Linc said.

"No... it's about the crops. Now that there's not enough food for everybody____"

Magda's face set into a tight mask. Even so, she's beautiful, Linc thought.

"All right," Magda said to the worker. "I'll speak to Monel about the food."

The three of them started down the passageway. Linc looked back over his shoulder at the hatch to the tube-tunnel. That must be the tunnel they put Peta into. I wonder if he's a II right? Can he get to Jerlei before he needs food or sleep? Does the tunnel really go all the way up to Jerlet's domain?

Monel was in a warm little compartment that had a rumpled bunk, a dead viewing screen on the far wall, and a desk studded with push buttons—also dead.

But on the bare part of the desk he had strewn lots and lots of colored chips of plastic. Where did he get them? Linc wondered.

He and Magda stood by the door of the little room. Monel

sat behind the desk in his wheeled chair, his long skinny fingers toying with the plastic chips. Sitting on the bunk was Jayna, a girl who had worked as a farmer. Now, somehow, she seemed to work for Monel all the time.

"I've learned how to use these bits of plastic to solve our food problem," Monel said.

"And I helped," Jayna added.

"We're going to eat plastic?" Linc asked.

"Of course not!" Monel snapped. "But these plastic pieces can show us how to give food to the right people."

"The right people?" Magda echoed.

"Yes... look____" Monel touched a few of the chips, began

lining them in straight files. "You see? Each piece stands for one of us."

"The yellow ones are for the boys and the green ones are for the girls," Jayna said, with a big smile of accomplishment on her face.

Linc watched Monel lining them up. "How do you know you've got the same number of chips as there are people?"

"That's what *I* did," Jayna said happily. "I picked out one chip for each person. I remembered everybody's chip... see, they're all shaped a little differently. So I can remember which chip belongs to which person. I'm good at remembering." She jumped eagerly from the bunk and bounced to the desk. "See? This one is you, Magda... it's the biggest green one. And this one is Monel, he's right behind you. Each chip *means* somebody!"

Monel seemed to be smiling and frowning at once.

"Very interesting," Magda said. It sounded to Linc as if she were trying to keep her voice as flat and calm as possible, and not quite succeeding. "But what does all this have to do with food?"

"Ahah!" Monel's frown vanished and he was all toothy smile. "Since Peta broke the pump, we have a problem: not enough food for everybody."

"Not yet," Linc said. "We have enough for the time being."

Monel shot him a nasty glance. "But when the next crop is harvested, we'll only have half of what we need. Somebody's going to go hungry... lots of people, in fact."

"We all will," Magda said. "We share the food equally."

"We always have," Monel agreed, "up to now. But that

doesn't mean we have to keep on doing things the old way. With these little chips, we can decide who should get food and how much he or she should get."

"But everybody needs food," Linc said.

Monet's answer was swift. "But not everybody deserves it."

"Deserves ...?"

"You know people are always doing wrong things." Monel said. "Not working hard enough, getting angry, not meditating when they're supposed to... my guards see a lot of wrongs being done, and so do you, if you keep your eyes open. With these chips, we can put a mark down on a person's chip whenever he does something wrong. The more marks he gets, the less food we give him."

Linc felt his jaw drop open, but before he could say any thing, Magda's voice cut through the room like an ice knife:

"And who decides when someone's done something wrong?"

Monel smiled again, and it was enough to turn Linc's stomach. "Why, the priestess will decide, of course," Monel said. "Assisted by these chips and those who know how to work them."

"You can't____" Linc began, but Magda waved him silent.

"And suppose," she asked, "that the priestess is unwilling to do this? Suppose that the priestess decides that this is an evil scheme, to deprive people of food deliberately?"

The smile on Monel's thin face stayed fixed, as if frozen there. Finally he said, "When the people get tired of having so little to eat, they will see that this scheme is better for them."

"Some of them."

"The good ones among us," Monel said. "Once they are convinced that this plan is better than letting everyone go hungry, they will decide that the priestess is wrong to oppose it."

"And then?" Magda asked.

"Then we will get a new priestess." He turned, ever so slightly, toward Jayna. The girl stared at Magda with bright eyes.

"It's wrong!" Linc shouted. "We've always shared all the food equally. This plan is just plain wrong. It's against the rules that Jerlet gave us."

"Then ask Jerlet what to do," Monel snapped.

For the first time, Magda looked shaken. Her voice almost trembled as she said, "You know that Jerlet doesn't answer every little question we put to him."

Monel said acidly, "I know that Jerlet *never* answers any questions that *you* put to him. He only says the same thing, over and over again."

"But if we had a new priestess..." Jayna whispered.

"... maybe he would answer her," Monel finished.

Linc suddenly felt rage. He wanted to smash his fists into something: the dead wall screen, the desk, the door... Monel's-twisted smiling face. *Violence! Mustn't commit the sin of....* Yet his fists clenched, and he took a step toward Monel.

Magda grabbed at his arm. "Linc! Come with me. We've heard enough of this."

He stared at Monel with hatred seething inside him, but Magda's hand on his arm and her voice were enough to turn him. Without another word he followed her out of the room and into the passageway.

She pushed the door shut. It was cooler out in the corridor. Linc could feel the flames within him damping down.

"That's just what he wants," Magda said. "If you attack him he'll have you cast out. Now I understand what happened to Peta... Monel used him as a test. If he could make poor little Peta attack him, he knew he could get you to do it."

"I'll kill him," Linc muttered.

"You will not," Magda commanded. "If you even try, you'll be killing yourself; and me, too."

"Then what can we do?"

She let herself smile. "You were going to show me the yellow star. Let's do that."

"Now?"

"Yes. Now."

They stood together at the wide observation window, his arm around her shoulders, hers around his waist. They gazed out at the stars that scattered across the darkness in an endless pattern of glory. And when the yellow star spun into view, they turned their faces and watched their shadows creep across the floor and walls of the passageway.

"It's strange," Magda murmured. "The yellow star brings warmth... it drives away the cold. It feels good."

"Only fora while," Linc said. "It will get hotter and hotter. It will turn everything to fire."

"Too much warmth and we die," she said.

Linc nodded.

"Too little food and we die," she added.

He still said nothing.

"Linc... Monel is right, isn't he? I'll have to decide on his way about the food?"

"You can't do that," said Linc. "We've always shared everything equally. You can't just decide that one person will starve while another eats."

Her dark eyes seemed to cut right through him. "The priestess can decide such things," she said.

"It would be wrong—"

"I decide what's wrong! No one else. Only the priestess."

"With Monel telling you what to do," Linc shot back.

She nearly smiled. "No one tells me what to do...except Jerlet."

The anger that Linc had tried to keep bottled up inside him came boiling out. "Jerlet never says anything new to you or anybody else. He always says the same thing!"

Magda remained icy-calm. "Of course. That's because he's told us everything that we need to know. Don't you see? Jerlet has given us all the rules we need. It's up to his priestess to use those rules wisely."

"By letting people starve?"

"If I find it necessary."

"If Monel tells you it's necessary!"

"Linc... there are so many things you don't understand. If I must decide that certain evil people must starve, and the people accept it, what's to stop me from deciding one day that Monel must starve?"

"You...." Linc had to take a breath, and even when he did, his voice was still high-pitched with shock. "You would do that?"

"If I find that Monel is evil."

He stared at Magda, as if seeing her for the first time in his life. This slim, lovely girl was in command of their lives. "You'd kill him?"

Magda smiled. "It will never come to pass. Sometimes I can see into the future... well, maybe *see* is the wrong word. I get feelings, like a cold draft touching me—"

"And?"

Turning slightly away from Linc, staring off into the

darkness of the corridor, Magda said in a strangely hollow voice, "I'm not sure... I don't see myself sentencing anyone to starve.. .not even Monel. I... *it feels* as if a miracle is going to happen. Yes, that's it!" She fixed her gaze on Line. "A miracle, Line! Jerlet's going to make the pump work again! He's going to bring it back to life!"

Line couldn't pull his eyes away from Magda's brightly smiling face. But his mind was telling him, *Jerlet's not going to do a thing... unless you do it for him.*

5

They slept right there in the passageway, next to the big observation window, huddled together to keep the chill away. The yellow star's radiance wasn't enough to really warm them, but that didn't matter.

Linc woke first.

He sat up and watched Magda breathing easily in her sleep. Just like when they had been children together, and there were no worries or fears. Jerlet had been with them then, and he had strange and wonderful machines that did everything for all the children: kept them clean, even kept their clothing clean; fed them; taught them how to speak and walk; everything.

One by one, the machines broke down or wore out. A few of the cleaning machines still worked. Something Jerlet had called ultrasonics. You stepped in and a weird trembly feeling came over you for an instant. Then you were clean. But even those machines were wearing out.

Linc frowned at the memories playing in his head. He had fixed one of the cleaning machines once, a long time ago. It wasn't working right, and Linc poked into its strange humming heart one day when no one was looking. There was a lot of dust and grime inside. He cleaned it out and the machine worked fine afterward.

He never told anyone about it. It would have made Jerlet angry.

It's a strange rule. Linc thought. Why would Jerlet give us a rule like that? If the machines don't work, we'll all die. But if-we could fix them, fix the heaters and the farm tanks and the

He glanced down again at Magda. She was stirring, beginning to wake up.

If I could fix the pump, then Monel's game with the chips wouldn't be needed.

He had told himself that same thing a thousand times since Magda had spoken of a miracle.

If I can fix it.

And if I don't get caught.

Magda finally awoke and they went down to the Living Wheel together. People were up and about. Monel was hissing orders at everyone as they Lincd up for firstmeal. He browbeat the cooks and made sure that everyone stayed in Linc. He checked the worn and faded plastic dishes that each person carried, and made sure no one took any extra food. He made a general nuisance of himself.

But no one complained. A few smiled. A mild joke here and there. That was all. They were accustomed to Monel's fussing about. And afraid of his guards.

Then the workday began. Linc's task was in the electrical distribution center. He stood by a flickering wall screen, just as Jerlet had taught him to do when he had been only a child, and watched the colored lights flash on and off. There was little else to do. The screen flashed and flickered. Once in a whole a light would flare red and then go blank. It would never light up on the screen again.

Over the years, Linc had gradually figured out that each little light on the screen stood for different rooms of the Living Wheel, and even different machines within the rooms. Whenever a symbol disappeared from the screen, a machine went dead somewhere. It could be a heater, or an air fan, or a cooking unit... anything. Which one stands for the pump Peta broke? Linc studied the section of the screen that represented the farming chambers.

One of the biggest thrills of Linc's life had been the moment he realized that the straight Lincs on the screen stood for the wires that stretched along the passageways behind the plastic wall panels. The Lincs were even colored the same way the wires were: yellow, green, red, blue, and so forth. Once he had even fixed one of the wires; he found the trouble spot by noticing that one of the Lincs on the screen suddenly showed a flashing red light on it.

It had taken a long argument and nearly a day's worth of meditation by the priestess before she decided that a wire was not a machine, and therefore could be touched by human hands. Linc fixed the faulty wire the way he had seen Jerlet and the servomechs do it years before, and a while room that had gone dark and cold suddenly became light and warm again.

Can I fix the pump? he asked himself, over and over again, all through the long day.

At the end of the workday he was still asking himself. He wondered about it all through lastmeal... which was noticeably skimpier than most lastmeals. And Monel was still there at the food Linc, wheeling his chair back and forth, badgering everybody.

Magda was nowhere to be seen. Which meant she had retired to her shrine to meditate.

She's trying to reach Jerlet, Linc knew.

With Monel's voice yammering in his ears, Linc took his food plate back to his own compartment and ate there alone. In silence.

The lights dimmed for sleeping as they always did, automatically. Linc stretched out on his bunk and felt the warmth in the room seeping away; the heaters were turned down, too, at sleep time. But Linc had no intention of going to sleep.

Now the question he asked himself wasn't: Can I fix it? It was: Will they catch me?

He stayed silent and unmoving on his bunk for a long time, eyes staring into the darkness. *Jerlet didn't want us to tamper with the machines because we were just kids when he had to leave us. He left the servomechs to fix the machines. He didn't want us to hurl ourselves, or mess up the machines.*

Linc rose slowly and sat up on his bunk. The servomechs were supposed to keep all the machines working. But they themselves broke down and died. So there's nobody here to fix machines. Except me.

He went to the door of his compartment and opened it a crack. The corridor outside was darkened, too. No sounds out there. Everyone was asleep.

I hope! Linc told himself.

Swiftly, he made his way down the corridor that went

through the sleeping compartments, through the kitchen and the bolted-down tables and chairs of the galley, and up to the metal hatch that opened on the main passageway.

Magda and the others are wrong when they say Jerlet doesn't want us to tamper with the machines. He wouldn't mind if I tried to fix the pump. He wouldn't get angry at me.

Still, Linc could feel a clammy sweat breaking out all over him. Gathering his strength, he pushed the hatch open and stepped out into the main passageway of the Living Wheel. Down at the end of the passageway loomed the huge double doors of the farm area. They were called airlocks, although Linc could never figure out how anyone could lock up air.

So far, all you've done is take a walk. But if they find you inside the farm section, Monel will know what you were up to.

Then he pictured Monel's smug face with the plastic chips, smiling at Magda and telling her that she was a failure as priestess. Linc pushed down on the heavy latch that opened the airlock door.

The farms were fully lit, and the vast room was warm and pungent with green and growing smells. The air felt softer, somehow. Linc squinted in the sudden brightness and let the warmth soak into his bones. It felt good. The crop tanks stood there, row after row of them, huge square metal boxes glinting in the glare of the long overhead light tubes. The only sound in the vast high-domed chamber was the gentle gurgle of the nutrient fluids flowing through the crop tanks. The pigs and fowl and even the bees were asleep in shaded, shadowed areas across the big room.

Linc went straight to the pump that had been damaged. It looked completely normal from the outside: a heavy, squat chunk of metal with pipes going into it and out of it. But it was silent. The floor plates around it were stained, as if there had been a flood of nutrient fluid that the farmers had mopped up.

He clambered up the metal ladder to the rim of the nearest crop tank and peered in. Young corn was growing in the pebbly bed, together with something else green that Linc couldn't identify. Nothing seemed to be wilted yet, but Linc was no farmer. Slav had said the crops would die without the nutrients that the pump provided, and the troughs criss-crossing the plastic pebbles of the tank were completely dry. The crops' roots

were sunk into those pebbles, and they were getting no nutrients.

Frowning, Linc clambered down again and stared at the pump. All right, brave hero. Now how do you fix it? Linc realized that he didn't even know how to get the pump's casing off so he could examine it.

Jerlet would know. But Jerlet never answered Magda's questions; he only spoke the same old words. Linc squatted down and stared at the pump. It sat there, silent and dead. Beyond it, on the far wall of the chamber, Linc could see a dead viewing screen. No one had used it since Jerlet had left them; it was a machine that only Magda could touch.

Linc focused his eyes on the distant screen. Suppose I called Jerlet and just asked him how to fix this pump? If he didn't want metotouchit, he could tell me. Hefrowned. Anothervoice in his head asked, What makes you think Jerlet will answer you, when he doesn't answer the priestess?

"If he doesn't answer," Linc whispered to himself, "that means he doesn't want me to touch the pump."

Yes, but to try to reach him means that you'll have to touch the viewing screen controls. That's just as bad as tampering with the pump.

Linc had no answer for that. He walked across the big empty room and stood in front of the wall screen. A tiny desk projected out from under the screen. It had three rows of colored buttons on it. Some of the colors on the buttons had been chipped away. *That's where Monel got his colored plastics!*

There was no chair at the desk. Linc looked down at the buttons, then up at the screen, then down at the buttons again.

"Jerlet wouldn't mind me calling him," he told himself. "Besides, if Monel can touch the buttons, why can't I?"

Still, as he reached out for the biggest of the buttons, his outstretched hand trembled. Swallowing hard, Linc jabbed at the button.

The screen glowed a pearly gray.

No face showed on it, no picture of any sort, nor any sound. But it was alive! It glowed softly.

"Jerlet," Linc blurted. "Can you hear me?"

The screen did nothing. It merely kept on glowing. Frowning, Linc called Jerlet's name a few more times. Still no

response. Impatiently, he started pressing the other buttons, jamming them down in haphazard fashion. The screen flashed pictures, lights, swirling colors. But no Jerlet. "Jeriet! Jerlet, answer me! Please!" After a few frantic minutes, a booming voice said:

"UNAUTHORIZED PERSONNEL ARE NOT PERMITTED TO USE THIS TERMINAL."

Linc staggered back, startled. "Wha... Are you Jerlet?" "UNAUTHORIZED PERSONNEL ARE NOT PERMITTED TO USE THIS TERMINAL."

"Jerlet! I need help!"

"UNAUTHORI—" The voice stopped for an eyeblink. "WHAT

SORT OF ASSISTANCE DO YOU REQUIRE?"

It didn't sound at all like Jerlet's voice. But it was somebody's voice.

"The pump... the main pump for the crop tanks," Linc said. "I need help to fix it."

The screen hummed for a moment. Then, "MAINTENANCE

AND REPAIR HYDROPONICS SECTION: CODE SEVEN-FOUR-FOUR."

"What?" Linc said. "I don't understand."

The screen suddenly showed a picture of the buttons on the desk. Three of the buttons had red circles drawn around them.

"MAINTENANCE AND REPAIR INFORMATION FOR HYDROPONICS EQUIPMENT. PUNCH CODE SEVEN-FOUR."

It took Linc a while to figure out what the strange words meant. He poked at the buttons indicated, and some even stranger symbols appeared on the screen. He told the screen that the pump was broken. The screen jabbered more meaningless words at him, then showed some pictures. Gradually, Linc realized that they were pictures of the pump: its insides as well as its outside.

It took a long time, so long that Linc was certain the workday would begin and the farmers would come in and discover him there.

In pictures, the screen showed him that the tools he needed were stored in a special wall panel. Linc found the panel; it hadn't been touched for so long that it was crusted over with dirt, but he pulled it open with back-straining desperation.

Some of the tools the screen's voice spoke about just didn't

work. Something it called a "torch" stayed cold and lifeless, even when the pictures showed that a flame was supposed to come out of it.

Maybe I just don't know how to work it, Linc thought.

But the screen was patient, and staggered Linc with its flood of knowledge. With pictures and the steady, unhurried voice, it showed Linc how to unfasten the pump's cover, disconnect its input and output pipes, check the seals and screens and motor. Linc, sitting in the midst of scattered bolts, metal pieces, lengths of plastic pipe, found that the main inner chamber of the pump was clogged with weeds and dead leaves. He cleaned it as thoroughly as he could,

then followed the screen's instructions in reassembling the machine.

"ACTIVATE THE POWER SWITCH," the voice said at last, and the picture showed a yellow arrow pointing to a tiny switch at the base of the pump.

Linc went back and pushed at the little toggle. The whole pump seemed to shudder and clatter for an instant, then settled down to a smooth steady hum. Above his head, in the crop tanks, Linc could hear the sudden gurgle of nutrient fluid flowing again.

He should have felt exultant. Instead, he merely felt tired. He managed a weak smile, went back to the screen, and said:

"Thank you, whoever you are."

The screen did not reply. Linc clicked it off, then turned just in time to see the first group of farmers entering the big, echoing room.

6

Linc's first impulse was to run.

But as the farmers noticed him there, sweat- and dirt-streaked, they seemed more surprised and curious than angry.

Why should I be afraid? Linc asked himself. Ifixed the pump. There's nothing to be afraid of.

The farmers were walking up to him, slowly, looking puzzled.

"Linc," said a lanky girl called Hollie, "what are you doing here?"

"What's going on?" Slav's strong voice came from behind them. The broad-faced, sandy-haired leader of the farmers pushed past Hollie to stare at Linc.

Linc was so tired that all he wanted to do was sleep. He pointed to the pump. "I fixed it," he said. "I saved the crops."

"What? You must be crazy," Slav said. "Nobody can fix the pump. It's dead."

Linc grinned at him. "Go see for yourself."

A crowd of farmers was gathering around them now. With a good-humored shrug, Hollie said, "Won t hurt to look."

She went to the pump, bent down and listened, put a hand on it.

"It's working, all right!" she shouted.

Everyone rushed to the pump, leaving Linc standing alone. Slav clambered up to the top of the nearest crop tank. A few other farmers followed him, bumping each other in their haste to climb the metal rungs. Others dashed to other tanks.

"The nutrient's flowing again!" someone yelled.

They all rushed back toward Linc. Slav grabbed him in a

bear hug that almost cracked his spine. The others pounded Linc on the shoulders, laughing and shouting, congratulating and thanking him. They half-carried him toward the airlock doors.

"Hey, no—" Linc objected weakly. "Let me go... all I want is some sleep."

They left him at the doors and turned back to their work. They were all smiling. One voice picked up an ancient work song, something about Hi Ho, whatever that was. Other voices joined the chant.

Linc smiled, too, as he headed down the passageway toward his bunk.

He was jolted out of his sleep when one of Monel's guards kicked his door open. Before Linc could get up from the bunk, they were on him, three of them. Two grabbed his arms and yanked him to his feet.

The third said, "Monel wants to see you. Now."

They pushed Linc out into the corridor and led him down to Monel's little room.

He was sitting at the desk, fingering the plastic chips. Jayna sat back in a corner, looking frightened, staring at Monel with big unblinking eyes. Monel himself seemed furious. He was flexing the chips in his fingers, bending them as if he wanted to break them into tiny bits.

For a long time Linc simply stood there, crowded against the doorway by the three husky guards.

Finally, Monel looked up at him. "You tampered with the food tank." His voice was pure acid.

"I fixed the pump."

"You touched a machine when you knew it was forbidden!"

Linc repeated stubbornly, "I fixed it."

"That's a crime! And you know it."

Stepping up closer to the desk and leaning his knuckles on it so that he loomed over Monel, Linc said, "I made sure that we'll have enough food for everybody. So you won't have to decide who's going to eat and who should starve."

"You committed a crime," Monel insisted.

"That's for the priestess to decide; not you."

Monel glared at Linc for a moment. Then a teeth-baring smile spread across his face. "Oh, she'll say it. Don't worry about

that. She'll say it, and you'll be condemned to outer darkness. Or maybe you both will!"

They let Linc go back to his room while the workday wore on. After lastmeal everyone would gather in the meeting room to hear Magda's decision about Linc.

He sat on his bunk and stared at the wall. Magda won't sentence me, she'll thank me. I did it for her. She'll be glad.

But still he worried.

The time for midmeal passed. Linc didn't bother going out to the galley, and no one brought him any food.

But then he heard swift footsteps outside his door. The door slid open, and Magda stepped into his room.

He stood up and reached for her.

"How could you?" she whispered.

He blinked, confused. "What do you mean?"

"How could you cause all this trouble? Fix the pump! You know that it's forbidden to tamper with the machines."

"I didn't tamper with it," Linc said stubbornly, "I fixed it. I figured out how to use the wall screen in the farm section, and the screen told me____"

But her eyes were wide with horror. "Linc! Do you realize what you're saying! No one's allowed to touch the machines. You can't play with viewing screens."

"But the screens know how to fix the machines."

She covered her mouth with one hand and paced the length of the room in four rapid strides. Turning back to Linc, she asked:

"Have you told anybody about the screen?"

"No... I don't think so."

"Good. Now listen to me. When we meet after lastmeal, say nothing about the screen. Or—better yet, tell them Jerlet appeared on the screen without you touching it."

"I was trying to get Jerlet to speak, that's why I turned the screen on."

"Listen to me," she urged. "Don't say that you turned the screen on. I'll tell them that I was meditating and looking for an answer to our problem all through the night. Which is no lie. I was. And Jerlet must have seen me, or heard me... and fixed the pump for us."

"But that's not true," Linc said. "I fixed it. I did it by myself, with my own hands."

She shook her head impatiently. "Monel will destroy you ... both of us, if we give him the chance."

"But I saved the crops. Nobody will go hungry."

"Which is why he's angry."

Linc pounded his fists against his thighs. "The people will be *glad* that the pump's working again. The farmers were singing!"

Magda glared at him. "Linc, people don't behave like machines. Don't you see what Monel will do? He'll say that it's a crime to tamper with the machines, yet you went ahead and did it anyway. This time it worked, but if you're left free to tamper again, you could destroy something and kill us all."

Linc sank down onto his bunk. "That's stupid."

"But that's just what he'll do. And then he'll tell me to get Jerlet to speak to us, and Jerlet will just answer with the same words he always speaks, and I'll have to condemn you. I'll have to!"

"I did it tor you," Linc muttered. "You wanted a miracle."

Her look softened. "I know. But we've got to be careful about how we explain it to the people. You've got to say that the screen came on by itself, and Jerlet told you what to do."

With a frown, Linc said, "And how do I explain why I went into the farms in the first place?"

Magda bowed her head in thought for a moment. Then she came up smiling. "Oh, it's easy! You say that Jerlet came to you in a dream, while you were sleeping, and told you to go to the farms."

"But that's not true!"

She sat on the bunk beside him and put a finger to his lips. "Linc, you couldn't have fixed the pump without Jerlet's help. We both know that."

"But...."

"We'll just *explain* his help a little differently from the way it really happened. It's not really lying; it's... well, it's bending the truth a little, so that the people won't get frightened."

"I don't like it."

"Trust the priestess," Magda whispered. "I want to help you."

With a shake of his head, Linc answered, "But you don't

understand what's really important. I found out that the screens ... they know how to fix things. They show you what to do. We can fix all the dead machines...."

"No!" Magda snapped. "You mustn't say that. You'll frighten everyone ... you'll be playing into Monel's hands." She got up from the bunk and started pacing the floor again.

He looked at her. "Am I frightening you?"

From the corner of the tiny compartment she returned his stare. "Yes," she said at last, in a hushed voice. "Yes .. .a little."

He reached a hand out toward her, and she rushed over and sat beside him on the bunk. She gripped his hands hard, and her fingers were ice cold.

"Magda, we can fix everything...."

"Hush." She bent forward slightly, squeezing his hands with a strength he never knew she possessed. She pressed her eyes shut, and began to tremble wildly.

Linc had seen Magda entrance herself before. She was searching the future, trying to see what would happen, what they should do.

She stopped trembling and eased up the pressure on his hands. She straightened up and looked into his eyes. Her own deep black eyes were rimmed with red and glimmering with tears.

"Linc... you're going to Jerlet." Her voice was a frightened whisper. "You.. .you're going to *see* him, talk with him. But before you do... you'll see Peta again."

Linc pulled his hands away from her. "That's what you see in the future, huh? All that means is that you're going to have me cast out, just the way you cast out Peta."

"No____" she gasped.

He jumped to his feet. "I know how to fix the machines, but you and the others are too scared to see the noses on your faces!"

'You think I'm wrong?" Magda's voice went rigid; it was the priestess speaking now, not his friend.

"The screens can tell us how to fix everything____"

"It is forbidden to touch the screens, or any other machine. You have committed sins and you're telling me that you're not sorry about it. You're telling me that you want to do even worse things."

"I want to save us! If we can learn how to fix all the machines,

maybe we can push the yellow star away."

"You'll make Jerlet angry at all of us."

"No, I want to save us all."

Magda walked past Linc to the door. She stopped, facing it. He could see from the stiff back, the way she held her head high, that every centimeter of her slim body was rigid with tension and anger.

She whipped around and faced him once more. "Linc, I want to help you, but you're going against everything we know. Everything we have. So you fixed one pump. That might have been luck or even a trap...."

"A trap?"

"Yes!" she insisted. "You think you know how to fix all the machines. Suppose Jerlet is just testing you, seeing if you'll tamper with more machines. *You're going against his rules*, Linc! I can't let you do that."

For the first time, Linc felt anger seething inside his guts. "You just don't believe that I can fix them. You believe all this stuff about not touching the machines, but you don't believe me."

"No one can fix them."

"You'd rather just sit here and let one machine after another break down until we're freezing and starving. You'd sit here and let the yellow star swallow us up, without even lifting a finger to *try----*"

"Jerlet's rules are----"

"Don't yammer at me about Jerlet's rules!" he roared. "I don't care about his stupid rules!"

Her mouth dropped open.

Forcing himself to take a deep, calming breath. Linc said more softly, "Magda, listen to me. Suppose this really *is* a test? Suppose Jerlet's trying to find out if we'll use the brains he gave us to find out how to fix the machines?"

"But his rules say we mustn't tamper with the machines."

"We were children when he told us that... so small we couldn't see over the galley tables. And all the servomechs worked then. Things are different now, and Jerlet hasn't said anything new about the machines for a long, long time." He felt a smile trying to work its way across his face. "Remember back then? Remember how I used to boost you up, so you could reach

the top buttons on the food selector?"

She grinned and looked down, so that Linc couldn't see her • face. "Yes____"

"But then the selector broke down...and the servomechs broke down ... all the machines are dying. Jerlet wouldn't want us to sit here and die. with them. He wants us to fix them."

"Then why hasn't he told us so?" Magda asked.

Linc shrugged.

She came away from the door and sat on the bunk beside Linc. "And you've forgotten about Monel."

"Hmp! What about him? After I've fixed a few more machines he----"

She touched his shoulder. "Linc, you might know about machines, but you don't know about people. Monel won't let you fix anything. I can see just what he'll do."

He took her hand, engulfing it in his own. "He won't be able to stop me if you're on my side. Together we can convince the people."

"No." Magda shook her head. "Not if you try to tell everyone that the screens speak, and you want to fix all the machines. It's too much for them to take, all at once. Monel will turn them against you."

"The farmers

"The farmers are glad the pump's working again. But Monel can frighten them into casting you out."

"But if I just tell them the truth____"

"If you tell them the truth, we'll both *be* cast out!" Magda's voice was iron hard now. "I want to save you, Linc, but you've got to help me. I will not allow Monel to become my master. I will not allow him to set up another priestess, I *must* be the priestess here! It's Jerlet's command."

Linc could feel the coldness of outside seeping into him. "You mean that you'll let them cast me out, rather than risk your position as priestess."

"It's what I have to do." Magda's voice was low, almost a whisper, but still unalterably firm.

"It's what you want to do," Linc answered bitterly.

Magda sat unmoving, like a statue. Even her face seemed to have gone hard and lifeless.

Finally, she spoke. "I am the priestess. I can see the future. I

can see into people's minds. I must stay as priestess. No one else can be priestess in my place."

Linc said tightly, "So what happens now?"

Magda still didn't move. Her voice sounded as if it came from one of the ghosts. "You will be brought before me for judgment, because you tampered with the machine."

He said nothing.

"If you confess that you did it, and say nothing about the screen, and tell the people that you followed Jerlet's

commands, I can show you mercy. Monel wouldn't dare insist on casting you out... this time. But if you try to insist that you can reach Jerlet by using the screens, and fix all the machines____"

Her voice trailed off.

For a long moment there was no sound in the tiny compartment except the distant buzz of an air blower. Linc felt the wall hard and unyielding against his back, the softer foamplastic of the bunk beneath him. It all seemed unreal, strange, as if he'd never been in this place before. Yet he had lived all his life here.

"And your vision of the future," he heard himself ask, stiffly, as if he was talking to a stranger. "You said I was going to find Jerlet...and Peta."

Magda nodded slowly.

"That means I'm going to be cast out, just as Peta was."

Her voice was distant, as if it came from the farthest star. "Don't force me to do it. Linc. Please ... don't make me do it."

He didn't answer.

After a long silent time, she got up and left him sitting there by himself.

7

He stayed alone on his bunk for only a few minutes.

Everybody's at lastmeal by now, he thought. He knew what he had to do. Suddenly, It was as clear as the instructions the wall screen had given him about the pump. Magda's vision of the future was right. I'm going to find Jerlet.

He went to the door and stepped out into the corridor. It was empty; everyone was in the galley.

Hurriedly, Linc padded down the corridor to his station at the electrical distribution compartment. He gathered a few tools: the knife he had made out of a screwdriver, a length of metal pipe, some coiled wire. They were the only things that he could vaguely imagine as being helpful on the long trek upward to the region of weightlessness.

H e almost got to the tube-tunnel hatch without being seen. A couple was lounging in the recessed alcove that the hatch was set into, out of sight from the main walkway of the corridor, shadowed from the overhead lights. They were just as startled to see Linc as he was to find them there when he ducked into the alcove.

"Hey what—" The guy jumped and yelled as Linc bumped into him.

"Oh... sorry," Linc said.

The girl was even more upset. "Why don't you watch... say," she recognized Linc. "Where are you going? There's going to be a meeting about you—"

Linc pushed past. "I won't be there."

"You can't run away," the guy said, reaching out to grab Linc. "Monel wants you—"

Linc brushed his hand away. "I'm not running away from anybody. I'm going up to find Jerlet. Tell Monel I'll be back."

They stood there, stunned, as Linc worked the hatch mechanism and swung it back. He stepped through. The last he saw of them was their shocked, wide-eyed faces as he slammed the hatch shut again.

It was dark in the tunnel. Linc stepped out across the metal platform and leaned over the railing. Up and up spiraled the metal steps, winding around the tunnel's circular walls until they were lost in blackness.

How far updid they go? Can I really climb them high enough to reach Jerlet? Linc wondered.

As he started up the winding steps, he told himself, it must be possible. Magda wouldn't have sent Peta up this way if the steps didn't go all the way to Jerlet.

With a sudden shock Linc realized that he had no food with him, and he had missed lastmeal and midmeal. He didn't

feel particularly hungry; more excited and curious. But suppose it takes a really long time to get-up there? I could starve!

He shook his head and kept on climbing. No, Magda's vision said I'd find Peta and Jerlet. I won't starve.

Sleep reached out for him before hunger did. Linc climbed for as long as he could, until his legs grew numb and his eyes gummed together. Then he tried to get out of the tunnel; he didn't want to sleep in this cold, dark, hollow-ringing metal tube. There could be rats here, or other things, unknown things, that were even worse.

The first hatch that he tried was jammed shut. Linc strained against it, but it refused to budge. He climbed up a long, spiraling level. The hatch there was shut, too, but there was a small window in it. Yellowish light slanted across the scene on the other side of the hatch. *The yellow star! Linc* realized. *Closer than ever*.

Then he focused on what the light was showing him. The passageway beyond the hatch was wrecked. Its walls gaped open, and Linc could see stars from outside peering into the shattered, twisted passageway. No one could live in there; it was all outer darkness, even in the warmth of the approaching star.

The hatch at the next level was open and Linc wearily stepped

through. The passageway was intact; it was even warm. Rows of doors Lincd the walls. Groggy from sleepiness, Linc tottered to the nearest door and pushed it open.

It was a small storeroom of some sort, caked with dust and ages of filth. In the light from the corridor, Linc found the control switch on the wall beside the door and flicked it. The overhead panels glowed to life.

No one had been in this room for ages. The thick dust was undisturbed. Not even the tiny footprints of rats or other animals. Linc nodded, satisfied that it was safe. He shut the door, turned off the lights, and stretched out on the grimy floor. He was asleep almost instantly, in spite of the choking smell of dust in his nostrils.

A dream awakened him.

Linc sat bolt upright, sweating and trembling. He had been screaming in his nightmare, and his mouth was open now, but nothing came out except a strangled cough. The dream fled from his memory; the harder he tried to recall, the smaller and smaller it dwindled inside his mind until, within a few moments, it was lost altogether. All he could remember was the terror. Something had been after him and nearly got him.

Still coughing from the dust, Linc got to his feet and left the room. Within a few minutes he was back in the tube-tunnel, shuddering slightly from the coldness of it. He touched the curving metal wall; it was so cold that it hurt his fingertips.

Upward, ever upward. Spiraling around and around until he grew dizzy and had to stop and sit on the steps and catch his breath. Then the cold would seep through his thin coveralls and he'd be forced to his feet again. Exercise warmed him. But his belly growled complainingly. It had been empty too long.

Once when he stopped, he heard scrabbling sounds. Clawed feet scratching across metal. Lots of them. In the echoes of the tunnel he couldn't tell if the noise was coming from below him or above.

Linc pulled the length of pipe from his belt loop and hefted it firmly in his hand. But his hand shook, and not merely from the cold.

He climbed more slowly now, and paused often to listen. The sounds were always there, and seemed to be drawing nearer. He

pounded the pipe against the steps, and the clanging frightened even himself. But within a few heartbeats, the scrabblings of the rats returned.

Linc had suffered an electric shock when he had fixed a faulty wire in the distribution center. He still remembered the feeling.

It was mild compared to the shock he felt when he saw Peta's body.

The boy was lying in a tumbled heap at one of the platforms in front of a hatch. H is clothes were badly chewed up and caked with blood. Linc sank to his knees and stared at the dead body. There was a huge red gash across his forehead. His eyes were open, staring sightlessly at nothingness.

Linc lost track of how long he knelt there, not knowing what to do. Did Jerlet do this? No, it couldn't be. This isn't the weightless domain. Jerlet's not here.

That meant that something, or someone, had killed Peta.

Monet's guards? Did they track him all this way and kill him? Linc shook his head. Impossible. Why would they? And even Monel's guards couldn't deliberately kill somebody.

As he knelt there, a tiny tick-ticking sound scurried across the platform. Linc looked down to Peta's bare feet. A pair of rats were sniffing there, their red eyes glittering in the darkness.

Linc swung his pipe at them but they scampered away unharmed and disappeared. The pipe clattered across the metal floor plates.

Can't leave Peta here!

Linc retrieved the pipe, then hoisted Peta's cold body to his shoulder. He worked the hatch open and stepped into the passageway on the other side..

For the first time he realized how little weight there was here. His own weight had been diminishing steadily, but he had been too sleepy and hungry, and too tired, to notice it. Peta felt as light as a bunk mattress, and Linc was almost tempted to try gliding down the passageway.

There's got to be a deadlock here someplace. Linc told himself as he tiptoed down the passageway. Got to put Peta safely away into the outer darkness.

The passageway seemed strange. The ceiling was lower than any Linc had ever seen before. There were doors only on one side

of the corridor. And the floor curved sharply upward. It looked as if Linc were walking uphill, but it felt to his tired legs as if he was on a perfectly flat floor.

The deadlock was at the end of the passageway, blocking it completely, a huge, heavy metal hatch with the strange symbols that the ancients had put there.

Linc studied it for along while, to make certain it was exactly the same as the deadlock in the Living Wheel. It seemed the same; as if it had been made by someone who couldn't possibly make two things differently.

He didn't like the idea of staying there any longer than he had to, but Linc worked the deadlock very carefully. He went exactly by the ritual J erlet had taught them so long ago, for he knew that to deviate from the ritual would mean instant death.

Carefully he touched the buttons set into the wall alongside the hatch in the proper order and watched the lights inside each button turn on, just as they were supposed to. When the correct ritual had been performed, the inner hatch slid open, and Linc peered into the glittery metal chamber uf the deadlock itself.

Strangely, he found that his eyes .nisted over and he was nearly crying as he gently laid Peta's body in the cold metal chamber. He looked so little, so helpless.

"Soon you will be outside," Linc whispered the words of the ritual, "with all the others who have ever lived. You will become a star, Peta, and you will never feel cold or alone again."

Linc went back to the keyboard to finish the ritual. The hatch closed and the red light over it flashed on. Linc could hear a faint hum and *whoosh* of the outer hatch opening and Peta's body taking flight for the stars. Then the humming stopped and the red light turned off.

It was done. Peta was launched into the outer world, as was proper. Yet Linc felt no happiness about it. He had done the correct thing, but it made him sad and somehow lonelier than he had ever felt before in his life.

Grimly, he made his way back along the passageway to the hatch that opened onto the tube-tunnel. Hunger and cold were his only companions now.

Except for the rats.

The tunnel was endless.

Linc pushed on, up the eternally-spiraling steps, eyes burning from lack of sleep, hands shaking from the cold. It was dark in the tunnel, the only light came from an occasional window. The starlight carried no warmth with it. Somehow the light from the yellow star never reached these windows; its warmth never touched the metal chill of the tunnel.

At his back Linc could hear the rats. At first they had been faint, distant. But now their scrabbling claws scratched clearly on the metal steps. Their screeching chatter came echoing off the curved tunnel walls.

Linc pushed on. His weight was getting lighter and lighter, but his strength was ebbing away fast, too, leached from his body by the cold and hunger.

Can't stop, he told himself. If you stop you'll fall asleep. And the rats will get to you----

He stumbled. He fell. He picked himself up. He spread out his arms and soared effortlessly. The tunnel was no longer spiraling up over his head. It was flat and open and there was no up or down. He laughed aloud, and heard a strange crackling haish voice echoing off the metal walls of the tunnel.

He floated almost weightlessly. *Floating*, *floating*— Everything was dark around him. Impenetrable black. He was alone in the darkness, without even a star to watch over

him. Nothing... no one... alone ---- Something deep inside

Linc's mind was telling him to stay awake, but the voice was far, far away.

Alone... all alone... and cold.... It didn't make any difference if his eyes were open or shut. There was nothing to see. The darkness was complete.

Linc drifted, weightless. His eyes closed. The cold seemed to wrap him tenderly now. It didn't hurt anymore. His aching muscles relaxed. He floated on nothingness.

Nothingness.

Pain awoke him. Not a sharp stabbing pain, but a far-off dull kind of discomfort that comes when there's a lump in your slipper. Or when a rat begins chewing on a leg that's numb from cold.

Linc shook his head to clear it. He wasn't certain that he was awake----

And then he saw the red gleaming eyes, heard the chittering of thousands of rats, felt them crawling over his body. A warm furry blur brushed across his face.

He screamed and jackknifed, doubling over weightlessly and sending his body twisting madly across the dark tunnel in a cloud of equally-weightless rats. They screamed, too, and scattered.

Linc bounced off a bitingly-cold metal wall and felt around his waist for the pipe he had been carrying, the wire, anything he could use as a weapon. His hand felt warm sticky blood.

Thousands of glaring red eyes surrounded him in the darkness. He kicked out, flailing arms and legs as he edged his back along the burningly-cold wall.

The rats flowed back away from him. They chattered among themselves as if to say. Stay clear. He's still strong enough to fight. Wait a while. He won't last long.

Linc kept edging away from the malevolent eyes, his back to the wall. But in the dark and weightlessness he couldn't tell which way he was going. Which way is up? he sobbed to himself. How can I tell?

The rats hovered just out of his reach, waiting, chittering.

Linc's feet were still dangling in midair. His only contact with the tunnel was the wall at his back. He pushed sideways on the frozen metal with the palms of his bloody hands, reaching out with his feet for some solid contact.

The steps. His feet touched a step. The rats followed him, chattering, patient.

Sinking to his knees on the steps, Linc forced his mind to remember: *The railing. When you were going up the tunnel, the rail was on your left and the wall was on your right.*

,He reached out with his left hand. Nothing. He peered into the darkness but he couldn't even see his own hand. He reached out farther. His hand bumped into the wall.

Suddenly Linc was sweating. It was a cold sweat trickling down his face and flanks like rivers of ice, making him shiver. He edged away from the wall and reached out with his right hand. It touched something warm and furry that shrieked. Linc yelled, too, and pulled the hand back. Tremblingly, he forced himself to reach out again. *Yes, there's the rail*.

Rail on the right. Wall on the left.

Thai means I'm turned around. I'm facing down the tunnel.

Something in him didn't believe that. Somehow he knew that if he turned around and started down the tunnel in the reverse direction from the way he was facing now, he would be walking into an endless fury of rats, heading away from Jerlet, going back the way he had so laboriously traveled.

He squeezed his eyes shut and tried to concentrate. He pictured all the times he had been in the tunnel, including the long journey he was on now. And he saw himself climbing up the spiraling steps with the rail on his left and the wall on his right.

No, the frightened voice within him screamed. You're wrong. I know you're wrong.

Linc opened his eyes. The rats were edging closer, glowering at him, saying, Make up your mind. Either way, it doesn't matter. We'll get you no matter what you do.

Every instinct in Linc's body was screaming for him to go forward, not to turn around, not to turn his back to the rats.

But his memory, his mind showed him clearly that he must travel with the rail at his left if he wanted to continue upward, toward Jerlet.

Forcing down a shaking shriek of fright, Linc slowly turned and grasped the rail firmly with his left hand. His feet floated slowly off the steps.

He took a deep shuddery breath, grasped the freezing, skin-sticking rail with both hands, and pulled himself into flight. He soared through the darkness like an arrow... upward toward Jerlet. *I hope!*

The rats followed, screeching.

But Linc could use his hands to pull himself along the spiraling railing, speeding along faster than the rats could follow. Hand over hand, racing faster and faster through the darkness, while the red eyes and evil voices dwindled behind him.

 $\label{lem:eq:linear_loss} Even\ if\ I'm\ going\ in\ the\ wrong\ direction,\ Linc\ thought,\ at\ least\ I'm\ outdistancing\ them.$

He was almost feeling good about it when he slammed into something utterly hard and unyielding. The darkness was split by a million shooting stars of pain.

And then the darkness swallowed him completely.

He awoke slowly.

And when he opened his eyes for the briefest flash of a moment, he wasn't sure that he had really awakened.

Dreaming, he told himself. I'm dreaming.

He cracked his eyes open again, just a slit, because of the brightness.

Squinting cautiously, he saw that he was in a room. A small room, not much bigger than his sleeping compartment back in the Living Wheel. But it was brilliant with light, light everywhere, white and clean and dazzling. And warm! The warmth flooded through him, soothing and gentle. Linc felt warmer than he ever had since he had been a tiny child.

Then the dream began to turn into a nightmare. He felt good enough to sit up, but found that he was unable to move. He could raise his head a little, but that was all. The rest of his body seemed to be paralyzed. He looked down at himself and saw that broad soft straps were holding down his arms and legs. Another strap crossed his middle so that he couldn't move his torso much.

There were some sort of coverings wrapped around his hands and feet. He was dressed in a clean, crisp white gown with short sleeves.

And there was a slim, flexible tube connected to his left arm, just above the inner elbow.

Suddenly frightened, Linc twisted his head around and saw that the tube was connected to a green bottle that was hanging upside down from a support on the wall. The other end of the

tube was inside his arm. The place where it entered his flesh was covered by something white and plastic looking. Linc *could feel* it inside him, and it made his flesh crawl.

"What is this place?" he yelled out. "Where am I? What are you doing to me?"

Only then did it occur to him that he had no idea at all of who "you" might be. The ship was much vaster than he had ever imagined. There might be all sorts of people living in it—

Linc let his head sink back on the bed. Don't panic, he told himself. At least you got away from the rats.

But the tight knot in his stomach didn't feel any better. Not for a moment. He glanced up at the tube going into his arm again, then turned his face away.

What are they doing to me?

He must have fallen asleep, because he was startled when the door banged open. Lifting his head as far as he could, Linc saw a shaggy, hugely fat old man push himself through the doorway, barely squeezing through. He floated weightlessly toward the bed, like an immense cloud of flesh wrapped in a gray, stained coverall that barely stretched across his girth.

"You finally woke up." His voice was as heavy and gravelly as his body and face.

"Who... who are you?"

The old man looked mildly surprised. "Don't you recognize me? I'm Jerlet."

"No you're not," Linc said. "You don't look anything like Jerlet"

9

A slow smile spread across the old man's craggy features. His face was shaggy with stubbly white hair across his cheeks and chin. The skin hung loose from his jowls and looked gray, not healthy. His hair was dead white and tangled in crazy locks that floated every which way in the weightlessness.

"Don't recognize me, huh," he said. He seemed amused by the idea.

He started unfastening the straps that held Linc down. "Don't move that arm," he warned, "until I get the l.V. out of you—"

Ivy? Linc wondered. That was something that grew down in the farms.

The old man floated lightly over the bed, to the side where the tube was, his huge bulk blotting out the light from overhead as he passed over Linc.

"Yep," he muttered in a throaty deep rumbling voice, "it's been a helluva long time since I cut those training tapes for you squirts. You're practically an adult— What's your name?"

"Linc."

"Linc... Linc----" The old man's face knotted in a frown of

concentration. "Hell, been so long I don't even remember myself. Got to look back at the records."

Linc was studying his face. The more he watched it, the more he had to admit that there *was* some resemblance to the Jerlet who showed himself on the screen down in the Living Wheel. But while the Jerlet he knew from the screen was old, this man seemed *ancient*. Even his hands were gnarled and covered with blue veins. Yet his body was huge, immense.

Those gnarled old fingers withdrew the tube from Linc's arm and covered the wound with a patch of plastic so quickly that Linc couldn't see the wound itself.

"The l.V.'s been feeding you since I brought you here... you've been out cold for nearly seventy hours."

"Hours?" Linc echoed.

The old man made a sour face. "Yeah, you squirts probably don't measure time that way at all, do you?"

Linc shook his head.

"Okay, see if you can sit up. Go easy now....."

Linc pushed himself up to a sitting position, then gripped the edge of the bed to keep from floating away. Weightless... maybe this is Jerlet's domain, after all.

"Guess I've aged a bit," he was saying. "Bloat like a gasbag up here in zero g. But listen, son—I am Jerlet. The one and only. N obody here but me. Those pictures of me you see on the screens down in your area, well, those tapes were cut a long time ago. I was a lot younger then. So were you."

Linc was barely listening. He was staring down at his bandaged arms and legs. "You saved me from the rats."

Shaking his head, the old man said, "Nope, you saved yourself from them. I just saved you from bleeding to death, or freezing. You ran smack into my electrical fence and knocked yourself out. I had to come out and get you. Wasn't expecting visitors. But I'm glad you came." •

"You... really are Jerlet?" Linc asked.

He bobbed his head up and down, and his tangled hair waved around his face.

Linc scratched at his own shoulder-length hair and realized that it too was floating weightlessly.

"Look, kid, I know I look kinda shabby, but I've been living alone up here for a lotta years... since you and your batchmates were barely big enough to reach the selector buttons in the autogalley."

"Why did you leave us?"

Jerlet shrugged. "I was dying. If I had stayed down there, in a full Earth gravity, my ol' ticker would've popped out on me."

"What? I don't understand?"

Jerlet smiled at him, an oddly gentle smile in that stubbly, shaggy face. "C'mon, I'll explain over lunch."

"What's lunch?"

"Hot food, sonny. Best in the world ... this world, at least."

Jerlet led Linc out of the little room and down a narrow passageway that curved so steeply Linc couldn't see more than a few paces ahead. Yet it was all weightless.

"It's not really zero gravity here," Jerlet said as they glided along the passageway. "Just enough weight here to keep something down where you put it. But with your oneg muscles this must seem like total weightlessness."

Linc nodded, not really sure he understood what the old man was rumbling about. *He must be Jerlet, all right.* Linc told himself. *But he sure doesn't look the way I thought he would!*

They passed a double door. Jerlet nodded at it. "Biology lab; where you and the rest of the kids were born. Show you

later."

Linc said nothing. Jerlet's words were puzzling.

Jerlet squeezed his bulk through a doorway, and Linc followed him into another small room. But this one had a round table and several soft-looking chairs in it. One wall was covered with buttons and little hatches and strange symbols.

"A food selector!" Linc marveled. "And it works?"

"Sure," Jerlet answered heartily. "Look at the size of me! Think I'd let the food recyclers go out of whack?"

Linc studied the buttons and the symbols on each one.

Jerlet loomed beside him. "Go on! Pick anything you want... it all works fine."

"Uh—" Linc suddenly felt stupid. "How do you know which button to push? I mean, back home we knew which button gave what kind of food... before it all broke down—"

"Broke down?" Jerlet snapped. "You mean the repair servomechs didn't keep it going?"

"They broke down, too...."

"Then how do you ... you cook the food yourselves?"

Linc nodded.

The old man looked upset. "I didn't think the machines would fail so soon... the repair units, especially. I'm not as smart as I thought I was." He put a hand on Linc's shoulder. His voice sounded strange, almost as if he was afraid of what he was saying. "How... how many of you... are still alive?"

Linc shrugged. "More than both hands."

"Both hands? You don't know the number? You can't even count? What happened to the education tapes?"

Somehow Linc felt as if he had hurt the old man. "I can name everybody for you. Would that be all right?"

Jerlet didn't answer, so Linc began, "There's Magda, she's

the priestess, of course. And Monel, and Slav____" He went

through all the names of all the people. He almost said Peta's name, but left it out when he remembered.

"Fifty-seven of you," Jerlet muttered. He seemed shaken. He shuffled slowly from the food selector to the nearest chair and sat down heavily, despite the minuscule gravity. "Fifty-seven. Out of a hundred. Nearly half of you "dead in less than fifteen years—" He sank his face in his hands.

Linc stood by the food selector wall, helpless, and watched the old man, his huge bloated expanse of flesh squeezed into the graceful little chair. A far part of Linc's mind marveled that the chair's slim legs didn't buckle under Jerlet's gross weight, despite the low gravity.

The old man looked up at last, and his eyes were rimmed with red.

"Don't you understand?" His voice was rough, shaky, almost begging. "I *made* you! You're my children, just as surely as if I was your father... I made you, and then I had to leave. Now nearly half of you are dead ... my fault—"

Linc stared at him.

Jerlet pulled himself out of the chair and took a shambling step toward Linc.

"Don't you understand?" His voice rose to a roar. "It's my fault! You were going to be the beautiful new people, the best .generation ever! You were going to reach the new world ... raised in love and kindness.... BUT YOU'RE NOTHING BUT A PACK OF IGNORANT HOWLING SAVAGES!"

His voice boomed off the walls of the tiny room. Linc winced and backed a step, bumping into the selector buttons.

"Fifty-seven of you," Jerlet bellowed. "Stupid, superstitious savages." He took a couple of faltering steps toward Linc, then stopped, gasping, his huge body wracked with shuddering panting sobs.

"No-" he gasped. "Not now...." He seemed to be

muttering to himself. But then his eyes focused on Linc, and he could see that the old man's eyes were as red and burning as the rats'. But not with hate, Linc knew. Jerlet's eyes were filled with pain.

"You don't... understand... any of this," the old man puffed, his voice low and rasping now. "Do you? It's all... beyond you—"

Linc wanted to say something, to reach out to him or run away, do *something*. But he was frozen where he stood. Even his voice seemed paralyzed.

Jerlet waved a meaty hand, feebly, at Linc and staggered out of the room.

He's crazy. Linc thought. Like Robar, when he tried to go through the deadlock with Sheela's body. What he says doesn't make any sense.

Linc wondered if he should try to follow the old man. Then he noticed that some food had dropped into the selector's pickup bin. *I must have touched some of the buttons when I backed into the wall*, he realized.

The food was neatly packaged, sitting in little shining boxes on a tray. Linc looked up toward the door, then decided, *I'd better leave him alone. If he really is Jerlet, he'll come back to me.*

He picked up the tray and took it to the table. Unwrapping each box, he blinked at the strange sights. One box contained a liquid that was an odd color, almost like one of the colors used in the wiring back at the Living Wheel. It felt cold to his lips. The second box was an oblong metal container filled with something that looked almost like meat. When Linc peeled off the transparent film from its top, the stuff began to steam. Linc smiled. It *smelted* like meat.

The third box was also cold, and filled with something smooth and featureless and white. Linc dug a fingertip into it, and tasted the tiny sample. *Sweet!* He had never tasted anything like it before.

Without thinking about additional selections he might make, Linc sat down at the table. This stuff was strange, but it was good food.

So his first meal in Jerlet's domain consisted of orange juice, soyburger, and ice cream.

* * *

Linc slept right there in the eating room. The floor was soft and warm, so he stretched out and went to sleep almost immediately.

In his dreams he saw Jerlet and some of the people from the Living Wheel—Magda was trying to tell him something, but Monel got between them somehow. It was all mixed up and strange.

Then he was falling, in his dream, falling through darkness with the evil red eyes of the rats chasing behind him. But the eyes all merged into one single huge red eye with a great hollow booming voice roaring after him. Linc fell through the empty darkness, cold, alone, helpless....

And woke with a shock. He was lying face down on the soft floor of the eating room. Soaked with sweat, hot, mouth open in what must have been a yell of terror.

He sat up.

He felt wide awake. The dreams quickly faded into the dark parts of the mind where forgetfulness covers everything.

Drawing his knees up under his chin, and wrapping his arms around his legs. Linc tried to concentrate and think.

Almost immediately he smiled to himself. "Magda, wherever you are, forgive me. I'm not going to meditate. I'm not going to ask for Jerlet to point out the way I should go. I have to think this out for myself."

It was funny, but in a bitter way. Here I nearly kill myself to find Jerlet, and it turns out that he's crazy. A new thought struck Linc's mind, and even his faint smile vanished. Maybe he's dangerous! Maybe he'll try to hurt me... kill me. He sure looked angry at lastmeal. Sounded it. too.

Carefully, Linc pushed the door open and peered down the narrow, strangely-curved passageway. No one in sight. He tiptoed down the passageway and tried several other doors. No sign of Jerlet, although he did find a couple of sleeping rooms, complete with sonic showers and bins full of strange-looking clothes.

All the machines worked up here! Linc saw that the lights were all glowing faithfully. He stepped into one of the bedrooms and the door slid shut behind him automatically. He tried the water tap, a shining metal faucet set above an equally-sparkling

sink, and water flowed sweet and cold from it.

I'll bet the sonic shower works, too.

Locking the door to the passageway. Linc quickly stripped off the formless white robe Jerlet had dressed him in and showered. The tingling vibrations all over his skin made him feel better than he had since he'd been a child. *No standing in Linc. No worrying about the power running down before your turn comes.*

He examined the clothes that were stored in the bins next to the bed. They seemed too small for Linc to wear, but when he tried on one of the shirts, it stretched fo fit his body exactly. The pants, too.

And there are different colors!

One of the wall screens was strangely shaped, long enough to reach from ceiling to floor, and so narrow that it was barely as wide as Linc's shoulders. And it was bright; it reflected everything in the room very clearly. Linc had never heard of a mirror before, but he automatically used this one as he tried on clothes of different colors.

He finally settled on a high-necked shirt that was almost the same shade of blue as his eyes, and a dark-brown pair of pants. He found slippers in another bin, and even they adjusted their shape magically to fit his feet snugly.

"Hello!"

Linc jumped as if an electric shock sparked through him.

"Hello!" Jerlet's rough, husky voice called again. "Can you hear me?"

It was coming from a speaker grill in the ceiling, Linc realized. There was a viewing screen on the wall facing the bed, but it was dark and dead.

"Look... I don't even remember your name, dammit. I, uh, listen son, I got very upset yesterday and I acted like an idiot. I'm sorry."

Linc saw that there was a small keyboard on the table beside the bed. Frowning, he wondered if he should touch any of the buttons.

"It won't do you any good to hide from me. You'll have to come out for food sooner or later," Jerlet was saying. "And I really want to help you, son. Really I do. The way I acted yesterday... well, I'll explain it if you'll give me a chance. At

least turn on one of the screens so I can talk to you face to face... what in hell is your name, anyway. I know you told me, but you mentioned all those other names, too, and now I can't remember... guess I'm getting old."

Linc stepped across to the table where the keyboard buttons glowed in their different colors. He felt as if his head was spinning; not just from the low gravity, but from the effort to decide what he should do. Slowly, reluctantly, he reached out for the buttons.

"If you want to turn on a screen," Jerlet was saying, "just punch the red button on any of the keyboards—"

Linc's outstretched finger touched the red button. Jerlet's haggard, stubbly face leaped into view on the wall screen across the room.

He was still saying earnestly, "I know I acted like a madman last night, but I can explain... oh, there you are!"

Linc gazed straight into Jerlet's eyes. They looked sad now. The pain was still there, but it was deeper, covered over by sadness.

"Linc. My name is Linc."

Jerlet bobbed his head eagerly, making his fleshy jowls bounce. "Yep, that's right. Linc. You told me, but I couldn't remember."

Linc started to reply, but found that he had nothing to say.

Jerlet filled in the silence. "I see you've cleaned up and changed clothes. Good! How about meeting me in the autogalley? Got a lot of things to show you."

"The autogalley?" Linc asked.

"The eating room. Where the food selector is."

"Oh.... Okay."

"Do you know how to find it from where you are?" Jerlet asked.

Linc nodded. "I can find it."

"Okay, good. I'll meet you there." The old man seemed genuinely happy.

He was still smiling when he eased his bulk through the doorway of the autogalley and glided toward Linc. He stuck out a heavy, short-fingered hand.

"Linc, I dunno what kind of customs you kids have put together down in the living section, but it's an old human custom

for two men to shake hands when they meet."

Thoroughly puzzled. Linc put his hand out.

•Jerlet waggled a finger at him. "No, no... the right hand."

With a shrug, Linc raised his right hand and let Jerlet grasp it firmly. The old man's a lot stronger than he looks, he realized.

"Good!" Jerlet beamed. "Now we're formally met. Got so much to show you." He rubbed his hands together. "Let's start with the food selector. Show you how that works."

They are well. Jerlet showed Linc all sorts of new foods and tastes that he had never known before. As the food began to make a comfortable warm glow in his middle, Linc found his worries and suspicions about Jerlet melting away.

Then they were up and moving through the nearly weightless world of Jerlet. The old man showed Linc the power generators, the mysterious humming machines that kept electricity going out to all parts of the ship. Then the master computer, with its blinking lights and odd sing-song voices. And a room full of servomechs, standing stiffly at attention, mechanical arms at their sides, sensors turned off.

"Are they dead?" Linc asked, his voice hushed.

"You mean deactivated," Jerlet replied in his normal booming tone. "Here... look, lemme show you." He took a tiny control box from a shelf near the door and touched one of the buttons studding its top. The nearest servomech came to life. Its sensors glowed; it pivoted slightly to face Jerlet, moving on noiseless little wheels.

"See?" Jerlet said. "They all work fine."

Linc shook his head. "Down in the Living Wheel they all died, a long time ago."

Jerlet snorted. "Well, we'll have to do something about that."

He took Linc down the passageway and through a set of double doors into a strange, dead silent room. It felt odd. Linc knew he had never been here before, yet there was a faint odor of something that made his spine tingle and the back of his neck go shuddery. The room was filled with strange glass spheres, long looping tubes, viewscreens, desks, other things of glass and metal and plastic that Linc couldn't even guess at.

"Genetics lab," Jerlet said. His voice sounded odd; half-proud, half-sad. "This is where you were born, Linc. You and the others down in the living section."

"Here?"

Jerlet nodded. "Yep. Took the sperm and ova from those cryofreezers, back behind the radiation shielding over there," he pointed to a heavy-looking dull metal wall, "and brought the fetuses to term in these plastic capsules. All very carefully done, very scientifically. Each specimen picked for its genetic perfection. Each resulting infant nurtured as meticulously as the psychologists could hope. A generation of physically and mentally perfect children. Geniuses... left to live in an idiotic environment."

Linc said, "I don't understand you."

Jerlet waved his pudgy hands about the laboratory."! was in charge of the project. I made you. Right here. This is where you were all created. By me."

10

Before Linc could ask any more questions, Jerlet swept him through the genetics lab and back out into the passageway.

"You haven't seen the best part yet," he said.

Totally puzzled by everything he'd seen and heard so far. Linc quietly followed the old man through a hatch into a tight little metal room. It felt cold and scary, like a deadlock. *Bui even if he's crazy, he wouldn't put us both in a deadlock*, Linc told himself. And a tiny voice asked back, *Would he?*

Jerlet's massive bulk seemed to completely fill the metal chamber. Linc couldn't breathe.

"Not too comfortable in here with both of us," the old man muttered as he fingered a complicated row of buttons. "Not very comfy in here by myself, come to think of it."

The top of the chamber swung open, and Linc realized it was another hatch. Jerlet grinned at him, then pushed against the sides of the chamber and floated up through the overhead hatch. Linc took a deep breath, glad to feel un-squeezed.

"Come on up and see the view!" Jerlet called. His voice suddenly sounded very distant and hollow.

Linc crouched slightly and sprang straight up. He shot through the open hatch and past Jerlet's floating obesity____

And nearly screamed in terror. He was in the outer darkness! Surrounded by stars and the blackness of the outside where there was no air or warmth or----

He felt a hand grabbing at his ankle and Jerlet calling, "Hey, whoa, take it easy." He realized that there was warmth and air to breathe.

Jerlet was chuckling as the two of them floated slowly in the

star-flecked darkness. Yet it really wasn't dark, either. The stars glowed all around them, over their heads, below their feet.

"What is this place?" Linc asked. His voice seemed to float, too, strange and hollow and lost in vast distance.

"Used to bean observatory," Jerlet's voice came back toward him, echoing.

Slowly, Linc's eyes adjusted to the dim light. They were in a vast round room made almost entirely of glass: transparent plastiglass, actually, although Linc didn't know that yet. The splendor of the stars surrounded them—stars powdering the blackness of infinity with endless points of light. White stars, blue stars, red stars, yellow stars... stars beyond counting, and even swirls and loops of brightness that glowed with strangely cool blues and pinks.

Linc felt his jaw hanging open as he floated in true weightlessness, hanging in the darkened observatory dome, gaping at the enormity of the universe.

And then he glanced downward, toward where his feet happened to be pointing, and saw the yellow star that was so close. He closed his eyes against its glare, but still its image burned against the inside of his eyelids.

"We'll be there soon," Jerlet's voice sounded near to him.

Linc opened his eyes and saw the old man's face next to him, haloed by the after-image of the yellow star. "It's coming to swallow us," Linc whispered. "It will kill us all in fire."

Jerlet's booming laughter surprised Linc. It echoed all around the huge dome.

"You've got it just about entirely wrong, son," the old man said. "The yellow star isn't coming toward us, we're heading for it. And it's not going to kill us—it offers us life. Hope. If we can get to it before this bucket falls completely apart!"

Linc started to say, *I don't understand*, but it had become such an overworked Linc that he felt ashamed to use it again.

"C'mon down this way," Jerlet tugged at his wrist, "and I'll show you something."

They swam weightlessly through empty air down to a patch of shadows that were deeper than the darkness of the rest of the dome. A spidery framework took shape as they approached, and Jerlet reached out a practiced hand for it.

"Careful," he said to Linc. "Slow your speed or you'll hurt

yourself when you hit the deck. Just 'cause you've got no weight doesn't mean you've got no inertia."

He can never say more than three words in a row that make sense. Linc thought. He always uses words I never heard before.

The deck was made of cold metal, and Linc could see that several desks and odd-looking instruments were attached to it. The biggest loomed far over their heads; the cylinder of metal struts that Jerlet had grabbed a few moments earlier.

"Telescopes," Jerlet said. "Devil's own time keeping them aligned right. Our closing rate is outrunning the old computer program and I haven't figured out how to update it. Gyros must be wearing out, too."

Linc shook his head and said nothing.

Jerlet squeezed his soft body into a seat behind one of the desks. "Take a look at this screen," he said as he touched some buttons on the desk top. Linc noticed that the desk top seemed to be nothing but buttons, row upon row of them.

The screen lit up and showed a fiery yellow ball that seethed and shimmered and shot out tongues of what could only be pure fire.

"That's the yellow sun we're heading for," Jerlet said. "I tried for years to find out if the old generations had a name for it, but the tapes don't have their star catalogues on 'em. Not anymore, anyway. Or maybe I just haven't found the right tape— Anyway, I've named it Baryta, in honor of its color and in memory of my long-lost education in chemistry. That's the name for our star: Baryta."

A tiny voice inside Linc's head began to whisper, He's sounding crazy again.

Linc watched Jerlet's face. The slanting light from the yellow star threw weird long shadows across his stubbly jowls and strongly-hooked nose. The creases under his eyes and around his mouth became deeply-shadowed crevasses. The glow from the little viewscreen .where the blazing star smoldered wasn't enough to penetrate the shadows.

"Now my frightened-looking friend," Jerlet smiled up at Linc, "take a look at this____"

H e touched another set of buttons, and the screen went blank for a moment, then showed a picture of a bluish-green circle. It was flecked with white spots. It seemed to be hanging in outer

darkness, because all around it was nothing but black.

"The new world." Jerlet's voice was barely audible now, a low rumble of hope and awe. "It's a planet, Linc. A world that orbits around Baryta. I call it Beryl. It's the destination that this ship has been heading for, for who knows how many generations."

"A... world?"

"An open, beautiful, free world, Linc. With good air and clean water and more room than any of us could even imagine. Like the old Earth, except better: cleaner, freer, newer. It's our destination, Linc. Our new home. That's where we're

going!"

Slowly, Linc began to learn.

With Jerlet as a teacher, and the ship's computer and memory tapes to help, Linc began to understand the who, the how, and the why of life.

The ship was incredibly old, so old that no one—not even the computer and its memory tapes—knew how long it had been sailing through space. Linc saw that the Living Wheel, the section where he had lived all his life, was actually the outermost wheel in a series of twenty concentric circular structures. The tube-tunnels linked them together like spokes that radiated outward from the central hub. The hub was Jerlet's domain, permanently weightless. The Living Wheel, turning endlessly on the widest arc of all the twenty wheels, was in a one g, Earth-normal gravitational condition.

The origins of the ship were shrouded in mystery, but the computer tapes made it clear that the ship's oldest generation was forced to leave Earth, sent away to roam the stars against their will. Watching the men and women who spoke from the computer's viewscreen, Linc saw that they regarded the Earth as evil and corrupt.

But when the history tapes showed pictures of Earth on the viewscreens, the pangs of ancient memories twisted inside Linc and made tears flow. All the old stories he had seen as a child, before the machines had died down in the Living Wheel: open skies of blue, bright soft clouds of purest white, mountains with snow on their shoulders, streams of clear water, grass and farms and forests that stretched as far as the eye could see. Cities that gleamed in the sunlight and sparkled at night. And people!

People of all ages, all sizes, all colors. By the uncountable multitudes. People everywhere.

Not everything he saw of Earth was good. There, was sickness. There was death. There was violence that turned-Linc's stomach—gangs beating people on city streets, strange machines that spewed fire, people lying dead and twisted on the streets.

Now I know why Jerlet warned us against violence. Linc told himself.

But even at its worst, it was clear to see that Earth was a beautfiul world. It made the cold metal walls of the ship seem like a prison to Linc.

"Beryl's a planet that's very much like Earth," Jerlet said one evening as they watched the ancient tapes together. The viewscreen was showing a broad grassland with strange, long-tailed beasts thudding across the landscape on hooved slim legs. "It'll be even better than Earth. U ntouched. Our new world. Our new Eden."

"When will we get there?" Linc asked.

"Not when, son... if."

As Linc learned more of the history of the ship, he soon realized how badly the machines had fallen apart. Here in Jerlet's domain everything worked well, but that was only one tiny section of the vast ship. Most of the other sections were shattered, ruined, decayed beyond all hope of repair.

"Some of the machines are still working down in the Living Wheel," he told Jerlet.

"I know," the old man said. "We spent the best years and the best people we had among us to set you kids up in a strong, safe area. But it might not have been good enough. We're in a race against time."

Again and again Jerlet told him the story. How the ship had come to a planet almost like Earth. How the people aboard had decided not to stop there, but to look for a world that was *exactly* like Earth.

"Beryl is that world... but it might be too late for you kids. It's already too late for me."

Jerlet explained it all. Time after time. He kept talking about the ship's bridge, and how important it was to make the

machines there work again. Slowly Linc began to realize that he was speaking of the Ghost Place, and the "ghosts" were Jerlet's friends and companions who had been killed in some terrible accident.

The old man taught Linc how to read and count, how to work the computers, how to understand the strange words that were needed to run the ship. And every night, during dinner and far into the night, until Linc nodded and fell asleep, Jerlet would tell his own story.

The ship was never designed to function for so long without complete overhaul and repair. Although the ancient generations had been very wise, still they could not keep the ship's machinery from slowly deteriorating.

As the ship cruised blindly through the depths of interstellar space, seeking the unknown world that was exactly like Earth, the machines that kept the people alive began to break down and die.

Whole sections of the ship became unlivable. The sections that remained intact were quickly overcrowded with too many people. Tempers flared. Violence erupted. And for generations the people of the ship lived in separate warring groups, each hating all the others, learning to fear strangers, to fight, to kill.

The cycle grew tighter and tighter. As more years passed, more and more of the ship's complex machinery broke down. It became a greater struggle to survive, to keep the air pumps working and the farm tanks productive. Bands of marauding killers skulked through the tube-tunnels, breaking into living areas to steal and murder.

"The most ironic part of all," Jerlet would say each night to Linc, "was that there was a scientific renaissance going on up here at the same time."

In the hub of the ship a few dozen people had established themselves in some degree of comfort. They had control of the ship's main power generators, and could turn off the supply of electricity—which meant warmth, air, life—to any group that displeased them. They tried to put an end to the roving bands of looters, but were never successful at it. On the other hand, the looters never tried to harm them.

The men and women who lived in the hub were scientists. Never more than a .handful, they still managed to maintain themselves in relative peace.

"The things they learned!" Jerlet would always shake his head at the thought.

Their work in genetics reached the stage of perfection where they could, if they wanted to, create perfectly normal human children in their lab. The physicists probed deeply into the relationship of matter to energy, in an attempt to find a way to break free of the confines of the dying ship.

"They learned how to turn solid objects into a beam of energy, and then re-assemble them back into solid objects again, the way they were when they started," Jerlet said. "But it took too much power for anything we really needed. We couldn't get a rat's whisker off the ship and back to Earth. But when we get close enough to Beryl's surface, you'll be able to whisk yourself down to the planet's surface in an eyeblink."

"But us, the kids down in the Living Wheel," Linc always asked. "How did we come about? Why did you make us?"

And Jerlet would smile.

"We finally found a star like the Sun, and it had a few planets around it, although we were still too far away to see if any of the planets were truly like Earth. But we decided to take the risk. We *had* to...we knew the ship couldn't last much longer, no matter what we did.

"I was getting to be middle-aged when we started the program to create you in the genetics lab. A hundred perfect specimens, as physically strong and mentally bright as we could produce. A hundred supermen and women.

"Well, we did it. And we set you up in the living section down in the one *g* wheel, next to the bridge. Six of us stayed with you the first few years, to get you started right. The servomechs did most of the dirty work, of course. But still... it was damned noisy down there!

"Around the time you were learning to walk, some marauders got to us. We protected you kids, but it cost us the lives of two people. One of them was my wife___"

Linc knew that a wife was a fully-grown girl.

"None of us could live indefinitely in a one *g* environment. We had all spent too much of our lives up here, in zerog. I stayed the longest, and I worked damned hard to make sure that all the machines and servomechs would work right and take care of you until you were old enough to take care of yourselves. Meanwhile, the rest of my friends systematically finished off all

the marauders on the ship. We weren't going to let them raid you again."

"And then you left us on our own?"

Jerlet would nod his head sadly. "Had to. Gravity got to my heart. I had to come back up here. Then, while you pups were still growing up, the rest of my friends died off, most of them in an accident down on the bridge. I'm the last one left."

Linc heard the story many times. But one particular night, as Jerlet wound up the tale, Linc said brightly:

"Well, at least you'll be able to come with us to the new world... if the ship makes it there."

Jerlet fixed him with a stern gaze. "It's up to you to make sure this bucket limps into orbit around Beryl. That's what I'm training you for, Linc. I spent a lot of years waiting for you kids to grow up and come up here and find me. You've got to keep this ship going until all you kids are safely transferred to the planet's surface."

For several minutes neither of them said a word. Finally, Linc nodded solemnly and said, "I'll do it. I'll get us all to Beryl if I have to go outside the ship and push it with my bare hands."

Jerlet laughed. "That'd be something to see!"

"I'll get us there. All of us. And that includes you."

But the old man slowly shook his head. "No, not me. I can't leave this zero *g* environment. My heart would *go poof if* I even tried to walk a few levels down the tube-tunnel, where the gravity starts to build up."

Linc said, "No... we'll find a way... something____"

"Listen, son," Jerlet said calmly. "I'm an old man. I might not even make it to the time when we go into Orbit around Beryl. That's why I'm pushing you so hard. It's all on your shoulders. Linc. You're the difference between life and death for all your friends."

Book Two

11

The inflated pressure suit stood before Linc like a live human being. But its "face"—the visor of its helmet—was blank and empty. Linc tested each joint for air leaks: ankles, knees, hips, wrists, shoulders. All okay.

He started to run his pressure sensor around the neck seal, where the bulbous helmet connected with the blue fabric of the suit. He smiled as he thought:

A few months ago I would have thought this was an evil spirit or a ghost... it would have scared me out of my skin.

Satisfied that the suit was airtight, Linc touched a stud on the suit's belt, and the air sighed back into the tanks on the suit's back. The suit began to collapse, sag at the knees and shoulders, held up only because the air tanks were fastened to the workroom's bulkhead wall.

Linc watched the suit deflate and found himself thinking of Jerlet. *He's been sagging himself lately. Losing weight. Slowing down.*

H e turned to the tiny communicator screen mounted atop the workbench at his right, and touched the red button.

"Hello.. .Jerlet. I've finished with the suit."

The old man's face appeared on the miniature screen. It looked more haggard than ever, as if he hadn't slept all night.

"Good," he rumbled. "Come on up to the observatory. Got some good news."

Linc made his way out of the workroom, down the short corridor, and into the airlock. He moved in the ultralow gravity without even thinking about it now, and when he floated up into the vast darkened dome of the observatory he no longer

panicked at the sight of the universe stretching all around him.

But he still thrilled at it.

The yellow sun was bright enough to make the metal framework of the main telescope glint and glisten with headlights. Jerlet sat at the observer's desk, wrapped in an electrically-heated safety suit. *But it's not that cold in here*. Linc told himself.

Obviously Jerlet felt differently. His fingers were shaking slightly as he worked the keyboard that controlled the telescope and other instruments.

Linc floated lightly to the desk and touched his slippered feet down next to Jerlet's chair. The old man looked up at him and smiled tiredly. His face was like a picture Linc had seen of old Earth: a beautiful river winding through a valley of scarred, ragged hills and bare, stubbly ground.

"Finally got the spectral analyzer working," Jerlet muttered without preamble. "Took all night, but I did it."

"You ought to get more rest," Linc said.

The old man shook his head. "Rest when we get there. Here...look at this."

He touched a few buttons and a view of Beryl flashed onto the main desk-top screen. It was blue-green and beautiful, a lovely gibbous crescent hanging in space, flecked with white clouds, topped by a polar cap of dazzling white.

"Now watch—" Jerlet touched more buttons.

The picture disappeared, to be replaced by a strange glow of colors that ranged from violet to deepest red. Squinting at the unfamiliar sight, Linc saw that there were hundreds of black Lincs scratched vertically across the band of colors.

"That's a spectrogram of the planet," Jerlet said. "A sort of fingerprint of Beryl."

"Fingerprint?" Linc asked.

Jerlet scratched at his craggy face. "That's right, you don't know what fingerprints are. Well... what's on the agenda for lunch?"

"We're supposed to go over the route I take to get back to the Living Wheel."

"H'mm. And dinner?"

"Nothing yet." He and Jerlet had a set routine foreach meal. If Linr had any questions that required a lengthy explanation,

Jerlet used, mealtime to explain them.

"Okay, dinner. The subject will be fingerprints. Might even tell you about retinal patterns and voice prints."

Linc nodded. He didn't understand, but he knew that Jerlet would explain.

"Now, about this spectrogram," the old man resumed. "It tells us what the air on Beryl is made of... what elements and compounds are in the air."

Curiosity knit Linc's brow. "How's it do that?"

Jerlet smiled again. Patiently he explained how the light from the planet is split into a rainbow pattern of colors by the spectrograph's prisms; how the spectrograph is fitted into the telescope; how each element and compound leaves its own distinctive telltale mark on the rainbow pattern of Beryl's spectrum.

Linc listened and learned. Usually, he only had to hear things once to remember them permanently.

"... And here," Jerlet said, his rough voice trembling with excitement, "is the computer's analysis, together with a reference to old Earth's atmospheric composition."

He touched a button, and the viewscreen showed:

ATMOSPHERIC CONSTITUENTS

BERYL EARTH

Nitrogen 77.23% Nitrogen 78.09%

Oxygen 20.44% Oxygen 20.95%

Argon 1.0I% Argon 0.93%

Carbon Dioxide 0.72% Carbon Dioxide 0.03%

Water Vapor: variable Water Vapor: variable,

up to 1.8% abs. up to 1.5% abs.

Linc studied the numbers for a few moments. Then he looked back at Jerlet.

"It's almost the same as Earth... but not *exactly*." "Close enough to be a twin," Jerlet boomed. "And as close as any planet's going to be. A smidge less oxygen and more carbon dioxide, but that could be because the planet's a bit newer than Earth. There's chlorophyll all over the place, lots of it. That means green plants, just like Earth."

"We can live there," Linc said.

Jerlet pumped his shaggy head up and down. His mouth was trying to form a word, but nothing came out for several seconds. Finally he gulped a strangled, "Yes, you can live there."

Linc saw that there were tears in his eyes.

"I'll have to tell the other kids about it," Linc said. "They'll be terrified by Baryta. They all think that the yellow sun is going to swallow us... burn us."

"I know," said Jerlet.

Linc went on, "I ought to get back to them as soon as I can. They've got to know about Beryl. I've got to stop them from being afraid."

Jerlet nodded wearily.

"If they think that we're all going to die, there's no telling what they'll do

"All right!" Jerlet slammed his heavy hand on the desk top. It startled Linc, made him jump and drift away a few meters, weightlessly.

"I know you've got to get back to them, dammit." In the golden light of Baryta the old man's paunchy body glowed in radiance, his wild hair looked like a crazy halo. "I know you've got to go back. I... it's just that... I don't want to be alone anymore. I want you to stay here, with me."

Linc reached up for a handhold on the telescope frame and pushed back toward Jerlet.

"But I've got to go back," he said. "The bridge—"

"I know," Jerlet grumbled. His face scowled. "But I don't have to like it! There's nothing in the laws of thermodynamics that says I have to like the idea."

Linc felt the air easing out of his lungs. He had been so tense that he had been holding his breath. But now Jerlet was grumbling in his usual way, and Linc could let himself grin. It would be all right. He would go back. Jerlet wouldn't try to keep him here.

The rest of the day went normally. Jerlet stayed in the observatory, studying Beryl. Linc went down to the workshop and studied the computer's memory tapes for information on repairing the instruments on the ship's bridge.

That's going to be the toughest part of the job, he told himself. Clearing the dead crew out of the bridge and getting the

controls working again. Despite himself, he shuddered.

At dinner that evening Jerlet launched into a long explanation of fingerprints, retinal patterns, voice prints, and other aspects of detective work.

Linc felt confused. "But why bother with all that? Everybody knew everybody else, didn't they? Why couldn't they just ask who a person was?"

Jerlet guffawed, stuffed a slice of synthetic steak into his mouth, and then began to explain about crime and police work. By the time dessert was finished and the dishes flashed into the recycler. Linc was asking:

"Okay, but who figured out this business of fingerprinting? Kirchhoff and Bunsen?"

Jerlet slapped a palm to his forehead. "No, no! They worked out the principles of spectroscopy. The fingerprint technique was discovered by some policeman or detective or somebody like that. An Englishman named Holmes, I think. It's in the computer's memory banks somewhere."

Linc looked down at his fingertips and saw the swirling patterns of fine Lincs there. Then he looked up, Jerlet's face was dead white. Veins were throbbing blue in his forehead. Cords in his neck strained.

"What's wrong?"

"Ahhrg... hurts," Jerlet gasped. "Must've eaten... too much... too fast____"

Linc pushed out of his chair and went to the old man.

"No... I'll be... all right...."

Without bothering to argue, Linc pulled him up from his chair and propped him up with his shoulder. He wanted to carry the old man, but Jerlet's girth was too wide for Linc's arms to grasp, even though the minuscule gravity made him light enough to carry.

Linc walked him past his own bedroom and down to the infirmary. Jerlet was panting with pain as Linc eased him down onto the tiny medical center's only bed.

Turning to the keyboard that stood on a little pedestal beside the bed. Linc switched on the medical sensors. The infirmary was almost completely automatic, and Linc didn't understand most of its workings, but he watched the wall screen above the bed.

It showed numbers for pulse rate, breathing rate, body temperature, blood pressure—all in red, the color of danger. A green wiggly Linc traced out Jerlet's heartbeat. It was wildly irregular.

"What should I do?" Linc called out to the automated room. There was no one to hear or answer.

Except Jerlet. "Punch... emergency input... tell medicom-puter... heart attack—"

Linc did that, and the wall screen began printing out instructions for medicine and setting up an automated auxiliary ventricle pump. Linc followed the step-by-step instructions as they came on the screen. He lost all track of time, but finally had Jerlet surrounded by gleaming metal and plastic machines that hooked themselves onto his arms and legs.

Still the numbers on the wall screen glared red.

Linc stood by the bed endlessly. Jerlet lost consciousness, regained, drifted away again.

Linc fought to keep his eyes open. The only sounds in the room were the humming electricity of the machines, and a faint chugging sound of a pump.

"Linc-"

He snapped his eyes open. He had fallen asleep standing up.-

Jerlet's hand was fluttering feebly, trying to reach toward him. But the machines had his arm firmly strapped down.

"Linc—" The old man's voice was a tortured whisper.

"I'm here. How do you feel? What can I do?"

"Terrible... and nothing. If the machines can't pull me

through, then it's over. 'Bout time, too. I____" His words sank

into an indecipherable mumble.

"Don't die," Linc begged. "Please don't die."

Jerlet's eyes blinked slowly. "Not my idea, son... Just glad I held on long enough... to meet you... train you____"

"No—" Linc felt completely helpless.

The old man's voice was getting weaker. Strangely, the harshness of it seemed to melt away as it faded. "Listen____"

Linc bent his ear to the ragged, ravaged face of Jerlet. His breath was gulping out in great racking sobs that were painful just to hear. His whole bloated body heaved with each shuddering gasp. Linc felt the old man's breath on his cheek. It smelted of dust.

"You... you know what... to do...?"

Linc nodded. His voice wouldn't work right. His eyes were blurry.

"The machines... you'll fix... what they need... to get to Beryl...."

"I will." It wasadistant, tear-choked voice. "I promise. I'll do it."

"Good." Jerlet's face relaxed into a faint smile. His body-racking gasps eased. His eyes closed.

"Please don't die!"

Jerlet's eyes opened so slightly that Linc couldn't be sure the eyelids moved at all. "You can... make it without me."

Linc clenched his fists on the edge of the bed's spongy surface. "But I don't want you to die!"

Jerlet almost laughed. "Told you... wasn't my idea___I'm

no ... proud-faced martyr, son. Just get back ... away... machinery oughtta start... any second—"

"Back? Away?"

"Go on... 'less you want to... be frozen, too "

Unconsciously Linc edged slightly away from the bed. He stood there for a moment uncertainly, watching the old man lying there. Jerlet's eyes closed again. All the numbers and the symbols on the wall screen began blinking red, and a soft but insistent tone started beep-beeping. The words CLINICAL DEATH flashed on and off again so quickly that Linc hardly had time to notice them. Then a piercing whistling note howled out of the machines around Jerlet's bed, as if in their mechanical way they were bewailing his death—or their inability to save him. Then the screen lettered out in green: CRYOGENIC IMMERSION PROCEDURE.

As Linc stepped farther away from the bed, the screen flashed numbers and graphs so quickly that only a machine could read them. The shining metal things around Jerlet's bed began to hum louder, vibrate, and move back. Linc watched, frozen in fascination, as Jerlet's entire bed sank down slowly into the floor. The machines went silent and still as the bed slowly receded through a trapdoor. As Linc stepped up for a closer look, the bed disappeared entirely and the trapdoor slid shut once again. A whisp of white steamy vapordrifted up just before' it closed completely.

The machines rolled silently back to their niches in the room's bare white walls. The viewscreen went blank.

"Cryogenic immersion," Linc muttered to himself. His mind started working actively again. "He had this all set up for himself. The machines are going to freeze him, so that he can be revived and made healthy again someday."

Even though Linc knew that Jerlet was dead in every sense of the word, that he would never see the old man again because even if he were revived someday it would be so far in the future that Linc would never live to see it, even though he realized all this. Linc somehow felt better.

"Good-bye old man," he said to the empty room. "I'll get them to Beryl for you."

Despite all his training, despite all he knew, despite Jerlet's assurances, Linc was tense as he donned the pressure suit.

It was like being swallowed alive by some monster that was vaguely human in form, but bigger than any man and strangely different. Linc's nose wrinkled at the odors of machine oil and plastic as he stepped into the suit and eased himself into it.

And there was another scent now, too. His own clammy sweat. The odor of fear, fear of going into the outer darkness.

It's space! he fumed at himself. Nothing but emptiness. Jerlet explained a thousand times. There's nothing out there to hurt you.

"If the suit works right," he answered himself as he lifted the bubble-shaped helmet over his head.

Just as he had been taught, he sealed the helmet on and then tested all the suit's seals and equipment. The faint whir of the air fan made Linc feel a little better. So did the slightly stale tang of oxygen.

Slowly he clumped to the inner hatch of the deadlock. *Airlock!* he reminded himself. He reached out a heavily-gloved hand for the buttons on the wall that would open the hatch, and stopped.

"You could stay right here," he told himself, his voice sounding strangely muffled inside the helmet. "Jerlet left everything in working condition. You could live here in ease and comfort for the rest of your life."

Until the ship crashes into Baryta, he answered silently, and everyone dies.

"What makes you think Magda and the others will believe

you? You think Monel's going to do what you tell him? You think any of them will touch a machine just because you say it's all right to do it?"

But Linc knew the answers even before he spoke the questions, li doesn't matter what they think or do. I've got to try.

His outstretched hand moved the final few centimeters and touched the airlock control button. There was a moment's hesitation, then the heavy metal hatch slid smoothly aside for him.

He flicked at the othef buttons, which would set the airlock mechanism on its automatic cycle, then stepped inside the cramped metal chamber. The inner hatch sighed shut. Pumps clattered. Linc couldn't hear them inside his suit, but he felt their vibrations through the thick metallic soles of his boots. H is pulse throbbed faster and faster as he stood there, waiting.

The outer hatch slid open. Linc was suddenly standing on the edge of the world, gazing out at endless stars.

And smiling. All his fears evaporated. It was like being in the observatory. The beauty was overwhelming. The silence and peace of eternity hovered before him, watching gravely, patiently.

Linc stepped out of the airlock and for the first time saw the ship as it really existed: a huge set of wheels within wheels, starkly lit by the glaring yellow sun that was behind his back. Fat circular wheels, each one bigger than the one before it, stretching away from the central hub where he stood, turning slowly against the background of stars. And connecting them were half a dozen spokes, the tube-tunnels, seen from the outside.

One of the spokes was lit by a row of winking tiny lights. Jerlet had shown Linc how to turn them on. They were Linc's guidepath, showing him which tube-tunnel would lead back to the living area in the farthest, largest wheel, where the rest of the people were.

Linc plodded slowly along the lane of yellow lights, moving carefully inside the bulky pressure suit. He was fully aware that a mistake now—a slip, a stumble—could send him tumbling off the ship, never to return.

But Jerlet had trained him well. Linc could see that there were footholds and handgrips studding the outer skin of the tube-tunnel. The metallic soles of his boots were slightly

magnetized, so that it took a conscious effort to lift a foot off the metal decking. The oxygen he was breathing made him a trifle lightheaded, but he felt safe and warm inside the suit.

The main trick was to avoid looking out at the stars. After the first few moments of awestruck sightseeing. Linc realized that the ship's spinning motion made it impossible to stargaze and walk a straight Linc at the same time.

So, shrugging inside the cumbersome suit, he kept his eyes on the winking yellow lights, on the handgrips and footholds that marked his way back to the Living Wheel.

Linc had no idea of how much time passed. He was sweating with exertion long before he neared the Living Wheel. He knew that he should feel hungry, because except for sips of water from the tube inside his helmet he had eaten nothing. But his insides were trembling with exertion and excitement. His only hunger was to reach his destination.

As he neared the outermost wheel, gravity began to make itself felt. The footholds turned into stairs that spiraled around the tube's outer skin. There was a definite feeling *of up* and *down* that grew more certain with each step. Instead of walking along a path, Linc found himself climbing down a spiraling ladder.

Abruptly, most unexpectedly, he_was there. The last winking yellow light gave way to a circle of tiny blue lights that outLincd the hatch of an airlock.

Linc stood there for a long moment, his feet magnetically gripping the ladder's final rung, one hand closed around the last handgrip. He studied the control panel set alongside the hatch. Out of the corner of his eye he could see the stars pinwheeling majestically as the largest of the ship's wheels turned slowly around the distant hub. He had come a long way.

With his free hand, Linc pushed the button that opened the hatch. He barely felt the button through the heavy metal mesh of his glove.

For an eternity, nothing happened. Then the hatch slowly edged outward and to one side. Nothing could be heard in the hard vacuum, but Linc could swear that the hatch creaked as it moved.

He stepped inside the cramped metal chamber of the airlock, and touched the buttons that would cycle the machinery. What if it doesn't work? he asked himself in sudden panic. I'll have to

go all the way back to the hub and fight my way down the inside of the tube-tunnel!

But the machines did their job. The outer hatch slid shut and sealed itself. Air hissed into the chamber. The telltale lights on the control panel flicked from red through amber to green, and the inner hatch sighed open.

Linc clumped through into the passageway.

He was home.

The passageway was empty. It usually is, down at this end, he reminded himself. After all, they call this the deadlock. It's not a happy place to be.

He thumped up the passageway, heading for the living quarters. He felt oddly weary and slow, only gradually realizing that here in normal gravity his pressure suit and backpack weighed almost as much as he did himself.

But he was too eager and excited to take them off.

He was approaching the farming section when he saw the first people. A group of men were coming out of the big double doors of the farm area.

Linc wanted to run toward them, but his legs were too tired to make his motion more than a clumsy shamble.

"Hey... it's me, Linc!" he shouted and waved both arms at them.

They froze. Seven of them, sweat-stained and dirty-faced, stopped dead in their tracks and stared at Linc, open-mouthed and wide-eyed.

"Slav... Cal... it's me, Linc!"

Terror twisted their faces. They broke and ran up the corridor, away from Linc, screaming.

Linc clumped to a stop, laughing. All they see is the suit!

Slowly he pulled off his gloves and started to undo the neck seal, so that he could remove his helmet and let them see his face.

They probably couldn't even hear me, from inside this bowl, he realized.

Before Linc could get the helmet off, Slav and three others came creeping down the corridor, armed with lengths of pipe. They moved as slowly and quietly as they could, but there was no way for them to hide in the bare corridor. They saw Linc and stopped, crouched, wary, scared.

Linc held up both hands. Then, realizing that they wouldn't

be able to hear him even if he shouted from inside the helmet, he reached down and touched the radio control studs set into the suit's waist.

"I've come from Jerlet," Linc said. The radio unit amplied his voice into a booming, echoing crack of doom. He turned the volume down a little.

"It's me, Linc. I've come back. Jerlet sent me back to you."

One of the farmers dropped his weapon and sank to his knees.

Slav scowled at him and held his ground. "What kind of monster are you? What have you done with Linc?"

"Wait," Linc said.

He finished undoing the neck seal and lifted the helmet off his head.

"I'm not a monster at all, Slav," he called to them in his normal voice. "I'm Linc. I've come back to you. Jerlet sent me."

Slav and the others fell to their knees.

It took many minutes for Linc to convince them that he was just as normal and alive as they were, even though he was wearing strange garments.

The four farmers watched, goggle-eyed with a mixture of fear and fascination, as Linc slid the heavy backpack off his shoulders, unstrapped the support web beneath it, and finally pulled off his cumbersome boots.

Slav was the first to recover.

"You... you are Linc!" He slowly got to his feet. The others, behind him, did likewise. A bit shakily, Linc thought.

"Of course I'm Linc."

"But you went away. Monel and the others said you died," one of the farmers muttered.

"I didn't die. Did Magda ever say I was dead?"

They looked at each other, puzzled, uneasy.

"I don't think she ever did," Slav replied.

Linc was glad to hear it.

"I didn't die," he said. "I'm as alive and normal as any of you. I found Jerlet. He told me many things, and gave me this suit to protect me so that I could come back to you. And he also gave me good news. The yellow star isn't going to swallow us. It brings us life, not death."

The good news didn't seem to impress them at all. But at least they didn't look so frightened.

Stav walked up to Linc and put out a hand to touch him. He peered closely at Linc's face. A slow smile unfolded across his broad, stolid face.

"You really are Linc,"

"Yes, Stav. It's good to see you again. Can you take me to Magda?"

Nodding, Stav answered, "Yes, yes... of course. But I think M onel will be on his way here before we can get to the priestess."

Monel did arrive, almost breathless, with four more men behind him. They were all armed with lengths of pipe and

knives from the galley.

Stav and the farmers had picked up the various pieces of Linc's pressure suit, their faces showing awe more than fear. Linc still wore the main body covering of the suit, and felt slightly ridiculous with his stockinged feet and bare hands poking out of the bulbous blue garment.

"It is you!" MoneFs tone made it clear that he didn't want to believe what he was seeing.

Linc could feel his face harden toward Monel. "That's right. I've come back. Jerlet sent me back to you."

"Jerlet? You don't expect us to believe—"

"I don't expect anything from you," Linc snapped. "I'm here to see Magda. I don't have time to waste on discussions with you."

Monel's thin face went red. He held up a hand, as if to stop Linc if he should try to move. The guards behind him tensed and gripped their weapons more tightly.

"You're not going to see Magda or anyone else until I'm satisfied that you're no danger to the people—"

Linc smiled at him, but his words were dead serious: "There's only one danger to the people, and that's delay. Jerlet showed me how to save the ship. We're not going to die; the yellow sun isn't going to kill us. If we act quickly. There's a new world waiting for us, if we do the right things to get there."

Monel's chair rolled back a few centimeters, but he insisted, "Jerlet showed you? You mean you talked with Jerlet?"

"That's right."

"Then why didn't he come with you?"

"He died--"

A shock wave went through them. Linc could feel it.

"Died?"

"Jerlet is dead?"

"Yes," Linc said. "But he'll come back again someday. When we've reached the new world and learned how to live on it. Probably not in our lifetime, but our children will see him when he returns."

Even Monel was visibly shaken by Linc's words. "I don't understand...." His voice was almost a whisper.

"I know," Linc said. "That's why I have to see Magda. She'll know what to do."

M onel pursed his lips, thinking. The others—the farmers and Monel's guards—clustered around Linc wordlessly. One of the farmers reached out and touched the rubberized fabric of Linc's pressure suit.

"We're wasting time," Linc said to Monel. "I've got to see Magda."

He started striding down the corridor, and the others hesitated only a moment. The farmers fell into step behind Linc. Monel's guards shifted uneasily, eyed their sallow little leader, then looked toward Linc and the farmers.

"Don't just stand there!" Monel snapped at them. "Get me up there with him."

If anything, Magda was even more beautiful than Linc remembered her. She stood in the center of her tiny compartment, her dark eyes deep and somber, her finely-drawn face utterly serious, every Linc of her body held with regal pride.

"You returned," she said.

Linc stepped into her room, and suddenly the crowd of people that had gathered around him as he had marched down the corridor seemed to disappear. There was no one in his sight except Magda.

"Jerlet sent me back."

But Magda didn't move toward him, didn't smile. Her gaze shifted to the people crowding the doorway behind Linc.

"Leave us," she commanded. "I must talk with Linc alone."

They murmured and shuffled back away from the door. Linc

shut it firmly. Then he turned back to Magda.

"I knew you would return," she said, her voice so low that he could barely hear her. "Every night, every meditation, I knew you were alive and would return."

"You don't seem too happy about it," Linc said.

Instead of responding to that, Magda said, "I must know everything about your journey. Every detail. You really saw Jerlet? He spoke to you?"

Linc sat down cross-legged on the warm carpeted floor and leaned his back against the bunk. Magda sat next to him, and he began to tell her about his time with Jerlet.

He knew this room, had known it all his life, since long before Jerlet had gone away from them and the kids decided to turn to Magda for the wisdom and future-seeing abilities that had made her priestess. But the room seemed different now. Magda was different. Everything *looked* the same: the carpeting, the drawing on the walls that Peta had done, the glowing zodiac signs traced across the ceiling. But it all felt different. Strange.

Magda listened to Linc's tale without interrupting once. Her eyes went misty when he told her about Peta, otherwise she showed no emotion at all. The room's lights dimmed to sleeping level, and still Linc wasn't finished. On the ceiling, the Bull, the Twins, the Lion, the Virgin also listened in their customary silence. In the shadows Magda sat unmoving, straight-backed, as if in meditation. The only sign that she heard Linc was an occasional nod of her head.

"... And", well, I guess that's all of it," Linc said at last. His throat was dry, raspy.

Magda seemed to sense how he felt. "I'll get you some water," she said, rising to her feet. "Stay there."

She went to the little niche in the wall where the water tap was and filled a cup for Linc.

Handing it to him and sitting down beside him again, Magda asked, "Jerlet wants us to fix the machines?"

Linc could hear uncertainty in her voice. Disbelief.

"Yes," he answered. "The machines are our only hope. If we don't fix them and use them properly, then we *will* fall into Baryta—the yellow sun. And we'll all die. But with the help of the machines, we can reach the new world. Beryl. And we can live there."

Magda said nothing.

Linc reached through the shadows to grasp her arm gently. "Think of it, Magda! A whole world for us! Open and free and clean. No more conning walls. All the air and food and water we could want. All the room!"

"The machines," she said softly. "Jerlet told us long ago never to touch the machines. Never."

Linc smiled at her, even though it was too dark for her to see it. "That was when we were children. Babies! Of course he told us not to touch the machines then. We would have hurt ourselves or fouled up the machines."

She didn't move away from his touch. But she didn't move toward him, either.

"If Jerlet himself could tell us to fix the machines___"

"He can't. He's dea'd."

"Yes, you told me."

"He used the machines himself. All the time. Even when he was dying."

"They didn't save his life."

"He was old, Magda. Unbelievably old. And he'd been sick for a long time."

"But the machines still let him die," she said.

Linc answered, "He's inside a machine now. A machine is keeping his body safe until we—or our children, I guess—learn enough to bring him back to life."

He felt her shudder, as though a touch of the outer darkness's cold had gone through her.

Linc lay back on the carpeting and stared up at the softly glowing figures on the ceiling. The Ram, the Scales, the Scorpion. Once they had been strange and mysterious signs that had puzzled and even frightened him a little. Now, thanks to Jerlet, he knew what astronomical constellations were and how the art of astrology had begun on old Earth.

"Magda," he said, surprised at the tone of his own voice. "We're dealing with the difference between life and death. We can save the people, and reach the new world. But only if we use the machines. We've got to repair them and then use them. If we help the machines, they will help us. To live. If we don't do it, then we will all die."

"Jerlet told you that."

"Jerlet *showed* me the truth of it. He taught me. He put ideas and information into my mind. I know what we have to do. But the people won't do it unless you tell them to. You are their priestess. If you tell them that it's the right thing to do, they'll believe you."

"Monel thinks he's their leader."

"Monel!" Linc heard anger and disgust in his voice. "He can play at being a leader, but if *you* tell the people that we've got to fix the machines, they'll do it no matter how much Monel hollers."

"You're really certain...?"

"I know what we have to do," Linc said firmly.

For a moment, Magda said nothing. Then, "All right, Linc. I want to believe you. I don't think I even care if you're right or wrong. I want to believe you."

He smiled into the darkness. "Magda"

"Where will we start, Linc? What has to be done first?"

"The bridge," he said. "We've got to get the bridge back into functioning condition."

"Bridge?" she echoed. "Where is that?"

He hesitated. "Um... it's what we call... the Ghost Place."

Magda sat bolt upright. "The Ghost Place?" Her voice was a horrified whisper." *The Ghost Place?* Linc, how could you even think of that? It's impossible! You can't go there!"

"We've got to."

"No!" Magda screamed. "Never! That's a place of death. I'll never let you go there. You, or anyone else."

13

Linc got slowly to his feet.

"Magda," he said, forcing his voice to stay steady and calm, "this is something that I understand and you don't. I've been with Jerlet; I know what has to be done."

She stood beside him, fists planted stubbornly on her hips. "You don't understand anything! You can't go to the Ghost Place. It's death "

"That's wrong. I know how to go there. I've got to clear out the bodies and fix the machines so that____"

"Linc, listen to me!" Her voice was more pleading than angry now. "I couldn't stand it if you died."

"I won't die."

"Jerlet died! You could, too." She took a deep breath. "Besides, if you go there it'll give Monel the chance he's been waiting for. He'll drive us both out."

"Monel?"

"I don't have the strength to fight him," Magda said. "He wanted to make Jayna priestess. But when I stopped fighting against him so much and let him have things his own way... he let that drop. I'm still priestess, but Monel tells everybody what to do."

Linc could feel his face pulling into a frown in the darkness. He couldn't see the expression on Magda's face, only the glint of highlights in her hair and the outLinc of her determined jaw, silhouetted against the fluorescent pictures on the walls.

"I'm here now," he'said. "I'll take care of Monel."

"How?" she snapped. "By going to the Ghost Place? By killing yourself? Or by making everybody so scared of you and

what you're doing that they'll listen to whatever Monel tells them?"

He reached out toward her. "Magda, it's got to be done, or we'll all die."

"No, I don't believe that. Jerlet wouldn't____"

"Jerlet has no control over it! He never did! He was a man, an ordinary man. He couldn't even move out of the weightless area. He couldn't control the ship."

Someone knocked at the door. Two sharp raps, loud and demanding. Their argument ended.

"Who is it?" Magda called.

"Monel."

Before Linc could say anything, Magda answered, "Come in."

The door slid open and Monel wheeled himself into the room.

"No lights?" His voice was mocking, a thin knife blade of sound. "Are you two meditating in the dark?"

Linc couldn't see Monel's face, but his two guards out in the softly-lit corridor were grinning. He went over and closed the door with one hand, while palming the light switch with the other. The room brightened.

"You two have had enough time to walk around the Wheel," said Monel. "How about telling the rest of us what you're up to."

The rest of us. Linc thought, meaning you.

"Linc has been telling me about his time with Jerlet," Magda said guardedly.

"Yes? You must tell us all about it." Monel was smiling, but there was neither friendship nor warmth in his face.

"Jerlet sent me back to fix the machines," Linc said, "so that we can be saved from the yellow sun."

"And you say that Jerlet has died," Monel added, "so that he can't tell us what he wants us to do. We've got to learn about it from you."

"That's right."

"And we must trust that you're telling the truth about what Jerlet desires."

Linc felt his fists clenching. "Do you think that I'm a liar?"

"Did I say that?" Monel countered smoothly.

Long ago, when he was only a tiny child and Jerlet still lived

with the kids, Linc saw a pair of cats getting ready to fight one another. They glared at each other, made weird wailing sounds, and paced stiffly around one another. It took a long time for them to actually fight, but they finally worked themselves up to it.

That's what we're doing now. Linc realized as he and Monel traded questions and demands. Just like the cats; we're getting ready to fight.

"I've got to repair the machinery on the bridge," Linc heard himself saying. "It's necessary, if we're to reach the new world."

"The Ghost Place," Magda added.

Monel didn't seem surprised.

"I've forbidden it," Magda said. "No one can go there and live."

"I can," Linc insisted.

"Jerlet told you how to do it?" Monel asked.

"Yes."

Magda shook her head violently. "It's wrong! You mustn't disturb the ghosts!"

"It's either that, or we all die."

Monel laughed. He threw his head back and laughed, a scratched, harsh, cackling laughter that grated against Linc's nerves.

"You really think anybody will believe you?" he demanded of Linc. "Do you think that the people will let you tamper with the machines—or go to the *Ghost Place?*"

"They will," Linc answered, "if Magda tells them it's all right."

He turned to look at her. She stared straight back at him, her space-black eyes hard and glittering. But she said nothing.

"Magda will say what I want her to say," Monel told Linc. And he wheeled his chair over to her. She stood unmovingas he reached an arm around her waist. "Magda is mine."

Linc felt the flames of anger flare within him.

But before he could say or do anything, Monel added, "And all you have is this crazy story about Jerlet. You have no proof. No one will believe you. No one at all."

Linc took a step toward the smirking rat-faced thing in the wheelchair. He wanted to silence Monel, wipe the evil smile off his face, close his ratlike eyes forever.

Magda stopped him with a word.

"Linc."

He stood there balanced on the balls of his feet, hanging between his desire to smash Monel and his desire to make Magda his own.

"Go in peace, Linc," she commanded.

And suddenly Monel's smile evaporated. He looked displeased, angry. *That's it!* Linc realized. *He wants me to attack him. Then the guards outside can come in and save him, and he'll have me for the sin of violence.*

Linc felt ice replacing the fire inside him. He stood there for an uncertain moment, then said to Monel:

"I know what has to be done. All you offer the people is death, but I bring the gift of life from Jerlet. And I'll show you—and all the p.ople—proof of what Jerlet demands from us."

M onel's voice was low and ominous. "How will you do that?"

Linc ignored his question and said to Magda, "Call a meeting of the people. Meditate and ask for Jerlet's guidance. He'll answer you with the proof that we have a chance to reach the new world. He'll show you that world, and tell you what needs to be done to reach it." *If I can get back to Jerlet's domain and set up the proper tapes for the wall screens to show.*

"There'll be no meeting," Monel snapped.

"I'll tell the people about it. They'll want a chance to see the proof," said Linc. "The priestess can't deny giving someone a chance to be heard."

"That's true," Magda said. "If the people ask for a meeting, I can't refuse. It's my duty as priestess."

"After the next workday," Linc said. "Call the people together to see Jerlet's proof."

Magda nodded her head so slightly that Linc wondered if she moved it at all. Monel sat glaring, red-faced with fury.

Linc turned and pushed the door open. He strode past the guards and down the corridor to his own room.

It should be a simple matter to set up the back-up communications antennas. Linc told himself as he paced down the corridor. Jerlet showed me how, and the computer has all the information I need to do it. Then I can beam the data about Beryl into the screens down here, even though the regular

communications channels are broken.

But sleep was making its insistent demands on him. By the time he got to his old room, he knew that he had to rest fora few hours, at least.

He was asleep as soon as his head touched the bunk. A deep dreamless sleep of exhaustion.

He awoke to someone shaking him by the shoulder.

"Linc...wake up. Please! Wake up."

He swam up through a fog, focusing his eyes slowly, with enormous effort. It was so good to sleep, to slide back into warm oblivion....

"Linc, please! Wake up!"

He flicked his eyes open. Bending over him was Jayna. She looked terribly upset.

"Wha... what's wrong?" Linc pushed himself up to a sitting position.

Jayna brushed back a wisp of hair. She was pretty, Linc realized. Golden hair and ice-blue eyes. Like the gold and blue of Baryta and Beryl, except that she was close enough to touch, warm, alive.

"What's the matter?" he asked again.

She glanced nervously at the door to the corridor. It was closed, but from the look on her face, she seemed to be afraid that someone could see her in here with Linc.

"You're in danger," Jayna said breathlessly. Her voice was soft and high-pitched, a little girl's voice. "Monel wants to cast you out."

"That's nothing new," he grumbled as he reached down for his slippers.

"No! You don't understand! He's going to do it now. This shift. Before the meeting."

Linc looked up at her. "What time is it?"

"Firstmeal's just starting."

He tugged on the slippers. "I've got a lot to do."

Jayna sank to her knees beside him. "Linc.. .please listen to what I'm saying. Monel is out to kill you. He won't let you get to the meeting. He wants you dead."

He stared at her. She seemed really frightened. "How do you know? And why...."

"I heard him telling his guards to find you and bring you to

the deadlock. They're waiting for you at the galley. If you don't show up there, they'll come down here and get you."

He got to his feet. Jayna stood up beside him. She's shorter than Magda, he automatically noticed. But softer.

"We can hide in my room," she said. "They won't think of looking for you there."

A trap? Aloud, he said, "Grab that helmet. I'll get the rest of the suit." He picked up the various pieces of his pressure suit, limp and lifeless now without him inside it. The backpack with its oxygen tanks was heavy, but Linc hefted it over one shoulder, gripping it by the straps.

"Hurry!" Jayna urged.

"The boots... can you carry them?"

She scurried to the corner of the room where he had left the boots and picked them up, shifting the bulbous helmet under her other arm.

Linc eased the door open and peeked out. A few people were walking in the corridor, but none of Mend's guards were in sight.

"Come on," he said, and started down the corridor.

"My room's in the other direction."

With a shake of his head, Linc countered, "This way. Toward the deadlock. That's where we're heading."

She looked even more terrified, but she scampered along beside him. Wordlessly, they rushed down the corridor and made it to the lock without any interference.

Linc began pulling on the pressure suit. As he sealed the leggings and sleeves, he asked Jayna:

"Why did you warn me? I thought you were Monel's girl."

"I couldn't let him hurt you. And besides..." her little-girl's face looked hurt, almost teary, "he's not interested in me. Only Magda. He said he was going to make me priestess, but all he does is stay with *her*"

"Listen," Linc said. "You'd better get down to the galley for firstmeal. Act as if everything's normal. Otherwise Monel and his guards will realize that you've warned me."

The frightened look came back into her eyes. "Oh. I hadn't thought of that."

"Go on ... I'll be all right."

"You're sure?"

He nodded. Then, as she hesitated, watching him pull on his gloves, she handed him the helmet that she was still holding.

"Thanks," he said.

Jayna suddenly threw her arms around Linc's neck and kissed him. "Don't let them hurt you," she whispered. Before Linc could answer she let go and dashed off down the corridor, toward the galley.

W ith a puzzled shrug, Linc cycled the airlock hatch open and stepped inside. *No sense hanging around out in the corridor where they might see me*. But he knew the airlock would be the last place Monel's guards-would search for him. To them, it was the deadlock, the dreaded place where the dead were sent into outer darkness. No one went there

unless they had to.

Linc put the helmet on, connected the oxygen and life-support hoses, and checked out the pressure suit quickly but thoroughly. Satisfied, he touched the buttons that put the airlock through the rest of its cycle. The air pumped out of the cramped metal-walled chamber, into the storage bottles that lay hidden behind the access panels lining the walls. The telltale lights on the tiny control panel shifted from amber to red, and the outer hatch swung open.

Once again Linc was outside the ship. This time, though, he hurried up the outer skin of the tube-tunnel, racing against time to get to the hub of the ship.

He had something less than ten hours before the meeting would begin, just after lastmeal. Less than ten hours to find the tapes he wanted and set them up on the back-up communications system.

I can do it, he told himself. I know lean. He kept repeating it to himself.

It seemed strange to re-enter Jerlet's domain. His months there were suddenly like a dream, something that had happened only in his imagination. *No wonder the others have a hard time believing it,* Linc realized. *I hardly can believe it myself.*

He took off the helmet, backpack, and gloves, then went to work.

It took hours. There were a few tapes where Jerlet's voice droned over the pictures of Baryta and Beryl. There were no tapes with Jerlet's picture. Linc found some old tapes in the computer's memory files, scenes from old Earth that would

show the people where their ancestors had come from. A carefully programmed series of old Earth as seen from the ship, centuries ago, together with similar views of Beryl. *They do look alike*, Linc saw.

Finally he had the tapes he wanted, arranged the way he wanted them, and programmed them into the communications system.

Then, soaking with sweat, he went back to the airlock and donned the rest of the pressure suit and its equipment. Outside once more, he checked the back-up communication system's antenna. It looked all right. The test panel set into the ship's skin, along-side the two-hands-wide, bowl-shaped antenna, glowed green when Linc touched its buttons.

Now he fairly flew down the outside of the tube-tunnel toward the Living Wheel. He took great incautious leaps, spanning a dozen meters in a stride. As he got closer to the living area and the gravity built up, he had to slow down and use the stairs more normally; But still he hurried.

It took agonizing minutes to find the back-up communications antenna down on the first level. It was clear on the opposite side of the wheel from the airlock. Linc located it at last, activated it, and let his breath gulp out in a grateful sob when the panel light flashed green.

All set, then. Wall screens'll show them everything. All I have to do is get Magda to turn them on. When she calls on Jerletfor guidance they'll see the new world and everything else I've programmed.

Wearily, suddenly realizing how utterly exhausted he was, Linc clumped back along the Living Wheel's skin to the airlock hatch. He stopped for a moment and watched the stars swinging in their stately course as the ship rotated. *It'd be so easy to float off.* he knew. So *easy to forget everything and just drift away. Float among the stars forever.*

But as he gazed out at the swirling stars, his mind's eye pictured Monel and the way he held Magda. As if he owned her, possessed her. And she let him do it. *She let him!* She didn't seem to be happy about it, but she didn't try to stop him, either.

Linc felt confused. Magda and Monel. ..Jayna warning him... everything seemed upside down. No one stayed the way they were. Everything was changing.

As the ship swung on its ponderous arc, the yellow sun came up over the curve of the metal wheel. The faceplate on Linc's helmet automatically darkened, but he still had to squint and look away.

It can bring us death, he said to himself, if we stray too close to it. But it can also give us life, if we act properly.

And suddenly he knew that he could never let himself drift into the oblivion of death, even if it meant spending his final moments among the glories of the universe. He would fight for life. Fight with every gram of strength in him.

Doggedly, Linc pushed his tired muscles back to the airlock hatch. There's still a lot to do. An awful lot to do.

He opened the hatch and stepped inside the airlock chamber. For a moment longer he gazed outward at the stars. But then he reached up and touched the button that closed the hatch. The pumps hidden behind the metal walls clattered to life; Linc felt their vibrations through the soles of his boots. Soon he could hear air hissing around him. The control panel light went from amber to green, and the inner hatch slid open.

Monel and four of his guards were waiting there.

"Good evening," Monel said sarcastically. "I'm glad we didn't sit here through lastmeal for nothing. I was expecting you to return sooner."

Linc stepped out into the passageway and unfastened his helmet.

"Sorry to keep you waiting," he said, as he raised the helmet off his head. "I had a lot of work to do."

"You finished your work? You're ready for the meeting?"

"Yes. When does it start?"

"In a little while." Monel seemed to be enjoying the conversation. He was smiling broadly as he said, "Too bad we'll have to have the meeting without you."

"You can't keep me away from it."

Monel laughed. He raised his right hand and pointed it somewhere behind Linc.

Before he could turn around, Linc felt his arms pinned to his sides by the guards. Someone loosened the straps holding his life support pack and its oxygen tanks. It thudded to the floor.

Monel had Linc's helmet in his lap.

"It's going to be my sad duty to organize a search party to try

to find you," he said pleasantly. "After all, when you don't show up at your own meeting, people will start to worry about you. We'll find this helmet here in the passageway, right beside the deadlock hatch. Someone will open the hatch to see if you're hiding in there. They'll find your body there. Too bad. But that's what happens to people who tinker with machines. It'll be a good lesson for everybody."

Linc was too furious to say a word. His voice gagged in his throat.

Silently, the guards opened the airlock hatch and pushed Linc inside. He fell to the floor in a heap. Before he could get to his knees, the hatch slammed shut.

The green panel light changed to amber. Linc could hear the pumps starting. The air was being sucked out of the chamber.

14

Linc scrambled to his feet and clawed at the control panel. No use. Monel had jammed it, somehow. But underneath the panel lights and the regular cycle control buttons there was a red button marked EMERGENCY OVERRIDE. Jerlet had explained to Linc that the override would stop the airlock's operation and fill the chamber with air whenever it was pushed.

Linc leaned on it. Nothing. The pumps kept on throbbing, the pulse in Linc's ears was pounding in rhythm with it.

He's tampered with the controls! Monel himself has tampered with the machinery!

But the realization wasn't going to help, Linc knew.

Already it was difficult to breathe. Linc staggered to the access panel where the pumps and oxygen bottles were hidden. He flicked the latches open and the panel slid to the floor with a crash.

An empty pressure suit was hanging limply inside the compartment. Linc grabbed at the helmet and quickly pulled it

over his head. There was enough air in it to let him take one quick breath. Blinking away the dark spots from his vision, he saw that there were instructions printed on the wall of the compartment, under a red EMERGENCY PROCEDURE heading.

Blessing Jerlet for teaching him to read, Linc reached for the emergency oxygen Linc that connected to a green metal tank and plugged it into the collar of his helmet. The stuff tasted stale and felt cold, but it was breathable.

Linc quickly sealed the helmet, pulled the oxygen tanks and life support pack from the emergency suit onto his own back.

and then disconnected the emergency oxygen supply Linc. He was fully suited up, able to face hard vacuum without danger.

He turned and saw that the amber control light was still on. As he lifted the access panel back into place, the light turned red and the outer hatch began to open.

If I slay here, they'll just take this equipment away from me and do it all over again, Linc thought. There was only one escape route: outside.

He clumped to the lip of the hatch and stepped outside once again. Grimly, Linc stood there and watched the hatch close.

He wished he could see the look on Monet's face when they opened the airlock and he was gone. Would they think he had been whisked away to outer darkness? Or would Monel guess that Linc had somehow escaped?

Either way, Monel would probably keep a guard or two at the hatch, just in case Linc should try to get back.

H is earlier weariness was still tugging at him. But now he had the adrenalin-fueled fires of survival and hatred urging him on.

Carefully he paced along the catwalk built into the Wheel's outer skin. As Baryta "rose" from behind the curve of the Wheel, Linc could see in its golden light that the metal of the ship was pitted and streaked, marked by time and the vast distances the ship had traveled.

Here and there were larger holes, actual punctures, and Linc began to understand why some sections of the Living Wheel were closed off. *No air. It leaked out of the holes.*

In one place there was a gaping wound in the Wheel's side. He could peer inside and see an empty room; nothing in it except a few tables welded firmly to the floor. There were some viewing screens built into the tabletops.

And then Baryta's sunlight glinted off the rounded hump of an airlock hatch. Linc felt a surge of joy warm his innards. He shouted to himself and dashed toward the airlock as fast as he could.

It wouldn't budge. He pushed the buttons a dozen times, but the hatch refused to move. Then, remembering what Jerlet had taught him, he tried the long lever of the hatch's manual control. It too remained frozen in place.

Linc wanted to cry. He sank to a sitting position as Baryta

slid out of sight. The stars looked down impassively on. the figure of alone, exhausted, frightened young man as he sat and felt the warmth of life ebbing out of his body.

Then Linc remembered. The hole in the ship. Maybe Icanget through there.

He backtracked and found the ragged hole again. It was barely big enough for his shoulders to squeeze through. Praying that he wouldn't rip the suit's fabric. Linc crawled through and put his booted feet down on the room's bare metal flooring. The tough suit fabric held up. His backpack stuck in the opening for a scary moment, but Linc managed to worm it through. He stood up.

I'm inside, but it's just as bad as being outside unless Icanget past this room.

There were two doors in the room. Linc saw in the light of his helmet lamp. One of them looked as if it opened onto a corridor; it was heavy, airtight, as all the corridor doors were. But the other, on a side wall, looked as if it were made of plastic rather than metal.

Linc tried to pull it open. It refused to slide as it should. He leaned against it, and it bowed slightly. He backed off a

step, then kicked at the door with the metal sole of his boot with all the strength he could muster.

The door split apart.

Linc stepped through the sagging halves.

Into the Ghost Place.

Despite himself he shuddered. *Inside nbs* ghosts were mute and immobile, their faces frozen in twisted soundless screams of horror and pain. Their eyes stared; their bodies slumped or sagged; their hands reached for control buttons, the hatches leading out of the bridge, or just groped blindly. Most of the ghosts still sat at the bridge's control stations, in front of instruments that were mostly dead. Only a pitiful few of the screens still flickered with active displays. Linc saw.

He noticed that a couple of the ghosts were staring up overhead. Linc looked up and saw that several pipes were split up there, hanging loosely from broken brackets. From the faded colors, Linc knew that the pipes at one time must have carried liquid oxygen and liquid helium.

They must have been frozen where they stood, when whatever tore the hole in the next room broke the pipes.

Suddenly, they weren't ghosts anymore. They were people like himself, like Jerlet, like Slav or Magda or Jayna or any of the others. Real people who died at their posts, trying to save the ship instead of running away.

There was no fear in Linc now. But his eyes were blurry as he realized that these people had given their lives so that the ship could continue living.

Slowly, Linc made his way past the dead bridge crew, heading toward the hatch that opened onto the passageway outside. They protected the bridge with airlocks, so that a loss of air outside wouldn't hurt the crew in here...and then the disaster struck from inside the bridge itself.

The airlock hatch was frozen shut, of course. It took Linc several moments to remember that there were tools here on the bridge. He found a laser handwelder, plugged it into the bridge's power supply, and grinned with relief when it worked. He set the tool on low power and played its thin red beam across the hatch mechanism.

The metal creaked and ticked and finally, when Linc tried the handle for the eleventh time, clicked open. Linc stepped into the airtight compartment between the two hatches, closed the inner hatch and opened the outer one. Warm air from the passageway rushed in, making it hard to push the hatch open.

But it did open, and Linc stood out in the familiar passageway once again. He started toward the library, hoping that the meeting was still going on. He unsealed his helmet as he clumped along the corridor, after clamping the hand-welder to a clip on the side of his suit.

No one was in the corridor. That meant they were all in the library, at the meeting. Linc passed his own empty room, and a sudden idea came to him.

He ducked inside and looked at the tiny screen set into the wall above his bunk. Since he had been a child, it had been untouched. Was it workable?

He pulled his gloves off and touched the red ON button. The screen glowed to life. He tried several different buttons and got nothing but views of other empty rooms. Finally, just as he was about to give up, the screen showed the library, crowded with all the people.

"He still hasn't shown up," Monel was saying. He was sitting beside Magda, who held her rightful place on the central pedestal. "He's scared of the truth, scared to face us all with his wild stories."

The crowd was muttering, a dozen different conversations going on at once.

"How long are we going to wait for him?" Monel demanded of Magda.

She looked down at him from her perch and said, "It's not like Linc to run away."

If Monel felt any guilt at her remark, he didn't show it. He merely insisted, "Linc demanded that we ask Jerlet's guidance. I say we should call on Jerlet now, and see what he has to say. Either that, or call an end to this meeting. Linc isn't going to show up. He's afraid of Jerlet's truth."

Smiling in the glow of his viewscreen. Linc punched the buttons that activated the computer tapes he had programmed earlier. All the screens in the Living Wheel, including the huge wall screen in the meeting room, suddenly blazed into life.

A view of old Earth, brilliant blue and dazzling white, swimming against the blackness of space.

Jerlet's rough, unmistakable voice rumbled, "That's Earth, the world where we all came from originally...."

The view abruptly changed to show an ancient city on old Earth. And Jerlet said, "I'm not sure which city this is, but it doesn't make much difference. They all got to be pretty much the

same----" The crowds and noise were overwhelming. The sky

was dark and somehow dirty-looking. Millions of people and vehicles snarled at each other along the city's passageways.

Then the scene shifted to show mountains, rivers, oceans of pounding surf. And Jerlet's voice continued:

"This is the world of our origin, where our ancestors came from, where this ship came from. It was a good world, long ago. But it turned rotten. Our ancestors fled in this ship... seems they were driven away by evil people, although they were glad enough to leave Earth; it had gone sour. They came out to the stars to find a new world where they could live in happiness and peace."

The scene changed abruptly once again, showing a telescopic view of Beryl.

"This is the new world," Jerlet said. "We can reach it, if we're

lucky. But there's a lot of work ahead of us if we're going to make

it there safely___"

Linc left his helmet and gloves on the bunk and strode out toward the meeting room.

15

For a moment, Linc felt silly as he approached the library, clumping along the corridor in the bright-blue pressure suit. He hadn't even bothered to take off the backpack. Only his gloves and helmet were missing.

But then he thought, I'll need every bit of impact lean get. If the suit impresses them, so much the better.

He checked to see if the hand-welder's power Linc was connected to the suit's electrical system. It was.

If Monel tries to send his guards at me, I'll burn the wheels off his chair.

He paused at the double doors of the library. Peering through the discolored windows he could see that everyone in the room—including M agda—was sitting with their eyes riveted to the big wall screen. Quietly, Linc pushed one of the doors open and slipped inside.

The screen was showing engineering drawings of the ship. Specific areas were outLincd with pulsing yellow circles, as Jerlet's voice commanded:

"The key to the whole damned thing is the bridge. That's where the astrogation computer and all the necessary instruments are. Can't start making course corrections until you know exactly where you are in relation to Baryta and Beryl. And I mean *exactly*. Laser wavelength accuracies, son."

Linc smiled to himself. In his mind's eye he could see the old man's shambling figure, bloated and almost grotesque, and the intense glitter in his eyes as he tried to get his points across to Linc. *Hard to think of him as dead*. Linc said to himself. But it was still harder to understand how he could be frozen, like the

ghosts on the bridge, and yet someday be brought back to life.

"The rocket engines ought to be all right; we checked them and repaired them back when you pups were being hatched," Jerlet's voice rumbled on. The screen showed red arrows where the thrusters were located. "You'll have to

make sure all the connections are still in place, so when the computer orders a burn the thrusters get the info. That'll mean some outside work

The pictures went on, with Jerlet's unmistakable voice explaining them, until they ended with another view of Beryl.

"That's the new world, Linc," the old man rasped. "Your world. Yours and the rest of the kids'. It's up to you, son. You've got to get them there safely. It's all up to you."

The wall screen went blank.

No one in the room moved. They all kept staring at the screen,' open-mouthed with awe.

"I intend to follow Jerlet's command," Linc said as loudly and strongly as he could.

They whipped around to see him. Magda's hands flew to her face. A girl screamed. Monel sagged in his chair.

Slowly, deliberately, Linc walked through the shocked people sitting on the floor, up to the pedestal where Magda reigned.

He turned to face the people. "I'm not dead, as you can see. And I'm not afraid to face you. I've been with Jerlet, and he sent me back here to help us get to the new world."

Jayna was sitting up front, her face glowing. No one spoke; the crowd hardly breathed.

Linc went on, "You all saw the pictures on the screen. There's a new world waiting for us. A world that's open and free. A world where we won't have to worry about warmth or food or anything else."

"Is it... is it really true?" someone in the crowd asked.

"Can it be really true?"

"It's real," Linc said. "I've seen it myself. The new world really exists. Its name is Beryl. Jerlet named it."

"And we're going there?"

"We can get there—but only if we fix the machines."

"That's forbidden!" Monel snapped.

A few people muttered agreement with him.

"Not anymore," Linc said. "Jerlet forbade us from touching machinery while we were children, and too young to understand what we were doing. Now he wants us to fix the machines and save ourselves from death."

Monel pushed his chair up toward Linc. "How do we know that was really Jerlet speaking to us? We didn't see his face. And you said Jerlet is *dead.*"

A shocked murmur went through the crowd.

"He is dead, but he will come back to life someday. He left those words and pictures for us, to teach us, to show us what we've got to do."

"Why didn't he speak to us directly?" someone asked.

Monel added, "And all this talk about fixing the machines in the bridge. That's the Ghost Place! How can Jerlet expect anyone to go there? It's a place of death."

"I was there a little while ago, and I'm not dead."

They actually drew back away from him. Monet's chair seemed to roll backward a few centimeters all by itself. The crowd sucked in its breath in a collective gasp of surprise and fear.

"I'm telling you," Linc shouted to them, "that all this fear of the machines is stupid! Do you know what Jerlet thought of us? He called us superstitious idiots! He was ashamed of us!"

They muttered. They shook their heads.

"How do we know you're telling the truth?" Monel demanded. "Just because you *say* you've been with Jerlet, and you *say* you've been to the Ghost Place

Linc found that he had the welding laser in his hand. Its smooth grip felt good against his palm. His fingers tightened over it.

"This suit I got from Jerlet. None of you has ever seen anything like it, have you?"

A mumbled "No."

"And this..." he held up the welder so that they could all see it, "I took from the bridge—the Ghost Place. Watch."

He turned to one of the few ragged books Jeft on the shelves and pulled the laser's trigger. A pencil-thin beam of red light leaped out. The book burst into flames.

The people oohed.

Linc eased off the trigger. He waved the laser in the general

direction of one of Monel's guards. "Put the fire out before it causes some real damage," he ordered. The fellow hesitated a moment, then went over and smothered the smoldering book with a rag he pulled from his pocket.

"I have been with Jerlet," Linc repeated to thecrowd. "I have been to the Ghost Place. Your fears are silly. It's time for us to stop acting like children and start doing what's needed to save ourselves and reach the new world."

"No."

Linc turned. It was Magda.

"You are wrong," she said. "Misguided. You may honestly think that you're doing Jerlet's work, but you are wrong."

"I lived with him!"

Magda's face was a mask of steel. "There is no proof. You tell us that Jerlet is dead, yet will live again. You say that Jerlet spoke the words we heard from the screen, yet he didn't show himself to us. You tell us to fix the machines, yet we have Jerlet's own words warning us that we mustn't touch the machines."

And she pressed the yellow button on the pedestal where she sat.

The wall screen glowed again, and now Jerlet's face appeared. Linc knew that it was the younger Jerlet, speaking to them when they had been only children.

"I've tried to set you kids up as well as possible," the tape began as it always began.

Linc watched the screen in sullen rage as the old tape unwound its familiar message. How can I get it through their skulls? he fumed at himself. How can I make them see?

"Now remember," Jerlet was saying, "all the rules I've set down. They're for your own safety. Especially, don't mess around with the machines...."

Magda turned from the wall screen to Linc. "That is Jerlet," she said. "He still lives. He speaks to us when the priestess summons him." Her mouth was tight and hard; her eyes burning with—what? *Is it fear? Or pain? Or hate?*

As Jerlet droned on, Magda raised a hand to point at Linc. "What you've told us is false!"

The laser was back in Linc's hand. Without even thinking of it, he fired at the screen. It exploded in a shower of sparks and plastic shards. The crowd screamed.

"You're wrong!" he shouted at them, waving the laser. "Superstitious idiots... Jerlet was right. Well, I'm going to the bridge. I'm going to repair those machines. By myself, if I have to. And don't any of you .try to stop me!"

No one moved as he stomped out of the meeting room. Either to stop him or to help him.

16

Linc slammed the welder on the desk top in fury.

He was standing in front of the bridge's main data screen. The access panels of the computer behind the screen were open, and the computer's complex innards stood bare and revealed to him. They were a heartbreakingly hopeless mess. Something had smashed the plastic circuit chips, melted the metal tracings of the circuit boards, vaporized the eyelash-small transistors.

Hopeless, Linc told himself.

Two servomechs stood impassively behind him, waist-high cubes of metal with little domes of sensors atop them and tiny silent wheels underneath. Their mechanical arms hung uselessly at their sides. They couldn't handle this kind of work, although they had been invaluable to Linc on many other jobs.

He still remembered how everyone in the corridors had fled in terror when the first few servomechs came through the tube-tunnel hatch and into the main passageway, trundling quietly and purposefully toward the bridge, under Linc's radio command.

Now I'll have to send one of them all the way back to the hub for more spare parts. Linc told himself. In the past months, more than one servomech had failed to make it all the way through the tube-tunnels and back again.

Linc frowned. "Well," he said to the nearest of the little machines, "you're just going to have to try to get through. I hope there are enough replacement parts left in the storage bins."

For months now Linc had had no one to talk to except the servomechs. They weren't very good company.

He programmed the servomech and it obediently rolled out

to the hatch, snaked a flexible arm up to the control button, and let itself out of the bridge.

Linc arched his back tiredly. The bridge's main observation viewscreen was focused on Baryta. The yellow sun was no longer merely a bright star; it showed a discernible disk. Even through the filtered screen display, it was bright enough to hurt Linc's eyes. Close beside hung a bluish star: Beryl itself was now visible.

But no one came from the people to tell him that they saw Beryl, and that they now believed him.

"Let them meditate and frighten themselves to death," Linc muttered as he walked tiredly toward the room he had made the servomechs fix up for him. His voice sounded harsh and strained; he hadn't used it too much lately.

Starting to sound as ragged as Jerlet, he said to himself.

He glanced at the airtight hatch that let to the passageway as he walked down the long, curving length of the bridge. Once in a while he thought he saw someone peering through the tiny window at him, watching him. "Imagination," he snorted. "You want them to come to you, so you imagine seeing faces. Next thing you know, you'll start imagining the ghosts are real."

They had seen the ghosts, all right. When the servomechs, led by Linc, carried the long-dead crew to the deadlock, the people had watched, aghast. No one offered to help. After the first few shocked moments of watching, they had all run into their rooms and shut their doors tightly.

The window in the hatch was dark, as usual, when he looked at____

There was a face there!

Linc stopped in his tracks. He blinked. The face was there, staring at him. The window was too clouded to make out who it was. A hint of yellow hair, that's all he could see.

After a moment's hesitation, Linc stepped over to the hatch. The face didn't go away.

He reached for the hatch's lever and pulled it open. Jayna stood on the other side, an odd-shaped package in her hands.

"H ... hello," Linc said, his voice nearly cracking.

She stood wide-eyed, frightened looking. But she didn't run away.

"I brought you some food." Jayna's voice was high and trembly.

She looks so scared. Linc Thought. Scared and little and helpless. And awfully pretty.

"Thanks," he said, reaching out for the package.

"I've been here before, but you never noticed me."

"You should have rapped on the hatch."

"Oh no... I didn't want to... to bother you," she said.

"I would have welcomed some company. It's been pretty lonesome in here all by myself. Nothing to talk to except machines, and they don't talk back."

"Oh."

They stood awkwardly facing each other, on either side of the hatch's metal lip.

"Want to come in and see what I'm doing?" Linc asked.

An even deeper fear flickered across her face.

"It's all right," he said, smiling. "I've cleared away the ghosts and cleaned up the place." He reached his freehand out for her.

She hesitated a second, then took his hand. Her grasp felt warm and wonderful to Linc.

She stepped inside and Linc swung the hatch shut.

"Do Monel or Magda know you've come here?"

Shaking her head, Jayna answered, "No. But I don't care if they do. They're going crazy, all of them. Every time we see the yellow star it's closer and hotter. But they say if we work harder and meditate longer it'll go away. But it's not!"

Smiling grimly, Linc said, "It better not. It's our chance for life. Has anybody noticed the little blue star beside it?"

"Yes. ..a few. Monel claims it's not there. He says it's a trick, to fool us."

"Hmp. That 'trick' is Beryl. Our new homework!, if we can reach it." He walked slowly back to the row of desks that Lincd the far wall of the bridge's length, and placed the food package down.

"A trick, huh? And who's playing this trick on everybody? Has Monel blamed anybody for it?"

Nodding, "Yes.... You."

Linc nodded back. "I thought so."

He showed Jayna the bridge, showed how many of the instruments and sensors he had already repaired. She watched in silent wonder as Linc made views of Beryl appear on the viewing screens that Lincd the bridge's curving length.

"The sensors are starting to bring us information on how far away we are, and what changes in our course we need to make to get to the new world," he explained to her. But it's all useless if I can't get the astrogation computer working, he added silently.

Linc showed the girl where he and the servomechs had repaired the hole in the ship's hull, and how he had fitted out the room next to the bridge—the captain's lounge, he had learned from the computer plans—for his own comfort. He kept the servomechs still while Jayna was near them; he didn't want to frighten her with machines that rolled around the floor and blinked lights and used mechanical arms.

She was silent all through the tour. Finally she said, "It's all wonderful! Linc, what you've done is wonderful! *You're* wonderful!"

"You're not frightened of me now?"

"No." She was looking up at him with those large, sweet blue eyes. "I was scared when I came in... I only meant to bring you some food. I didn't think I'd have the nerve to really come inside."

"There's nothing here to be frightened of."

She stepped close to him. "I know that... now." His arms circled around her automatically.

For a while they stayed together, holding each other, not moving. But finally, Linc gently disengaged himself.

"You'd better go back, before they find out that you've come here."

Jayna looked up at him, her eyes troubled. "Linc.. .let me stay here. With you."

"No." He shook his head. "You can't."

"Please."

His hands reached out to her, almost as if they had a life of their own and he had no control over them. But he stopped them and let them fall to his sides.

"No," he said firmly. "You've got to go back. If you stay, Monel will send his guards here to bring you back. It will be the excuse he needs to try to stop me."

"They'd be afraid to come in here," she said.

I want her to stay! Linc realized. But he said to Jayna, "You can't stay here. Go back to the rest of them. Tell them you've been here, if you want to. Tell them what you saw, what I'm

doing. Tell them—all of them—that I'm going to save their lives whether they help me or not."

"I'll help you." Her voice was pleading now. "I want to help you."

"The best way for you to help is to go back and tell them."

Jayna looked as if she would keep on arguing. But abruptly, she pulled her gaze away from Linc, turned, and nearly ran for the hatch that led to the passageway. She didn't look back. Linc stood rooted to the floor plates, as if welded there, and watched her open the hatch and flee back to the rest of the people.

Idiot! he snarled at himself. *She doesn't know why you wanted her to leave.* After a moment's thought, he admitted, *And neither do I.*

Time became a meaningless, endless round of work. Linc slept, ate, and worked. He sent the servomechs back and forth from the bridge to the hub so often that he lost count. He learned what he needed to know from the computer's instruction screens; and a lot more besides.

Jayna returned for more brief visits. She always brought food, even, though Linc assured her that he ate very well; the servomechs brought food down from the galley in the hub. She stopped asking to stay with him, but hinted subtly about it. Linc ignored her hints.

Beryl grew brighter, and Baryta became a blinding sphere of brilliance that he could watch only through the special filters of the telescopes and viewing screens. Linc finally got the astrogation computer working, and then faced the problem of checking out the controls and wiring that linked the computer's command system to the ship's rocket thrusters.

That's when Slav showed up.

He simply pushed open the airlock hatch and called in his heavy deep voice, "Linc? It's me, Slav."

Linc was at the other end of the bridge, studying a diagram on a viewing screen. It traced out the wiring circuits that led to the main rocket engines.

He rushed down the length of the bridge as Slav called again:

"Hey Linc. Where are you? It's me..."

Stav heard his pounding footsteps and turned to see him. Linc skidded to a halt.

"... Slav," he ended, his voice going soft.

For a moment, Linc didn't know what to say. "I... it's good to see you, Slav."

His broad-cheeked, square-jawed face broke into a wide boy's grin. "Jayna told me she's been here and the ghosts didn't get her. I felt kind of silly, staying away."

"There's nothing here to be afraid of."

"Huhn... that's what Jayna said. Thought I'd come and see for myself."

Linc waved a hand at the curving Linc of desks and viewscreens that formed the bridge. "Sure... see for yourself."

Stav paced along, hands locked behind his broad back, and looked at the instrument screens. Nearly all of them were working now, showing views of Beryl, readout numbers and curving graph Lincs in different colors that reported on how the ship's power generators and other machines were working. Slav seemed especially fascinated by the computer and it's winking lights.

"You've got all the machines working," Stav said.

"Almost all of them," Linc replied. "It wasn't too tough to do. Most of them just needed minor repairs. Whoever built them made them to last."

Stav nodded heavily. He was impressed.

"I could use some help," Linc said.

Stav pursed his lips quizzically. "Monel wouldn't like that."

"Is he just as bad as when I left?"

"Worse."

"Oh."

"Every day the yellow sun gets closer, the people get more afraid, and Monel gets crazier. He's got everybody lining up in the morning for firstmeal. If he doesn't like you, you have to go to the end of the Linc. Maybe you don't get any food at all. His guards watch us all day long. It's not easy to do your work with somebody staring at you all the time. If you try to rest for a few moments they yell at you. And then you don't get any food at lastmeal."

"And the people are putting up with that?"

"What can we do? I almost wrapped a hoe around one guard's head, but then I remembered what happened to poor litle Peta. I don't want to be cast out!"

Linc frowned. "What about Magda?"

"We never see her anymore. She's locked herself in her room. Monel claims she's meditating day and night, trying to save us by pure mental concentration."

Linc looked away from the thick-armed farmer and stared at a viewscreen that showed green curving Lincs snaking across a gridwork graph. The background of the screen was black, and Linc could see his face reflected in it: tight, hollow-cheeked, thin-lipped, eyes scowling.

"Slav," he said at last, "meditating isn't going to save this ship. And nothing Monel can do will save us, either. But *I* can save us all. I know how to get us safely to the new world. Most of the machines are working now. I need help to get the rest of them in shape."

"You want me to help you."

"Not just you," Linc said. "All the people. Anyone and everyone. Go back and tell them that they can help me... and if

they do, they'll be saving themselves."

Slav blinked his eyes. Like almost everything he did, it was a slow and deliberate movement. "Not everybody can come here. Somebody's got to work the farm tanks

"I need all the help I can get. We're in a race against time. Everything's got to be ready *before* we get too close to the yellow sun. Otherwise we won't be able to pull away from it and land on the new world."

"All right," Slav said. "I'll tell the people. Monel and his guards, though...."

"They can't stop you. Not if you all act together."

Slav nodded slowly, but he didn't seem convinced.

17

Linc paced slowly along the bridge, watching the yiewscreens and the men and women sitting at their stations tending the instruments. He felt a warm glow of pride.

The ship works beautifully, he said to himself. My ship. I brought it back to life. I made it work again. He wished for a moment that Jerlet could see it all; how the machines hummed and clicked to themselves. How the people had come to him: Jayna first, then Slav, then two more, a handful, a dozen. Now he had enough people to do all the tasks that needed doing. They didn't even jump when a servomech trundled past them, anymore. The rocket engines tested out; the connections were solid. The computer had worked out a flight plan to put them in orbit around Beryl.

All that remains to do is to test the matter transmitter. Linc knew. But even if it takes time to get it working, once we're in a stable orbit around Beryl we'll have plenty of time. Already the main computer up in the hub was going over all the necessary data and working up a program that would tell Linc how to repair and test the matter transmitter system.

If Jerlet could only see this! He'd be proud of me. But Linc frowned to himself. He knew who he really wanted to see his accomplishments: Magda. But she had never once visited the bridge, his domain.

Monel had come.

Red-faced, thinner, and nastier than ever, he had come flanked by six of his guards and watched—angry and snarling—as more than a dozen people worked at the tasks Linc had assigned them.

"You'll get no food!" he screamed at them. "None at all! Don't expect to go against my orders and still get fed."

Linc countered, "We have food processors at the hub and other levels of the ship. The servomechs keep us well-supplied. We won't starve."

Monel spun his chair around and wheeled himself away from the bridge. One of his guards stayed with Linc, a fellow named Rix. "He's gone crazy," Rix said. "I'm better off with you."

Linc didn't tell everyone that the food processors couldn't feed a large number of people indefinitely. They would need inputs of fresh food eventually. *But by that time we'll either be in orbit around Beryl or dead.*

Monel was back a few days later, this time threatening to have the guards tear people away from the bridge by force, if necessary.

"Violence?" Linc asked.

"Justice!" Monel snarled.

Linc went to a desk top and touched a button. A servomech rolled up to Monel's chair and stood there, its dome sensors pulsing with a faint reddish light. Monel backed his chair away.

"Those metal arms," Linc said, "can inflict a lot of justice on your guards. Or you."

Monel left the bridge. He never returned. Neither did his guards.

And Magda never came at all.

I could go get her, Linc thought. But he shook his head at the idea. No! Let her come to me. She's wrong and I'm right.

Besides, there was Jayna and a dozen other girls who wanted to be with him now. Let Magda sit in her shrine, Linc told himself. Let her meditate 'til she turns green!

Most of the people came to the bridge to help him every day, then returned to their quarters for meals and sleep. Despite the threats and grumblings, Monel took no action to stop them. Slav and his farmers hardly ever showed up on the bridge, but Linc knew they were on his side.

Linc himself slept in the captain's lounge, next to the bridge. He ate what Jayna or some of the other girls brought him.

He spent most of his time working on the matter transmitter.

It was incredibly complex, and he didn't understand the first tenth of what he was doing. But the computer patiently showed detailed diagrams, gave him long lists of parts and instructions on where to find them and how to use them.

And each day the yellow sun grew brighter, bigger. It seemed to be reaching out for them.

Linc was squatting on the floor of the transmitter booth—a» tall cylinder of transparent plastic that stood in front of the system's roomful of electronic hardware—when Hollie came running up to him.

"Linc," she called breathlessly, "the astrogation computer is starting to print out the final course corrections!"

Linc scrambled to his feet and wordlessly followed her to the bridge. Hollie was a slim, lanky girl, almost Linc's own height, and her long legs kept pace with him as they raced down the corridor from the transmitter station to the bridge.

More than a dozen people were crowded around the astrogation computer desk. They moved back when Linc arrived and let him slide into the seat.

Above the desk, the computer's main viewscreen had split into several different displays. One showed numbers: the exact timing and thrust levels of the rocket burns that must be made. Another showed a picture of their course, laid against a schematic drawing of the solar system that they were finally reaching. Thin yellow Lincs showed the orbits of the system's six planets: Beryl was the second-closest to the yellow sun. A glowing blue Linc showed the course that the ship would have to follow; it ended in a circular orbit around Beryl. A flashing green dot showed where the rocket burns had to be made.

Linc studied the numbers and nodded.

"Twelve hours," he said. "The first rocket burn has to be made in twelve hours."

They all clapped and laughed. They were excited, eager. Their long weeks of work were finally resulting in something they could see.

But Linc found himself wishing for more time. *I've got to be in a dozen places at once*, he realized. The matter transmitter wasn't ready for testing yet, and no one else could read or handle the tools well enough to be trusted with it. But he also had to be

here on the bridge to make certain that the course-changing maneuvers were done exactly right. Otherwise everything was doomed.

And, he realized, he had to see Magda.

It was night. Everyone was asleep. Linc stood by the astrogation computer and watched all the unsleeping, hard-working instruments of the bridge. *The whole ship is at my fingertips. All mine. Just as though nobody else existed.*

In three more hours they would all be awake and clustered here at the bridge while the rocket engines roared briefly to life. A few seconds to thrust, that was all that was needed for this first course correction. A quick burn that would swerve them away from Baryta's glaring hot grasp.

The difference between life and death.

She won't come to see it happen, he knew. She'll stay in her little shrine and wail for me to come to her.

He paced the length of the bridge once. Then twice. Abruptly he strode to the hatch and pushed it open. For the first time in many months, he went back to the living area.

It seemed strange to be walking down the old corridor again. His home, for most of life. But now it looked old, worn, and tired, somehow different than Linc remembered it. The walls were stained and discolored. The floor was scuffed and dull.

He passed the big double doors of the farm section. How many lifetimes ago had he repaired the pump that Peta had damaged? How much had happened since then!

Linc found himself slowing down as he neared Magda'sdoor. He glanced up and saw a long-dead TV camera's eye staring blindly out of the ceiling. *I could fly that and watch the corridor from the bridge, he* thought idly.

He finally got to her door, hesitated, then tapped on it lightly.

"Come in Linc," came Magda's muffled voice.

The room was the same. The walls glowed dimly. The strange sky shapes shone across the ceiling. Magda sat on the bunk, her face deep in shadow, as Linc stepped in and let the door slide shut behind him.

"How did you know it was me?" he asked. She pushed her hair back away from her face with a graceful hand.

"I'm the priestess. I can see things that other people can't see."

He didn't answer.

"Besides," she said, "who else would it be? I knew you'd come sooner or later. And probably while everyone else was asleep."

He crossed the tiny room in three strides and sat on the floor, at her feet.

"You don't sleep?" he asked.

"Not very much, anymore."

From this close he could see, despite the room's dimness, that her face was even more gaunt and hollowed than his own.

"I've got the ship running smoothly now," Linc said.

She looked down at him and let one hand rest on his shoulder. "Yes, I know." Her hand felt cold through the thin fabric of his shirt. She seemed tense, almost afraid.

"We'll be able to make it to the new world."

"Perhaps."

"You could help us-"

"I have helped you," Magda said.

Linc stared up at her. "You have? How? By meditating? A few hours with a screwdriver would have been more help."

"Don't joke about serious things," Magda said softly. "I've helped you by staying here and fasting, concentrating, meditating—and by preventing Monel from stopping your work."

"Monel couldn't---"

"Monel tried to rouse all the people against you," Magda said. "But Slav and his farmers refused to follow him. Thanks to the priestess."

Linc didn't understand. "What? Are you saying...?"

It was difficult to see her face in the shadows. Magda seemed to be staring off somewhere in the darkness. "Ever since you went to the Ghost Place," she explained, "Monel has tried everyday to make me say that you are evil, and you must be stopped. I have not said it. Slav asked me for guidance, and I told him that he should not fear you, or the Ghost Place."

"But you told me—" Linc didn't bother finishing the sentence. None of it made any sense to him.

Magda went on, "You are such children, all of you. You each

want to be the mighty leader, the one who gives orders, who decides what must be done. You *know* you're right. Monel *knows* you're wrong. At least Slav doesn't pretend to know everything, he asks the priestess for guidence."

Shaking his head, Linc asked, "I thought you believed—"

Her hand tightened on his shoulder. "The priestess is always in command. Monel thinks he's the leader; he's a fool. You think you can save us all from death; you're a fool, too. *I* am the leader here, and all of you do as *I* wish. I am letting you try to fix the machines because you might be right about them. I am letting Monel think he's giving orders to everyone because then I can make him give the orders that I want him to give.

"When you tried to overthrow everything we have believed all our lives, even the power of the priestess, I used Monel to balance your new power. When Monel wanted to stop your work in the Ghost Place and have you cast out, I used Slav to balance him. You men do all the struggling and I remain the priestess, the real leader, the one who brings Jerlet's wisdom into the lives of the people."

Linc felt stunned. "You've been playing us against each other?"

Magda's voice smiled. "Of course. I've been directing all of you ever since I became priestess. Before that time, even when we were children, I could make any one of you do almost anything I wanted to."

"But you didn't want me to fix the machines in the bridge."

"True. I was afraid for you. And afraid that if you succeeded, it would ruin my power and the people's belief in Jerlet. But when I realized that i couldn't stop you, I decided it was foolish to resist. This way, you counterbalance Monel's power. And Slav and his farmers have become a third power, in between the two of you."

Sagging against the edge of the bunk, Linc said, "I just can't believe it. You can't play with people's lives like that. No one can. You just think____"

"Why do you think you came here tonight?" Magda asked.

"Why do I think... ? I came here because we're going to light off the rockets tomorrow for the first course change, and I'd like you to be there."

"No, that's not why you came." And her hand gripped his

shoulder hard. "Linc, I summoned you. I called you. That's why I knew who it was when you knocked."

He puffed out a disgusted breath of air.

"I know you don't believe me." Magda's voice was so quiet that he could barely hear her. "But you might at least ask why I called you."

"All right: why?"

"Because I have a terrible fear. Your rockets are not going to work tomorrow. We're all going to plunge into the yellow star and be burned... or... something terrible is going to happen."

"Don't be silly." But her hand was a claw biting into his shoulder now. "Magda, everything's checked out. The computer____"

"Don't tell me what machines say!" she snapped. "I *know* something is wrong. And I need you to help me find out exactly what it is."

"Need me?"

She nodded and closed her eyes. "I have to touch you, feel your vibrations, to find out what's wrong."

He stared up at her. "You're serious about this, aren't you?"

But she was no longer listening to him. Her fingers were digging deeply into his shoulder. Her eyes glittered, but she was staring at empty shadows. Her entire body was shaking spasmodically.

Magda's mouth worked, tried to form words, but no sounds came out. Despite himself, Linc felt drawn into her spell. "What is it? What do you see?"

She didn't answer.

He waited. The minutes stretched tautly. Still she seemed possessed by something invisible.

Then she sagged and nearly collapsed against him. Linc got to his knees and held her.

"Magda, what is it? What's wrong?"

She was cold with sweat. "I...trouble—" she gasped weakly. "Trouble with the engines____"

"What kind of trouble? What will go wrong?"

"I don't know... couldn't see."

He held her tightly, his mind racing. Foolishness! You're letting yourself get caught up in this whole superstitious nonsense. But his own inner voice asked, What could go wrong?

Where could a failure happen? The answer: Anywhere.

"But what's the most likely way that a failure could happen?" he asked himself. And the answer flashed into his mind like an explosion. "If someone tampered with the engines...or the connections between the astrogation computer and the controls... or

Magda stiffened in his arms. She pulled away and stared into Linc's eyes.

"Monel," she whispered.

18

Monel was. not in his room.

Linc and Magda raced down the corridor and banged on his door. When there was no answer, they pushed it open. No one was there.

"There's a hundred places he could be," Linc said.

"What should we do?" Magda's eyes were wide with fear.

He grabbed her hand. "Let's go to the bridge."

Linc tried to force himself to think calmly as they ran toward the bridge. But his mind was a hopeless jumble of fears, hatred, darting wild thoughts.

He didn't even realize that the bridge was totally new to Magda. He just made his way to the main computer desk and plunked himself down in the chair. With one hand he waved Magda to the empty chair beside him, with the other he switched on the computer screen.

"Show me the locations of the main rocket thrusters, the control systems, and all the links between them and the bridge," he commanded.

A series of diagrams flashed onto the screens that Lincd the wall above the curving desk. The areas that Linc asked about were circled with bright colors.

"How could Monel know where these are?" Magda wondered, staring at the screens.

"Somebody told him," Linc snapped. "Rix... the guard that stayed here to help us. A traitor. That overfed, rat-faced... he's been telling Monel everything, I'll bet."

Linc hauled himself out of the computer desk chair and hurried over to another station. He punched buttons madly and

studied the pictures that the screens there showed: TV camera views of a half-dozen different parts of the ship. All empty.

He spun around and faced Magda. "We'll have to search everyplace where he might be."

"How much time do we have?"

Linc glanced at the computer's countdown timer. "A little more than two hours until the rockets fire."

"How can we search...."

But Linc was already at the communications desk. "Everybody. ..wake up!" he bellowed into the pin-sized microphone that projected from the desk top. "Slav, Cal, Hollie, get up. and report to the bridge *at once*. Emergency! We need everybody up here right away."

In less than five minutes they staggered in, sleepy, puzzled, surprised. Linc quickly told them what had happened.

There were nearly fourdozen people standing around as Linc said:

"I don't think he could get much farther than the second level, upstairs. The computer has shown us where the vital areas are. He must be in one of those places. We've got just about two hours to find him. I want you to move in teams of at least six people each. No telling how many of his guards are with him."

Magda stayed on the bridge with Linc. He checked every circuit, all the controls, using the computer and the ship's sensing equipment to tell him if Monel had damaged the rocket engines or their control circuits.

Linc showed Magda how to work the communications desk, and she began to keep track of the search parties. They could hear the people shouting to one another, thanks to the ship's built-in microphones and loudspeakers, as they tracked through the corridors and rooms of the first and second levels.

"Nothing in here."

"Hey, I thought I saw... naw, just a shadow."

"Look at this! Does this look like wheel tracks?"

"Where?"

"Right here. See, he must've rolled through that oil stain back there

Linc wished a thousand times each minute that he had fixed the TV cameras in all the corridors so that he co.uld *see* what they were doing.

The countdown timer went past the one-hour mark. Forty-five minutes. Thirty.

"Up here, by the deadlock."

Linc hadn't moved from the checkout desk. The whole rocket system still seemed to be perfectly intact; no damage.

"Ask them where they are... the ones who're following those wheel tracks," he said to Magda, without taking his eyes off the viewscreens.

She said back to him, "The tracks go into the deadlock up on level two."

You-mean airlock, he corrected silently. Then he realized that Magda was working the communications machinery without arguing or complaining and he was glad that he'd kept his mouth shut. If she's scared to touch the machines, she's not showing it.

"WE GOT HIM!" The voice was a triumphant shout.

"He was in the deadlock, hiding. We got him. We're bringing him back down to the bridge."

Linc realized that he should feel relieved. There was still more than twenty minutes to go before the rockets would fire. But somehow he still felt anxious. What was he doing in there? He glanced over at Magda. She looked apprehensive, too.

"Still worried?" he asked.

She nodded. "You?"

"I'll feel better when the engines fire okay."

Monel was his usual glaring, angry self.

"You think I'm crazy, don't you? All of you!" he shouted. He sat huddled in his chair, surrounded by the grinning men and women who had ferreted him out of his hiding place. They had also found all of his guards.

All except Rix.

"What were you trying to do?" Linc demanded.

"Stop you."

"By hiding in an airlock?"

Monel looked disgusted. "By getting your attention away from these damnable machines!"

The answer didn't satisfy Linc at all. But before he could say anything, Slav sho'ok Monel by the shoulder roughly.

"Why don't you want us to get to the new world? You want us all to die?"

Monel pulled himself free of the farmer's heavy hand. "What makes you think that you'll be able to live on this new world? Because *he* says so?" He sneered at Linc. "We know we can live on the ship. But this new world of his... who's ever lived outside the ship?" His thin voice rose to a nerve-racking shrillness. "It's death to go outside, everyone knows that! The ship is life... everyplace else is death."

Linc stepped up in front of him; towering over him. "And what happens when the ship plunges into the yellow sun? That's *certain* death!"

"Who says we're going to fall into the yellow sun?"- Monel snapped back. "You do! You claim Jerlet told you. But Jerlet never spoke to us about it."

Slav frowned down at Monel. "Everybody's afraid of being eaten by the yellow star. You are, too."

With an exasperated flap of his hands, Monel answered, "Of course I'm afraid! But I'd rather take my chances with the yellow star than deliberately leave the Living Wheel. We *know* it's death to go outside."

"Linc's been outside," said Jayna.

"In his special suit," Monel countered. "How long could he live out there? Well, Linc—tell them! How long could you live outside in that suit?"

Linc shrugged. "Many hours. A few days, probably."

"But you want us to live outside forever! Don't you?"

"Not in space," Linc said. "Not in outer darkness. On Beryl. On the new world. We'll live the way our ancestors did on old Earth."

"They had to leave old Earth, didn't they?"

"TIMECHECK," the computer's tape voice called out. "COUNT DOWN TIMECHECK: T MINUS FIVE MINUTES AND COUNTING."

Slav turned to Magda. "What do you say, priestess? Is Linc right or is Monel? Should we try to leave the ship and live

on the new world, or should we stay here?"

Magda was standing halfway between Linc and Monel. All eyes turned to her.

"I've meditated on this for a long time^she said, her voice low but strong. "I've asked Jerlet for guidance, and tried to feel the inner truth of the problem."

"And...?"

"Linc has shown that our old fears of the machines were probably wrong. He should be allowed to bring us to the new world."

The crowd sighed. A decision had been reached.

"If we were not meant to live there," Magda went on, "the machines will fail. Jerlet won't let us be led toward death. If the machines work as Linc says they will, then we will reach the new world safely and live there in happiness. But if they fail, we'll stay on the ship. All is Jerlet's will."

They seemed satisfied with that. Even Monel appeared to relax. But Linc shook his head. *Superstition. Nothing but stupid superstition.*

"COUNTDOWN TIMECHECK: T MINUS FOUR MINUTES AND COUNTING."

Time seemed to stretch out endlessly. Linc sat at the checkout desk, watching the displays on the viewscreens as they flickered past, showing every part of the rocket propulsion system. It all seemed perfectly normal, everything working smoothly.

Three minutes. Two. Sixty seconds... thirty... ten.

Linc suddenly felt as if he were somewhere high above the bridge, looking down on all the people standing there clustered around him, looking down on himself who stared solemn-eyed at the viewscreen displays, hands poised over the cutoff buttons, ready to stop the countdown if anything appeared to be wrong.

"...THREE SECONDS..."

The fuel pump symbol on the viewscreen flashed from green to amber, showing that the pump had turned on exactly on schedule.

"...TWO... ONE..."

Just at the count of ONE the pump symbol flashed red. Linc felt his jaw drop open. He jammed both hands down on the cutoff switch as the computer's toneless voice said:

"ZERO. IGNITION."

And an explosion tilted the bridge to a crazy angle, smashing Linc against the desk and sending everyone sprawling.

19

They were alive.

Through the pain that flamed through his chest, Linc realized that basic fact. He pulled himself up dizzily to his feet and looked around. The bridge seemed undamaged. There was no smoke, no fire. The people were dazed, but more from some inner turmoil than any outward fear. Hollie and one of the guards were helping Monel back into his chair.

He was laughing.

Linc glanced at the viewscreens. Everything seemed to be working, except that the astrogation display was flashing a red

ERROR, ERROR, ERROR, sign.

Linc stepped over to Monel, who was laughing so hard that his eyes were squeezed shut. His head was thrown back and the cackling, screeching sound of his laughter was the only noise in the bridge.

Linc slapped him.

With all the fury in him. Linc slapped Monel's laughing face hard enough to knock him out of the chair.

No one moved.

"Get him out offiere," Linc growled. "He's killed us all: Now get him out of here. All of you! Out! Get outf

They grabbed at the sputtering Monel, his face striped with the white prints of Linc's fingers, and dragged him away. Someone pushed the empty wheelchair. They all scurried out of the bridge.

Linc turned and saw Magda standing in front of the communications desk, taut as a steel rod.

"He's killed us all," Linc said.

"You hit him."

"I wanted to kill him!" Linc pounded his fists against his thighs.

"You struck him."

"What difference does it make?" Linc shouted at her. "We're all dead. He's ruined everything."

She shook her head. "No, Linc. Nothing is ruined except your own inner peace. You'll find a way to get us to the new world, despite Monel. You'll make the machines do what you want. But you run the danger of turning into a machine yourself."

"Leave me alone," he snapped.

"I will. You're not fit for human company."

The machines told him what had happened. Someone had deliberately knocked the safety valve off one of the fuel pumps at precisely T minus one second, too late for even the automatic machinery to shut down the rocket firing. It turned out that it was Rix who had done it. Monel told him what to do, and he did it. The explosion wrecked one of the rocket engines and killed him. That much Slav found out, and came back to the bridge to tell Linc.

The computer told him more. The rocket's misfiring had still added thrust to the ship's velocity. Its course had been altered. Not in the precise way that Linc had planned, however.

He sat gloomily at the desk keyboard and watched the astrogation computer display the ship's new course. The blue Linc now swung wide of Baryta—they would not be roasted by the approaching star. But it also missed Beryl by a wide margin. No matter how Linc pushed buttons or coaxed the computer, there was no way for the ship to get into orbit around the new world.

He paced the bridge alone, refusing to see anyone, refusing food, refusing himself even the comfort of sleep. He checked the main computer about the matter transmitter.

Question: How close to Beryl must we be to use the transmitter?

Answer: TRANSMITTER EFFECTIVE OVER RANGES LESS THAN

5000 KILOMETERS.

To the astrogation computer he asked:

Question: What will be out nearest approach to Beryl? Answer: 28,069.74 KILOMETERS.

Question: Can we get to within 5000 kilometers of Beryl? Answer: WORKING. CALCULATED THRUST LEVELS REQUIRED TO

ACHIEVE DESIRED DISTANCE FROM PLANET EXCEED STRUCTURAL LIMITS OF SHIP.

More pacing. Linc's body felt like a block of hard plastic. He buried the pain from the bruise across his chest, buried his fatigue and hunger. This was a problem he had to solve. Had to! And the machines couldn't solve it for him

Why can't the matter transmitter work over a longer range? Because it would need more power, and there isn't any more power available for it.

Of course there's more power! Linc realized. There's all sorts of power in this ship: lights, heat, all the power that runs the other machines—

Back to the computer. More questions, more answers.

They all looked shocked when he showed up at the galley. It was lastmeal. Linc knew from the low level of the lighting in the corridor.

Jayna reached him first. "Linc! You look sick—" She took his arm. "Here... sit down—"

"No. Not yet." He gestured to them all to sit down. Only a little more than half the people were in the galley. Magda"wasn't. Neither was Monel.

"Listen to me. We've still got a chance to get to the new world. It'll be difficult, but we can do it. And if we don't.. .then the ship is going to loop into a wide arc. We'll move away from Baryta—the yellow sun—for a while. We're already moving away from it. But inside of a year we'll fall back into it and get burned up."

They murmured amorig themselves. They don't believe me, Linc thought. They're tired of hearing me.

But Jayna asked, "What do we have to do, Linc?"

"Nothing," he answered. "There's nothing for you to do. Except,.. when I tell you to move, you'd better all *jump*." He snapped out the last word, startling them. "We're only going to have one tiny chance to make it—one chance for life. You'd better be ready to move when I tell you to."

He dragged himself back to the computer desk on the bridge and began programming it. *Every gram of rocket thrust... every erg of power... it's going to be all or nothing.*

Jayna brought him food. He took it without even speaking to her. He ate at the computer desk, while the screens flickered their messages at him. She stood behind him for a long while, not speaking, not interrupting. Linc could see her reflection in the screens, half a dozen Jaynas in half a dozen screens, all looking confused and worried. But she never questioned him.

He fell asleep at the desk. He awoke again and finished the programming. The computer digested all his instructions and questions, hummed and twittered to itself for nearly an hour—an incredibly long time for such a machine—and then reported with yellow block letters on its main screen:

"PROGRAM WORKING. ALL SYSTEMS FUNCTIONING AS REQUIRED."

Linc asked the machine, "How long before we reach the transfer point?"

The answer came immediately:

"76 HR II MIN I4.08 SEC."

"Start the countdown sequence at T minus three hours."

"ACKNOWLEDGED."

"How long will we be within transfer range?"

"53 MIN I2.6444I SEC."

"The matter transmitter will have to be cycled so that it can accept one person every fifty seconds or so. Can it do that automatically?"

"AUTOMATIC CIRCUITRY NOT OPERATIVE. MANUAL CONTROL NECESSARY."

Which means I'll have to stay aboard until the last person goes through the transmitter. Linc told himself.

He pushed his chair away from the computer desk and glanced at the countdown sequencer, a few desks down the

row. Its central screen read:

"76 HR I0 MIN 06 SEC."

And counting, Linc added silently.

He spent most of the time up in the hub, away from everyone. He ate from the food machines and slept, a deep, long, restful sleep. Then he returned to the bridge to check the matter transmitter.

The machine didn't look as impressive as the long row of desks and controls on the bridge. There was a transparent plastic booth, big enough to hold a person. There was a gleaming metal console that housed complex electronic circuits snaking Out of it. Linc had traced the power cables along the outside of the main tube-tunnel, straight into the fusion generators up near the hub. There was a control desk studded with knobs and switches. Linc would have to operate it smoothly, without a single wasted motion, if he was to save everyone aboard the ship.

He nodded to himself as he touched the buttons that activated the transmitter's self-inspection sensors. The checking circuit's green lights glowed at him. The machine was ready to function properly.

Linc frowned as he tried to fathom what fantastic powers must lie inside this machine. Jerlet had told him what the transmitter did: it transformed the atoms of whatever material was put inside it, changed therr\ into energy that could be beamed like light for a certain distance. There was a receiving machine that had to be at the other end of the beam, which took the incoming energy and transformed it back to the original object. Put a person into the transmitter and he could be beamed instantly from the ship to the new world.

If there was enough power.

If the ship was close enough to the planet.

If the receiver was set up properly on the planet's surface.

If the person would actually take the risk of stepping inside a machine that would literally destroy his body completely.

We can get the power by shutting down everything else aboard the ship. Linc told himself. And the remaining rockets can put us close enough to the planet for nearly an hour. The receiver's set to blast off by itself; it operates automatically.

"That leaves only one problem," he muttered.

He went to find Magda. She wasn't in her room, she wasn't with Monel. She wasn't anywhere in the living area. Linc checked the library: empty. Then he realized where she must be.

He dashed up to the second level, soared with giant strides to the observation window.

She was kneeling on the floor, staring out at the yellow sun. Even through the heavy tint of the polarized window, Baryta glared bright and angry. Linc could see tongues of flame licking

from the star's surface, beckoning to them, reaching for them.

"Magda," he called softly.

She looked up at him. "It's all right, Linc. I'm not meditating. Come sit beside me."

"What are you doing?" he asked.

"Waiting."

"For what?"

She shrugged and looked back toward the window. "For you. Or the yellow star. Whichever reaches me first."

"I'm here."

"You've found a way to save us."

"Yes."

She seemed neither surprised nor pleased. "I knew you would."

"There's something I want you to do," he said.

"What is it?"

"You've got to be the first to go through the matter transmitter."

She turned to him, her face perfectly serious, utterly calm."! can't be, Linc. You know that. I can't use your machines... any of them. You see how we were punished when I tried to help you on the bridge."

A bright flash flared outside the window, and a long flaming streak dwindled off into the distance, heading for the tiny blue crescent that was Beryl.

"That's the receiver. It's in an automatic rocket that will land on Beryl's surface and wait for us."

Despite herself, Magda looked curious. "How did you make it do that? What did you do?"

He laughed. "The machines did it. They were built long, long ago by the scientists who lived in the ship. People who were old and gone before Jerlet was born."

"They made the machines," Magda said.

"Yes, and Jerlet showed me how to fix them so that they'll work properly."

She was still kneeling, her back rigid, her eyes dark and sad. "Linc, I can't touch your machines. I've been thinking about it, and meditating on it. I just can't. It would be wrong."

"It would be right for you to die?"

"Maybe."

"No maybe about it. And not only you—everybody on the ship will die, too. Because if you don't use the matter transmitter, nobody else will."

She closed her eyes. "I'm sorry, Linc. There's nothing else I can do."

He grasped her by the shoulders. "Listen to me! There's no choice for you. None at all. I'm going to destroy the ship. If you don't go through the transmitter, you'll be dead! Not maybe, not a year from now, but in just a few hours. This is for real. There's no other way. It's either go through the transmitter to the new world, or die here with the ship. The ship will be falling apart as we leave."

Her eyes were wide now. And angry. "You couldn't! No one would be able to destroy the ship... it's our home____"

"Only for another few hours," Linc answered. "I had to do it, and it's already done. Just as that rocket took off for Beryl with the matter reciever, that's how automatically the ship is going to fall apart."

"You're going to kill us all!"

"I'm going to save you all!"

"You've gone crazy!" Magda screamed. "The machines have turned you into a monster!"

He stood up, grabbed her by the wrist, and yanked her to her feet. "Listen to me and listen hard. There's no more time to play your little games of balancing me against Monel. If you want to be a priestess to these people, then you'd better open your eyes to the truth. This ship is going to die in a few hours. Anyone left aboard will freeze, just like the ghosts."

Magda tried to pull her hand free, but Linc just held it tighter.

"If you really want to be the leader here," he went on, "then you've got to *lead*. If you don't step into that transmitter booth, none of the others will. We'll all die. You've got to lead us to life, Magda. If you're really our priestess, now is the time to set an example for everybody. Life or death! It's up to you."

20

Magda sat at the countdown desk, sullenly rubbing her wrist and glaring at Linc.

He was at the computer desk, staring intently at a display from the astrogation computer. The blue Linc that marked their course had several kinks in it, each k ink jogging the Linc closer to the planet Beryl. A red flashing dot showed where the ship was at the moment. It was almost at the first kink.

"The main rockets will fire in another few seconds," Linc said to Magda. "That is, the ones that are still working."

He slid his chair over beside hers and touched a button on the countdown desk-top keyboard. The main screen continued to show the countdown for their transfer to Beryl. The lower left-hand screen of the group now showed a countdown for the rocket firing. It read: T MINUS 00 00 38.

"Hold on," Linc told her. "This might be a rough blast."

"More violence," she snarled at him.

"If you call what I did violence____

The bridge shook. It vibrated as if some giant's hand had grabbed it and was shaking it to see if anything inside would rattle out. Linc felt his teeth grating together and he gripped the edge of the desk to keep from falling off his chair. A deep rumbling growl filled the air: the giant's voice. Magda clutched at Linc, and he put an arm around her.

As abruptly as it started, the noise and vibration stopped. It didn't dwindle away; it stopped.

Magda pulled away from Linc immediately. Linc turned and looked at the astrogation display.

"Right on course." The flashing red dot was squarely on the

blue Linc, but now it was past the first bend.

"You should have warned the people about that," Magda said. "Somebody could have gotten hurt."

"There's worse to come."

"There's going to be more blasts like that?"

He nodded. Pointing to the screen, he said, "See? Two more. And then we're on a course that will sweep past the planet. As we fly by it, for a little less than an hour we'll be close enough to make the jump down to Beryl's surface. After that, the ship will swing out of range."

Magda said, "I'll go out and tell the people."

"No! You stay right her^. You can talk to them on the loudspeaker... two seats down, the communications desk. You used it before."

Magda got slowly to her feet. She eyed the hatch that led out to the passageway. For a moment, Linc was afraid that she would walk out on him. Then she stepped over to the communications desk.

She stared at the keyboard for a long moment, then looked back at Linc.

"The red button next to the microphone," he said. "It won't hurt you. Just tap it with your finger."

She looked as if he was telling her to shove her hand into a flame. But she touched the red button, pulling her hand away from it almost before her finger reached it.

"Fine," Linc said to her. "Now all you have to do is sit down and talk."

Slowly she sat at the desk, frowning at the tiny microphone. Then she said, "This is Magda. Listen to me. Don't be afraid. The blast that we just went through was caused by the rockets firing. Linc has worked out a way for us to get off the ship and reach the new world—"

As she spoke, Linc flicked the buttons on the computer keyboard that turned on the few TV cameras still working.

Three of the screens in front of him showed people standing in the corridors, listening to Magda's voice. People came out of their rooms to hear her. Linc saw Slav and Hollie. He couldn't find Jayna in the crowd.

And there's Monel. Doesn't he look happy!

"... Don't be afraid," Magda was repeating. "We can reach

the new world. The ship is dying, but Linc will bring us safely to the new world."

She turned to look at him. "I can't think of anything more to say."

"Tell them to stand by for my orders. I'll let them know when they have to move."

Looking worried, Magda relayed Linc's words to the people.

They began gathering at the bridge after the second rocket blast. Linc didn't like them clustering around him, but they came anyway.

Should have locked the hatch, he grumbled to himself.

But they didn't get in his way. They stood there silently, watching, staring at the screens that showed so many incomprehensible pictures, words, numbers. Linc could feel them at his back, breathing, waiting, wondering.

He glanced at Magda. She was sitting at the communications desk, her eyes closed and head bowed in meditation.

She's got to go into the transmitter booth when I tell her to, Linc knew. If she doesn't, we're going to have a pack of crazy people going wild.

The countdown sequencer gave off a warning whistle, and the crowd of people shrank back from it, gasping.

"Don't be afraid," Linc said. "It's just a signal that we're going to have another rocket blast in five minutes. This'll be the last one." *And the roughest*.

They stared at the countdown screens, fascinated by the ever-changing numbers even though they couldn't read them. A minute before the rockets were set to fire, Linc told them to lie down on the floor.

"Magda!" he called.

She raised her head and looked at him.

"Tell all the people who haven't come up to the bridge yet to get down on the floor or on their bunks. Tell them to keep away from anything that might fall on them. They've got... fifty-one seconds to the final rocket burn."

She spoke into the microphone. The crowd on the bridge lay down. Linc wedged hisfeet solidly against the desk supports and held onto the sides of his chair.

The giant spoke again. The roar, was bone-rattling. The whole bridge shook as if it was going to come apart. Someone

screamed. Linc realized he had squeezed his eyes shut. He opened them and tried to focus on the screens in front of him, but everything was shaking too much. All he could see was a jangled, multicolored blue.

Then it stopped. Linc leaned forward to stare at the astrogation display. *On course*. He didn't feel triumphant about it. Just grateful.

Magda was staring at him, watching him as intently as Linc himself watched the screens.

"Better tell everybody to start heading for the bridge. Now." As she turned back to the microphone, Linc said to the people who were getting up off the floor, "There's a short corridor on the other side of the hatch at the far end of the bridge. Linc up there in single file. No pushing and no panic. Everything's going very smoothly, so let's not foul it up by getting excited."

A voice came screaming from the open airlock hatch that led to the passageway: "The farm tanks! Something's happened to the pumps. They've stopped!"

Linc glanced at the screens that told him what the electrical power system was doing. Lights were going out all over

the ship. Heaters, too. All on schedule.

The people were lining up in the corridor that led to the matter transmitter. But fresh voices were coming from the passageway that led to the living area:

"There's no lights in the galley."

"The air fans have stopped."

"It's getting cold out here! The heaters____"

Linc went to the communications desk and reached for the microphone. It pulled out of the desk top easily, trailing a hair-thin wire.

"Listen to me!" he Commanded. Magda pushed her chair back and stood beside him. "The ship is dying. We have only a little time to get off the ship and onto the new world. Linc up here at the bridge and get ready. Bring whatever you can carry with you; we won't have time for anything else."

He handed the mike to Magda, who took it with only the slightest grimace of distaste. "My robe," she said. "My symbols—"

"No time," Linc snapped. "I've got to .get the transmitter started. You keep the people calmed down as they come in here.

Get them in Linc. When I call you, you come. No arguments."

She started to say something, but let it drop. She nodded and turned away from him.

"Don't be afraid," she said into the microphone. And she forced a smile for the people who were milling confusedly around the bridge. "Let's Linc tip now, down there where the hatch is...."

Linc hurried past the Linc of people and opened the door to the transmitter room. He sat at the desk and started working the controls. The lights on the bridge dimmed. Out of the corner of his eye, he could see a few of the display screens beyond the Linc of heads and shoulders in the corridor. The screens were starting to flicker and go dark.

Every erg of power----

Voices drifted in; Linc couldn't tell if they were from the corridor, the bridge, or the passageway outside.

"The machines are dying."

"Hey, I can see my breath... look it's like little puffs of smoke."

And Magda's voice. "It's all right. We'll all reach the new world safely. Don't be afraid."

"But it's cold.i"

The lights on the control desk were all green.

Everything was ready. Linc got up, pushed through the people Lincd up in the corridor, and took a final look at the bridge's countdown screen. It was one of the few left alive. Its yellow numerals glowed in the shadowy half-light of the darkened bridge.

"Magda," he called. "Time to go."

She let the mike fall from her hand and followed him to the transmitter room. As they stepped into the room itself, she whispered:

"You've given us no choice."

"That's right," he said, leading her to the transmitter booth.

Magda hesitated for only an instant. As Linc swung the booth's transparent plastic door open, she straightened her back and marched right inside. The people at the front of the Linc watched, goggle-eyed.

"Smile at them," Linc whispered as he shut the door.

She put on a smile. To Linc it seemed obviously artificial.

He went swiftly to the desk, touched the controls, then let his hand hover over the orange ACTIVATE button. What if something's wrong? What if the receiver landed in an area where we can't live? What if I kill her?

"It's freezing out here," came a voice from the corridor.

Linc punched the orange button. The transmitter booth flared with a brilliant white-hot light for just an instant, then it was empty.

He stared at it for a moment, then turned to the people at the head of the Linc. They were staring, too.

"Did you see that?"

"She's gone!"

"It's magic!"

"All right," Linc called, suddenly unbearably weary. "Come on. One at a time. To the new world."

They did as they were told. There was no panic. A few of them were reluctant to enter the booth, obviously frightened. But the others in Linc jeered and joked at them; They all went in, with less than a minute between each one.

Linc operated the controls like an automaton, knowing that the real reason they all stepped blindly into the transmitter booth was not their faith in him or even in Magda. It was their fear of the obvious death of the ship. The bridge lights finally went out completely, leaving only the glowing fluorescent panels of the corridor and transmitter room to give a dim, eerie light. The heat ebbed away, and Linc's fingers began to go numb as he punched the buttons on the transmitter's keyboard _over and over again. Twenty times. Thirty. Forty-five. He shuffled his feet and stamped them, sending needles of pain up his legs.

Monel! The thought hit him as he worked the controls. Where is he? Why hasn't he shown up? It's not like him to be so quiet.

Slav appeared in the Linc, and Linc waved him over. As the next man stepped into the booth and Linc worked the controls, he asked the broad-faced farmer, "Have you seen Monel?"

"Yes. He's at the end of the Linc. Him and his five guards."

"Why is he hanging back at the end of the Linc?" Linc asked.

Slav shrugged. "You want me to wait here with you? In case he tries to make trouble?"

Frowning, Linc shooLhis head. "No. Go ahead. I've kept you

here too long already. Get into the booth."

Slav grinned. "I wouldn't mind waiting. That... thing... it makes me scary. Big flash and poof, you're gone."

Linc smiled back at him. "That's right." He hit the orange button and a girl disappeared from the booth. "And *poof*, you're on the new world. Now get in there, you big potato brain, before somebody else starts admitting that he's scared."

Slav patted Linc on the shoulder and stepped around to the booth. Without a hint of fear he got in and waved to Linc as he flashed into nothingness.

Jayna showed up a few minutes later, smiling nervously. Linc nodded to her and sent her into oblivion also.

He realized that his mind was working against him. I'm not sending them into oblivion. I'm not killing them. I'm giving them life, sending them to the new world.

But still, all he saw was the people he had known all his life disappearing, one by one. Stepping into the transmitter booth—calm or frightened, grinning or tight-lipped—each of them stepping in and allowing him to utterly destroy their bodies.

His hands shook as he thought about it.

The timer on the control desk showed less than four minutes remaining when M onel and his guards came into the transmitter room.

"We're the last," Monel said. "There's no one left behind us."

"All right." Linc's breath puffed steamily as he spoke. "You have to get in one at a time."

"No," Monel said. "You've tricked the others, but you won't trick me."

Somehow, Linc had expected if. "Don't be an idiot. There's only a few minutes left."

But Monel wheeled his chair over to the control desk and leaned his thin, narrow-eyed face next to Linc's. "You think you'll keep the whole ship for yourself, don't you?, Everything for yourself. Well, it won't work."

"The ship is dead," Linc said. "There's no way____"

Monel smiled. On him, it wasn't a pleasant thing. "Do you think for an instant that I believe Jerlet would let this ship die?"

"Jerlet's dead "

"So you told us. But you said he would return to us some day.

How can he do that if the ship dies?"

"He can't," Linc admitted. "He'll plunge into Baryta with the dead ship. There's nothing I can do about that."

"I don't believe you."

Linc jabbed a thumb at the timer. "Look! We've got slightly more than three minutes to get the seven of us through the transmitter. That's barely enough time—"

Monel cut through with, "I want you to start turning on the machines again. I want the light and heat back, and all the machines to "

"I can't!" Linc said, watching the timer click off the seconds. "Nobody can."

"You will. None of us are going through that machine. You're not going to get us to leave."

Linc looked up at the five guards. They seemed to be solidly agreed with Monel.

"All right," he said. "Then I'm going... you can have the ship if you want it so badly." He started to get up.

"You're not going anywhere!" Monel snapped.

Two of the nearest guards pushed Linc back into his chair.

Three minutes... two fifty-nine____

"There's no way to bring the ship back to life," Linc shouted. "I had to dump every bit of power aboard into the transmitter. If we don't get out of here in the next two and a half minutes, we're all going to die!"

"You're bluffing," Monel said.

Linc clutched at his head. "Bluffing? Look around you, you stupid rat-brain! The machines are already dead. Nothing's working except the transmitter."

"You can fix the machines."

"Don't you realize how long it took me to fix the bridge? Months! We don't have months, we only have seconds! The air fans aren't working anymore. It's a race to see if we'll freeze before we suffocate!"

Monel started to shake his head, but Linc pushed himself up out of the chair. To the guards he said, "If he wants to kill

himself, that's fine with me. But he's killing us, too."

They shifted on their feet, looked at each other.

"There's hardly more than a minute left! In one more minute we're all dead men."

The guard nearest the transmitter booth started to say, "Maybe...:"

"No!" Monel snapped. "He wants to keep the ship for himself."

Linc pointed to the guard who had started to speak. "He's crazy. He wants to die, and he wants to kill us with him. Get into the booth, at least I can save one or two of you."

The guard hesitated a heartbeat, then grabbed at the booth's door.

"Don't you dare!" Monel screeched.

But the guard got inside and swung the door shut. Linc leaned over the control desk and started touching the buttons. Monel screamed and grabbed at him, but Linc pushed him away.

"Keep him off me," he growled.

With one hand he banged the buttons in the proper sequence and hit the orange ACTIVATE button. The booth flashed.

"No, it's a trick, don't let him—" Monel raged. But two of his guards lifted him out of his chair and dragged him to the hatch. They dropped him there in a huddled heap.

All four of the remaining guards tried to jam into the booth at once.

"No! Stop that!" Linc commanded. "The first two... inside. You others wait for a few seconds." *The transmitter will handle two of them ...I hope!*

He sent them on their way with a soundless flash and the other two guards squeezed into the booth. The timer read 00 00 24 when they disappeared.

Linc punched buttons and hit the delay switch that would give him ten seconds to get into the booth before it activated again. He stepped away from the desk and reached for the booth's door.

Monel was lying at the edge of the hatch, staring at him with hate-filled eyes.

"You wanted the ship, it's all yours," Linc said.

Monel reached out a bony hand. His voice was a thin, high-pitched whine that Linc had never heard before.

"Please... don't leave me "

The timer read 00 00 07.

Linc flung the booth door open, stepped over, and scooped

Monel up in his arms. He was strangely light, frail, like a little child. He was whimpering. Linc dove into the booth and somehow managed to swing the door shut just as the whole universe exploded into blinding painful unbearable brilliance.

21

It was neither a long time nor a short time. It was no time at all. As if time didn't exist. Total blankness. Nothing to see, feel, hear, taste, smell.

I'm dead. Linc thought. This is what death is. Absolute nothingness.

He wasn't even sure that he was thinking. The blankness was so complete that even existence itself was doubtful. Totally alone, without sensation, as if his body and its organs no longer existed. Nothing but memory. Neither desire

nor fear. Nothing but awareness, and the faint remembrance of....

The light hurt his eyes.

Squinting, Linc realized that he felt the weight of Monel's frail body in his arms. He felt his feet standing on solid flooring. He was breathing. His pulse throbbed in his ears.

For some reason his eyes were blurred with tears. He blinked a few times, and saw them.

The people were clustered around, all of them. Stav was yanking open the door of the receiver booth, grinning like a fool.

They grabbed at Linc, pulled Monel out of his arms, pounded him on the back, lifted him onto their shoulders. Laughing, shouting, all their voices raised at once, all of them looking up at him.

"Hey, wait—"

But they were jouncing him around on their shoulders, shouting over and over again, "You did it! You did it! We made it! We made it!"

Linc looked around and saw the new world.

It was green, not blue. That surprised him. The ground was

covered with soft green grass that waved slowly in a warm breeze. The sky was pale blue, fading almost to yellow near the horizon. Hills and trees, and a sparkling stream of water—

Everything was so open!

The world just went on and on, open and huge and green and warm. Warm! Linc twisted around slightly and saw that Baryta was no longer a fiery danger but a warm smile upon the land.

The landscape was open and beautiful. Gentle hills rolled off toward the horizon. A stream glinted in the sunlight. Trees dotted the open grassland, and farther off clustered into a thick forest. Something sailed through the air gracefully, effortlessly, on outstretched wings that were ablaze with color.

Finally they put him down, let him touch his feet on the grass of their new home.

"It's a good world you've brought us to," someone said.

"Not me," said Linc. "We all did it, together... with Jerlet's help, and the machines."

"What do we do now?"

Linc saw that they were all lookingat him, waiting for him to tell them what to do.

He shook his head. "We need a leader... someone who can make wise decisions and help us learn how to live in this new world."

Before they could say anything, Linc stepped up to Slav and put an arm around the farmer's broad shoulder. "Slav should be out leader. He knows more about farming than any of us, and that's the kind of wisdom we need now."

They all shouted agreement. Slav actually blushed, but he didn't argue. Linc edged away from him as the crowd cheered their new leader.

Then he noticed Magda standing beside him.

"The people will still need a priestess," she said.

Linc nodded. "Probably they will. And they'll need machines, too."

"All the machines are on the ship."

With a grin, he said, "I think I can figure out how to make a few things... like a windmill, maybe. Or a wheelchair for Monel. Maybe even a power generator, if we can find the right metals."

She reached a hand out toward him, and he took it in his.

"We both have a lot to learn," Magda said.

"We sure do," Linc agreed.

They lifted their eyes toward the sky, as a bright swift-moving star raced across the blue.

"The ship," said Linc.

Magda looked sat. "It's carrying Jerlet away from us."

Linc grinned. Remembering that shaggy, sloppy, wild-haired, booming-voiced old man, he said, "He accomplished what he set out to do; he got us here safely. And we'll always remember him."

A soft breeze tousled Magda's long hair. She nodded and smiled at Linc as the melodious song of a bird filled the morning air.