

EQUATION OF DOOM—This World Died Screaming

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equation of doom

His agony of soul at being unable to save Margot was far greater than physical torture.

They grounded Ramsey's ship on a hostile planet hoping he would starve to death, so the first thing he did was give most of his money away and lose the rest gambling. Then he picked a fight with the Chief of Police and joined forces with a half-naked dream-chick who was seemingly bent on self-destruction. The stakes were big—a planet or two—but it all added up to an—

Equation of Doom

By GERALD VANCE

“YOUR name ith Jathon Ramthey?” the Port Security Officer lisped politely.

Jason Ramsey, who wore the uniform of Interstellar Transfer Service and was the only Earthman in the Service here on Irwadi, smiled and said: “Take three guesses. You know darn well I’m Ramsey.” He was a big man even by Earth standards, which meant he towered over the Irwadian’s green, scaly head. He was fair of skin and had hair the color of copper. It was rumored on Irwadi and elsewhere that he couldn’t return to Earth because of some crime he had committed.

“Alwayth the chip on the shoulder,” the Port Security Officer said. “Won’t you Earthmen ever learn?” The splay-tongued reptile-humanoids of Irwadi always spoke Interstellar *Coine* with a pronounced lisp which Ramsey found annoying, especially since it went so well with the officious and underhanded behavior for which the Irwadians were famous the galaxy over.

“Get to the point,” Ramsey said harshly. “I have a ship to take through hyper-space.”

“No. You have no ship.”

“No? Then what’s this?” His irritation mounting, Ramsey pulled out the Interstellar Transfer Service authorization form and showed it to the Security Officer. “A tip-sheet for the weightless races at Fomalhaut VI?”

The Security Officer said: “Ha, ha, ha.” He could not laugh; he merely uttered the phonetic equivalent of laughter. On harsh Irwadi, laughter would have been a cultural anomaly. “You make joketh. Well, nevertheleth, you have no ship.” He expanded his scaly green barrel chest and declaimed: “At 0400 hours thith morning, the government of Irwadi hath planetarithed the Irwadi Tranthfer Thervith.”

“Planetarized the Transfer Service!” gasped Ramsey in surprise. He knew the Irwadians had been contemplating the move in theory for many years, but he also knew that transferring a starship from normal space through hyper-space back to normal space again was a tremendously difficult and technical task. He doubted if half a dozen Irwadians had mastered it, yet the Irwadi branch of Interstellar Transfer Service was made up of seventy-five hyper-space pilots of divers planetalities.

“Ecthactly,” said the Security Officer, as amused as an Irwadian could be by the amazement in Ramsey’s frank green eyes. “Tho if you will kindly thurrender your permit?”

“Let’s see it in writing, huh?”

The Security Officer complied. Ramsey read the official document,

scowled, and handed over his Irwadi pilot license. "What about the *Polaris*?" he wanted to know. The *Polaris* was a Centaurian ship he'd been scheduled to take through hyper-space on the run from Irwadi to Centauri III.

"Temporarily grounded, captain. Or should I thay, ecth-captain?"

"Temporarily my foot," said Ramsey. "It'll be months before you Irwadians can get even a fraction of the ships into hyper. You must be out of your minds."

"Our problem, captain. Not yourth."

That was true enough. Ramsey shrugged.

"Your problem," the Security Officer went on blandly, "will be to find a meanth of thelf-thupport until you and all other ecthra-planetarieth can be removed from Irwadi. We owe you ecthra-planetarieth nothing. Ethpect no charity from uth."

Ramsey shrugged. Like all extra-planetaries on a bleak, friendless world like Irwadi, he'd regularly gambled away and drank away his monthly paycheck in the interstellar settlement which the Irwadians had established in the Old Quarter of Irwadi City. But last month he'd managed to come out even at the gaming tables, so he had a few hundred credits to his name. That would be enough, he told himself, to tide him over until Interstellar Transfer Service came to the rescue of its stranded pilots.

Ramsey went up the gangway and got his gear from the *Polaris*. When he returned down the gangway, the late afternoon wind was blowing across the spacefield tarmac, a wet, bone-chilling wind which only the reptile-humanoid Irwadians didn't seem to mind.

Ramsey fastened the toggles of his cold-weather cape, put his head down and hunched his shoulders, and walked into the teeth of the wind. He did not look back at the *Polaris*, marooned indefinitely on Irwadi despite anything the Centaurian owners or anyone else for that matter could do about it.

The Irwadi Security Officer, whose name was Chind Ramar, walked up the gangway and ordered the ship's Centaurian first officer to assemble his crew and passengers. Chind Ramar allowed himself the rare luxury of a fleeting smile. He could imagine this scene being duplicated on fifty ships here on his native planet today, fifty outworld ships which had no business at all on Irwadi. Of course, Irwadi was an important planet-of-call in the Galactic Federation because the vital metal titanium was found as abundantly in Irwadian soil as aluminum is found in the soil of an Earth-style planet. Titanium, in alloy with steel and manganese, was the only element which could withstand the tremendous heat generated in the drive-chambers of interstellar ships during transfer. In the future, Chind Ramar told himself with a kind of cold pride, only Irwadian pilots, piloting Irwadian ships through hyper-space, would bring titanium to the waiting galaxy. At Irwadi prices.

With great relish, Chind Ramar announced the facts of planetarization and told the Centaurians and their passengers that they would be stranded for an indefinite period on Irwadi. Amazement, anger, bluster, debate, and finally resignation—the reactions were the expected ones, in the expected order. It was easy, Chind Ramar thought, with all but the interstellar soldiers of fortune like Jason Ramsey. Ramsey, of course, would need watching. As for these others....

One of the others, an Earthgirl whose beauty was entirely missed by Chind Ramar, left the *Polaris* in a hurry. She either had no luggage or left her luggage aboard. Jason Ramsey, she thought. She had read Chind Ramar's mind; a feat growing less rare although by no means common yet among the offspring of those who had spent a great deal of time bombarded by cosmic radiation between the stars. She hurried through the chilling wind toward the Old Quarter of Irwadi City. Panic, she thought. You've got to avoid panic. If you panic, you're finished....

"So that's about the size of it," Ramsey finished.

Stu Englander nodded. Like Ramsey he was a hyper-space pilot, but

although he had an Earth-style name and had been born of Earth parents, he was not an Earthman. He had been born on Capella VII, and had spent most of his life on that tropical planet. The result was not an uncommon one for outworlders who spent any amount of time on Irwadi: Stu Englander had a nagging bronchial condition which had kept him off the pilot-bridge for some months now.

Englander nodded again, dourly. He was a short, very slender man a few years older than Ramsey, who was thirty-one. He said: "That ties it. And I mean ties it, brother. You're looking at the brokest Capellan-earthman who ever got himself stuck on an outworld."

"You mean it?"

"Dead broke, Jase."

"What about Sally and the kids?"

Englander had an Arcturan-earthian wife and twin boys four years old. "I don't know what about Sally and the kids," he told Ramsey glumly. "I guess I'll go over to the New Quarter and try to get some kind of a job."

"They wouldn't hire an outworlder to shine their shoes with his own spit, Stu. They have got the planetarization bug, and they've got it bad."

Sally Englander called from the kitchen of the small flat: "Will Jase be staying for supper?"

Englander stared at Ramsey, who shook his head. "Not today, Sally," Englander said, looking at Ramsey gratefully.

"Listen," Ramsey lied, "I've been lucky as all get out the last couple of months."

"You old pro!" grinned Englander.

"So I've got a few hundred credits just burning a hole in my pocket," Ramsey went on. "How's about taking them?"

"But I haven't the slightest idea when I could pay back."

"I didn't say anything about paying me back."

"I couldn't accept charity, Jase."

"O.K. Pay me back when you get a chance. There are plenty of hyper-space jobs waiting for us all over the galaxy, you know that."

"Yeah, all we have to do is get off Irwadi and go after them. But the Irwadians are keeping us right here."

"Sure, but it won't last. Not when the folks back in Capella and Deneb and Sol System hear about it."

"Six months," said Englander bleakly. "It'll take at least that long."

"Six months I can wait. What d'you say?"

Englander coughed wrackingly, his eyes watering. He got off the bed and shook Ramsey's hand solemnly. Ramsey gave him three hundred and seventy-five credits and said: "Just see you make that go a long way supporting Sally and the kids. I don't want to see you dropping any of it at the gaming tables. I'll knock your block off if I see you there."

"I'll knock my own block off if I see me there. Jase, I don't know how to thank—"

"Don't is right. Forget it."

"Do you have enough—"

"Me? Plenty. Don't worry about old Jase." Ramsey went to the door. "Well, see you."

Englander walked quickly to him and shook his hand again. On the way out, Ramsey played for a moment or two with the twins, who were rolling a couple of toy spaceships marked hyper-one and hyper-two across the floor and making anachronistic machine-gun noises with their lips. Sally Englander, a plump, young-home-maker type, beamed at Ramsey from the kitchen. Then he went out into the gathering dusk.

As usual on Irwadi, and particularly with the coming of night, it was bitterly cold. Sucker, Ramsey told himself. But he grinned. He felt good about what he'd done. With Stu sick, and with Sally and the kids, he'd

done the only thing he could do. He still had almost twenty-five credits left. Maybe he really would have a lucky night at the tables. Maybe ... heck, he'd been down-and-out before. A fugitive from Earth didn't have much choice sometimes....

"Red sixteen," the croupier said indifferently. He was a short, heavy-set Sirian with a shock of scarlet hair, albino skin, and red eyes.

Ramsey watched his money being raked across the table. It wasn't his night, he told himself with a grim smile. He had only three credits left. If he risked them now, there wouldn't even be the temporary physical relief and release of a bottle of Irwadian brandy before hitting the sack.

Which was another thing, Ramsey thought. Hitting the sack. Ah yes, you filthy outworlder capitalist, hitting the sack. You owe that fish-eyed, scale-skinned Irwadian landlady the rent money, so you'd better wait until later, until much later, before sneaking back to your room.

He watched the gambling for another hour or so without risking his few remaining credits. After a while a well-dressed Irwadian, drunk and obviously slumming here in the Old Quarter, made his way over to the table. His body scales were a glossy dark green and he wore glittering, be-jeweled straps across his chest and an equally glittering, be-jeweled weapons belt. Aside from these, in the approved Irwadian fashion, he was quite naked. An anthropologist friend had once told Ramsey that once the Irwadians had worn clothing, but since the coming in great number of the outworlders they had stripped down, as though to prove how tough they were in being able to withstand the freezing climate of their native world. Actually, the Irwadian body-scales were superb insulation, whether from heat or from cold.

"... Earthman watching me," the Irwadian in the be-jeweled straps said arrogantly, placing a fat roll of credits on the table.

"I'm sorry," Ramsey said. "Were you talking to me?"

"I thertainly wath," lisped the Irwadian, his eyes blazing with drunken hatred. "I thaid I won't have any Earthman thnooping over my thoulder while I gamble, not unleth he'th gambling too."

"Better tell that to your Security Police," Ramsey said coldly but not angrily. "I'm out of a job, so I don't have money to throw around. Go ahead and tell me—" with a little smile—"you think it was my idea."

The Irwadian looked up haughtily. Evidently he was looking for trouble, or could not hold his liquor, or both. The frenzy of planetarization, Ramsey knew from bitter experience on other worlds, made irrational behavior like this typical. He studied the drunken Irwadian carefully. In all the time he'd spent on Irwadi, he'd never been able to tell a native's age by his green, scale-skinned, fish-eyed poker-face. But the glossy green scales covering face and body told Ramsey, along with the sturdy muscles revealed by the lack of clothing, that the Irwadian was in his prime, shorter than Ramsey by far, but wider across the shoulders and thicker through the barrel chest.

"You outworlderth have been deprething the thandard of living on Irwadi ever thince you came here," the Irwadian said. "All you ever brought wath poverty and your ditheath germth and more trouble than you could handle. I don't want your ththink near me. I'm trying to enjoy mythelf. Get out of here."

It was abruptly silent in the little gambling hall. Since the establishment catered to outworlders and was full of them, the silence, Ramsey thought, should have been both ominous and in his favor. He looked around. Outworlders, yes. But not another Earthman present. He wondered if he was in for a fight. He shrugged, hardly caring. Maybe a fight was just what he needed, the way he felt.

"Get out of here," the Irwadian repeated. "You ththink."

Just then a Vegan girl, blue-skinned and fantastically wasp-waisted like all her kind, drifted over to Ramsey. He'd seen her around. He thought he recognized her. Maybe he'd even danced with her in the unit-a-dance halls reserved for humanoid outworlders.

"Are you nuts?" she said, hissing the words through her teeth and

grabbing Ramsey's elbow. "Don't you know who that guy is?"

"No. Who?"

"He's Garr Symm, that's who."

Ramsey smiled at her without mirth. "Do I bow down in awe or run from here screaming? I never heard of Garr Symm."

"Oh you fool!" she whispered furiously. "Garr Symm is the brand new number one man of the Irwadi Security Police. Don't you read the 'casts?"

Before Ramsey could answer or adjust to his surprise, the Irwadian repeated:

"I'm telling you for the third time. Get out."

Ostentatiously, Ramsey reached into his cloak-pocket for a single credit bill and tossed it on the table.

"The denomination is not sufficient, sir," the albino Sirian croupier said indifferently. Ramsey had known it was not.

Garr Symm's face turned a darker green. The Vegan girl retreated from Ramsey's side in fright. Symm raised his hand and an Irwadian waiter brought over a drink in a purple stem glass with a filigree pattern of titanium, bowing obsequiously. Symm lurched with the glass toward Ramsey. "I'm telling you to go," he said in a loud voice.

Ramsey picked up his credit note but stood there. With a little sigh of drunken contentment, Garr Symm sloshed the contents of his stem glass in Ramsey's face.

The liquor stung Ramsey's eyes. Many of the other outworlders, neither Irwadian nor Earthmen, laughed nervously.

Ramsey wiped his eyes but otherwise did not move. He was in a rough spot and he knew it. The fact that their new Security Chief went out drunk at night with a chip on his shoulder was the Irwadian government's affair, not Ramsey's. He'd been insulted before. An Earthman in the outworlds, particularly an Earthman fugitive who knew he dared not get into the kind of trouble that could bring the Earth consul to investigate, was used to insults. For Earth was the leading economic and military power of the galaxy, and the fact that Earth really tried to deal fairly with its galactic neighbors meant nothing. Earth, being top dog, was resented.

The thing which got Ramsey, though, was this Garr Symm. He had never heard of Garr Symm, and he thought he knew most of the big shots in the Irwadian Security Police by name. But there must have been a reason for his appointment. A government throwing off outworld influence had a reason for everything. So, why Garr Symm?

"You, Mith Vegan!" Garr Symm called suddenly. "You whithpered to the Earthman. What did you tell him?"

"Not to look for trouble," the Vegan girl said in a frightened voice.

"But what elth?"

"Honest, that's all."

"Come here, pleath."

Her blue skin all at once very pale, the Vegan girl walked back toward Garr Symm. He leered at her quite drunkenly and took hold of her slender arm. "What did you tell him? For the latht time."

The girl whimpered: "You are hurting my arm."

Thoughts raced through Ramsey's mind. As an administrator, as an Irwadian public servant in a touchy job, Garr Symm, a drunkard, was obviously grossly incompetent. What other qualifications did he have which gave him the top Irwadian Security job? Ramsey didn't know. He sighed. The Vegan girl's mouth formed a rictus of pain. Ramsey had a hunch he was going to find out.

He said curtly: "Let go of her, Symm. She told me nothing that would interest you."

Garr Symm ignored him. The blue-skinned girl cried.

Ramsey grimaced and hit Garr Symm in the belly as hard as he could.

Symm thudded back against the table. It overturned with a crash and the Security Chief crashed down on top of it. There wasn't a sound in the gambling hall except Ramsey's sudden hard breathing, the Vegan girl's sniffling, and Garr Symm's noisy attempts to get air into his lungs. Then Garr Symm gagged and was sick. He writhed in pain, still unable to breathe. His hands fluttered near his weapons belt.

"Come on," Ramsey told the Vegan girl. "We'd better get out of here." He took her arm. Dumbly she went with him. None of the outworlders there tried to stop them. Ramsey looked back at Garr Symm. The Irwadian was shaking his fist. He had finally managed to draw his m.g. gun, but the crowd of outworlders closed between them and there was no chance he could hit Ramsey or the girl. Retching, he had dirtied the glossy green scales of his chest.

"I'll get you," he vowed. "I'll get you."

Ramsey took the girl outside. It was very cold. "I'm so afraid," she said. "What will I do? What can I do?" She shook with fear.

"You got a place to sleep?"

"Y-yes, but I'm the only Vegan girl in Irwadi City. He'll find me. He'll find me when he's ready."

"O.K. Then come home with me."

"I—"

"For crying out loud, I don't look that lecherous, do I? We can't just stand here."

"I—I'm sorry. I'll go with you of course."

Ramsey took her hand again and they ran. The cold black Irwadian night swallowed them.

"So you live in the Old Quarter too," the Vegan girl said.

"Heck yeah. Did you expect a palace?"

Ramsey had a room, rent one Irwadi month in arrears, in a cold-water tenement near the river which demarked the Old and the New Quarters. The façade of the old building was dark now. His landlady was probably asleep, although you never could tell with that old witch. Ramsey knew it wouldn't be the first time she stayed up through half the night to await a delinquent tenant.

"I—I never went to a man's room before," the blue-skinned Vegan girl said. She was rather pretty in a slender, muscleless, big-eyed, female-helpless mode.

"You're a dance-hall girl, aren't you?"

"Still, I never spent the night in a man's—"

"What's the matter with you? You think we're going to spend the night here? Somebody over at those gaming tables will be able to identify me. Garr Symm'll be on his way before long."

"Then what are we going to do?" The girl was shivering with cold.

"Hide," Jason Ramsey said. "Somewhere. I just came back to get my things. There isn't much, but there's an old m.g. gun which we might need."

"But they'll find us, and—"

"You coming upstairs or will you wait out here and freeze to death in the cold?"

"I'm coming."

They went upstairs together, on tip-toe. Ramsey's room was on the third floor, with a besooted view of the industrial complex on the river by day. The narrow hall was dark and silent. Behind one of the closed doors an outworlder cried out in his sleep. Ramsey had to cup a hand over the Vegan girl's mouth so she wouldn't scream in empathic fear. He opened the door of his room, surprised that it was not locked. He

thought he had left it locked.

At once he was wary. It was dark in the hall, just as dark in the room. He could see nothing. The door hinges squeaked.

"Come in, Captain Ramsey," a voice said. "I thought you would never get here."

He stood on the threshold, uncertain. The voice had spoken not Interstellar *Coine*, but English. It had spoken English, without a foreign accent.

And it was a girl's voice.

Still, it could have been an elaborate trick. It was unlikely, but not impossible, that Garr Symm had learned Ramsey's identity already and had sent an operative here to await him. Ramsey and the Vegan girl had come on foot. It was a long walk.

"I'm armed," Ramsey lied. "Come over here. Slowly. Don't put any lights on." He could feel the Vegan girl trembling next to him. Not able to understand English, she didn't know what was going on.

"You're armed," the unseen girl's voice said in crisp, amused English, "like I'm a six-legged Antarean spider-man. You have an m.g. gun, Ramsey. It's in this room. I have it. That's all you have. No, don't try to lie to me. I'm a telepath. I can read you. Come in and put the light on and shut the door. You may bring the girl with you if you want. Brother, is she ever radiating fear! It's practically drowning your own mind out."

The unseen girl wasn't kidding, Ramsey knew. She could read minds. She had proved it to him. Which left him this choice: he could grab the Vegan girl's arm again and get the heck out of there, or do what the unseen Earth girl told him to do. He wanted that m.g. gun. He took the Vegan girl's hand and advanced over the threshold and closed the door and switched on the light.

The girl was sitting on the bed. She was an Earthgirl, all right. She had come in a toggle-cloak of green Irwadian fur, which was folded neatly at her side on the bed. Under it she wore a daring net halter of the type then fashionable on Earth but which had not yet taken over the outworlds. It left her shoulders bare and exposed a great deal of smooth, tawny skin through the net. Her firm breasts were cupped in two solid cones of black growing out of the net. Her midriff was bare to an inch or two below the navel. Her loins were covered by an abrevitog which formed a triangle in front and, Ramsey knew, would form one in back. Her long, well-formed legs were bare down to the mid-calf boots she wore. She had a beautiful body and had dressed so Ramsey couldn't miss it. Her face was so provocatively beautiful that Ramsey just stood there staring at it—after he had taken in the rest of her. She wore her hair quite long. She seemed perfectly composed. In her right hand she held Ramsey's m.g. gun, but she wasn't pointing it at them.

She looked at the timid Vegan girl and smiled. "Oh, I am sorry, Captain Ramsey," she said. "I couldn't know, of course, you'd be coming home with—company."

"It isn't what you think it is," Ramsey said, surprised to find himself on the defensive. "The girl's in trouble. So'm I."

The Earthgirl laughed. "Already? You looked the type, but I thought it would take a little time."

"What do you want?" Ramsey said. They were speaking in English. The Vegan girl tugged at Ramsey's arm. She wanted to get out of there and hoped Ramsey would go with her. Abruptly the Earthgirl burst out laughing.

"What's so funny?" Ramsey demanded.

"Your little Vegan friend. I read her mind, Ramsey. She thinks I'm your wife. She thinks I'm mad at you for bringing her home."

"Then why don't you talk in *Coine*," Ramsey said in the interstellar language, "and make her feel better? She might as well know I never saw you before in my life." He was annoyed.

The Vegan girl smiled timidly, taking hope.

"But you did," the beautiful Earthgirl said. "I was on the *Polaris* today, Captain. You were to be the pilot, until Interstellar Transfer here on Irwadi was planetarized."

"I didn't see you. Dressed like that I wouldn't have forgotten you."

"I wasn't dressed like this." The girl smiled, very sure of herself. "I read your mind when you came in. The costume's had the desired effect, I see. But you needn't broadcast your animal desires so blatantly."

"Nobody asked you to read my mind. Besides, you needn't broadcast your physical assets so blatantly."

"Touché," said the Earthgirl.

"Listen," Ramsey began. "We're in a jam. We're in a hurry."

"So you told me. I couldn't have wished for more. It looks like I didn't need this costume and its obvious inducements at all, if you're really in a jam."

"What the devil is that supposed to mean?"

"My name is Margot Dennison, Captain Ramsey. I have managed to buy an old starship, small and held together by spit and string and whatever the Irwadians use for prayer—"

"They're atheists," Ramsey said a little pointlessly. It was the girl. Darn her hide, she was beautiful! What did she expect? Looking at her, how could a man concentrate.... "Hey!" Ramsey blurted suddenly. "Did you say Margot Dennison? The tri-di star?"

Margot Dennison smiled. "That's right," she said. "Stranded five hundred light years from nowhere, Captain Ramsey. With a ship. With money. In need of a hyper-space pilot. That's why I'm here, or didn't you guess?"

"I'm listening."

"Isn't it clear? I'll pay you to take me away from here."

"Where to?"

"Through hyper-space to Earth. Well?"

"I've been grounded. If I take you through hyper-space, I lose my license."

"You really don't believe that, do you? After the Irwadians grounded all of you without warning, and grounded all ships until they can train a few more pilots. You don't really think I.T.S. would take your license away if you took a ship up and through hyper, do you? Under the circumstances? Especially since you're in a jam with a totalitarian government gone wild? Do you?"

Ramsey said abruptly: "I'm sorry. I can't take you to Sol System."

Margot Dennison smiled. It wasn't the kind of smile designed to make a man roll over on his back and wave all fours in the breeze. Margot Dennison didn't need that kind of smile.

"Oh, I'm sorry," she said. "I read your mind, you see. Very well, Captain. If you're a fugitive from Earth—I assume Ramsey isn't your real name, by the way—you may take me through hyper to Centauri. That will be quite satisfactory. I will make my way from Centauri. Well?"

"Give me the gun," Ramsey said.

"My goodness, of course. I'm not trying to hold you up. Here." She got up from the bed for the first time and walked toward them. She had firm, long legs, and used them well. She was utterly lovely and although part of it was probably her professional know-how, she made you forget that. She was the most attractive girl, Earth or outworld, Ramsey had seen in years.

Ramsey took the gun. Their hands met. Ramsey leaned forward quickly and kissed her on the lips. He was still holding the Vegan girl's slender arm, though. She tried to run away but couldn't. Margot Dennison returned the kiss for an instant, to show Ramsey that when she really wanted to return it, if she ever really would, she would pack the same kind of libidinal vitality in her responses as she did in her appearance;

then she stood coldly, no longer responsive, until Ramsey stepped back. "Maybe I was asking for it," she said. "I was prepared for that—and more. But it isn't necessary now, is it? My gosh, Ramsey! Will you please close that mind of yours? You make a girl blush."

"Then put on your cloak," Ramsey said, and, really blushing this time, she did so.

She said: "I'm prepared to pay you one thousand credits; what do you say?"

"I say it must be a pretty important appointment you have on Centauri."

"Earth, Captain Ramsey. I'm settling for Centauri. Well?"

"I'll take you," Ramsey said, "if this girl comes too."

Margot Dennison looked at the frightened Vegan girl and smiled. "So it's like that," she said.

"It isn't like anything."

Ramsey packed a few things in an expanduffle and the three of them hurried through the doorway and down stairs. The cold dark night awaiting them with a fierce howling wind and the first flurries of snow from the north.

"Where to?" Ramsey hollered above the wind.

"My place," Margot Dennison told him, and they ran.

Margot Dennison had a large apartment in Irwadi City's New Quarter. This surprised Ramsey, for not many outworlders lived there. That night, though, he was too tired to think about it. He vaguely remembered a couch for himself, a separate room for the Vegan girl, another for Margot Dennison. He slept like a log without dreaming.

He awoke with anxious hands fluttering at his shoulder. Opening one sleepy eye, he saw the Vegan girl. He saw daylight through a window but said, "Gmph! Middle of the night."

The Vegan girl said: "She's gone."

Ramsey came awake all at once, springing to his feet fully dressed and flinging aside his cloak, which he'd used as a blanket. "Margot!" he called.

"She's gone," the Vegan girl repeated. "When I awoke she wasn't here. The door—"

Ramsey ran to the door. It was a heavy plastic iris door. It was locked and naturally would not respond to the whorl patterns of Ramsey's thumb.

"So now we're prisoners," Ramsey said. "I don't get it."

"At least there's food in the kitchen."

"All right. Let's eat."

There were two windows in the room, but when Ramsey looked out he saw they were at least four stories up. They'd just have to wait for Margot Dennison.

It took the Vegan girl some time to prepare the unfamiliar Earth-style food with which Margot Dennison's kitchen was stocked. Ramsey used the time to prowl around the apartment. It was furnished in Sirian-archaic, a mode of furniture too feminine to suit Ramsey's tastes. But then, the uni-sexual Sirians, of course, often catered to their own feminine taste.

Ramsey found nothing in Margot Dennison's apartment which indicated she had done any acting on Irwadi, and that surprised him, for he'd assumed she had plied her trade here as elsewhere. He felt a little guilty about his snooping, then changed his mind when he remembered that Margot had locked them in.

In one of the slide compartments of what passed for a bureau in Sirian-archaic, he found a letter. Since it was the only piece of correspondence in the apartment, it might be important to Margot

Dennison, thought Ramsey. And if it were important to her....

Ramsey opened the letter and read it. Dated five Earth months before, it ran:

My darling Margot: By the time you read this I shall be dead. Ironical, isn't it? Coming so close—with death in the form of an incurable cancer intervening.

As you know, Margot, I always wished for a son but never had one. You'll have to play that role, I'm afraid, as you always have. Here is the information I told you I would write down. Naturally, if you intend to do anything about it, you'll guard it with your life.

Apparently the hyper-space pattern from Irwadi to Earth is the one I was looking for. The proto-men, if I may be bold enough to call them that, first left hyper-space at that point, perhaps a million, perhaps five million, Earth years ago. I don't have to tell you what this means, my child. I've already indicated it to you previously. It suffices to remind you that, in what science has regarded as the most amazing coincidence in the history of the galaxy, humanoid types sprang up on some three thousand stellar worlds simultaneously between one and five million years ago. I say simultaneously although there is the possibility of a four million year lag: indications are, however, that one date would do quite well for all the worlds.

Proto-man was tremendously ahead of us in certain sciences, naturally. For example, each humanoid type admirably fits the evolutionary pattern on its particular planet. The important point, Margot, is the simultaneity of the events: it means that proto-man left hyper-space, his birth-place, and peopled the man-habitable worlds of the galaxy at a single absolute instance in time. This would clearly be impossible if the thousands of journeys involved any duration. Therefore, it can only be concluded that they were journeys which somehow negated the temporal dimension. In other words, instant travel across the length and breadth of the galaxy!

Whoever re-discovers proto-man's secret, needless to say, will be the most influential, the most powerful, man in the galaxy. Margot, I thought that man would be me. It won't be now.

But it can be you, Margot. It is my dying wish that you continue my work. Let nothing stop you. Nothing. Remember this, though: I cannot tell you what to expect when you reach the original home of proto-man. In all probability the whole race has perished, or we'd have heard of them since. But I can't be sure of that. I can't be sure of anything. Perhaps proto-man, like some deistic god, became disinterested in the Milky Way Galaxy for reasons we'll never understand. Perhaps he still exists, in hyper-space.

Finally, Margot, remember this. If you presented this letter to the evolutionary scientists on any of the worlds, they'd laugh at you. It is as if unbelief of the proto-man legend were ingrained in all the planetary people, perhaps somehow fantastically carried from generation to generation in their genes because proto-man a million years ago decided that each stellar world must work out its own destiny independently of the others and independent of their common heritage. But in my own case, there are apparently two unique factors at work. In the first place, as you know, I deciphered—after discovering it quite by accident—what was probably a proto-man's dying message to his children, left a million years ago in the ruins on Arcturus II. In the second place, isn't it quite possible that my genes have changed, that I have mutated and therefore do not have as an essential part of my make-up the unbelief of the proto-man legend?

Good luck to you, Margot. I hope you're willing to give up your career to carry out your dying father's wish. If you do, and if you succeed, more power will be yours than a human being has ever before had in the galaxy. I won't presume to tell you how to use it.

Oh, yes. One more thing. Since Earth and Alpha Centauri are on a direct line from Irwadi, Centauri will do quite well as your outbound

destination if for some reason you can't make Earth. Again, good luck, my child. With all my love, Dad.

Ramsey frowned at the letter. He did not know what to make of it. As far as he knew, there was no such thing as a proto-man myth in wide currency around the galaxy. He had never heard of proto-man. Unless, he thought suddenly, the dying man could have simply meant all the myths of human creation, hypothecating a first man who, somehow, had developed independently of the beasts of the field although he seemed to fit their evolutionary pattern....

But what the devil would hyper-space have to do with such a myth? Proto-man, whatever proto-man was, couldn't have lived in hyper-space. Not in that bleak, ugly, faceless infinity....

Unless, Ramsey thought, more perplexed than ever, it was the very bleak, ugly, faceless infinity which made proto-man leave.

"Breakfast!" the Vegan girl called. Ramsey joined her in the kitchen, and they ate without talking. When they were drinking their coffee, an Earth-style beverage which the Vegan girl admitted liking, the apartment door irised and Margot Dennison came in.

Ramsey, who had replaced the letter where he'd found it, said: "Just what the devil did you think you were doing, locking us in?"

"For your own protection, silly," Margot told him smoothly. "I always lock my door when I go out, so I locked it today. Naturally, we won't have a chance to apply for a new lock. Besides, why arouse suspicion?"

"Where'd you go?"

"I don't see where that's any of your business."

"Believe it or not," Ramsey said caustically, "I've seen a thousand credits before. I've turned down a thousand credits before, in jobs I didn't like. As for being stranded here on Irwadi, it's all the same to me whether I'm on Irwadi or elsewhere."

"What does all that mean, Captain Ramsey?"

"It means keep us informed. It means don't get uppity."

Margot laughed and dropped a vidcast tape on the table in front of Ramsey. He read it and did not look up. There was a description of himself, a description of the Vegan girl, and a wanted bulletin issued on them. For assaulting the Chief of Irwadi Security, the bulletin said. For assaulting a drunken fool, Ramsey thought.

"Well?" Margot asked. This morning she wore a man-tailored jumper which, Ramsey observed, clashed with the Sirian-archaic furniture. She looked cool and completely poised and no less beautiful, if less provocatively dressed, than last night.

Ramsey returned question for question. "What about the ship?"

"In a Spacer Graveyard, of course. There isn't a landing field on the planet we could go to."

"You mean we'll take off from a Graveyard? From a junk-heap of battered old derelict ships?"

"Of course. It has some advantages, believe it or not. We'll work on the ship nights. It needs plenty of work, let me tell you. But then the Graveyard is a kind of parts department, isn't it?"

Ramsey couldn't argue with that.

They spent the next three days sleeping and slowly going stir-crazy. They slipped out each night, though, and walked the two miles to the Spacer Graveyard down near the river. It was on the other side of the river, which meant they had to boat across. Risky, but there was no help for it. Each night they worked on the ship, which Ramsey found to be a fifty-year old Canopusian freighter in even worse condition than Margot had indicated. The night was usually divided into three sections. First, reviewing the work which had been done and planning the evening's activities. Then, looking for the parts they would need in the jungle of interstellar wrecks all about them. Finally, going to work with the parts they had found and with the tools which Ramsey had discovered on the old Canopusian freighter the first night.

As they made their way back across the river the first night, Ramsey paddling slowly, quietly, Margot said:

"Ramsey, I—I think we're being watched."

"I haven't seen or heard a thing. You, Vardin?" Vardin was the Vegan girl's name.

Vardin shook her head.

Ramsey was anxious all at once, though. Things had gone too smoothly. They had not been interfered with at all. Personally, things hadn't gone smoothly with Ramsey, but that was another story. He found himself liking Margot Dennison too much. He found himself trying to hide it because he knew she could read minds. Just how do you hide your thoughts from a mind reader? Ramsey didn't know, but whenever his thoughts drifted in that direction he tried thinking of something else—anything else, except the proto-man letter.

"Yes, that's just what I was thinking," Margot said in the boat. "I can read minds, so I'd know best if we were being watched. To get a clear reading I have to aim my thoughts specifically, but I can pick up free-floating thoughts as a kind of emotional tone rather than words. Does that make sense?"

"If you say so. What else did you read in my mind?"

Margot smiled at him mysteriously and said nothing.

Ramsey felt thoughts of proto-man nibbling at his consciousness. He tried to fight them down purely rationally, and knew he wouldn't succeed. He grabbed Margot and pulled her close to him, seeking her lips with his, letting his thoughts wander into a fantasy of desire.

Margot slapped his face and sat stiffly in her cloak while he paddled to the other side of the river. Vardin sat like a statue. Ramsey had come to a conclusion: he did not like letting Margot know how he felt about her, but it was mostly on a straight physical level and he preferred her discovering it to her learning that he'd read the proto-man letter from her father. In his thoughts, though, he never designated it as the proto-man letter from her father. He designated it as X.

When they reached the bank, Margot said: "I'm sorry for slapping you."

"I'm sorry for making a pass."

"Ramsey, tell me, what is X?"

Ramsey laughed harshly and said nothing. That gave Margot something to think about. Maybe it would keep her thoughts out of his mind, keep her from reading....

X marks the spot, thought Ramsey. XXX marks the spot-spot-spot. X is a spot in a pot or a lot of rot....

"Oh, stop it!" Margot cried irritably. "You're thinking nonsense."

"Then get the heck out of my mind," Ramsey told her.

Vardin walked on without speaking. If she had any inkling of what they were talking about, she never mentioned it.

Margot said: "I still get the impression."

"What impression?"

"That we're being followed. That we're being watched. Every step of the way."

Wind and cold and darkness. The hairs on the back of Ramsey's neck prickled. They walked on, bent against the wind.

Security Officer Second Class Ramar Chind reported to his Chief in the Hall of Retribution the following morning. Chind, a career man with the Irwadi Security Forces, did not like his new boss. Garr Symm was no career man. He knew nothing of police procedure. It was even rumored—probably based upon solid fact—that Garr Symm liked his brandy excessively and often found himself under its influence. Worst of all—after all, a man could understand a desire for drink, even if, sometimes, it interfered with work—worst of all, Garr Symm was a scientist, a dome-top in the Irwadi vernacular. And hard-headed Ramar Chind lost

no love on dome-tops.

He saluted crisply and said: "You wanted to see me, sir?"

Garr Symm leaned forward over his desk, making a tent of his scaly green fingers and peering over it. He said three words. He said: "The Earthgirl Dennison."

"The Spacer Graveyard," Ramar Chind said promptly. That was an easy one. His agents had been following the Dennison girl, at Garr Symm's orders. Ramar Chind did not know why.

"And?" Garr Symm asked.

"The Earthman Ramsey, the Vegan Vardin, both are with her. We can close in and arrest the lot, sir, any time you wish."

"Fool," Garr Symm said softly, without malice. "That is the last thing I want. Don't you understand that? No, I guess you don't."

"Yes, sir."

"Their ship?"

"Every morning after they leave we go over it. Still two or three nights away from completion, sir. Also—" Ramar Chind smiled.

"Yes, what is it?"

"Two or three nights away from completion, except for one thing. They'll need a fuel supply. Two U-235 capsules rigged for slow implosion, sir. The hopper of their ship is empty."

"Is there such a fuel supply in the Graveyard?"

"No, sir."

"But could there be?"

"Usually, no. Naturally, the junkers drain out spaceship hoppers before scrapping them. U-235 in any form brings—"

"I know the value of U-235. Proceed."

"Well, there could be. If they were lucky enough to find such a fuel supply in one of the wrecks in the Graveyard, they wouldn't be suspicious. Naturally, we won't put one there."

"But you're wrong, my dear Ramar Chind. You'll load the hopper of one of those wrecks with enough U-235 for their purposes, and you'll do it today."

"But sir—"

"We're going to follow them, Chind. You and I. We want them to escape. If they don't escape, how can we follow them?"

Ramar Chind shrugged resignedly and lisped: "How much fuel will they need for their purposes, sir, whatever their purposes are?" Naturally, his lisping sounded perfectly normal to Garr Symm, who also spoke in the sibilantless Irwadi manner.

"You'd really like to know, wouldn't you?" Garr Symm said.

"Yes, sir. To put me in a position in which I could better do my—"

"To satisfy your curiosity, you mean!"

"But sir—"

"I am a scientist, Chind."

"Yes, sir."

"Didn't it strike you as odd that a scientist should be elevated to the top post in your department?"

"Of course, sir. I didn't question it, though."

"As you know, Chind, when it was decided to planetarize Irwadi as a first step toward driving away the outworlders, the quarters of every outworlder on Irwadi were thoroughly searched."

"I participated in the—uh, program, sir."

"Good. Then I needn't tell you. Something was found in Margot Dennison's apartment. Something of immense importance. Something

so important that, if used properly, it can assure Irwadi the dominant place in the galaxy for all time to come."

"But I thought Irwadi craved isolation—"

"Isolation, Chind? To be sure, if intercourse with the other galactic powers saw us at the bottom of the heap. But at the top—who would crave isolation at the top?"

"I see, sir. And the something that was found needed a scientist?"

"Very perceptive of you, Chind. Precisely. It was a letter. We copied it. Of course, Margot Dennison knows more than what is in the letter; the letter alludes to previous information. We need Dennison and Ramsey. We have to let them go ahead with their plans. Then we follow them, Chind. You understand?"

"Yes, sir."

"You're a good policeman, Chind. The best we have, I understand. You'll be going with me—on the most important assignment you or any Irwadian ever had."

"I am grateful, sir, that you consider me—"

"Now, see about that U-235 slow-implosion capsule."

"At once, sir."

Saluting smartly, Ramar Chind left Garr Symm's office. Symm smiled and sat perfectly still for some minutes. For Irwadi, yes, he was thinking. Certainly for Irwadi. For Irwadi absolutely. To make Irwadi the most important planet in the galaxy. But important planets—in the way that Irwadi would be important—couldn't maintain the status quo. For example, Irwadi's form of government might have to be changed. At present, an autocratic bureaucracy with no one man at the top. Ultimately, after the rediscovery of proto-man's secret—rule by one man.

Garr Symm, absolute dictator of the galaxy, if he played his hand right.

Garr Symm sat there for a long time, dreaming of power as no man before him on any world had ever dreamed of power....

Vardin rushed into the airlock of the Canopusian freighter in a state of excitement. At last they had given her something to do, and she had been successful at the outset. Specifically, Ramsey and the beautiful woman had given her a scintillation-counter and told her to prowl among the wrecks with it while they worked on the control board of the freighter, which the beautiful woman had named *Enterprise*.

"I found it!" Vardin cried. "I found it!"

She led a sceptical Margot Dennison outside while Ramsey continued working on the *Enterprise*. The two girls walked swiftly through the darkness between the wrecks. By this time they knew every foot of the Graveyard.

"There," Vardin said. "You see?"

The scintillation counter was clicking and blinking. Margot smiled and went to work with a portable mechanical arm and a leaded bottle. In ten minutes, she had the slow-implosion capsule out of the hopper of a battered old Aldebaranese cargo ship.

"I never saw one of those mechanical arms working before," Vardin said.

Margot smiled. She was delighted with the timid Vegan girl, with the cold night, with the way the wind blew across the Graveyard, with everything. They had their fuel. Tomorrow night the *Enterprise* would be ready for its dash into hyper-space. In thirty-six hours she might have her hands on the most valuable find in the history of mankind....

When they returned to the *Enterprise*, she let Ramsey kiss her and tried to slip the telepathic tentacles of her mind behind his guard—

Lewd libidinous fantasies, X stands for nothing for nothing for nothing, XXX—she got nowhere.

What was X? What was Ramsey's secret? Margot did not know, and wondered if she would ever find out.

She smiled, reading Vardin's mind. For Vardin was thinking: it must be so wonderful to have beauty such as she has, to melt the wills of strong handsome men such as Ramsey. It must be truly wonderful.

For the first twenty-eight years of her life, Margot Dennison would have agreed, would have delighted in her own beauty. She still did, to a point. But beyond that point, she could dream only of proto-man and his secret.

Beauty or power?

She had beauty.

She wanted power.

In the early hours of the following morning, behind the cover of what appeared to be a dense early morning fog but what actually was an artificially produced fog, a team of Irwadi technicians swarmed all over a battered Procyonian cruiser of three thousand tons. By mid-morning, working swiftly and with all the tools and spare parts they would need, they made the ship, called *Dog Star*, space-worthy.

Later that day, but still two hours before nightfall, Ramar Chind arrived with a small crew of three Security Police. He had selected his men carefully: they knew how to handle a spaceship, they knew how to fight, they were quite ruthless. He thought Garr Symm would be pleased.

Symm did not arrive until just before nightfall. He was very agitated when he came. Ramar Chind, too, was eager. What would happen within the next several hours, he realized, might be beyond his ken, but he still recognized its importance. And, being an opportunist, he would pounce on whatever he found of value to himself....

Several hours after the setting of the Irwadi primary had ushered in the cold night, Margot Dennison, Ramsey and Vardin arrived at the Graveyard and made their way at once to the *Enterprise*. They went inside swiftly and in a very few minutes prepared the thousand-tonner for blastoff. Ramsey's mouth was dry. He could barely keep the thoughts of proto-man from his mind. If Margot read them....

"Centauri here we come," he said, just to talk.

"Centauri," said Margot.

But of course, she had another destination in mind.

Several hundred yards across the Graveyard, watching, waiting, the occupants of *Dog Star* were armed to the teeth.

Ramsey sat at the controls. Vardin stood behind him nervously. The space trip from Vega to Irwadi was probably the only one she had ever taken. Margot sat, quite relaxed, in the co-pilot's chair.

"I still can't believe we're not going to feel anything," Vardin said in her soft, shy voice.

"Haven't you ever been through hyper-space before?" Margot asked the Vegan girl.

"Just once."

"In normal space," Ramsey explained, "we feel acceleration and deceleration because the increase or decrease in velocity is experienced at different micro-instants by all the cells of our body. In hyper-space the velocity is felt simultaneously in all parts of the ship, including all parts of us. We become weightless, of course, but the change is instant and we feel no pressure, no pain."

Ramsey was waiting until 0134:57 on the ship chronometer. At that precise instant in time, and at that instant only, blastoff would place them on the proper hyper-space orbit. And, before they could feel the mounting pressure of blastoff, the timelessness of hyper-space would intervene.

"0130:15," Margot read the chronometer for Ramsey. "It won't be long now. 30:20—"

"All right," Ramsey said suddenly. "All right. I can read the chronometer."

"Why, Ramsey! I do believe you're nervous."

"Anxious, Margot. A hyper-pilot is always anxious just before crossover. You've got to be, because the slightest miscalculation can send you fifty thousand light years off course."

"So? All you'd have to do is re-enter hyper-space and go back."

Ramsey shook his head. "Hyper-space can only be entered from certain points in space. We've never been able to figure out why."

"What certain points?"

Ramsey looked at her steadily. "Points which vary with the orbits of the three thousand humanoid worlds, Margot," he said slowly. He watched her for a reaction, knowing that strange fact about hyper-space—perfectly true and never understood—dovetailed with her father's letter about proto-man, an unknown pre-human ancestor of all the humanoid races in the galaxy, who had discovered hyper-space, bred variations to colonize all the inhabitable worlds, found or created the three thousand crossover points in space, and used them.

Margot showed no response, but then, Ramsey told himself, she was a tri-di actress. She could feign an emotion—or hide one. She merely asked: "Is it true that there's no such thing as time in hyper-space?"

"That's right. That's why you can travel scores or hundreds or thousands of light years through hyper-space in hours. Hyper-space is a continuum of only three dimensions. There is no fourth dimension, no dimension of duration."

"Then why aren't trips through hyper-space instantaneous? They take several hours, don't they?"

"Sure, but the way scientists have it figured, that's subjective time. No objective time passes at all. It can't. There isn't any—in hyper-space."

"Then you mean—"

Ramsey shook his head. "0134:02," he said. "It's almost time."

The seconds ticked away. Even Margot did not seem relaxed now. She stared nervously at the chronometer, or watched Ramsey's lips as he silently read away the seconds. A place where time did not exist, an under-stratum of extension sans duration. An idea suddenly entered her mind, and she was afraid.

If proto-man had colonized the galactic worlds between one and four or five million years ago, but if time did not exist for proto-man, then wasn't the super-race which had engendered all mankind still waiting in its timeless home, waiting perhaps grimly amused to see which of their progeny first discovered their secret? Or must proto-man, like humans everywhere, fall victim to subjective time if objective time did not matter for him?

Ramsey was saying softly: "Fifty-three, fifty-four, fifty-five, fifty-six ... blastoff!"

His hand slammed down on the activating key.

An instant later, having felt no sensation of acceleration, they were floating weightlessly in the cabin of the little *Enterprise*.

"The qualities of radar," Garr Symm said, "exist in their totality in a universe of extension. Time, actually is a drawback to radar, necessitating a duration-lag between sending and receiving. Therefore, Ramar Chind, radar behaves perfectly in hyper-space, as you see."

"Yes," Ramar Chind said, floating near the radar screen aboard the *Dog Star*. At its precise center was a bright little pip of light.

The Enterprise....

"But don't we do anything except follow them?" Ramar Chind said after a long silence.

Garr Symm smiled. "Does it really matter? You see, Chind, time actually stands still for us here. Duration is purely subjective, so what's your hurry?"

Ramar Chind licked his lips nervously and stared fascinated at the little

pip of bright light.

Which suddenly dipped and swung erratically.

"What is it?" Margot asked. "What's the matter?"

"Take it easy," Ramsey told her.

"But the ship's swooping. I can feel it. I thought you weren't supposed to feel movement in hyper-space!"

"Relax, will you? There are eddies in hyper-space, that's all. If you want an analogy in terms of our own universe, think of shoals in an ocean—unmarked by buoys or lights."

"You mean they have to be avoided?"

"Yes."

"But this particular shoal—it's midway between Irwadi and Earth?"

"There isn't any 'midway,' Margot. That's the paradox of hyper-space."

"I—I don't understand."

"Look. In the normal universe, extension is measured by time. That is, it takes a certain amount of time to get from point A to point B. Conversely, time is measured by extension in space. On Earth, a day of time passes when Earth moves through space on an arc one three-hundred-sixty-fifth of its orbit around the sun in length. Since there isn't any time to measure extension with in hyper-space, since time doesn't exist here, you can't speak of mid-points."

"But this—shoal. It's always encountered in hyper-space between Earth and Irwadi?"

Ramsey nodded. "Yes, that is right."

Margot smiled.

The smile suddenly froze on her face.

The *Enterprise* lurched as if an unseen giant hand had slapped it.

At that moment Ramsey leaned forward over the controls, battling to bring the *Enterprise* back on course.

And let down his mental guard.

... precise place in hyper-space her father must have meant ... home of proto-man ... thinks I'm going to stop there, she's crazy ... heck, I'm no mystic, but there are things not meant to be meddled with ...

The ship swooped again. Ramsey went forward against the control panel head-first and fell dazed from the pilot chair. His head whirled, his arms and legs were suddenly weak and rubbery. He tried to stand up and make his way back to the controls again, but collapsed and went down to his knees. He crouched there, trying to shake the fog from his brain.

With a cry of triumph, Margot Dennison leaped at him and bore him down to the floor with her weight. He was still too dazed from the blow on his head to offer any resistance when her strong hands tugged at his belt and withdrew the m.g. gun. She got up with it, backing away from him quickly toward the rear bulkhead as the ship seemed to go into a smooth glide which could be felt within it. Vardin stood alongside Ramsey, a hand to her mouth in horror. Ramsey got up slowly.

"Stay where you are!" Margot cried, pointing the m.g. gun at him. "I'll kill you if I have to. I'll kill you, Ramsey, I mean it."

Ramsey did not move.

"So you knew about my father," Margot challenged him.

"Yeah. So what?"

"And this shoal in hyper-space is a world, isn't it?"

Ramsey nodded. "I think so."

"O.K. Sit down at the controls, Ramsey. That's right. Don't try anything."

Ramsey was seated in the pilot chair again. His head was still whirling

but his strength had returned. He wondered if he could chance rushing her but told himself she meant what she said. She would kill him in cold blood if she had to.

"Bring the *Enterprise* down on that world, Ramsey."

He sat there and stubbornly shook his head. "Margot, you'll be meddling with a power beyond human understanding."

"Rubbish! You read my father's letter, didn't you? That fear's been implanted in your genes. It's part of the heredity of our people. It's rubbish. Bring the ship down."

Still Ramsey did not move. Vardin looked from him to Margot Dennison and back again with horror in her eyes.

"I'll count three," Margot said. "Then I'll shoot the Vegan girl. Do you understand?"

Ramsey's face went white.

"One," Margot said.

Vardin stared at him beseechingly.

Ramsey said: "All right, Margot. All right."

Five minutes later, subjective time, the *Enterprise* landed with a lurch.

That they had reached a world in hyper-space there could be no doubt. But outside the portholes of the little freighter was only the murky grayness of the timeless hyper-space continuum.

"They've gone down, sir!" Ramar Chind cried.

Garr Symm nodded. For the first time he was really nervous. He wondered about the Dennison letter. Could his fear be attributed to ancestral memory, as Dennison had indicated? Was it really baseless—this crawling, cold-fingered hand of fear on his spine?

There was no physical barrier. The *Enterprise* had established that fact. Then was there a barrier which Garr Symm, along with all humanoids, had somehow inherited?

A barrier of stark terror, subjective and unfounded on fact?

And beyond it—what?

Power to chain the universe....

Think, Garr Symm told himself. You've got to be rational. You're a scientist. You've been trained as a scientist. This is their barrier, erected against you, against all humanoids, a million years ago. It isn't real. It's all in your mind.

"Do you want me to follow them down?" Ramar Chind asked.

Garr Symm envied the policeman. Naturally, Ramar Chind did not share his terror. You didn't know the terror until you learned about proto-man; then the response seemed to be triggered in your brain, as if it had been passed to you through the genes of your ancestors, waiting a million years for release....

Fear, a guardian.

Of what? Garr Symm asked himself. Think of that, fool. Think of what it guards.

Power—

Teleportation or its equivalent.

Gone the subjective passage of hours in hyper-space.

Earned—if you were strong enough or brave enough to earn it—the ability to travel instantly from one humanoid world to another. Instantly. Perhaps from any one point on any humanoid world to any one point, precise, specific, exact, on another world.

To plunder.

Or assassinate.

Or control the lives of men, everywhere.

Sans ship.

Sans fear.

Sans the possibility of being caught or stopped.

Sweating, Garr Symm said: "Bring the *Dog Star* down after them, Ramar Chind."

Ramsey smiled without humor. "What now, little lady?" he said mockingly.

"Shut up. Oh, shut up!"

"What are you going to do now?"

"I told you to shut up. I have to think."

"I didn't know a gorgeous tri-di actress ever had to think."

"Let me see those figures again," Margot said.

Ramsey handed her the tapes from the *Enterprise's* environment-checker.

Temperature: minus two hundred and twenty degrees Fahrenheit.

Atmosphere: none.

Gravity: eight-tenths Earth-norm.

"And we don't have a spacesuit aboard," Ramsey said.

"But it can't be. It can't. This is the home of proto-man. I know it is. But if I went out there I'd perish from cold in seconds and lack of air in minutes."

"That's right," Ramsey said almost cheerfully. "So do I take the ship back up?"

"I hate you, Jason Ramsey. Oh, I hate you!" Margot cried. Then suddenly: "Wait! Wait a minute! What was that you were thinking? Tell me! You must tell me—"

Ramsey shook his head and tried to force the thoughts from his mind with doggerel. Ben Adam, he thought. About Ben Adam, Humpty Dumpty, hurry, hurry, hurry, the only two headed get yours here the sum of the square of the sides is equal to the square of the hyper-space, no, mustn't think that mimsy were the borogroves and the momraths now what the heck did the momraths do anyhow absolute zero is the temperature at which all molecular activity....

"What were you thinking, Ramsey?"

His mind was a labyrinth. There were thousands of discrete thoughts, of course. Millions of them, collected over a lifetime. But all at once he did not know his way through that labyrinth and his thoughts kept whirling back to the one Margot Dennison wanted as if, somehow, she could pluck it from his mind.

She stood before him, her brow furrowed, sweat beading her pretty face.

And she was winning, forcing the thought to take shape in Ramsey's mind—

But if I went out there I'd perish from cold in seconds and lack of air in minutes.

Cold, came the known and unbidden thoughts to Ramsey's struggling mind. And lack of air. Attributes of extension, of space, but measured by duration, by time. And since time does not exist in hyper-space, the vacuum out there and the terrible, killing cold, could have no effect on you. You could go out there perfectly protected from the lethal environment by the absence of the time dimension.

Margot smiled at him. "Thank you," she said. "Thank you, Ramsey."

He was about to speak, but she added: "And don't give me that stuff about a power we shouldn't tamper with. I'm going out there. Now."

Ramsey nodded slowly. "I won't stop you."

"But just so you don't get any ideas of stranding me here—Vardin. Vardin's going with me."

The Vegan girl looked at Ramsey mutely.

Ramsey said: "What makes you think I'll let you take her?"

Margot smiled again. "The m.g. gun makes me think so."

"The heck of it is, you're not really bad, Margot. This thing's got you, is all. You're not essentially evil."

"Thank you for the thrilling compliment. I'm delighted," Margot said sarcastically.

"Vardin stays with me."

Margot reminded him of the lethal m.g. gun by showing it to him, muzzle-first.

He laughed in her face. "Go ahead and shoot."

She stared at him.

"There isn't a lethal weapon'd do you any good here in a timeless continuum. Take an m.g. gun. It induces an artificial breakdown of radioactive fuel in its chamber, firing an instantly lethal dose of radiation. But in order for radioactive breakdown to occur, time must pass. Even if it's only milliseconds, as in the case of an m.g. gun. There aren't any milliseconds on this world, Margot. There isn't any time. So go ahead and pull the trigger."

Margot frowned and pointed the gun to one side and fired.

Nothing happened. Margot almost looked as if her hard shell had been sundered by the impotence of the m.g. gun. She pouted. Her eyes gleamed moistly.

Then Ramsey said: "O.K. Let's go."

"What—what do you mean?"

"Out there. All of us."

"But I thought you said—"

"Sure, I'm scared stiff. A normal man would be. It's in our genes, according to your father. But I'm also a man. What the devil d'you think it was first got man out of his cave and started along the road to civilization and the stars? It was curiosity. Fear restraining him, and curiosity egging him on. Which do you think won in the end?"

"Oh, Ramsey, I could kiss you!"

"Go right ahead," Ramsey said, and she did.

They opened the airlock. They went outside smiling.

But Vardin, who went with them, wasn't smiling. There was sadness instead.

In cumbersome spacesuits, the five Irwadians made their way from the *Dog Star* to the *Enterprise*. Ramar Chind and his three policemen carried m.g. guns; Garr Symm was unarmed. Chind used a whorl-neutralizer to force the pattern of the lock on the outer door of the *Enterprise's* airlock. Then the five of them plunged inside the ship.

The inner door was not closed.

The *Enterprise* was empty.

Garr Symm looked doubtfully at the gray murkiness behind them. Although the *Dog Star* stood out there less than a quarter of a mile away, they couldn't see it through the murk.

"Where did they go?" Ramar Chind asked.

Symm waved vaguely behind them.

Chind and his men turned around.

Gritting his teeth against the fear which welled up like nausea from the pit of his stomach, Garr Symm went with them.

At that moment they all heard the music.

"You hear it?" Ramsey asked softly. His voice did not carry on the airless world, of course. But he spoke, and the words were understood, not merely by Margot, who could read his mind, but by Vardin as well.

"Music," said Margot. "Isn't it—beautiful?"

Ramsey nodded slowly. He could barely see Margot, although he held

her hand. He could barely see Vardin although they stood hand in hand too. The music was un-Earthly, incapable of repetition, indescribably the loveliest sound he had ever heard. He wanted to sink down into the obscuring gray murk and weep and listen to the haunting, sad, lovely strains of sound forever.

"What can it possibly be?" Margot asked.

Surprisingly, it was Vardin who answered. "Music of the Spheres," she said. "It's a legend on Vega III, my world."

"And on Earth," Ramsey said.

Vardin told them: "On all worlds. And, like all such legends, it has a basis in reality. This is the basis."

That didn't sound like timid little Vardin at all. Ramsey listened in amazement. He thought he heard Vardin laugh.

Music. But didn't the notes need the medium of time in which to be heard? How could they hear music here at all? Or were they hearing it? Perhaps it merely impinged on their minds, their souls, just as they were able to hear one another's thoughts as words....

They'd never understand fully, Ramsey knew suddenly. Perhaps they could grasp a little of the nature of this place, a shadow here, the half-suggestion of the substance of reality there, a stillborn thought here, a note of celestial music there, the timeless legacy of proto-man, whatever proto-man was....

"The fog is lifting!" Vardin cried.

The fog was not lifting.

Then it was.

Ramsey would never forget that. Vardin had spoken while the dense gray murk enveloped them completely.

Then it began to grow tenuous.

As if Vardin's words had made it so. Little Vardin, shy, frightened Vardin, suddenly, inexplicably, the strongest, surest one among them....

The sky, white and dazzling, glistened. The gray murk glistened too, a hundred yards off in all directions, like a wall of polished glass surrounding them.

In the very middle of the bell-jar of visibility granted them all at once, stood a black rectangular object.

"The teleporter!" Margot cried. "The matter-transmitter! I know it is. I know it is!"

Ramsey stood waiting breathlessly.

No, he realized abruptly, not breathlessly. You couldn't say breathlessly.

For Ramsey had not breathed, not once, since they left the *Enterprise*.

You didn't breathe on a timeless world. You merely—somehow—existed.

"It's opening!" Margot cried.

The black rectangle, ominously coffin-shaped, was indeed opening.

"The matter transmitter," Margot said a second time. "The secret of proto-man, of our ancestors who colonized all the worlds of space with it, instantly, at the same cosmic moment. Think of what it means, Ramsey, can you? Instantaneous travel, anywhere, without the need for energy since energy cannot be used here, without the passage of time since time does not exist here." She stood transfixed, looking at the black box. The lid had lifted at right angles to the rest of the box.

Margot said, in the whisper of an awed thought: "Who controls it controls the galaxy...."

And she walked toward the box.

At that moment Ramsey had a vision. He saw—or thought he saw—Margot Dennison in the costume she had worn when they first met. She stood, eyes wide, fearful, expectant, before a chess-board. The pieces seemed to be spaceships. It was a perfectly clear vision, but it was the only such vision Ramsey had ever been vouchsafed in his life. He was no mystic. He did not know what to make of it.

Playing chess with Margot was—proto-man.

Ramsey only saw his hand.

A hand perhaps five million years old.

He blinked. The vision persisted, superimposed over Margot's figure as she walked toward the box.

A game, he thought. Because we don't understand it. Not that kind of power. Not the power a matter-transmitter would give. A cosmic game on a chess-board which wasn't quite a chess-board, with a creature who had never lived as we know life and so could never die....

With the future of the galaxy hanging in the balance. Life or death for man hanging on a slim thread, because man wasn't ready for matter-transmission, couldn't hope to use it wisely, would use it perhaps for war, transmitting lethal weapons, thermonuclear, world-destroying weapons, instantly through space, for delivery anywhere, negating time....

Death hovered.

"Wait!" Ramsey called, and ran forward.

Just then five new figures, space-suited, appeared under the gleaming dome.

"Stop that woman!" a voice which Ramsey should not have been able to hear but which he somehow heard perfectly cried. "Stop her!"

M.g. guns were raised, fired.

Without effect.

Three of the spacesuited figures ran after Margot as the voice repeated: "Stop her! The box is mine, mine!"

It was Garr Symm's voice.

Ramsey did not know if he should stop Margot himself, or fight Symm's men. Although they couldn't use their weapons on this world, they could still hurt—possibly even kill—Margot. Ramsey turned and waited for them.

The strange, mystic vision was gone. He saw only three space-suited figures, saw Margot walking steadily toward the box. Either she was moving very slowly or the box retreated or it was further away than it had looked at first. For she hadn't reached it yet.

Ramsey met the space-suited figures head-on.

There were three of them, but they were awkward in their suits, cumbersome, incapable of quick responses.

Ramsey hit the first one in the belly and darted back. His fist felt contact with the soft bulk of the insulated suit, then with the harder bulk of the man. He struck again, harder this time.

The scaly green face of the Irwadi within the space-suit grimaced with pain. He doubled over and fell, his helmet shattering against the ground at Ramsey's feet.

Then an incredible thing happened. The Irwadi opened his mouth to scream. His face froze. He lost his air. His face bloated.

And he died.

Ramsey couldn't believe his eyes.

It was not possible to die from lack of air or from cold on a world without the time continuum. Ramsey, Vardin and Margot had proved that by venturing out without protection.

But the Irwadi had died.

Mental suggestion?

Because he thought he would die?

Because that was the only way you could perish on a world lacking in the time dimension—by your own thoughts?

The second space-suited figure closed with Ramsey awkwardly. Ramsey hit him. The man of Irwadi fell, his helmet cracked, he tried to scream—and died.

The third man fled.

Ramsey ran after Margot. "Wait!" he cried. He couldn't talk to her about his fantastic vision. It was personal. She wouldn't understand. Mystic experience always is like that. And yet, with the conviction that only a mystic can have—although he certainly was no mystic—Ramsey knew the galaxy would be in grave trouble if mankind were given the secret of matter-transmission.

A voice said: "You are right."

It was Vardin's voice, and Vardin went on:

"Ramsey, stop her. I can't stop her. It is only granted that I observe—and convince, if I can. I am not a Vegan girl. I am—"

Ramsey said it. "Proto-man!"

"There aren't many of us left. We discovered matter-transmission. We used it once, to people the worlds of the galaxy. It was our final creative effort. We merely observe now, unable to destroy our creation, trying to keep it out of mankind's hands. You see—"

"Then back on Irwadi you knew all along we would come here!"

"I was vouchsafed the vision, yes. Even as you—stop her, Ramsey. You must stop her!"

Ramsey sprinted forward. Margot was nearing the black coffin now.

Ramsey ran at her, and tackled her.

They went down together, the girl fighting like a tigress, tooth and nail, wildly, sobbing, striking out at Ramsey with small impotent fists, until he subdued her. Panting, they glared at each other.

And could not stop Garr Symm from running past them, eyes rapt behind the plastiglass of his helmet, and jumping into the black box.

"To the end of the universe and back!" he cried. "Take me there and back. Instantly. Prove to me that you work! Now...." His voice trailed off. He had addressed the black rectangle almost as if it were something alive.

Ramsey thought he heard a growl from the box. He stood before it, looking in. The hackles rose on his neck.

"You see," Vardin said. "My ancestors and yours discovered the power of a god—and did not understand it. We were incorporeal. We created life—your ancestors. We patterned it to fit the evolution of the three thousand worlds. Human life. Millions of them, colonists for the worlds of normal space. We were tampering in our tragic pride, Ramsey, with forces we would never comprehend.

"We colonized the worlds, deciding that physical existence, along with the mental prowess we had, was the ideal state. A few of us, like myself, or my ancestors if you wish, although the purely mental lives continuously—a few of us stayed behind and saw—the loss of a million years!"

Ramsey's eyes still could not pierce the darkness inside the box.

"What do you mean?" he asked in an awed voice.

"We sent out god-like men. We did not understand our discovery. The god-like men—but look at Garr Symm."

The spacesuited figure got up slowly. It blinked at Ramsey. It growled. It had a recognizably green, scale-skinned face. But it was not the face of Garr Symm. It was the face of Garr Symm's caveman ancestors, a million years ago....

"This is what happened to my people," Vardin said.

She looked at Ramar Chind and Chind, responding, went to Garr Symm and led him quietly back toward the *Dog Star*. Chind never said a word. Garr Symm growled.

"Take the Earthgirl and go," Vardin told Ramsey.

"But I—you—aren't you coming?"

"My work is finished," Vardin told him. "For now."

"For now?"

"I am a guardian. When I am needed again—" She shrugged her slim blue shoulders.

"But Margot will never be content now," Ramsey protested. "Not when she's come so close."

"She'll understand. Just as you understand. You'll be good for each other, Ramsey, you and the girl. She's had only her fierce pride and her dreams of power. She has room for love. She needs love."

"But you—"

"I? I am nothing. I am the end-product of an equation our ancestors found a million years ago. An equation to give them god-like power. Instead it made them savages and I have had to watch their slow climb back to the stars. An equation, Ramsey. Almost an equation of doom. Now go."

Vardin flickered, became insubstantial. Her body seemed to melt into the gray mists.

The gleaming walls were gone. The black box was gone. Vardin was gone.

Ramsey led Margot back to the *Enterprise*.

Moments later—although the elapsed time was subjective—they blasted off.

Margot opened her eyes. She had been sleeping. She smiled at Ramsey tremulously. "I love you," she said. Her words seemed to surprise her.

"I can't go back to Earth," Ramsey said.

"Who wants to go back to Earth—if you can't?"

They had, Ramsey knew, all of space and the life-span of mortal man to enjoy together.

THE END

Transcriber's note:

Inconsistent hyphenation (matter transmitter/matter-transmitter, scintillation counter/scintillation-counter, spacesuit/space-suit) has been retained.

Corrections to spelling are flagged thus; holding the mouse over the word will show a note of the original printing. Deliberate mis-spellings (borogroves, momraths; plus all the lithping) have been retained. Minor changes to punctuation were made without comment.

END OF THE PROJECT GUTENBERG EBOOK EQUATION OF DOOM

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