

Do you have a restless urge to write?

If you do, here is an opportunity for you to take the first important step to success in writing



Bennett Cerf, the distinguished publisher, is a member of the Guiding Faculty of the Famous Writers School.

There's something different about people who feel the urge to write. They have a spiritual hunger that sets them apart—even from family and friends.

If you have known this burning need to write, you, too, may have the gift suc-

cessful authors possess.

They know that this restless urge for self-expression is perhaps the most important ingredient of writing success. But, they realize it can waste away if you don't know how to get started writing, or if you hesitate to try.

Several years ago a group of famous authors including Rod Serling, Faith Baldwin, Bennett Cerf, Bruce Catton, and several others joined forces to start the Famous Writers School. They poured everything they know about writing into a remarkable new kind of professional training course which trains you at home in your spare time. You begin with the fundamentals of all good writing. Then you get advanced training in the specialty of your choice.

Each of your assignments is examined by an instructor who is a professional writer or editor. He goes over your work word by word, blue-penciling changes right on your manuscript. Then he returns it to you with a long letter of advice on how to improve your writing.

This training works well. Our students have sold their writing to hundreds of publications.

Free Aptitude Test offered

Famous Writers School

Dept. W-4522

To find out if you, too, have writing ability worth developing, send for the School's revealing Aptitude Test. If you test well, or offer other evidence of writing aptitude—you may enroll. However, there is no obligation to do so.

Westport Connecticut 06880
I want to know if I have writing aptitude worth developing. Please mail me, without obligation, your Aptitude Test and illustrated brochure.
Mr. MrsAge Miss [Circle one please print]
Street
City
StateZip
Accredited by the Accrediting Commission of the National Home Study Council.



ALL NEW STORIES

Ejler Jakobsson, Editor Frederik Judy-Lynn Benjamin, Managing Editor Lester de L. C. Murphy, Circulation Director Franc L. Jack Gaughan, Associate Art Director

Frederik Pohl, Editor Emeritus Lester del Rey, Feature Editor Franc L. Roggeri, Art Director t Director

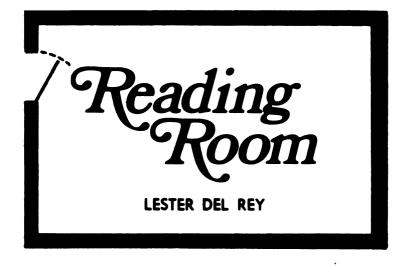
NOVELETTE	
PRESSURE VESSEL, Ben Bova	4
SERIAL (Part II)	
WHIPPING STAR, Frank Herbert	120
SHORT STORIES	
A MATTER OF RECORDINGS, Larry Eisenberg	
PREZ, Ron Goulart	54
THE CUBE, C.M. Drahan	67
A GAME OF BIOCHESS, T.J. Bass	74
HIRED MAN, Richard C. Meredith	88
FRUIT OF THE VINE, George C. Willick	
DRY RUN, J.R. Pierce	113
FEATURES	
READING ROOM: Book Reviews, Lester del Rey	2
SF CALENDAR	73
HUE AND CRY: Reader's Write—and Wrong	154

Cover by GAUGHAN, suggested by WHIPPING STAR

Arnold E. Abramson, Publisher

Bernard Williams, Associate Publisher

IF is published monthly by Universal Publishing & Distributing Corporation, Arnold E. Abramson, President. Main offices: 235 East 45 Street, New York, N.Y. 10017. 60t per copy. 12-issue subscription: \$6.00 in the United States, elsewhere \$7.00. Second class postage paid at New York, N.Y. and additional mailing offices. Copyright < 1970 by Universal Publishing & Distributing Corporation under International, Universal and Pan-American Copyright Conventions. All rights reserved. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction and any similarity between characters and actual persons is coincidental. Title registered U.S. Patent Office. Printed in U.S.A. The Company also publishes Award Books, Nova Books, Tandem Books (United Kingdom), Vocational Guidance Manuals, Golf Magazine, Golfdom, Ski, Ski Business, Ski Area Management, Home Garden, The Family Handyman.



One of the most frustrating things about reviewing books is the time lag between the publication date of the book—even when the reviewer is presented with an advance copy—and getting the review on the newsstands. Few publishers have tried to solve the problem.

Terry Carr, the enterprising editor of the Ace Specials, is a welcome exception. He has been submitting page proofs of forthcoming books due to appear several months later. This is doubly welcome, since the Specials have included several outstanding books and the series deserves careful attention.

In this case, the novel for December release is Fourth Mansions, by R.A. Lafferty (Ace Special, 75c). It's a novel that will probably be greeted with enthusiasm by the Lafferty fans, who made his Past Master a serious

contender for the Hugo this past year, as well as by those who seem to regard Kurt Vonnegut as America's answer to William Burroughs. It is, in many ways, a richer example of Lafferty's work than his previous book and should be doubly rewarding to his fans. I must confess, however, that I'm not one of them and that this is not a book to convert me. In fact, only a sense of obligation kept me reading beyond the first thirty turgid pages.

The basic idea of the novel is that various mysterious groups are trying to dominate the world and that a tremendous hidden struggle for power is going on. One small group has developed the ability to pool its members' psychic powers into a unified, brain-weaving net of force that can influence others and even affect seismographs. Another, more ancient group, has the

(Please turn to page 147)

These great minds were Rosicrucians...

Benjamin Franklin



Isaac Newton



Francis Bacon

WHAT SECRET POWER DID THEY POSSESS?

Why were these men great?

How does anyone — man or woman — achieve greatness? Is it not by mastery of the powers within ourselves?

Know the mysterious world within you! Attune yourself to the wisdom of the ages! Grasp the inner power of your mind! Learn the secrets of a full and peaceful life!

Benjamin Franklin, statesman and inventor... Isaac Newton, discoverer of the Law of Gravitation... Francis Bacon, philosopher and scientist... like many other learned and great men and women... were Rosicrucians. The Rosicrucians (NOT a religious organization) have been in existence for centuries. Today, headquarters of the Rosicrucians send over seven million pieces of mail annually to all parts of the world.

The ROSICRUCIANS

San Jose

(AMORC)

California 95114, U.S.A.

THIS BOOK FREE!



Write for your FREE copy of "The Mastery of Life" — TODAY. No obligation. A non-profit organization. Address:
Scribe E.R.A.

Scribe E.R.A.
The ROSICRUCIANS
(AMORC)
San Jose, California 95114, U.S.A.
Please send me the free book, The Mastery of Life, which explains how I may learn to use my faculties and powers of mind.

Name____

Address_____

State_



PRESSURE

BEN BOVA

Deeper and more dangerous than the seas of Jupiter—was the human mind!



VESSEL

I

AM the ship.

We're cruising just under the cloud deck. The wind velocity outside is still brutal, gusty. Makes us buck and shudder like a glider in a thunderhead. My infrared eyes see the ammonia clouds

above us as cold and gray. Lots of turbulence.

The first men inside Jupiter. We've got the lumps to show for it. Took a helluva beating getting through the clouds. The scientists must have been scared. So was I on that one jolt. It hurt.

It's snowing like hell all around us. I can barely see the second

cloud layer below. It looks vaguely pinkish, warm. They're supposed to be water clouds, ice crystals. And below that? Intelligent life? The people who built the machinery on Titan?

The captain is asleep. I am the ship. All alone except for the computer and this recorder I'm mumbling into. The scientists are plugged into their special instruments, each in his own narrow cubicle. But I am the ship. Plugged in completely. The engines are my heartbeat. The computer flashes information into my eyes and talks right into my brain. The recorder takes down this subvocal chatter for the ship's log. I see outward with infrared or sonar or any of the other sensors. And inward with the intercom cameras. I'm in touch with every piece of machinery, every electrical circuit, every transducer and sensor. They all plug in to me.

Me. The human me. I can see myself: a six-foot-tall Caucasian floating in a contour couch like an enlarged fetus, naked and depilitated. Gills flapping softly. Body bobbing gently in the currents that surge through the heavy saline solution we live in. Face mostly hidden behind sensory connectors and communications unit. Cranial connectors pressed against bald skull like a yamulka. Hands and feet enclosed in more sensory connectors and control units.

A semi-mechanical fetus,

breathing liquid with man-made gills. A part-time cyborg. Robert Donovan O'Banion, youngest full commander in what used to be the United States Navy. Now we're all brothers, of course. No more national armed forces. The buildings on Titan ended that. We're all lined up shoulder to shoulder to face the Threat From Space. Like hell.

SYSTEMS REPORT. ALL SYSTEMS PERFORMANCES AT NOMINAL VALUES. ALL SYSTEMS WITHIN TOLERABLE LIMITS.

I don't know why they used my voice for the computer's vocal output. The captain laughs about it—says it's like I'm talking to myself. At least they didn't try to build a personality into the computer. Having four scientists aboard is enough personality for any mission.

What's Ling saying?

"They are definitely biological. Look at the readouts yourself."

INTERCOM camera view. Ling is sitting on the edge of his couch. It's cranked up to a sitting position and swiyeled to his workbench. He's flashing the readout from one of his instruments over the intercom. The spectrophotometer, looks like. It shows a list of numbers. The recorder will read it off for the data file and the log. The other three scientists are mak-

ing professional grunts and mumbles.

"Hydrocarbons mostly," Ling goes on. "But notice, please, lines fourteen and thirty-seven—leucine and tyrosine. Amino acids."

Ling is trying to maintain his Chinese cool but he sounds excited. Just for kicks, let's check his medical monitor. Yes—heart rate is up.

"Amino acid molecules," Bromley says flatly from his cubicle. "We're in the midst of a biological blizzard."

That's no surprise. The unmanned probes discovered the biological "snow" falling from the top cloud deck. Sunlight and lightning propel biochemical reactions in the clouds—amino acids and other gunk precipitates out. It's what happens to the stuff underneath the clouds that we're supposed to investigate,

It's a shame Ling's depilitated. He'd look better with a stringy mustache. The complete Chinese sage. Head too big for his skinny body. Bromley's just the opposite: soft and round. I swear he's bloating. He looks spongier every time I check on him. He can't be gaining weight on what we get for nutrients.

Ludongo is hunched over his instruments, running tests on the gas samples we've sucked in. Doc Speer is clinging to his couch; hasn't said a word since that first jolt up in the clouds. Youngest

man aboard. Hope to Christ we don't have a medical emergency. He would be useless.

COMMUNICATIONS CHECK.

The computer flashes the words before my eyes as well as saying them to me.

Okay, sweep the radio frequencies. Nothing is getting past the nerve-sizzling interference. The electrical storms make radio virtually useless. Try the laser again. Won't go through the clouds. All right, end communications check. We're cut off from the orbiting ships, completely shut away from the rest of the human race. Not even the starships are as lonely.

SHIP SYSTEMS CHECK.

The computer is flashing data to me. Images flicker in my eyes as fast as my brain can take in the information—propulsion system, electrical power, life support, structural integrity—numbers, bar charts, symbols, graphs, curves. Outside pressure is up to ten atmospheres. And we've just started. When do we enter the second cloud deck?

IN FORTY-SIX HOURS EIGHTEEN MINUTES, AC-CORDING TO PLAN.

Below that deck is the ocean, where the pressure starts at a ton per square centimeter. Then we'll see how good a ship we are.

Were those sonar pictures from the unmanned probes really showing animals? As big as icebergs? Ling's cubicle. They're comparing notes. Ludongo has finished his atmospheric analysis, looks like. Ling is working on the biochemistry of the snowflakes.

Bromley's getting off his tail and joining them.

Ling is saying,—"It's amazing how similar the biochemistry is to the terrestrial pattern."

Bromley floats in and grabs a handhold. The cubicle is barely big enough for the three of them. Ludongo nods hello and drifts behind Ling's couch to the corner where the medical monitoring console stands. Maybe I ought to make them stay in their own cubicles and chat over the intercom. Avoid injury if we hit more turbulence.

Check the outside infrared. Give me a course plot and turbulence prediction.

NO MAJOR TURBULENCE WITHIN INSTRUMENTS' RANGE AND SENSITIVITY.

Okay. Let them float around for a while. The bulkheads are padded. Alert me if any sign of turbulence shows up.

UNDERSTOOD.

My God, Speer's getting up. Is he finally getting a little courage or is he scared of being left alone?

DISTURBANCE DETECTED AT MAXIMUM INFRARED RANGE.

Show me. Flickering light. Gone now. No, there's another.

Give me max magnification. It must be a lightning storm. Distance?

ĐATA INSUFFICIENT FOR DISTANCE ESTIMATE.

Hell! Looks pretty dim but infrared wouldn't pick up much of a lightning bolt, would it? No ideas at all for estimating the distance?

COMPARISON OF VISUAL SIGNAL AGAINST AUDIBLE SIGNAL COULD GIVE AN APPROXIMATION OF DISTANCE.

Listen for the boom, yeah. We used to do that when I was a kid, gauge the distance to a thunder-storm that way. Turn on the outside mikes and filter out the boundary layer noise. What's the speed of sound out there?

BASED ON MEASURE-MENTS OF ATMOSPHERIC PRESSURE AND COMPOSI-TION, SOUND SPEED IS AP-PROXIMATELY SIX KILO-METERS PER SECOND, PLUS OR MINUS TWENTY PER CENT.

But I don't hear anything. No boom. Shock waves must be damping out. What's the damping function for this atmosphere?

DATA INSUFFICIENT FOR ESTIMATE.

Great. Now do I let them stand around and jabber or do I send them back to their couches?

NO MAJOR TURBULENCE PREDICTED FOR AT LEAST

THIRTY MINUTES.

Inside view. Speer is bobbing softly in the passageway just outside Ling's compartment, one hand on the open hatch. The other crewmen are jammed inside.

Ling is saying, "If this biological snow is falling all across the planet—what happens to it in the second cloud layer? And in the ocean?"

"Torn to shreds, I should imagine," says Bromley. "Those are not the warm, gentle seas of Earth down there, you realize. They're no doubt highly corrosive, laced with plenty of ammonia and God knows what else. Long-chain molecules simply wouldn't stand a chance in that ocean."

Ludongo looks like he's fed up with Bromley's pompousness but Ling simply smiles like a cat.

"Indeed?" Ling asks softly.
"But what of the sonar pictures that the probes returned? What are those huge objects floating in the ocean?"

"Icebergs, rocks, mountains torn loose from the surface below—"

"So? Warmer than the ambient seas around them?"

Bromley looks uncomfortable. "I'll admit that there's a good deal we have to learn. But one shouldn't jump to conclusions. Whoever built those machines on Titan certainly did not come from Jupiter—or from Saturn, for that matter. Any fool could've told the

politicians that. It's so obvious."

Ludongo's father is a politician. He says, "Yes, of course. But if we had convinced the politicians there would have been no Jupiter mission at all."

"Frankly, I wouldn't have minded a bit," Bromley says. "This is no place for a manned expedition. Unmanned probes could do everything that needs to be done here. I volunteered for a star mission, not this. I accepted Jupiter because they needed me."

Ling smiles sadly.

"We all desired star missions."

"And none of us qualified," adds Speer.

"I qualified for a star mission," Ludongo counters. "But my father, the Prime Minister (he stares straight at Bromley), did not want me to go. By the time I returned even from Alpha Centauri' he would be long in his grave."

"Yet he permitted you to go on this—this—"

Bromley means, but does not say, suicide mission.

"A Ludongo does not back away from a question of courage."

S PEER hunches his thin shoulders. "Let's face the truth. We're expendable. For this mission they needed good, capable men who won't be missed too much if they don't come back."

He made three great friends with that crack. We all know it's

true but who wants to talk about it? The only nonexpendable member of this mission is the recorder. It listens to everything we say, takes down every bit of data from the instruments, carries my mutterings for the log. They built it to make its way back to the orbiting ships all by itself, even if we break into pieces.

Starting to hear rumbles from the lightning storm. Bolts are becoming bright enough to blank out my eyes for a second or so.

MODERATE TURBULENCE TEN MINUTES AHEAD.

Noted—hey, there's a blast! Single lightning tree zapping from the clouds above all the way down to the second deck.

SEVERE TURBULENCE THIRTY SECONDS AHEAD.

"Grab onto something quick—"

I put as much snap and urgency as I can into my words over the intercom.

Turn off the outside mikes. The turbulence is like getting hit with a hammer. Stabilizer cuts in. Okay.

Inside camera.

"Everybody all right?"

They're grumbling and swearing. Nobody hurt.

"Get back to your own couches and strap in. Strong turbulence coming up."

How come you only gave a thirty-second warning?

ELECTRICAL STORM GROWING RAPIDLY.

GROWTH PARAMETERS IN-SUFFICIENTLY UNDER-STOOD FOR DETAILED TUR-BULENCE PREDICTIONS.

Thanks for admitting it—after the fact. Storm's spreading and we're heading right into it. Carpenter's not much on maneuvering—more like a dirigible than anything else.

Here's Captain Voronov. Chunky Russian. Used to be blond and jovial. Looks blond and worried now. He buckles himself into the pilot's couch and fits the connectors to his face and cranium.

Now there are two of us. He's sharing the ship with me. He slips his hands and feet into the control connectors. We're linked.

"Don't think we can get around it, Andy."

I can sense him nodding. My eyes are watching the flickering lightning, closer than ever now. The computer is superimposing numbers over the outside view—storm's extent, our course and speed, turbulence levels.

"I would not care to try going through it," Andrei says. His English comes out slow and careful, in a deep baritone. This saline we live in makes everybody's speech a bit slower and deeper than normal.

The scientists are all battened down like good little boys. They're watching their display screens, looking at the storm. "Would it be possible," Ling asks softly, "to get close enough to the storm to observe the effect of the lightning on the biological particles?"

"Lord, I should hope not," says Bromley.

"Too much turbulence," Andrei says firmly.

He's checking the mission plan and our performance limits. I realize that he wants to go under the storm, through the second cloud deck. I run through a systems check and start the computer plotting an optimum course.

"Good Robert," Andrei says as the course plot flashes before our eyes. "The descent rate is steep but within tolerable limits. Execute."

It is steep. My stomach doesn't like it. Displays are flashing like a movie now—engine thrust, temperatures, hull pressures, strain, descent rate.

Listen to them wail!

"What are we doing?" Ludongo calls. "Are we going down?"

Andrei answers, "The only way to avoid the storm is by penetrating the second cloud layer."

"But we're not supposed to go down for another two days. I have two days of experiments to do at this level."

Bromley: "You can't arbitrarily juggle the mission plan like this, without consulting us first. After all—"

"No time for discussion," An-

drei euts in. "We go right down."

They're sore. And scared. Me, too. Below the second cloud deck is the real unknown. Only a couple probes ever got back. Those sonar pictures. Big as mountains. Warm. And alive?

We're really bouncing now. I can feel liquid gurgling in my ears. Outside view is blank. We're in the clouds. Damned couch feels like it's got rocks inside the padding. Straps are cutting into me. Ship feels okay, though. Engines are strong. The bright boys in back are clammed up. Was that Bromley's yell? Don't blame him. Another drop like that and I'll yell too.

Starting to ease off, I think. Maybe we—what a jolt! Felt like a bomb went off inside the ship.

YELLOW ALERT. SUBSYSTEM MALFUNCTION. GENERATOR OUTPUT. DOWN TEN PER CENT.

"Check it," Andrei says to me.

The performance graph doesn't look too bad. No real danger. Look into the generator bay. Everything seems normal—wait. A bubble just drifted up from behind the—get a closeup. Yep, a leak in the coolant line. Nothing serious. Not yet.

"I see it," Andrei says.

The ship's riding smoother now. Long, slow rolling moment, with a bit of a choppy pitch still but now it's more regular. Not too bad.

"I'd better fix that coolant

leak," I tell Andrei.

"Yes. And then take your rest period. We're out of the turbulence now. I can handle it alone."

UNPLUG.

H

PLUG IN.
I didn't sleep too well.
Dreamed about Marlene, just like she was alive.

The ship is riding along easily now, inside the ocean, more like a submarine than a dirigible. Andrei lolls in his couch. The scientists are happy as kids in a cave, with a whole new world to explore. Every instrument we have is going full bore. Visions of Nobel Prizes floating out there.

Can't see much else. Really black now. Even the infrared is useless. It's sonar or nothing. No more snowflakes. Maybe they're still out there but they don't register on the sonar.

"Did you have a good sleep?"
Andrei asks.

"So-so. Kind of tense, excited. I feel more relaxed when I'm plugged in. Got something to do, somebody to talk to. It's fonely back there in the cocoon. Unplugged here means unconnected—to me at least. Nothing to do but think and worry."

Andrei says nothing. The connectors hide most of his face. All I can see are his mouth and chin. But I get the feeling that what I've

said somehow has displeased him.

Bromley braced me back there. I was on my way back from the generator bay, heading for the cocoon. He floated out of his own compartment and blocked the passageway.

"Could we speak to you for a

moment in private?"

That's a laugh—in private. "Who's we?" I asked him.

Bromley nodded toward Ludongo's cubby and drifted toward the hatch to it. I pushed a foot against the passageway bulkhead and followed him. Ludongo was sitting on his couch. His instruments

on his couch. His instruments were all on automatic and he reached over to snap off his intercom screen when I hunched in. That was what Bromley had

meant by private.

"We want to talk with you," he rumbled in his pressure-deepened bass.

"In strict confidence," Bromley added. "If you feel that you can't keep what we say confidential—" He let the idea dangle.

"I'll listen," I said. "If you start to say things I can't keep

quiet about I'll tell you."

"Fair enough," said Ludongo. He looked up at Bromley, who was bobbing nervously in front of the workbench.

"We're worried about Captain Voronov," Bromley said.

"Worried about him?"

Ludongo said, "We don't like the arbitrary way he decided to plunge into the ocean. That was not only a dangerous decision but an unfair one."

"Who's we?" I asked again.

"We scientists, of course," Bromley said.

"All four of you?"

"Speer feels exactly as we do. Ling is naturally more reticent about his feelings but he's upset also."

I looked at Bromley. Inside that rubbery face was a born troublemaker, the kind who starts fights and then stands off at the sidelines holding the coats and watching the blood flow.

"He's the captain," I said. "He had to make a fast decision. There wasn't any time for a conference or a vote."

Bromley countered, "There were a number of other things he could have done. He could have reversed our course, or gone up over the storm."

I shook my head. "Either alternative would have cost too much energy. He's got to consider the whole mission. You wouldn't want to get caught down here in a week or so without power, would you?"

"Of course not," said Ludongo.
"Maybe the captain made the best decision. We're not arguing that point—merely the manner in which it was made. We should have been consulted."

"No time for it."

"Nonsense," Bromley said. "It's

his attitude, that's all. He's acting as if this were a warship and we nothing but crew members under his command."

"That's right. This is a military mission. That's why military men are in charge."

"You two are in charge—" Bromley shook a finger at me—"because you're experienced in ship handling. The purpose of this mission is scientific. There isn't the faintest military reason for this expedition."

I felt myself starting to simmer. "Come on now. If those buildings on Titan weren't there we wouldn't be here—and you know it."

be here—and you know it."
"Yes," Ludongo answered, smiling broadly, "that's true. But you don't actually expect to find the builders down here, do you?"

"You're the scientists. You tell me."

"What makes you so certain that those buildings present a military threat to man?" Bromley asked.

HOW could he be so blind?
"Any race that can set up machinery that runs unattended for God-only-knows how many centuries has a technology that is capable of crushing us. You know that, too."

"But what makes you think they'd be hostile?"

"Why are the machines still running?"

Bromley told me with a look of

disgust, "The machines could be completely benign toward us. More likely, they're completely indifferent. Their builders probably never gave a damn about us one way or the other."

"I have my own idea," said Ludongo. "I have been on Mars. I have seen the artifacts there. They were created by human hands, built to human scale for human uses."

"Yes, I know," Bromley muttered.

"It is entirely possible that there was a human civilization before the Ice Ages. A civilization that reached Mars, perhaps even Titan. Those buildings and the machinery inside them could have been put up by our own ancestors."

I asked, "What happened to that civilization?"

Shrugging, Ludongo answered, "War. Natural catastrophe."

"The Ice Ages could have easily wiped it out," Bromley suggested. "On Earth," I said. "What hap-

"On Earth," I said. "What happened on Mars, on the Moon? And why are the buildings on Titan still standing? And what are the machines doing?"

No answers.

"Okay," I said. "You could be right. Maybe there's nothing to be worried about. But there's still a good chance that the works on Titan were built by another race. We can't just assume that they're friendly or even neutral."

"They're probably dead and gone by now," Bromley said, "At least they're gone," Lu-

"At least they're gone," Ludongo added.

They still didn't get it. "Look. From a military point of view, we've got to assume that those buildings represent a possible threat. We've got to be ready for that threat. If it never materializes, fine. But if it does and we're not ready for it—goodbye for keeps."

"How could you possibly expect to be ready—"

"We've drifted away from the original subject," Ludongo said uneasily.

"No, we're exactly on the subject," I insisted. "This is a military mission. The captain's job is to seek out any alien life forms we can find and get enough information about them to decide whether or not they might have built the machines on Titan."

"That's arrant nonsense. No creatures that live in this black gravity pit could even realize that there are other worlds, let alone build interplanetary ships."

"Maybe. But we're here to find out for sure. You scientists are supposed to provide the information. The captain and I are here to run the ship and see that the mission objectives are carried out."

Bromley's face seemed to puff out even more with anger. He looked past me, to Ludongo. "I told you it'd do no good to talk to him. Bloody fools all think alike. Military mission!" He turned on me. "You're here to ferry us about and see to it that we're safe and comfortable. This is a scientific expedition. There's no military necessity behind it—except what you gold-braided barbarians make up out of thin air."

"Okay, that's enough," I snapped. "You can think whatever you like. But you'll take orders from the captain just like any crewman on a military ship. Period."

I didn't wait for an answer. I pushed through the hatch and swam up the passageway to the flight deck.

ON PLAYBACK the encounter is almost funny. Bromley's weird. He really thinks we'd be risking our butts in this soup just to give him a chance to satisfy his scientific curiosity.

SONAR CONTACT.

Six faint white blips in the middle of the gray, grainy sonar display. Nothing else is visible. Computer's flashing data—course, current vector, range, closing speed.

Andrei mumbles, "Fifty kilometers away and closing on us at better than fifty kilometers per hour."

"Look at that current vector. Unless the computer's blown a circuit, they're moving against the current." Andrei goes to the intercom. "Sonar has detected six large objects approaching us. They are moving upstream—against the prevailing current."

Ling is the first to answer. "Is this the maximum enlargment you can provide?" He's got the sonar display on his main screen.

"Yessir," I answer. "It's on max. When they get into closer range we can switch to other sensors."

Ludongo, "Can the computer make a size estimate?"

TWO POINT FIVE TO THREE POINT FIVE KILO-METERS, PLUS OR MINUS TWENTY PER CENT.

Kilometers! Not a word from the scientists now. They're all watching the sonar display. Ling's trying to view them on infrared, as well. About all you can tell at this range is that they're slightly warmer than the sea itself.

They've disappeared.

"My screen's gone blank."

"What happened?"

"Hold on, hold on," I yell at them. Check the screens. Get a wide-angle view. Yeah, there they are—look at them go!

"They're running away from us."

"They sure are," I say.

Andrei watches them dwindle in the distance on the wide-angle sonar display. "I thought we had lost them entirely when they jumped out of view on the closeup. Give me a speed estimate."

ONE HUNDRED EIGHTY KILOMETERS PER HOUR, PLUS OR MINUS FIVE PER CENT.

"I don't believe it," I mutter. CONFIRMED.

"We certainly won't be able to catch up with them," Andrei says. A very practical thought.

"They are alive," Ling says, awed. He's knocked the empty sonar display off his main screen and is rerunning the tape showing the animals.

"Alive," Speer echoes. "And so huge."

"Like whales," Andrei says. "Jovian whales. Have any of you hunted whales?"

No answers.

"Well, I have. When I was much younger. Whales can be very intelligent beasts—extremely intelligent."

Bromley chimes in, "Do they build machinery, Captain?"

"No. But they learn to run at the sight of danger. Those Jovian whales ran away from something. They sensed us, probably, and bolted. Why should they do that?"

FLICK a peek at Andrei. His mouth is set in a tight line.

"Are you suggesting that these animals are accustomed to being hunted?" Bromley asks. His voice is dripping disbelief.

"They certainly acted as if they were frightened."

"Nonsense," Bromley snorts.

Ludongo says, "But there's the infall of biological snow from the clouds above. This ocean is like a constantly replenished biological soup—"

Bromley, "More like a biological vichysoisse, considering the temperatures out there."

"The point is," Ludongo resumes, "that the whales have a steady food supply. Why should there be predators when free food is plentiful?"

I can sense Andrei shrugging. "Terrestrial baleen whales eat plankton—also free. Yet they are preyed upon by orcas, sharks—and submarines carrying men."

"You're not suggesting that these whales are hunted by intelligent creatures?"

Bromley looks really upset. He doesn't want to believe a word of what is being said by the others but his face shows absolute fear.

"I am suggesting only that those whales were frightened by us—and fear is normally a conditioned reflex."

Ling gives a little cough. "Excuse my interruption, please. But it seems that these arguments cannot be resolved until we learn more about the creatures themselves. Can anyone suggest a technique by which we can study them at close range?"

"Not if they run when they sense us," Bromley says.

Speer adds: "And they de-

tected us at fifty kilometers, didn't they?"

them?" Ludongo asks.

Andrei knows, I'm sure. But he's hesitating. Probably used the technique hunting whales in the Antarctic. We've done it in the Navy. What the hell, we're supposed to be working together now. I'll break the ice.

"We can try to spoof the whales' sonar," I tell them.

"What's that?"

I peek at Andrei again. He's broken into a broad grin.

"Check the sonar tapes," I say, "to find the frequency that the whales used to detect us. Then amplify our return signal on that same frequency. It'll make the whales think we're one of them. Instead of running, they might let us get close."

"Exactly," Andrei agrees. "The trick works against terrestrial whales. Even against terrestrail antisubmarine patrols."

We laugh together. For once everybody's in agreement. The computer has a record of the sonar frequency the whales put out. It's lower than anything we can do. So Andrei goes aft to jury-rig one of the transmitters to match the whales' frequency.

Alone now. Ship's completely mine again. Feels good. Nothing around us. Riding smooth and easy.

Funny I dreamed about Mar-

lene. Haven't thought about her since we left Earth. Maybe it "How can we get close to wasn't a dream. Too logical. Maybe I just remembered about her while I tried to sleep.

> THERE IS NO RECORD OF YOUR DREAM IN THE SHIP'S LOG.

Damned right there isn't.

MISSION OBJECTIVE FOURTEEN NUMBER **QUIRES THAT PSYCHOLOG-**ICAL RECORDS BE MAIN-TAINED AS FULLY AS POS-SIBLE.

I know. They want to study our dreams. They claim it's important for the next mission. Especially if we don't make it back. Get it into the recorder so they'll be able to figure out if we went off the deep end

VOCALIZATION OF SUB-CONSCIOUS **ACTIVITIES** SUCH AS DREAMS IS HELD IN STRICT PRIVACY.

Sure. Only two or three dozen psychs will hear the tape. Okay, can't argue with mission objective fourteen. I'll try to remember the dream. For the psychs. For the next set of poor bastards they send in here.

Ш

T WAS the time we jetted over to the Sequoia forest. After so many months training in Texas flat scrubland we wanted to see mountains and real trees again.

The park was filled with tourists, even a planeload of scout troops from Indonesia. We ducked off the main trail and climbed up and away from them. The trees are as big and tall as booster rockets—they've been standing there for two thousand years. Solemn as a cathedral. And those damned people crawling around clicking cameras, yelling after kids, carving initials. Sacrilegious.

"Look at them," I said to Marlene when we stopped for breath halfway up the slope. "Not a care in the world. This damned Titan business doesn't mean a thing to

them"

She answered, "Perhaps they are trying very hard to forget about Titan."

She was inclined to be serious—a Germanic trait, I guess. When we had first met, back at the beginning of training, she had told me several times that she wasn't going to fall in love with me because the chances were that we'd be sent on different missions and because she was older than I. But six months later we ran off like a couple of kids and got married. Nobody else knew about it. Very romantic.

Now we worked our way deeper into the forest, hiking up the slope, away from the noise of the tourists. I had our lunch in my backpack. The big trees made a canopy of cool shade far overhead but every once in a while a shaft

of sunlight would break through and set off sparkling highlights in Marlene's hair.

"Actually," she said thoughtfully, "life has become much better since the discovery of the buildings on Titan. World tensions have dried up. The threat of a big war is now very dim."

I laughed. "Sure. Why worry about blowing ourselves to hell when there's a race somewhere that can do it for us?"

"But it's a much more distant threat, a remote possibility. That race visited the solar system thousands of years ago. Perhaps thousands of centuries ago. They may never come back."

"Then why are the machines still working?" I asked. "And what are they doing?"

"That is the disquieting part of it," she admitted.

We found a mossy stretch with a cold stream sluicing through it. We could hear birds and a squirrel chittered at us from the fire-hollowed base of a tree. I unslung the pack from my shoulders and we had lunch.

"You were there," I said through a sandwich. "What's it really like?"

She stopped eating and shook her head. "It's—very hard to describe. Not the physical conditions—you've seen films of the buildings and you know what Titan's like—"

"Pretty damned dark and

gloomy, except when Saturn's up."

"There you forget that Saturn's in the sky," Marlene said. "You can—feel—the machinery throbbing. The ground vibrates. When you're near the buildings the sensation you get—it makes your flesh crawl."

"They ought to hit it with a nukie missile and make everybody feel better."

"But suppose the machines are sending out a signal? Some wavelength that we can't detect? If we stop that signal—mightn't it tell those who built the machines that it's time to return to the solar system?"

Her eyes were wide now with real fear.

I had run out of flip answers.

"I spent a whole year there," Marlene went on, quieter-now. "We knew just as much about the machines when I left as when I had arrived. We don't dare dismantle them. I'm not even sure that we could if we tried."

I lay back and stared up at the green canopy above us. Fresh and-alive and good.

"Must be like living next to a haunted house," I muttered.

"That's exactly it," Marlene said, stretching out beside me.

I put my arm around her shoulders. Instead of drawing closer to me, though, she said, "Bob, I saw a man try to kill himself on Titan. The problem got too much for

him to bear. We barely got to him in time."

I made a sympathetic noise.

"Bob—you see, I was in love with him. He was married but his wife had stayed on Earth. He never knew I loved him but I did. I think I still do."

All in a rush.

I turned and looked at her. "In love? Where is he now? How long ago—"

"He's out of the hospital. I saw him yesterday at the center. He's been accepted for star-flight training. If he can qualify and get through the training he'll go on a star mission."

"And you still love him."

"I'm not sure. I think I do. His wife has divorced him, I believe."

"Great." I forced a smile. "So we'll have a triangle heading out for the stars. Maybe we can all get freezer beds next to each other."

That was before I knew I would be sent to Jupiter, not on a star mission. And before she died.

A NDREI'S back. Checking the sonar transmitter, matching its output against the computer memory of the whales' frequency. Flash me a comparison. Looks good. Check sonar. Nothing out there now. Sea's empty.

Controls feeling sluggish. Nothing definite, no alarms. Just not responding as smoothly as they should. Maybe it's the outside

pressure. Up to seventy tons per square centimeter.

Andrei's not yet plugged in. Still playing with the sonar.

"Looks good to me," I tell him. He nods. But he looks sort of

grim, preoccupied.

"Yes, I suppose it will do." He hesitates. Then: "Can you handle the controls by yourself for a while longer? I want to check something with Speer."

"You feel sick?"

"I'm having a little trouble breathing."

I look at him. He means it. "But you're not breathing. The gills are."

Frowning. "Yes, of course. I mean I'm having some soreness in my chest. Perhaps I'm merely tired."

"Well, you'd better check it out."

He puts his hand on my shoulder. "Don't be worried. It's nothing serious, I'm sure. Speer will probably say it's psychological. You know, I really don't enjoy being plugged into the ship. It bothers me. It makes me feel less than human."

"Really? I get just the opposite reaction."

He bangs my shoulder. "Good... I'll let Speer poke at me and then take my rest period. Call me if anything unusual develops, will vou?"

That's almost funny, "How do you define unusual?"

He laughs. "Use your judgment, comrade."

Alone again. Odd that Andrei should feel that way. - Being plugged in-it's beyond being human. Lets you think with the speed of a computer, see what no human could ever see for himself, swim the depths of Jupiter's seas. All human frailties and wiped out, buried, forgotten.

RÉ-SYSTEM ANOMALY

PORT.

Go ahead.

PRESSURE TRANSDUC-ERS ON MAIN HULL SHOW LOCAL INCREASE OF EX-TERIOR PRESSURE ON PORT SIDE OF NOSE SEC-TION. INTERIOR PRESSURE BETWEEN MAIN AND SEC-ONDARY HULLS HAS BEEN INCREASED AUTOMAT-ICALLY TO COMPENSATE.

Display data.

Curves don't look too bad. All parameters within tolerable limits. Check possible reasons for pressure rise and display most likely.

LOGIC WORKING. MOST LIKELY CAUSE IS HULL CORROSION LEADING TO WEAKENING OF HULL **STRUCTURAL** STRENGTH. SECOND MOST LIKELY CAUSE IS TRANS-DUCER FAILURE, AUTO-CHECK SHOWS TRANSDUC-ER OPERATING NORMALLY Hull corrosion. That could lead to major failure./

ALL PARAMETERS WITH-INTOLERABLE LIMITS.

At present. Display projected estimate of hull strength over next twenty-four hours.

INSUFFICIENT DATA FOR PROJECTION.

Understood. Monitor hull pressure continuously. Flash yellow alert when structural strength drops five per cent from its current value.

THAT WILL STILL BE WITHIN TOLERABLE LIMITS.

Understood. Execute order as given.

UNDERSTOOD.

And also review all mission objectives, by priority rating. List all priority objectives that can be accomplished in periods of twelve, twenty-four, thirty-six, and forty-eight hours.

UNDERSTOOD, WORKING.

And maintain continuous watch on hull pressure.

EXECUTING AS PREVI-OUSLY ORDERED...SO-NAR CONTACT.

Display. Yes, there they are. Ten... fifteen... seventeen of them. Range?

SIXTY-THREE KILOME-TERS.

Display their course and relative velocity. Estimated time to intercept?

TWO HOURS TEN MIN-UTES, PLUS OR MINUS FIVE PER CENT. Execute intercept course. Any change in hull pressure?

ALL PARAMETERS WITH-IN TOLERABLE LIMITS.

"Seventeen big ones on sonar," I say into the intercom. I'm nearly whispering, I realize. "If they've detected us at all our sonar camouflage has fooled them. So far."

THE scientists must have been asleep. Takes them a few minutes to get started again. Now I can see that they've all got the sonar display on their screens. Andrei's in the cocoon. Leave him there. Nothing will happen for two hours or more.

Sonar view again. "We don't know how sensitive their accoustical gear is," I tell the scientists. "We're matching their own outputs as closely as possible. Our engine noise is muffled as much as we can manage. We should run silent in case they're sensitive to other frequencies. Don't make unnecessary noise."

It's easy to keep quiet. The whales are just too awesome for words. Even in the gray, ghostly sonar view they look tremendous, gliding effortlessly through the ocean in a loose herd. We're gaining on them slowly, holding our breaths.

Can't see much detail about them with sonar. But they're getting bigger and bigger. Sonar's getting jumbled now—too many echoes are bouncing around. Display's starting to look like a badly tuned television picture. Switch to infrared

Better. They radiate nicely. Look slightly orange. They've got tail flukes something like a whale's—maybe smaller in proportion to the body. And a fin or something under the gut. Edge closer to them, careful, don't make any sudden moves, nothing that will scare them.

Hard to tell their real size, nothing to compare them against. Give me a rundown on the numbers you've got.

AVERAGE LENGTH: TWO POINT EIGHT KILOMETERS. MAXIMUM LENGTH: THREE POINT SEVEN KILOMETERS. MINIMUM LENGTH: TWO POINT ONE FIVE KILOMETERS. DENSITY UNKNOWN. MASS UNKNOWN.

Pulling up astern of them now. Feel like a flea trailing an elephant herd. It would take ten minutes to travel the length of one of them with engines on max standard power. It's been two hours since we first sighted them.

Andrei slips quietly into his couch.

"Want the controls?" I whisper, glancing at him with the intercom eyes.

He shakes his head. "No, you're doing very well." He pulls the sensor unit in front of his eyes but doesn't touch any of the controls

or communications connectors.

Ling pipes up, "Can we pull closer to them?"

"Don't go between them," Andrei warns.

"Are we close enough to use TV?" Ludongo asks.

"What do you think?" I ask Andrei.

"I doubt that they are sensitive to light," he says. "Try a few short bursts with the laser first, to see if there is any reaction."

I steer out alongside the herd, then settle as close as I dare to one of the outer bulls. Not that I can tell a damned thing about their sex, if they have any. But the outermost whales are the biggest. Laser beam doesn't seem to bother him. Put it on fast scan and hook in the TV. Back away so we can get the whole animal on the viewscreen.

Listen to the wise men gasp.

Now we can see them for real, in color and all. They stagger the mind. Built more like an armless squid than anything else. Flukes in the tail, but these seem to be more for maintaining trim and maneuvering than for propulsion.

Mammoth open mouth up front; maybe it's permanently open. Can't see any teeth. A siphon under the belly pulses rhythmically. No wonder they can move so fast—they run on jet propulsion. No eyes, no fins except the tail flukes. Sleek and streamlined. Powerful. Glossy gray-green color.

Mouths big enough to swallow a town. If they had teeth we'd be toothpick size for them.

Nobody's saying a word now. For once the scientists and I are in complete agreement. I could watch these giants all day. They're just gliding along in formation, the outer bulls weaving back and forth a little. Can't make out any really small members inside the pack but there's a pretty tight knot of cows in the center. Maybe they're protecting the youngsters.

From what?

Every instrument on the ship is grinding away. Power drain is at max. Just keeping up with these whales while they're grazing is straining the engines.

"Is there any way we can get samples of their tissue?" Ling asks. I hope he's being rhetorical.

Bromley says, "I suppose we could slice off a bit with the high-power laser."

I glance at Andrei.

HE REACHES for the intercom unit. "Our orders are to conduct remote observations of any life-forms discovered. No direct contact unless it is forced upon us. No samples, I'm sorry."

"Oh, come now," Bromley argues. "A little nick on one of those flukes—"

"We have no way of knowing how the animal would react," Andrei says. "I wouldn't want to be close to one when it started thrashing around. Well—would you?"
No answer. Discussion ended.

"How're you feeling?" I ask

"Not too bad. Speer says he can't find anything physically wrong."

"Want to rest some more?"

"No. It's time for your rest period, isn't it?"

"I'm not tired."

"Never mind. Go back and sleep."

It's funny. He sounds so reluctant. He doesn't want to plug in. And he doesn't realize how much I don't want to unplug.

"Something you ought to know." I tell him about the hull, show him the computer's estimates and then flash the priority lists. "I haven't told the scientists about it yet. Observing the whales overrides all the other priority mission objectives. Looks like pressure's holding steady, even though it's a little high. Probably the hull will be okay as long as we don't go any deeper."

Andrei still hasn't plugged in. I can see his whole face. He looks

positively happy.

"I understand. We will start the twelve-hour priority list and do as much as we can. If the hull still is good after that we will stretch it for another twelve hours. But that's all. After that we go up."

"What do you think the scientists are going to say?"

He shrugs. "That is irrelevant."

Fine by me. Let him argue with them. Andrei slowly plugs himself in and takes over control of the ship. It's time for me to let go.

UNPLUG.

IV

TOLUG IN. Pain! Lights flashing, tumbling wildly.

"What's the matter? What's go-

ing on?"

I'm slapping on connectors as fast as I can. Ship's lurching like a runaway drunk. Andrei looks had.

"Can't-control-can't-" "Speer. Get up here fast."

Check all systems. Give me just the emergency data.

STABILIZER OVERLOAD. USE MANUAL OVERRIDE.

I'm trying, I'm trying! Outside view. Nothing. Where did the whales go?

"Speer—where the hell

you?"

"I'm right here!" he screams through my earphone from a few centimeters away.

Inside view, Speer's unplugging Andrei. Captain's arms are floating limply, head lolling back, mouth sagging open. Ship still buffeting. Fighting for control. Stabilizer coming around. Slewing and rolling.

"What the hell happened? I was in the sack when everything

seemed to bust loose."

"I don't know," Speer shouts. "It all happened so fast. The captain yelled something and the ship seemed to roll completely over. Lights went off for a moment. I fell out of my couch. I think Ling's been hurt."

Got her righted now. Bouncing's smoothing out. Stabilizer starting to respond on its own.

Any red alerts?

RED ALERTS: NO SYSTEMS FUNCTIONING WITHIN TOLERABLE LIM-ITS.

Speer's still struggling with the captain.

"Ludongo, Bromley-one of you get up here and give Speer a hand with the captain."

We're all in one piece. Run a complete systems check, display anything outside nominal values.

Display hull pressure.

ONE PER CENT INCREASE PRESSURE AT PORT IN NOSE SECTION. STILL WITHIN TOLERABLE LIM-ITS. ALL OTHER SYSTEMS FUNCTIONING AT NOMIN-AL VALUES.

Okay. Rerun sensor tapes for the past ten minutes so I can figure out what happened.

TV view, good. There are the whales, still feeding. Everything peaceful enough. what are those? Different-look at the whales buck! There they go, top speed, right out of sight. Wide-angle sonar view now. More animals zooming in. Not whales, though. Too small. Different shape. Delta form, faster, tight formation. Look like manta rays or sharks. Zooming in like rocketplanes—hey, they're coming right at us!

Blackout.

Back to real time. Outside view. Still nothing. Whatever they were, they're gone.

Intercom. Speer's got Andrei on the emergency couch in the medical bay, next to his own compartment. With these damned gills you can't tell if a man's breathing or not. Closeup. Yep, the gills are pulsing. But damned slow. And why did they have to make them green?

"Speer, how's he doing?"

"I don't know," Speer says, looking miserable. "He has some of the symptoms of shock. Blood pressure's very low. I'm going to try pressure cuffs to pump the blood back up from his legs and lower torso."

"Dr. Ling needs help also," Ludongo says.

Look in on Ling's compartment. He's got a gash on his forehead. Blood seeping out makes a reddish cloud that drifts in the circulation currents toward the exhaust duct in the overhead. Ludongo's in there with him.

"It's not a serious wound," Ling says calmly. "Attend to the captain first."

"Somebody put a patch on him

at least," I say.

Ludongo looks up at the intercom screen. Bromley, back in his own cubicle, says, "I'll get a firstaid kit."

Okay. They're helping each other. Ship's handling all right now. Controls still sluggish, though. Stabilizer acting okay. Andrei must have turned off our fake-whale signal. Why?

"Does anyone understand what happened to us?" Ludongo asks. He's sitting beside Ling, who now has a white plastic gummed on his brown skin from one non-existent eyebrow halfway back to the top of his head. It's about three times more bandage than the cut needed, but at least the bleeding has stopped.

"We were attacked by the sharks—or whatever they were," I tell them.

Ling agrees. "I was watching the viewscreen when it happened. The new type of creature is clearly a predator."

"Sharks," Bromley mutters.

"And we outsmarted ourselves," I realize. "Our sonar camouflage fooled the sharks. They thought we were a whale. When the real whales took off and we just stood here, they jumped us."

"But how?" Ludongo asks. "Did they ram the ship? What did they do to us?"

Good questions. We rerun the tapes. Four times. In ultra-slow

motion. The computer checks their sizes, speeds, closing rates. Up at the front end of their manta-shaped bodies is a snout that may or may not have a mouth in it. They're about a quarter of the size of the whales—still more than three times our size. And the computer is very definite that the nearest shark was still half a kilometer away from us when Andrei shouted and the ship went haywire.

Now we're all silent. Very, very silent. Speer standing over the captain, Ling on his couch with the other two beside him. And me up on the flight deck.

The sharks have something that can knock this ship for a loop. Something that acts over a range of half a kilometer. A weapon.

"YOU'RE not suggesting that they're actually intelligent?" Bromley asks finally, his voice strained.

"Who can say?" Ludongo replies. "Are dolphins intelligent?"

"We must learn more about them," Ling says.

"But how?"

"Decoy them again," I answer.
"Put on our whale camouflage and wait for them to find us."

"We can't risk it," says Speer.
"The captain's been hurt. What happens if you—" His voice drops out.

Bromley chips in, "Yes, and how long can you stay at the con-

trols of this ship without collapsing from fatigue? I vote that we get out while we're still able to. We've already discovered much more than anyone expected us to."

"Still," Ling says, "it would be extremely valuable to study these creatures further. If they are intelligent—"

I tell them, "Discovery of an intelligent creature falls under our primary mission objective. The most important task we have is to determine if the sharks are intelligent or not.

"Wait," Bromley says. "What about the hull? The captain told us while you were sleeping that the hull is showing signs of corrosion and we must pull out in twelve hours. So any further arguments are purely academic."

"We still have twelve hours to see what we can accomplish," I say. "And longer if we need it."

"What about the captain himself?" Sheer asks. "We should be getting him to proper medical treatment."

"Will twelve hours be critical?" I ask.

"Of course. Twelve minutes might be critical. I can't really diagnose him accurately here."

What would Andrei do if I were stretched out on the couch? Twelve hours. He's in shock. If he's lived through the first few minutes he ought to be okay. Speer can take care of him. Ship's

all mine now—the decisions are mine to make. Another twelve hours. All mine for another twelve hours. Maybe longer.

"We'll stay," I tell them. "Speer, let me know if he gets any worse. We'll put out the whale sonar signal. If the sharks show up we'll try some long-range looks at them and then turn off the whale signal."

"If they have any intelligence at all," Bromley says, "the sonar camouflage won't fool them. They'll know we're not a whale."

"It fooled them once."
"Did it?"

Hadn't thought of that. Ignore it. "Okay. The computer will give each of you a priority list of measurements that must be made. Carry out as many as you can, starting at the top of the list. If and when we make contact with alien life-forms, all instruments will be devoted to getting as much data on them as possible."

Bromley mutters, "Another ruddy admiral handing down orders to his deck hands."

But they're getting to work. Keep them busy. Suppose the sharks are intelligent? Suppose they're the ones who built the machines on Titan? What kind of weapon did they use on the ship? What else do they have?

THE LOG REQUIRES A RE-PORT ON YOUR SUBCON-SCIOUS ACTIVITY DURING YOUR SLEEP PERIOD.

1

Not now, I'm busy.

REVISED MISSION SCHED-ULE INDICATES LACK OF FIRST PRIORITY OBJEC-TIVES AT PRESENT. SUB-CONSCIOUS ACTIVITY RE-PORT CAN BE FILED NOW.

I didn't really dream . . .

EYE MOVEMENT MONITOR AND EEG TAPE SHOW EVIDENCE OF SUBCONSCIOUS ACTIVITY DURING SLEEP PERIOD. MISSION OBJECTIVE FOURTEEN REQUIRES...

Okay, okay—But it wasn't much of anything. It was kind of mixed up, wierd. Part of it was the last time I saw Marlene.

HAD already been fitted out with gills. They had us living in test tanks. The banks connected with the lake and we could spend our free time there if we felt like it. I had been there for an hour or so, watching the dolphins they had stocked the lake with. To keep us company, I guess.

Marlene had not told me she was coming to see me. She just showed up with a tank strapped to her back and her face covered by a goggled mask. But I recognized her immediately. Even with her hair pulled back I knew her the instant I saw her.

"They've taken off all your hair," was the first thing she said from inside the mask.

"More than you know," I an-

swered. I was wearing my trunks.

We swam for a long time, hooked rides on the dolphins, talked about trivialities, hardly touched each other.

"I've got my assignment," she said at last. "Sirius."

"Same as your friend?"
"Yes."

"Was it a tough job to wangle the same mission? Did you have to lay any of the administrators or personnel people?"

"Bob, don't be--"

"Don't be what?" I asked.

And somehow it was a different time and place. I was standing in front of a desk, in my Navy uniform, while a fat civilian was telling me, Don't be disappointed that you weren't accepted for a star mission. Only a handful of the very finest scientists and spacemen could be picked. There's an even more challenging assignment waiting for you, if you're willing to tackle it.

I must have asked him what it was

Jupiter. Far more dangerous and hostile than any star mission. The most difficult challenge we have ever faced. And possibly the most important. Certainly the most rigorous mission we've attempted so far . . .

Note the we. He never got closer to Jupiter than the men's room down the hall from his office.

The Jupiter mission is so hostile that we're only accepting single men for it. He hesitated a beat, then: There's been a rumor that you...

I'm not married, I said to him. I was once but she's dead now. I'm single.

The dream changed again. I was standing alone, watching as Marlene died. The details were confused, mixed up. The noise was shattering. Flame and smoke. People shouted and pointed.

CAN YOU DESCRIBE THE SCENE MORE CLEARLY?

No, it's all a jumble.

CONTINUE.

THAT'S all there is. End of dream. End of report. Give me a sonar sweep, max range. Still nothing. Okay, systems check. Controls still heavy. Don't like the way the stabilizer—hey, why are we nose down?

SHIP'S ATTITUDE IS SET AT ONE POINT FIVE DEGREES DESCENT.

The hell it is. I want her straight and level. Maintain constant depth.

STABILIZER OVERRIDE REQUIRED.

Override it, then. Keep us straight and level. Check ship's attitude every five minutes. If the stabilizer can't keep us level, override it.

UNDERSTOOD.

"Speer, how's the captain?"
Young as he is, Speer is squint-

ing near-sightedly at the sick-bay instrument board. "His condition is about the same. Comatose. Blood pressure low but steady."

"Will he make it?"

He shrugs elaborately. "If we were on Earth or even on one of the orbiting ships—"

He's looking for a bowl of water to wash away his responsibility.

"Are you still insisting on this madness?" Bromley's whine. "We haven't found any more animals. Give it up. For God's sake, let's get out of here while we still can."

Hull pressure report.

NO RISE IN PRESSURE SINCE LAST REPORT.

Minimum time to failure?
INSUFFICIENT DATA

"All systems are within tolerable limits," I say into the intercom. "We will continue the mission."

Dr. Ling, sounding a little weaker than before, says, "I wish to go on record as requesting that we remain at least long enough to make another attempt at observing the native life forms. If possible, I would like to sample some tissue."

Tough old bird. He'd probably go after Jovian whale hide with his teeth if he had to.

"Dr. Ludongo, do you wish to make any comment for the ship's log?"

After a moment's hesitation, he answers, "I am concerned about

the captain's health and the ship's safety. However, I realize the importance of our mission and wish to continue—unless the risks become too great."

Hah! His father couldn't have straddled the fence any better.

SONAR CONTACT.

Display it. Six blips. Too far to make out what they are. Keep them in sight, follow them. Display size estimates as soon as sufficient data is recorded.

OVERRIDING STABILIZER TO MAINTAIN LEVEL ATTITUDE.

Understood.

"We have six objects on sonar," I tell them, punching the sonar display onto their screens.

"Are they whales or sharks?"

Ludongo asks.

"Probably whales. They're cruising peacefully. Too far off to sense us."

Bromley says, "If they're sharks and they attack us—"

"Computer is preset to turn off our whale signal if sonar returns show that they're sharks."

Bromley doesn't look happy at

all. I can see him shudder.

AT PRESENT HEADING AND SPEED, INTERCEPTION OF SONAR CONTACT WILL BE IN ONE HOUR TWENTY-FIVE MINUTES, PLUS OR MINUS TEN PER CENT. MISSION PROFILE CALLS FOR CO-PILOT REST PERIOD AT THIS TIME.

Can't rest. Captain's in sick bay.

EMERGENCY PROCE-**DURE CALLS FOR CO-PILOT** TO RECEIVE NUTRIENTS **FROM** AND DISCONNECT ACTIVE SHIP CONTROL WHILE MAINTAINING NEU-RAL CONNECTIONS WITH COMPUTER AND ALSO WITH SENSORS.

Watching myself on the inside camera, I pull my hands and feet out of the control connectors. Now I reach between Andrei's couch and mine for the nutrient tube and plug it into the socket on my left arm. Andrei's is on his right arm. He used to joke that this was the way you could tell the pilot from the co-pilot.

OVERRIDING STABILIZ-

I crank the couch back slightly and try to relax. Sonar still shows six gray smudges. Guess I'm supposed to nap but I don't want to. Dream too much. Like the time just before we left for Moonbase, when I was swimming in the lake and saw Marlene. She'd been dead for more than a month but there she was swimming toward me. My heart just stopped. Only it wasn't she. When the girl got close enough I could see she did not look anything at all like Marlene.

I don't want to dream about her now. Concentrate on the mission. Don't sleep. Don't dream.

OVERRIDING STABILIZ-

Must have dozed off after all. Computer turned off the sensor display.

Outside view. They're whales all right. More than six—two smaller ones in sight. Youngsters? Can't be sharks, they're riding right alongside one of the big ones.

Maintain max magnification and display all data as it comes in. Also maintain max warning range for any other contacts. Interrupt all displays if another contact appears.

UNDERSTOOD.

Look in on the scientists. They're resting now, letting the instruments pull in the data and record it. Ling's watching the sonar display while lying down. Bromley and Ludongo are chatting about something over the intercom. Science stuff. Speer's back in his own cubby, sleeping. Check the captain. Still unconscious, looks like. Tap into the medical recorders. All displays fairly constant—heart rate, breathing, body temperature. Holding his own, I guess.

NEW CONTACT.

Track him.

It's more than one. A dozen objects, whistling along in close formation out at the edge of our sonar range. They're on the far

side of the whale group. Probably they haven't picked us up at all.

They're sharks, no doubt about it. Can't tell their sizes or shapes at this distance. But just watching them move you can see they're completely different from the whales. They're hunters. And killers.

"Sonar contact. Twelve sharks," I say on the intercom.

The scientists snap to life, stare at the sonar display.

"Observe max safety procedures," I tell them. They're already strapping in.

Range to whales?

FORTY-FIVE MINUTES TO INTERCEPTION.

Maintain constant distance from them. Follow them without getting any closer.

UNDERSTOOD.

So far the whales haven't detected the sharks at all. They're just lumbering along. The sharks are still out at the edge of our detection range. But now they're splitting up into smaller groups—two or three each.

"My God, they're going to surround the whales!" Bromley's voice, awe-stricken.

"Rather intelligent behavior," Ling says softly.

Ludongo, "Many predators on Earth are equally intelligent. The lion, for instance. And the wolf."

Two of the sharks are circling around behind the whales while the rest are deploying themselves ahead of the whales and along their flanks. The whales still haven't noticed them.

Speer says, "They're going to be butchered—"

TWO CONTACTS AP-PROACHING FORTY-FIVE MINUTE RANGE.

"Shouldn't you be turning off the whale signal?" Bromley asks.

Ludongo says, "If we turn off the camouflage signal the real whales might sense us and bolt."

"That could save their lives," says Ling. "Surely many of them will be killed if they don't beginto run soon."

"Mission objectives clearly state we are not to interfere with local ecological patterns," I remind them. "However, ship safety requirements have the highest priority."

OVERRIDING STABILIZ-ER.

Understood. Will assume stabilizer is being overriden every five minutes until you report otherwise. No further need for override reports.

UNDERSTOOD,

Turn off the sonar signal. If the scientists could hold their breaths with artificial gills they'd be doing it now. Nothing. The whales don't sense us. And the two sharks are paying no attention to us either. They're lining up. The other sharks are deployed in ambush.

There they go. Wide-angle view

—follow them in. The whales finally sense them. Look at them buck. The whales are faster than the sharks—at least for short sprints. They're going to bull right past the sharks and break free.

GOD ALMIGHTY—lightning bolts! Electric blasts arching from the sharks to the whales. Blank out the eyes when they flash. They're paralyzing the whales with electricity.

"Stop them—kill them," Bromley's shouting. "Don't let them do it—use the laser on the sharks—"

The sharks are doing a thorough job. Electric bolts stun the whales. Then the sharks latch on with their snouts, like lamprey eels. Looks like they suck the juices from the whales instead of eating the meat. Most of the whales have two or three sharks attached to them now, drifting slowly, sinking.

One of the youngsters has managed to keep clear of them. He's heading our way, emitting all sorts of high-pitched peeps. Three sharks closing in on him.

snarks closing in on nim.

"Save him," Bromley shrieks. "Don't let them get him—"

"Our mission is to observe, not interfere."

This time it happens no farther than ten kilometers from us. Infrared picks up good detail.

The little whale isn't much bigger than our ship. He's fast but the sharks have an angle on him.

Crosing fast. Youngster's screeching louder and louder. Or maybe it's just the Doppler effect. There goes the lightning—was that Bromley groaning? Eyes recovered now. Whale's dead in the water. One shark already stuck into him, other two move in and hook on. The scene is obscene.

Ludongo says, "Now we know how they attacked us. An electric arc—it makes an effective weapon."

"But a completely natural one," Ling says, sounding a little subdued. "They apparently have no artifacts."

"The captain must've been jolted when their electric arcs hit the ship. Doubt he got an electrical shock—the systems are protected against that. But having several bolts slam into the ship and overpower all the controls and sensors must have been enough to send him into—what do you call it, Speer?"

"Physiological shock."

"Yes. Does that help you? Can you treat him better now?"

"Not really." He sounds sullen. Outside view shows the baby whale and its three leeches drifting just below us now. "Why did you have to let them get the little one?"

I flick a look at him. He's practically in tears. Bromley's livid. It's hard to tell what Ludongo's expression means. Ling's impassive but very quiet now. Sheer

emotionalism. The whale was panicked and running blind. It wasn't heading for us deliberately. It couldn't know that we might have helped it.

Ling speaks up. "It seems there is a considerable amount of Jovian tissue nearby. Will it possible to sample it?"

Looking out again, I see that the sharks have detached from the baby whale. It's still close to us but starting to sink faster. The sharks have gone. There are no living creatures left nearby.

Nose the ship down. Plot fast-

est intercept course.

WORKING. INTERNAL SYSTEMS CHECK SHOWS ALL SYSTEMS OPERATING WITHIN TOLERABLE LIMITS, EXCEPT STABILIZER, WHICH IS STILL BEING OVERRIDEN AT FIVE-MINUTE INTERVALS. PRESSURE IN NOSE SECTION MAY BECOME CRITICAL IF DEEP DIVE IS NECESSARY.

How deep?

INSUFFICIENT DATA.

Display any change in nose pressure immediately.

UNDERSTOOD.

Ling uses the high-powered laser to vaporize some of the whale's flash. Studies the light on spectrophotometer. Ludongo helps by probing the animal with high-frequency sonar to get some idea of density. Bromley tries neutron beam probe but returns look

too weak to be intelligible. Either not much solid structure inside the baby or Bromley's still too upset to work instruments.

"Speer, how's the captain's condition?"

He looks up from the sick bay couch. "Worse. His breathing rate is slower. I think the higher pressure down at this depth is bothering him."

Check internal monitor. "But the internal pressure's only up one point one percent."

"I don't care what the numbers are," he says, frowning angrily. "His gill rate is getting critical. It's getting hard for me to breathe, too. My gill rate's slowed down—I've checked it."

Pressure shouldn't bother them. Check performance ratings for gill systems. Curve shows pressure versus oxygen production. Now superimpose ship's current internal pressure readings. Pressure is approaching the critical point but is not there yet.

Whale is still sinking.

"Dr. Ling, we will exceed safety margins if we go deeper."

"Do you have all the data you want?" Ludongo asks.

Ling smiles into the camera. "It would take several generations to get all the data that I desire. But I have accomplished far more than I expected to. I can stop now if you wish."

Good. Set course for surface and execute.

STABILIZER DOES NOT RESPOND.

¬LARIFY that. STABILIZER DOES NOT RESPOND TO CONTROL IN-OVERRIDE. PUT OR TO LOCKED IN ONE-DEGREE NOSE **DOWN** POSITION. SUGGEST YOU **ATTEMPT** MANUAL OVERRIDE.

Useless. Track down the malfunction. Fast.

WORKING.

Possible causes of stabilizer failure: electrical, hydraulic, mechanical. If electrical, can use alternate circuit. If hydraulic, back-up system should work. But if external pressure has overloaded the system—and ship's still nosing deeper—we're in trouble.

Flick on the intercom. "Gentlemen, the stabilizer system is temporarily inoperative."

Explain it to them. Watch their faces. Each one shows fear.

"Isn't there anything we can do?" Bromley asks.

"Computer is working on the problem."

"You could use engine thrust to push us up out of this depth," Ludongo says. "Perhaps at lower pressures the stabilizer will work again."

He's running his hands along the edge of his couch as he speaks.

"That might be tried if nothing else works."

"Why not now?" Speer asks.

"It would take an excessive amount of propulsion power to lift the ship while the stabilizer is pointing us down. There might not be enough power left to lift out of the atmosphere and return to orbit."

"There is nothing for us to do but wait?" asks Ling.

"That's right."

"Tell me," Bromley says, his voice calm except for a slight tremor. "How long can we remain in this attitude before we reach a depth that will crush the ship?"

"Insufficient data."

They lapse into silence. Ludongo turns again to his workbench. Bromley leans back on his couch, Ling is rerunning data tapes. Speer is fidgeting around the captain.

Computer, make a straight-line extrapolation of pressure gradient recorded so far. Compare it to hull structural strength and display an estimated time to hull rupture. Private circuit display for flight deck only.

WORKING. AT PRESENT DESCENT RATE, HULL RUPTURE WILL OCCUR IN TWO HOURS, PLUS OR MINUS TWENTY PER CENT.

What about malfunction check on stabilizer.

NO MALFUNCTION ESTABLISHED. CIRCUITS OPERATING NORMALLY. SERVOS FUNCTIONAL. EXTERIOR PRESSURE MEASURED

AT FIFTEEN PER CENT BELOW NOMINAL DESIGN STRENGTH OF SYSTEM. NO MALFUNCTION YET ESTABLISHED.

Run through history of stabilizer performance. Minute-by-minute record off the tapes. Identify when nose-down began and check all circuits, components and total system status at that moment.

WORKING.

Ludongo calls, "O'Banion, why don't you use the engine's thrust to take us up just a little? There's no sense staying at this depth."

"Not yet necessary. May be possible to identify the fault and correct it before critical depth is reached."

Bromley says, "Is that O'Banion talking or the computer?"

"I—I can't tell," Ludongo says, sounding shocked.

SPEER gets up from his couch and heads from Bromley's compartment. No, not Bromley's. Ling's.

"Could I speak with you, Dr. Ling? In private?"

Ling's been running tapes of our encounter with the sharks when they slaughtered the whale family. He blinks once at Speer, then reaches out and turns off his intercom connections. Blank now.

Where's that stabilizer history? WORKING. SCANNING

TAPES FOR COMPLETE DATA, AS INSTRUCTED.

"O'Banion, this is Ludongo again. I don't want to seem panicky but it's getting damned uncomfortable in here. Can't you take us up at least a little way?"

Bromley: "I thought it was only me. It is becoming bad in here. My head aches terribly and I'm beginning to get pains in my chest and abdomen."

Check internal pressure. Rising. Nearing max allowable. Check life-support systems. All functioning normally but curves starting to approach red.

"Internal environment remains within tolerable limits. Emotional factors may be adding to your discomfort. No one is in immediate physical danger. Suggest you ask Dr. Speer for tranquilizers."

"He's talking like the ruddy computer," Bromley insists.

The intercom in Ling's compartment flicks back on. Speer leaves, returns to the sick bay.

"This pressure is hurting the captain," he says, squinting at the monitor board above Voron-ov's head. "His breathing rate is going down steadily."

"Check for gill malfunction." Why does someone have to spell out everything for him?

"For God's sake," Bromley shouts. "Take us up! Can't you see we're starting to die in here? We're too deep—we can't stand it here much longer—"

"All systems are within tolerable limits."

"But the people aren't," Bromley yells. "Damn the machines the people are dying. Damn you military heroes—you're driving us to death. It was a mistake to trust our lives to you."

"Systems indicate your reaction is purely emotional, possibly close to hysteria. Dr. Speer, please—"

"May I interrupt?" Ling's voice slides in smoothly. "Although all the systems appear to be operating within tolerable limits, as you say, I suggest that there is one system that may be working at less then nominal values."

"Which one?"
"The pilot."

He means the human pilot. Operating at less than nominal value. No way to check that.

Ling goes on: "You have been at the controls steadily now for more than twelve hours. If nothing else, fatigue may be clouding your judgment. Perhaps you should check the computer's memory for the operating procedures specified for situations such as this. I believe that they call for computer control of the ship while the pilot rests."

"Computer control unfeasible during emergency situation." He should know that.

"Then perhaps you could use the engine thrust to lift us to a safer pressure and afterward take your rest."

"Suggestion unfeasible."

Speer: "He's withdrawing more and more."

"He's becoming part of the computer," Bromley says.

He's talking nonsense but his voice sounds strangely hushed, no longer raving.

"What can we do about it?" asks Ludongo.

VI

NOTHING. They can't control the ship. They can't get to the flight deck because the hatch is being closed and dogged down. There. They need the ship. But the ship doesn't need them. Turn off the intercom and stop their faces and voices from interfering with the ship's performance.

SYSTEMS CHECK.

Displays parading now. Graphs and charts, pretty yellow curves on black backgrounds, multi-colored bars creeping across white grid lines—all of them edging toward red lines, danger zones. Life-support systems, electrical power drain, navigation, control, propulsion reserve, sensors are all getting weaker.

Sinking deeper.

Medical monitor shows Voronov completely stable. Heart rate, breathing rate, metabolic rate, alpha rhythm—all zero. OPERATIONAL HISTORY OF STABILIZER COMPLET-ED.

Display it.

NO MALFUNCTIONS IDENTIFIED. NO SYSTEM OR COMPONENT FAILURES IDENTIFIED. STABILIZER SYSTEM OPERATING WITH-IN NOMINAL VALUES. ORIGIN OF PERSISTENT NOSE-DOWN ATTITUDE UNIDENTIFIED.

Insert stabilizer history in ship's log under prime priority. Important to make them realize what happened for mission analysis.

ONE HOUR FORTY MIN-UTES TO PREDICTED HULL

FAILURE.

Generate a plot showing how much height would be gained by using engine thrust to counteract stabilizer failure.

WORKING, COMPLETED.

Useless. Curve doesn't even reach ocean surface. Burn out engine without getting above surface and the stabilizer will nose ship back into depths. Check the recorder. Is it ready for separation?

RECORDER SYSTEM FUNCTIONING AT NOMINAL VALUE. SEPARATION CHARGES READY FOR ARMING. WILL ARM AUTOMATICALLY ON RED ALERT. WILL FIRE AUTOMATICALLY ON MAJOR SYSTEM FAILURE.

And the rest of the recorder system?

RECORDER UNIT PROPULSION SUBSYSTEM IN STANDBY MODE. GUIDANCE SUBSYSTEM FUNCTIONAL. BEACON SUBSYSTEM FUNCTIONAL.

All major mission objective are met if the recorder gets back to the orbiting ships.

AFFIRMATIVE. ALL MAJOR MISSION OBJECTIVES MET ALSO IF RECORDER SYSTEM SUCCESSFULLY TRANSMITS STORED DATA AND SHIP'S LOG TO RECEIVERS ABOARD ORBITAL SHIPS.

Good. Mission objectives will be met despite stabilizer malfunction and hull failure.

CREW CHECK.

Crew incapacitated. Cannot be contacted.

PILOT REST PERIOD DUE IN FIVE MINUTES.

No rest period. Captain incapacitated. No other pilot available.

EMERGENCY PROCEDURE CALLS FOR PILOT TO RECEIVE NUTRIENTS AND DISCONNECT FROM ACTIVE SHIP CONTROL WHILE MAINTAINING NEURAL CONNECTION WITH COMPUTER AND SENSORS.

Guess it won't hurt anything. Tired . . . how much time to hull failure?

SCIENCE FICTION REVIEW

15

Contraversial
Uninhibited
Pently Serious
Humorous
and
Incredibly Interesting?

WHERE

Brien Aldiss...Poul Anderson...
Piers Anthony...Isaac Asimov...
Richard Bergeron...Bob Bloch...
Vaughn Bode...John Brunner...
L. Sprague de Camp...Torry Carr...John Christopher...Philip K.
Dick...Hartan Ellison...Philip Jose Fermer...Jack Gaughen...
Herry Harrison...Lee Hoffman...John Hayden Howard...Lee
P. Kelley...Dean R. Koentz...
Anne McCaffrey...Michael Moorcock...Alexei Panshiel...Morman Spinrad...Bob Tucker...
Harry Warner, Jr....Ted White

... and many, many more
contribute their GRIPES, JOYS,
ARTICLES, ANGERS, QUESTIONS,
COLUMNS, COUNTER-ATTACKS,
REVIEWS, SATISFACTIONS, DISENCHANTMENTS, LETTERS, OPINIONS, and BENEDICTIONS.

AND where editor and publisher Richard E. Geis does his thing.

Bi-Monthly & Apgs. Photo Offset TWO ISSUES—\$1 \$3 PER YEAR

> P.O. Box 3116 SANTA MONICA, CALIFORNIA 90403

ONE HOUR THIRTY-FIVE MINUTES.

Disconnecting from active ship control. Will reconnect in one hour. If no reconnection is initiated in one hour, sound yellow alert.

UNDERSTOOD.

Get nutrient tube. Last meal. Check sensors. Completely empty out there, nothing around us. Maybe we're too deep for the whales now... Sleepy. What difference will a dream make at this stage?

HAVE I been asleep? ALPHA RHYTHMS INDICATE SLEEP PATTERN.

How long?

FIFTY MINUTES ELAPSED SINCE CONTROL DISCONNECTION. Reconnecting with controls now. How much time to hull failure?

FIFTY-FIVE MINUTES.

Wait, that's wrong.

PREDICTED HULL FAIL-URE WILL OCCUR IN FIFTY-FIVE MINUTES.

But before I went to sleep it was one hour thirty-five. Been asleep fifty minutes, so we should have only forty-five minutes to failure, not fifty-five.

DESCENT RATE SLOWED DURING PILOT REST PER-IOD.

Show-me! Damn, it did level off a bit. But now it's getting as steep as ever.

Why?

SUBCONSCIOUS ACTIVITIES REPORT IS REQUIRED.
Not now, I'm thinking.

WITH HULL FAILURE PREDICTED IN FIFTY-FOUR MINUTES AND SUBSEQUENT RECORDER SEPARATION, FINAL SUBCONSCIOUS ACTIVITIES REPORT IS REQUIRED FOR COMPLETION OF MISSION OBJECTIVE FOURTEEN.

Damn mission objective fourteen! Oh—okay. I'll think while I talk.

I—it was the same dream. I saw Marlene die again. Only this time I recognized where it happened.

I was in my tank, watching her booster launch on the TV screen in my compartment. I had asked to go to the launch but they would not risk letting any of us out of the water, even in special pressure suits. Marlene was lifting off for rendezvous with the starship. He was already aboard, waiting in orbit for her, waiting to go with her to Sirius. Her booster malfunctioned. It exploded on the pad, I guess.

And then—somehow I was standing there at the pad, naked. I could feel the heat from the flames on my skin. The smoke from the explosion was swirling all around. You could hear alarm sirens and people shouting. Somebody—it was Bromley! He was dressed in the admiral's uniform

and shouting at me above all the noise.

It's your fault—you killed her...

I'm cold—God, I feel cold. I tried to tell him it wasn't true, that I had nothing to do with it—but the dream changed, shifted. I was back in that stupid office with that fat civilian telling me I had been turned down for the star missions.

I'm sorry. There are just so many berths on the starships, and we had to take the absolute cream of the crop. But there will be other missions.

I'll be too old for the next round of star flights. By the time they come back from these first missions and the next round starts I'll be an old man...

Yes, but you're still young enough to perform a vital job for us.

But Speer's younger than I am, I said.

Which was crazy, because at that point in reality I had not yet even met Speer.

INTERCOM ALARM NOW FLASHING.

I don't want to talk to them. They're afraid to die. Everybody dies but they don't want to face it. Voronov died and Marlene died and I'm going to die soon. Maybe it is my fault.

ESTIMATED TIME TO HULL FAILURE FORTY-FIVE MINUTES.

STILL sinking. But damn it, she leveled off while I was asleep and disconnected. Now she's nosing down again. Give me the record of the stabilizer control settings for the past hour and a half. Manual settings and automatic.

WORKING. INTERCOM ALARM STILL FLASHING.

Okay, I'll answer it. Speer's face. He must be right on top of the camera. Sick bay couch behind him. Empty now.

"What is it?" I asked him.

He looks surprised that I answered him. "Uh—we've been trying to get through to you."

"You're talking to me now.

What is it?"

"The captain-"

"I know about it."

"We're all in bad shape. Ling's unconscious. It's very hard to breathe—hard even to move around. A lot of pain—bad—"

STABILIZER CONTROL SETTING RECORD AVAILABLE.

ABLE.

"Hold it, I'll get back to you," I tell Speer.

Look at the automatic control settings. There's the one-degree nose-down pattern, with the automatics trying to correct. But the only time they did any good was while I was asleep. Which means—check the manual settings—Holy hell— It's been me! The manual controls have been depressed one degree all this time.

It's been me. I've been nosing us down—killing us.

Damned stupid computer! Why didn't you tell me I had the manual controls set down?

DATA ON MANUAL SETTINGS WAS DISPLAYED WHEN REQUESTED. PREVIOUS INSTRUCTIONS DEALT ONLY WITH MALFUNCTIONS SEARCHES.

"Speer, get up here fast—"

Disconnecting from ship controls. Let the automatics take over. I've been the weak link in the system. No wonder the computer couldn't find a malfunction. The system was working perfectly—the pilot was malfunctioning.

"I can't get the hatch open,"

Speer says.

Undog it. Okay, here he is, floating in and hovering alongside Voronov's couch, his face lined, eyes sunken.

STABILIZER HAS RETURNED TO LEVEL ATTITUDE. ESTIMATED TIME TO HULL FAILURE HOLDING STEADY AT THIRTY-FIVE MINUTES.

"Get into the captain's couch," I tell Speer. "Stay with me. Don't leave me alone. I think we can get out of this but I can't risk being alone up here."

He looks scared but he does it.

Set stabilizer and all controls to return trajectory. Follow minimum energy course.

UNDERSTOOD.

ISAAC ASIMOV

is one of the world's most famous science-fiction writers. He has also written books on astronomy, anatomy, robots, mathematics, physics, chemistry, biology, words, the Greek myths, and the Bible. His new book — 100th in a long line of best sellers — contains selections from the first 99.



OPUS 100

Asimov's own vast enthusiasm for whatever subject he is tackling immediately infects the reader with a spirit of intellectual adventure. To read OPUS 100 means a series of relaxed evenings in the company of a warm, ebullient, very human being who is — in fact — a genius.

At your bookstore • \$5.95

HOUGHTON MIFFLIN COMPANY, 2 Park Street, Boston, Mass. 02107

Okay, execute. And show me all systems performances.

EXECUTING.

It looks good. Power, propulsion, hull pressure—we're rising!

"We're pulling out of it," I tell Speer. "We'll be all right."

Ludongo heard it over the intercom. "Thank all the gods of Earth!"

I see my mouth grinning. "Bromley's got nothing to say?"

"We had to put him under sedation," Speer answers.

I try to explain to Speer what happened. He listens without saying a word, without even nodding.

"I guess I blamed myself for Marlene's death," I tell him. "I guess I unconsciously wanted to join her—or punish myself. Something like that."

"But how could you blame yourself for an accident? If the booster exploded—how could it be your fault?"

Ludongo breaks in, "What booster exploded? There were no

accidents among the star missions. All the ships took off on schedule. I have a friend on the Sirius mission; they didn't lose anyone in an accident."

"You're wrong—I saw it—In the dream I keep seeing it again—the noise and the flame and the smoke."

"There were no accidents," Ludongo insists.

Could it have been just a normal lift-off I was watching? The booster rising up and out of the smoke, the flame coming from normal rocket exhaust?

"The announcer—I remember now. They even showed telescope pictures of the booster orbiting with the starship. You're right it didn't explode."

"Then why did you think she was dead?" Ludongo asks.

The answer comes immediately. "She is dead. For me she's dead. By the time she comes back from Sirius, I'll be past sixty years old. She'll be about thirty-five. I've lost her for good—remember now locking my mind on the fact that she's dead—"

Speer: "But your dreams kept forcing you to look at the situation. They were trying to make you—well, unlock."

"But I didn't want to dream."

"Of course. You wanted to hide inside the ship, in the computer. You wanted to stop being human—because that's painful. But your dreams wouldn't let you do it."

"But in the meantime the captain—"

Speer shrugs. "The captain's safely stored in the cryogenic locker. When we get back to Earth we can revive him and make him good as new."

Voronov's not dead? But Marlene is—she really is. But I want to live. I'm going to get back to that beautiful blue planet, get rid of these damned gills and breathe sweet air again.

SENSORS DETECT OCEAN SURFACE. ESTIMATED TIME TO SURFACE ONE HOUR THIRTY MINUTES.

"Okay. Back to work. Doc, you'd better check Ling and Bromley, see if they're okay. Then come back here. Dr. Ludongo, might be a good idea to strap down. There'll be turbulence when we get closer to the surface and even more in the atmosphere."

Ludongo nods into the intercom camera. Speer pulls himself out of the captain's couch and goes aft.

Give me a complete systems check.

WORKING.

Turbulence coming up. But we'll get through it. She's a good ship. I can reconnect with the controls now—it'll be okay. We'll get through the clouds and back home again.

It'll be good to be able to look at the stars again.



A MATTER OF RECORDINGS

LARRY EISENBERG

If you could get anyone you wanted on tape—would you?

HAD rarely seen Duckworth in so ebullient a mood. His tiny eyes sparkled. His normally pale cheeks were aglow with color and his wispy beard fluttered like a royal pennant.

"You've won the state lottery?"
I cried.

He shook his head. His federal research grants had been sharply slashed and he had taken to pasting lottery tickets on the walls of his laboratory for all visitors to see.

"It's not that at all," growled Duckworth. "I've come up with a new idea and it has exciting possibilities."

He drew up a rickety laboratory stool and gingerly lowered his rump as he began to sketch out penciled squares on a lined yellow pad.

"I can't make it out," I said, staring at the irregular lines.

"All a matter of recordings," said Duckworth. "To take a simple example, consider sound. We've captured the analogue of sound waves on disks, then on wire—and currently on magnetic tape."

I nodded.

"And in the case of light," I said, "we've recorded it on glass plates, then film and now on photochromic materials."

"That's the point," said Duckworth. "And by use of the hologram we can lock up interference patterns into a tiny space, which

can be used to reconstitute a threedimensional image at some other time."

"Well, that takes care of sound and light," I said. "There's still taste, touch and smell."

Duckworth leaned forward in a conspiratorial manner.

"And feeling," he added.

"Feeling?"

"The full emotional impact of an event, once experienced, just as it happened to you," said Duckworth. "Just imagine what it would be like to relive an exquisite, once-in-a-lifetime experience and savor once again all its joys. It would mean that one could transform the life of every invalid, every old man, every middle-aged couple that's lost the freshness of the honeymoon era."

"You're an incurable romantic," I said. "But I get your point. The great part of living is made up of tedium, trials and tribulations. The high spots are quite rare."

"But they don't have to be," said Duckworth. "I have worked out a way of locking them up, ready to be recaptured and relived at will over and over again."

My jaw dropped.

"If you have," I said, "then you've outdone yourself. It sounds utterly impossible to me."

"So would holography have seemed a hundred years ago," said Duckworth.

He rose from his stool suddenly. It clattered to the floor.

"Come along," he said, "and I'll show you what I mean."

He DASHED off down the corridor to his animal room, unbuttoned lab coat fluttering around him. I followed warily. I had many a bump and bruise to show from iron test-tube stands and dismantled fraction collectors that were set about in unlikely places. Duckworth flipped on the main light switch and pointed exultantly at six small cages set on a table in the middle of the room. Each one held a single white rat.

He stroked his beard reflective-

ly.

"I suppose I ought to give you some preliminary information," he muttered to himself.

"Please."

"Look at it this way," said the great biochemist. "The internal effects of a real-life experience on a sentient being must affect all the senses. Somewhere in the nervous system is a terminal cell or set of cells for each peripheral receptor. The pathways may not be easy to find. But in these terminal cells every split second of experience is electrochemically recorded and stored sequentially. We can all, by means of a crude memory recall, relive very approximately some past experience. The reason for the roughness of the recall is that the record of the experience is cluttered over by the interfering effects

of innumerable previous experiences and the hash of succeeding events. Besides, even without interference, there would be some degeneration in the record as time went by."

"I can accept your hypothesis," I said. "But how can you possibly retrieve the information of these records, particularly in the correct sequence."

Duckworth's eyes began to

gleam again.

"First I freeze the records," he said. "In that way there can be no loss of information. And then I retrieve every bit of data in proper sequence."

I threw up my hands.

"How?"

"By combining old and new techniques," said Duckworth. "For many years we've been able to map cortical areas in the mammalian brain which correspond to various sensory inputs. Into the brain of each one of these rats I've implanted thousands of tiny integrated circuits, charge-sensitive oscillators. Local temperature differences are sufficient to provide the necessary energy to power these oscillators, each of which operates at a different carrier frequency. The charge pattern variations, both in amplitude and time, are telemetered to my special purpose receiver-computer. It receives the information just as it comes, converts it to binary form and stores it on magnetic tape."

"Can your little implanted oscillator receive information as well as transmit?"

"You've caught on," said Duck-worth.

"By playing back the stored pattern in the proper sequence," I said, "you restimulate the appropriate sites of the cortex and the animal re-experiences every sensation as he once felt it."

"Bravo," said Duckworth.
"That's just what I've done with
these rats. I can make each one
salivate as though he were eating.
I can send him into paroxysms of
terror or even arouse him sexually,
depending on which of his experiences I play back."

"Will one animal respond to an-

other's recordings?"

"In principle it can be done," said Duckworth. "But it would require the utmost care in matching up corresponding sites."

I fixed my eyes on his.

"Are you thinking of trying out this scheme on a human being?"

Duckworth shrugged.

"I've been toying with the idea," he admitted. "But choosing and convincing the subject might be a ticklish matter. There are surgical risks."

"To put it mildly," I said. I backed away from him. "Don't consider me," I warned. "I cherish some of the finer moments of my bygone past—but not that much."

"I know," said Duckworth. "I suspect that anyone I'd approach

would react the same way. And yet the rewards could be so great. I wonder if I've been wasting my time?"

"You haven't," I assured him. "Publish your results and you'll see."

HAD no idea then of how prophetic my remarks were. Duckworth's sober and rather stodgy account of his method of recording sensations appeared first in an eminent scientific journal. I expected him to get a few crackpot responses but I had totally underestimated the number.

"I've been flooded with thousands of nutty requests from autoeroticists," said Duckworth wearily.

He had sidled into the Computer Laboratory where I was debugging a new program to be used in his system. I shook my head sadly.

"It's an unfortunate truism that every nut in the world is attracted by this kind of scheme."

"But some of these letters are beyond belief," said Duckworth. "And I thought I was a manabout-town!" He waved a heavily embossed piece of stationery at me. "This one is from the Nazir of Waddam. I've known him for years. Can you guess what he wants?"

"I know what he wants," I said.
"He asks you to record all his current amatory exploits in his harem, for replaying in his old age."

"How did you guess?" said Duckworth.

He was awestruck by my prescience.

I shrugged off the question. It had been purely a matter of empathy. I had simply put myself in the Nazir's place.

HE demented and oddball amateurs posed one type of problem but each one could be dealt with. The serious difficulties arose when the professionals appeared on the scene like a swarm of locusts. Each one had a surefire deal in mind and talked in large amounts of dollars. I was afraid that Duckworth might be tempted. Maintaining his research on inadequate funds was wearing him out. And his professional salary was quite modest. But he withstood all temptations, direct and oblique.

One chap persevered however. He was unstoppable, loquacious and imaginative. His name was Hart Felsen, a short stout man in his late forties, wearing a floppy straw hat in the manner of vintage Sidney Greenstreet films. His clothes were of first quality, suggesting distinguished Saville Row tailors, but his bulging form inserted wrinkles everywhere.

Felsen appeared at the university and made his first approach to Duckworth through the head of the chemistry department. After being rebuffed he tried the dean's office and finally appealed to President Hinkle, all to no avail.

Felsen remained undiscouraged.

To supplement his research funds Duckworth reluctantly decided to take on some consultation work for one of the more reputable drug houses. Sometimes these meetings took the form of a working luncheon. With consummate artistry Felsen contrived to wangle an invitation to one of these luncheons. He began to chat with Duckworth on the decline in the quality of modern wines and drew a frosty blank. But a chance sally on the inferior workmanship of new Bunsen burners drew a warm response. A little later Felsen broached the subject of Duckworth's recent paper and revealed an amazingly thorough understanding of what was involved. Duckworth was impressed with the acuity of his observations.

"Could this system be fabricated in portable packages?" asked Felsen.

"It's all portable now," said Duckworth. "The receiver-computer weighs under ten ounces, batteries included."

Felsen licked his lips.

"Dr. Duckworth," he said, trying vainly to lean forward against the inertia of his waistline. "Might it be possible for one person to respond to another's recordings?"

"You may recall," said Duckworth, "that in my paper I discussed this very point. I stated that it would require very careful mapping of the proper cortical sites in each individual to make certain of an exact correspondence."

"Of course," said Felsen, "how stupid of me to forget."

But his eyes glowed and he ate voraciously thereafter.

WEEK later Felsen appeared at Duckworth's laboratory with a ten-page proposal and a multimillion-dollar contract in hand. Duckworth refused to read either one.

"Don't be foolish," said Felsen. "You could become completely independent of government grants and do whatever you wanted to do. Besides, there's more than money at stake here. You know what pleasure people get from audio recordings. Just picture the reaction to a catalogue of different joyous experiences. We could offer the experiences of presidents, surgeons, movie stars, courtesans. potential for exploration, The stimulation and excitement is unlimited and the monetary rewards incalculable."

"It's not what I orginally had in mind," said Duckworth glumly. "It would be a gross perversion of my basic idea."

Felsen removed his straw hat and fanned his perspiring florid cheeks.

"Let's forget individual pleasures and cash rewards," he said.

"Let's think in grander terms. What about One World At Peace? Just think what it might mean if, for the first time, an American president could actually experience the feelings of a Russian premier and vice versa. Two otherwise hostile peoples could interchange vital life experiences with one another. For the first time in the history of mankind a real path to permanent peace between nations might be in our grasp."

Duckworth was shaken but only

momentarily.

"It sounds good," he said, "too good. I don't believe the idea could ever be implemented. Not only two hostile individuals but two hostile nations would have to agree to submit wholesale to very delicate brain surgery to make it all possible. If these people can't agree now on less substantive matters, how could we ever get agreement on your proposals?"

"Nations have traded hostages before this," said Felsen. "This scheme would simply be another variation on the hostage idea. Give it a chance, Duckworth. Give generations yet unborn a chance."

Duckworth was pale.

"No," he said. "I'm not interested in your idea."

And that, he thought, ended that.

It seemed to, although for days thereafter Duckworth swore that he was being tailed in the streets and even on the campus. He maintained that olive-skinned men had been lurking about, some in the burnous of the Middle East. Once, as I walked at his side, he nudged me and gestured at a horny-handed laborer type who walked stolidly behind me, his trouser cuffs white with cement dust.

"See what I mean?" hissed Duckworth.

He moved his elbow knowingly once again at the laborer.

"He looks more Italian to me than Near-Eastern," I said. "You're becoming absolutely paranoid."

My triumph was complete when the laborer joined a construction crew working on the new south campus building. Duckworth looked a bit sheepish, then he sighed.

"Even paranoids have enemies," he said.

TEN days later Felsen accosted us in the computer laboratory. Duckworth stiffened as Felsen waved a puffy hand in greeting.

"Dr. Duckworth," he said warmly. "You've passed the test."

"What test?" snarled Duck-worth.

"Let me explain," said Felsen. "I am really an emissary from your old friend, the Nazir of Waddam. His remembrances of your integrity, your courage and your genius have lingered with him over the years. But he wasn't quite cer-

tain that your character was unchanged—"

"He hasn't changed much," said Duckworth. "I have a letter from him suggesting an erotic use of my recording system."

"I know," said Felsen, "that was part of the test, believe me. But now we can dispense with all pretense and get down to the heart of the matter. The Nazir wants you to come to Waddam. He has a most important proposition to put to you. He will pay generously."

"I'm too busy at the moment," said Duckworth. "I can't spare the

time."

"Too busy? Can't spare the time? Is this what you say to the man who offered you refuge in your time of need?"

He was alluding of course to Duckworth's flight when the news had broken years earlier about his macromolecule. Duckworth just tugged at his beard reflectively.

"I have responsibilities here," he said. "Graduate students, laboratory assistants, grant renewal requests. Without my presence the whole program here might go down the drain."

"Splendid," said Felsen. "I'm sure your laboratory would benefit from a large grant-in-aid from the government of Waddam with no strings attached."

"It sure would," I interjected. Felsen beamed at me warmly.

"And," he added, "the Nazir has also requested the presence of your friend. We feel that his computer experience will be of great help in our project. The consultant's fee will be quite handsome."

A ND so it was that Duckworth and I were flown to Waddam in the luxuriously mounted private jet of the Nazir. The Nazir was at the airport in person to greet us. He embraced Duckworth, his cheeks wet with tears.

Duckworth stepped back out of his arms.

"You've forgiven me about the matter of the harem?" he said.

The Nazir waved his hands effusively.

"It never happened," he said grandly.

At this point I was introduced to the Nazir and received a rather perfunctory handshake. The Nazir was a tall man whose hawklike proboscis seemed to dwarf even Duckworth's magnificent beak. He wore the long flowing robes of his hereditary office and his fingers were completely covered with rings set with enormous diamonds, rubies and emeralds. I thought it was a vulgar display and said so to Duckworth.

"It's all a matter of taste," said Duckworth. "Personally, I think they're colorful."

We were escorted into the airconditioned Cadillac of the Nazir and whisked to his palace, some fifteen miles from the airport. It was a stunning edifice in alabaster white, with cunningly fashioned minarets, winding stairways and limpid pools everywhere. The East Wing was under heavy guard.

"The harem," muttered Duck-worth.

After a lavish dinner that set my gall bladder into violent reprisals, the Nazir, with Felsen at his elbow, put his proposal to Duckworth.

"I am a humane man as you know, Duckworth. I abhor violence and bloodshed."

Duckworth looked skeptical but said nothing.

"After learning of your scientific publication from Mr. Felsen here," resumed the Nazir, "I conceived of a magnificent plan to end turmoil, disruption and misery in my country."

Duckworth leaned forward.

"Then you're going to share some of your oil royalties with the people? Congratulations," said Duckworth warmly.

Felsen coughed and studied the end of his five-dollar cigar. The Nazir looked alarmed.

"Heavens no," he said. "I have a much less sordid plan to offer. As I see it, the rift that exists between me and my people is due to a lack of mutual understanding. They think that my life is simply one of sybaritic luxury. They cannot conceive of the preparations, the planning, the administrative details, in short, the aggravation I go through. I want to end all that."

Felsen puffed smoke.

"If I may interrupt, Your Highness?" he said deferentially.

The Nazir-nodded.

"What his Highness wishes to say is that in the interest of his people, he is willing to volunteer to have the necessary surgery to implant your transducers in his cortex. The leader of the revolutionaries, a fiercely stubborn man now in custody, will undergo the same operation. You gentlemen will thereupon record the emotions and frustrations of the Nazir during a typical morning's work. This recording will be transmitted over and over to the brain of our revolutionary friend. He will then be able to communicate to his comrades the terrible hardship of being the Nazir."

"All a matter of empathy," said Duckworth.

The Nazir beamed.

"Duckworth," he said, "you're every bit as understanding as ever."

"You bet," said Duckworth.

"And I suppose you hadn't thought of recording your harem exploits afterward?"

"To be honest," said the Nazir, "I had. But that was a secondary benefit. What your military industrialists refer to as 'spinoff.'"

"Well, my answer is no," said Duckworth tartly. "I'll have no part of this outrageous scheme. Instead of dealing honestly with your people, you want to trick them."

"If I dealt honestly with this

scoundrel of a revolutionary," said the Nazir, "I'd boil him in oil. But I want to use a modern, humane approach."

"The brain surgery is difficult," said Duckworth. "The physical risks may be great. I'd have to tutor a surgeon on every single step of the procedure. Is it worth all this to you?"

"My dear Duckworth," said the Nazir. "I'm sitting on a revolutionary volcano that's ready to erupt momentarily. If my enemies win, it will cost me my oil, my palace, my life, even my harem. If your scheme should work it would be worth every bit of the risk entailed. Besides, if anything goes wrong with the operation—you and your friend would join me in the Gardens of Allah."

"Nonsense," said Felsen soothingly. "Dr. Duckworth is too great a scientist for any such slips to occur. And who knows, we may have the answer to upheavals the world over. Think of it, Duckworth. You will personally usher in a new period of tranquillity. And if you're still wavering—let me point out that we have the most up-to-date, fully equipped torture chamber in the Near East."

I turned to Duckworth.

"What do we do?"

"We have no choice," he said glumly.

I was disappointed in my friend but I knew the extreme pressure he was undergoing. "Okay then," I said. "I'll help you. But only because I'm a coward"

At these words he clapped his hands and an exquisite coffee liqueur was brought forward by a turbaned lackey. Handcut emerald goblets were filled and passed around.

"To my people," said the Nazir, his voice throbbing.

We all drank somberly to the health of that harassed population.

TWO of the world's finest neurosurgeons were flown in and teaching seminars were scheduled with Duckworth. My friend spent considerable time in briefing them on the special skills and problems involved in the implanting and on the absolute necessity for sobriety. As expected, the first operation was to be carried out on the revolutionary. Then, if all went well, the Nazir would risk his royal head.

Despite careful and intense preparation, the first operation was touch and go. Once Duckworth became enraged and threatened to take a scalpel to the skull of one of the surgeons. The offer seemed to have a salutary effect in bracing the man's nerve and the implanting was finally and successfully concluded.

Ten days later, when the healing process was almost completed and no neurophysiological damage was apparent, the Nazir took a deep breath and went under the knife. This time, to my intense relief, the performance went more smoothly. When the Nazir had completely recovered we were promptly summoned to his royal chambers.

"I feel absolutely in the pink, Duckworth," he said. "I'm ready to proceed."

Duckworth bowed.

"So are we," he said quietly. "However, it would be dangerous to start prematurely. I'd like to carry out tests on both of you to make sure that the implants are receiving and transmitting properly."

The Nazir insisted, purely as a precaution, on his first recording being taken that night at the harem.

"In the morning," he added, "you can record my reactions to the rigors of the job."

Even Duckworth was startled at the superb quality of the recordings and the very low noise level.

The following day he repeated his tests on the captive revolutionary with equal success. Felsen hovered about all the time, ostensibly to satisfy his curiosity but in actuality to keep an eye on us. The Nazir, however, was impatient with all the delays.

"I want the recordings played back on this fellow," he said. "And at once. When we are satisfied that they have taken hold he will be interviewed on our national television network and then released."

THE playbacks were run off without a hitch. The rebel leader was carefully interrogated by the Nazir's psychiatric staff.

"This man really believes," they chorused. "He is not shamming."

And indeed, on the Waddam TV network, he articulated his total empathy for what the Nazir went through daily in governing the country. He expatiated at great length on the mind-boggling problems of administering this little oil-soaked country. Duckworth was sitting off to one side, out of sight of the camera.

"Then you wouldn't change places with the Nazir?" he called out.

The revolutionary sprang to his feet.

"You bet I would!" he cried. "For the kind of harem the Nazir has—anything would be bearable."

ATER, when the man had been cut off the air, Duckworth and I were placed in the same dungeon.

"What happened out there?" I asked. "I can't understand it."

"I played two recordings sequentially," said Duckworth. "The first, under the guise of test runs, was a playback of the Nazir's night at the harem. The sec-

ond was the administrative morning at the royal desk."

"I'm proud of you," I said. "But it may mean curtains for us."

"No it won't," snapped Duckworth. "The Nazir is a proud man and the last thing he'd want is publicity on this matter. He'll let us go if we pledge secrecy."

"And our generous consultation fees?"

"Don't push things too far," said Duckworth.

And we didn't. Back in the States I was tempted to initiate a whopper of a lawsuit but I held down my baser instincts. Duckworth was less restrained. I barged into his office and found him in the act of studying the university major medical contract.

"Anything wrong?" I said.

"Not yet," said Duckworth noncommittally.

"Are you contemplating surgery?"

Duckworth sighed.

"I haven't yet made up my mind," he said.

He pulled out a desk drawer and removed a five-inch reel of magnetic tape.

"The harem recording of the

Nazir," he said wistfully.

We looked into each other's eyes for a meaningful moment. I coughed.

"How extensive is our coverage?" I asked.



Prez was more than human. He could even be inhuman! The lovely blonde threw her paper dress into the deep fireplace and stood back, watching it burn, her slender hands hooked under trim buttocks.

"That's cozy, isn't it?" she said over her shoulder. "There's something especially pleasant about clothes burning on a chill winter day, isn't there?"

She spun, bounded over the thick white rug and grabbed up the trousers Norbert Penner had just dropped. These she bundled and heaved into the flames.

"Hey, Benny," said Penner, half out of his all-season underwear. "Those aren't paper."

The girl shrugged.

"You're not abandoned enough, Norby. No, don't frown. I love you. But I bet you're thinking of what that pair of pants cost."

"Fifty-two dollars."

Penner was a tall lanky young man, just twenty eight years old, with hair colored like sand and a slight gap between his upper front teeth.

Benny held her hands to the fire. "Relax, relax."

"They're going to smoke." Penner was out of his underwear. He kicked it carefully into a safe corner of the big beam-ceiling room. "Burning trousers smoke like the devil."

"You worry too much, Norby," said the girl. "You're my guest, aren't you? We have this whole sixteen-room, three-bath house entirely to ourselves. We have ninety-six acres of beautiful early-winter, rural Connecticut outside. You can stay here from now till spring. Relax. Thousands of people come hundreds of miles just to spend a few days in New England."

"They don't get their pants set on fire."

"You never know. All people aren't as conservative as you are."

She coughed quietly as smutty smoke came rolling slowly out of the white stone fireplace.

"See?"

Penner wandered over to a box window and looked out at the rolling grounds.

Benny said, "I have the notion you don't really love me at all, Norby. I don't think you want to make love to me right now, even. You aren't in the mood, are you?"

"I was until you set my pants on fire."

"That's an excuse, isn't it?" She held out her arms, a gesture he caught out of the corner of his eye. "Let's forget the fire incident, Norby. Come here now, won't you?"

Penner watched a maple leaf spin to the ground. He turned around and walked to the girl.

"You're beautiful."

"Yes. Thank you," answered Benny, catching him with one hand around the neck and one on his left side ribs. "But really my physical body is not half as beautiful as my inner being." She rested her head on his bare chest. "One's inner being is what counts, don't you think?"

"Um."

"That's how Defrocked Bishop Dix puts it in Spirit Mediator— Talking To The Departed In The Technological Age. I'm aware you don't completely agree with Defrocked Bishop Dix but you must see it's one's inner being that counts most. Don't you think?"

"I think," said Penner, gently backing her toward a zebrastriped couch, "there are times to talk and times to shut up." He gently swung the now silent Benny off her feet and placed her on the long couch. He kneeled on the soft rug, bent and kissed her right hand, which was peaked over her navel. "Benny," he said.

A wet nose pressed into his right buttock. Hot breath followed.

"Where'd you hide the chow, peckerwood?"

Penner bounded upward, spinning in the air, landing facing the dog.

"Go away-shoo."

The dog, a medium-size and shaggy black mutt, snorted.

"Never mind, peckerwood. Benny, there's no food for me in the kitchen. The robot dispenser just rattles and retches when I push the chow button. Somebody forget to load the machine."

The dog's blue-red tongue flapped and he panted.

Benny sat up and stroked the old dog's head.

"Now, Prez, didn't we tell you not to barge in."

"The door was open," said the dog. His left eye flared for an instant. It was made of vinyl. "I

respect privacy, even that of peckerwoods. The door, however, was open."

Penner grunted suddenly, hopped, kicked the side of the dog. The animal made a clunking sound and Penner howled.

"Ow-ow-"

"You kicked his metal side," said Benny. "Come on. Let's not have my two favorite people squabble."

"He's not a person," said Penner. "He's a mongrel dog."

"Peckerwood," said Prez.

"I'll kick the live side of your tail in a minute," said Penner. He grimaced, went and found his underwear. "You freak of science."

Prez licked Benny's knee.

"How much longer you going to be, Benny."

THE girl smiled down at the old dog.

"Prez, you trot back to your nice rumpus room and we'll feed you soon."

"Don't patronize me," the dog told her. "You and your folks helped turn me into a modern miracle. You financed it. I'm as bright as the average ten-year-old boy now."

"Miracle," said Penner, stomping back into his clothes. "Every other bored matron down in Westport has a cybernetic poodle. Sentimental. Instead of letting the damn animals die of old age they

replace their old parts with synthetics."

"You'd like to turn me over to a vivisectionist," said the dog, showing its teeth. Half of them were plastic.

"A scrap yard."

"At least I earn my keep. I'm not some unemployed freeloader."

"Listen, I worked six damn years in Manhattan," Penner shouted at the shaggy dog. "I was editor-in-chief of Barnum & Sons for four of those damn years. I'm the guy who bought the Lupoff papers and got them in shape for publication. They gave old Lupoff the damn Nobel Prize. So now I'm taking some time off to find myself again."

"If you want to find yourself," said the dog, "you're looking in the wrong neighborhood. You're out of your class, peckerwood."

Penner tugged on one shoe and limped over to kick Prez. The old dog yelped. Penner said, "Damn it, Benny. Why did you have to have him fixed to talk?"

"It only cost five thousand extra," said Benny. "When they put in the vinyl larynx Dad said we might as well go first cabin." She smiled gently up at Penner. "Norby, relax. I've explained about Prez. It is sentimental, isn't it? Still he's been my dog since I was just a little girl."

"Two years and three months old," said Prez. "Cute as a bug's rear you were."

"We can certainly afford to have him maintained," said Benny. "Imagine, Norby. Prez is well past twenty and he's healthier and brighter than he ever was. And I've had him for over twenty years. Ever since—"

"August, nineteen-eighty-seven," said the dog. "And I'm going to live a long time beyond this decade. I'm even going to be around in the twenty-twenties, peckerwood."

"Even three years is a long time."

Penner put on his other shoe and sat down in a black leather lounging chair.

"Is that a threat?" asked the dog. "I know you'd like to do me in, peckerwood."

Benny said, "Relax, Prez."

The dog flicked his short tail. Music box music began coming out of him, a gentle lullaby. "Remember this, Benny?"

"Of course." She patted the dog, smiled across at Penner. "He has two thousand music tapes, miniaturized, built into his stomach."

"I know," said Penner.

"They named me after the noted jazz man, Lester Young," said the dog. "His nickname was Prez, short for the President. Because he was the best of the saxophone players of his day, musicians agreed."

Benny lifted the dog and carried him to the doorway. He was

playing One O'Clock Jump when she set him out on the parquet.

S NOW began to fall while Penner was a quarter of a mile from the rambling two-story house the next morning. He was leaning against the mail-box pole, watching the sky. The air suddenly clicked colder and flakes of snow hit his cheeks. The US Mail 'copter sounded at the same time and Penner spotted it, rising up from the Pfeiffer estate a half-mile down the country road. The road was called Maitland-Scott Lane. named for Benny's great-grandfather, the one who had founded the family woolen mills. The 'copter whirred nearer and dropped, hovering.

When it was a hundred feet above Penner's head a ten-yearold boy in a jumpsuit climbed down out of it on a dangling rope ladder.

"Twenty-six cents postage due," said the boy.

"Who's the package for?"

"Prez, as usual."

"We don't want it."

"But it's fragile, it says. All the way from Algiers." The boy came down the ladder, dropped to the ground. He held the small package in one hand, a bundle of letters in the other. "That Prez sure has a lot of pen pals. My dad, you know Floyd Dell up in the ship, he says all the time Prez is sure some dog. To have all these pen

friends around the world. I wrote to a kid in Newfoundland last year but nothing came of it."

Penner took the letters.

"Send that other thing back to Algiers."

"We're obliged to deliver it."
"Oh, okay."

Penner hooked a finger into his change pocket and gave the boy some coins. The boy turned over the package and caught the swinging ladder.

"This snow. We just recently moved here from California. This is snow all right. I never saw any except in books. My father says we're going back to California even if it is full of goofs. He forgot it was so cold in Connecticut. How do you feel. You're a stranger, too?"

"New York isn't that much different."

He gave the boy's left foot a boost.

The postman hung his head out of the cabin.

"That's some screwball dog you folks have. I've dealt with weirdies from coast to coast and experienced a lot of webfoots and goofs, but your dog there he must be the prince of the screwballs. What's he write to all these people about?"

"Jazz."

"Jazz? Oh, sure, I remember that. Black people used to play it back a half-century ago."

Penner nodded and started

back toward the house. He was soon among trees—the grounds were thick with maples and pines. The snow was coming straight now, faster. He casually flipped the Algiers package off into the brush. A bluejay looked up from a sparse branch.

A slim bare arm extended from the partly open front door as he approached.

"Here, warm up."

Penner took the hot rum drink from Benny, dropped the mail on a metal-legged hall table.

"Why are you naked?"

"Don't be always so inquisi-

"You were clothed at breakfast, as I recall."

"Well," said the girl, undoing the scarlet ribbon in her hair. "I have to leave in an hour and I thought to spend my last hour with you, Norby. Romantically."

"Leaving?"

"I got a call from Dad."

"Your father?"

"That's him. We call him Dad. A sentimental touch."

"I meant, what does he have to do with your leaving?"

"He's in Switzerland."

"Yes, I know that, too. Which is why we have your whole place here to ourselves for the next six months."

"A small emergency has come up," said Benny. "I have to pick up something in Amsterdam and take it to him in Switzerland."

"You want to go alone?"

Benny bit her lower lip, shook her head. "It's that I have to, Norby. Some of Dad's business ventures have to be carried on very quietly. I'll only be three or four days. I'm booked on a robot jet out of Kennedy II at five this afternoon."

"You already made a reservation?"

"While I was taking off my clothes. Come on, finish your drink. We'll make love."

. Penner set the mug aside.

"It started snowing."

"We'll make love inside then."

"I was only commenting on the weather, not complaining."

He took her by the shoulders.

Prez said from the other end of the hall, "Where's the mail, peckerwood?"

"Right here." He released the girl, snatched up letters, approached Prez. "Now you get into the kitchen or the rumpus room and attend to your mail. Don't bother us for an hour or I'll do something evil to you."

"You're more open about your threats these days but I've suspected you for a long while," said the dog. "Right now, though, I just want to take care of my jazz-buff friends. Any packages?"

"No."

"Overdue. I'm expecting several. I'll have to call those peckerwoods at the post office."

"Yes, do. They all like you."

Penner returned to Benny and locked her up with him in the second downstairs guest room.

THE dining room was fully automatic. Alone at the head of the long, white-covered table Penner fussed with the control buttons. He got the six candles to flame, then poked the aperitif button. A slot at his left hand slid open and a dubonnet jogged up. Sipping it, Penner flicked on the menu screen that was mounted on the wall.

Prez hopped into the chair next to Penner.

"Order some lean read meat," he suggested.

"Back to your quarters."

"Relax, peckerwood. You heard what Benny said as she left. You're to look after the house and old Prez. So be nice."

"You're not allowed on the chairs."

"Okay, okay." The shaggy black dog hopped to the floor, wagging his tail. "Order the chow."

"Nope. You go back to where you belong. I'll bring you some scraps later."

Prez woofed disdainfully.

"You ought to go back where you belong. Brooklyn Heights, wasn't it? Your idea of class."

Penner didn't reply.

"Nothing like this. Not on the salary Barnum & Sons paid."

"I made twenty-five thousand a year."

"Twenty thousand," said the dog. "I checked."

"Oh? How?"

"I have ways. I keep in touch."

Prez sat on the hardwood, bit
at his flank.

"Fleas?"

"No, my wiring is itching. This damn weather makes your wiring itch. Remember that when you get old and they start turning you into a cyborg."

"Too bad you're sensitive to cold. Prez."

The dog rolled over and rubbed his shoulders into the smooth flooring.

"I phoned the post office and they insist they delivered one of my lost packages, peckerwood."

"Say, that's right. I forgot to mention it," said Penner. "I dropped a little package out in the woods. I had my mind elsewhere."

"You dropped it whereabouts?"
"Ten feet or so from that old

pump.".

"You can go fetch it now and we'll call it even."

"Come off it, Prez. We're just the two of us now. You go."

The dog rocked on its back a few times, growling in his chest.

"Okay, I'll go because I'm very anxious about my package. By the pump?"

"Yes, to your left as you go to-

ward the front gate."

Prez trotted into the hall. Pen-

ner followed, held the front door open. The dog headed into the heavy falling snow. The grounds were two feet thick with new snow and Prez sank in and left dark holes as he went.

Penner slammed the front door, locked it. He ran through the rest of the house, locked doors, activated all the electric window locks and burglar bolts.

In the dining room he ordered a curry dinner.

The first thing Prez did was scratch at the front door, then the back. He barked, howled, shouted insults. Gale winds rose a little after ten and the sounds of the angry dog were muffled and lost.

By the time Penner went to bed the snow was coming in blizzard strength. There was no sound at all from Prez.

THE breakfast-table radio said, "Present reports indicate all aboard the Swiss-bound New World Airlines autosonic superjet were lost when it went down in the storm-tossed Atlantic. Among those listed as passengers on the NWA flight were Asmund Crowden, the well-known investment broker, singer Merlo Benninger and Benny Maitland-Scott, lovely country-hopping daughter of the woolens tycoon..."

Penner put down his coffee cup. He swooped an arm across the table and twisted up the volume.

The radio said, "Also said to be

on the flight was former lightheavyweight champ, Kid..."

There was a crackling and the sound died.

Penner hit the speaker grid with the heel of his hand. The little radio snapped, dislodged from its position on the table and fell. Penner ran to the living room and got the entertainment system warmed up. He flicked a toggle in the wall panel and the wall-size TV screen came alive.

"This is a cockatoo, of course, boys and girls," explained the plump man in the scarlet band uniform and curly red wig. "Isn't he handsome, Mr. Crackerjacker?"

"I'll say, Cap. Oops, he nipped a little chunk out of your thumb."

"Son of a bitch," said the cap-

Penner hit at another switch. The Secretary of Defense appeared.

"I think we can level with each other, gentlemen. I have great respect for your committee and I say to you now in all honesty that we wouldn't drop anything like that on civilians."

On the next station a Black man in a smock said, "Hello, Rick. Martin here with the weather picture. As you can see by the map our computer is drawing for us, we Connecticut residents are in for more of the same. That's right, snow and more snow. Looks like the worst blizzard since the big one in nineteen-seventy-one." Behind Penner a voice asked, "What's the excitement?"

"Prez-"

The floppy black dog was lolling in a flowered loveseat.

"No hard feelings," said the dog, scratching at his ear with his hind foot. "I guess you simply didn't realize I got locked out last night. You sure couldn't have heard my howling with the storm raging."

"How'd you get in?"

"I know a few tricks. Electronics tricks, simple lock-picking," the dog told him. "You look unsettled."

Penner said, "The news. The news just said Benny's robot jet crashed."

Prez made an anguished whining sound.

"Benny? No. Are you sure she was on the plane?"

"Yes-they gave her name."

"There could be a mistake."

"You're right, Prez. I'll call the damn airline." He strode to the phone on the round marble coffee table. He picked up the receiver. "Damn it."

"What?"

"Line's dead."

"Happens during these blizzards. This isn't Manhattan or even the suburbs. Everything isn't underground yet in this neck of the woods. Trees fall over and disrupt the phone service."

Penner was in the hall. That

phone was dead, too. He went through the big house and checked all the phones. He returned to the hall and snatched open the closet. He had his hand on a plaid neck scarf when Benny called to him.

"Norby, Norby, darling, where are you?" -

Walking backward three steps, his fingers trailing the woolen scarf, Penner said carefully, "Benny?"

"Can you hear me? Oh, Norby, can vou hear me across such a distance?"

She seemed to be in the living room. Penner stepped there.

"Benny, where are you?"

"I'm not sure, Norby. This is all very strange, isn't it? What a pleasant surprise, though, to discover that Defrocked Bishop Dix is right."

Her voice was coming from the dog.

Penner's arms involuntarily rose and his hands flapped faintly. He dropped the scarf, began breathing through his mouth.

"Benny, how in the hell did you get inside that damn dog?"

Prez's eyes were tightly closed and his mouth was barely open.

"I'm in the-well-what Defrocked Bishop Dix calls the Other Reality, Norby."

"Didn't you go to Switzerland?"

"Oh, Norby, darling, you are slow on the uptake, aren't you? Norby, I'm dead."

"Dead? No-"

"Yes. I'm here in the Other Reality now. But I can still talk to you sometimes. That'll be nice, won't it?"

Penner blinked, shook his head, gingerly picked up the dog.

"Benny, what are you saying?"

"I'm communicating with you from over here, Norby, through the spirit media. Don't ask me how or why, darling, but the best medium for communicating with you seems to be poor old Prez' electronic parts."

"Yes, but," said Penner.

"Please stay there so I can talk to you, Norby. It's so strange here and I don't know anybody yet. Except for some of the people from the plane. You stay at the house until Dad can do something. And, Norby, I guess it's safe to tell you now I've mentioned you in my will." those we "But talk to is."

The its ear.
"I to safe to tell you now I've mentioned you in my will."

Penner was face to face with the

old dog.

"What's a girl twenty-two need

a will for?"

"It came in handy, didn't it? Now that I'm deceased and all. I just want you to know you'll be provided for. You and poor dear Prez."

"I don't want to talk about that

now, Benny."

"A half-million is all I could manage on my own for you, Norby. Is that going to be okay?"

Penner dropped the dog.

"A half a million dollars?"

Prez sáid, "Ouch. What's the idea, peckerwood?"

"Benny," called Penner.

"Are you getting unsettled some more?" Prez asked.

"Benny was just now talking to me. Through you, Prez. Didn't you hear it?"

"No." The dog jumped back up on the loveseat and arranged himself. "That's sort of marvelous in a way. Bishop Dix turns out to've been right, huh?"

"Bishop Dix. Defrocked Bishop

Dix. He left the church."

"I guess you'd have to with all those wacky ideas."

"But it works, Prez. Benny can talk to me from—wherever she is."

The shaggy black dog scratched

"I think I'll go out and sniff around in the woods."

Penner said, "No. You stay right here."

"I have to go to the john," the

dog said.

"I'll fix you up something in the rumpus room. You have to stay indoors. I don't want to risk you out in a blizzard. Benny will keep trying to get through."

"Okay, I'll cooperate." The dog sniffed. "I'm hungry. Do you recall the lean red meat I alluded to

last evening?"

"Sure, I'll get you a nice little steak and put it out in your dish."

"A big steak, peckerwood. And right here is where I'll eat it."

Penner said after a moment, "Okay, Prez."

LOOKING away from the electric typewriter, Penner watched the swirling snow outside the conservatory windows. The snow was four feet high and the wind roared and whooped.

"I thought you had a special dictating machine for your correspondence," he said to Prez.

Prez was on a white leather sofa chair, worrying a steak bone.

He paused to say, "I'm not in the mood for that. It's more fun to dictate to you. Benny would help me out once in a while, too. Great fun on stormy days. Now get typing."

"A lot of fun—being private secretary to a mongrel dog," said

Penner.

"What's that, peckerwood?"

"Nothing." Penner had talked to Benny twice more since that first time yesterday. He'd decided it was worth putting up with Prez if he could keep in contact with the girl. "Go ahead."

"Where was I?"

"'The sidemen on that particular session, my dear Derik, were Dicky Wells, Benny Carter, Wayman Carver, Leon "Chu" Berry...' How many of these guys do you write to, Prez?"

"More than a hundred." The dog repositioned the bone with both front paws. "I'm in touch with more than a hundred jazz buffs through out the world. We exchange letters, records, tapes and other, sometimes exotic, memorabilia."

"Exotic?"

"The postal system is often very lax. We swap a few pills, a pinch of snuff now and then."

"You're a junkie?"

"No, I simply have a certain kind of scientific curiosity," replied the dog. "Let's get back to the letter at hand."

When Penner had typed three more letters and put them in envelopes he said, "Enough for today."

"Mail them now."

"There's not likely to be a pickup today."

"The post office will be open."

"It's two miles away and we're still having a blizzard,"

He dropped the three letters down on the closed typewriter.

"I'm expecting a couple of more packages, too."

"I'll go after the thaw," the dog said.

"Today."

"Don't get arrogant, Prez."

"I'll go then."

The dog, bone in mouth, jumped to the floor.

"No you don't."

"Then, you."

Penner slowly inhaled and exhaled.

"I'll give it a try. You stay inside and if Benny tries to contact me, explain."

"Get a book of twelve-cent stamps while you're there."

Prez trotted out of the room.

PENNER threw himself at the front door of the house, stumbled through it. He fell over the hall rug, crashed against the mail table on his way down, dropping two letters, a magazine and three packages. His face was frosted and a tingling red color. He did a lopsided pushup and worked to a sitting position. He unwound the cold and soggy woolen muffler with his stiff wool mittened fingers.

"Norby, darling? Oh, my dearest, where are you?" called Ben-

ny's voice.

"In a minute, in a minute," he

yelled back. "Hold on."

He grunted, tugged at his boots. These were slushy and dripped brown snow up his sleeves. He next rolled out of his snow coat.

"Norby, are you all right? Please talk to me. It's growing harder to reach you from over here. Such an effort is required."

"I'm coming, I'm coming. I've got problems, too, Benny."

He shed the rest of his outdoor clothes and went weaving into the living room.

Prez was on the floor near the magazine bin, on his back, feet up in the air.

"Norby, is something wrong?"
"I'm okay." Penner, squatting

next to the dog, added: "Sometimes I wish you had worked out a better means of communication."

"I don't have much choice. Listen, Norby, it would be a great help if you could—"

"Could what?"

Prez opened his eyes.

"Where's the mail?"

Penner pinned the dog down by his shoulders.

"Benny, what is it you want?"
"Let go of me," said the dog.
Penner did

THE warm hand sat on his naked chest like a starfish. Penner sat up in the wide bed and said, "Yow."

"Norby, relax. You're certainly jumpy, aren't you?"

Penner reeled in the lamp cord and found the toggle. Light came on and he saw Benny, in a tan raincoat and dark head scarf, sitting on the edge of the bed.

He caught her elbow. The cloth was chill, still damp with the snow-flakes.

"How does Bishop Dix work this?"

"What? I didn't mean to scare you awake, Norby. I know you weren't expecting me for several days. After the flight was canceled I spent the night in New York. I called you first thing the next morning but the phone was out. So I decided to fight my way

back to you and here—finally—I am."

She leaned down to kiss him.

"Then you didn't go down in the storm-tossed waters of the At-

lantic?"

"Our flight was canceled," said the lovely blonde girl. "I phoned Dad and he said he'd make other arrangements. So I rented a car and I got stuck in Port Chester for the longest spell—but here I am."

Penner touched her again.

"Benny, about Prez?"

"Is he well? The cold bothers him sometimes."

"He's fine. Can he change his voice at all. That is, have you ever known him to do something like that?"

Benny laughed.

"Has he been teasing you. Yes, he's very good at impersonations. We had that built in."

Penner said, "You stay here. I'll be back in a few minutes. A last-minute something I thought of."

"Can't it wait?"

"No."

"I'll take off my clothes."

"Do that," he said.

Penner grabbed a robe and shuffled into slippers. He shot out of the bedroom and down the stairs. Prez was gone from the loveseat he had selected to sleep on. Penner chose the heaviest poker from the rack of them screwed to the fireplace bricks. He roamed the dark house and located the shaggy black dog under an old desk in the rumpus room.

"Come out of there, you stinker."

The dog huddled in a nest of torn package wrappings. A Swedish stamp had gotten stuck to his floppy left ear.

"What is it now, peckerwood?"

Penner said, "We've sure had a lot of fun. You and your damn hoax. Well, as you must know, Benny's back. I'm going to run things."

"That'll be a switch."

Penner thrust his free hand under the desk and caught at Prez.

"Watch it—"

Prez snarled, then bit Penner's hand.

"Damn." Penner pulled his bleeding hand free. "Now you're really through, Prez."

"Oh, no," said the dog. "You

are."

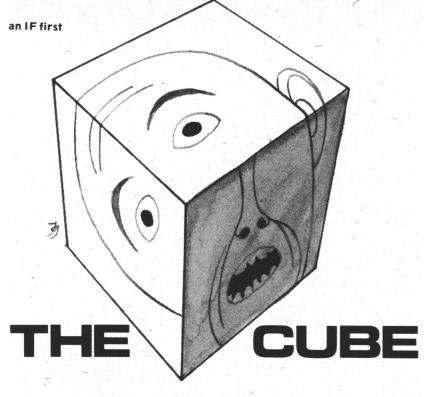
"What?"

"You've just been infected with rabies."

Penner looked from his injured hand to the dog under the desk.

"No more jokes, Prez. I happen to know there hasn't been a case of rabies in this part of the country for ten years."

"I know," said the dog. "That's why I had to send away for the virus."



C. M. DRAHAN

Which is better—to understand an alien or to know yourself?

THE captain picked up one of the cubes and very carefully felt it between his thumb and forefinger. His eyes held suspicion.

"What is it?"

"A bomb."

He stared at it.

Jerod answered the unspoken

comment: "No—not like any bomb you've ever seen. 'Specially constructed for our purpose. The explosive is inside under pressure."

The captain put the blue-black cube down beside its twin. They lay together on the desk between the two men reduced now to brooding silence. The captain's eves were on the cubes.

"When?"

Jerod understood.

"Departure is scheduled for as soon as the Telepath arrives. The rest is set. Your ship is ready?"

"Yes." The captain raised his eyes to Jerod's. The sharp lines of his face softened. "I won't be needing the replacement personnel. The entire crew is staying on." Pride echoed in his words. "We've been together a long time—since before the War. It's—" He stumbled-tongued, looking perhaps for a word to describe his feelings. Lamely he finished: "It's too late now anyway."

The door slid open onto renewed silence. The intruder's face wore an indoor pallor. His uniform was wrinkled. His eyes were hollow, with harsh shadows beneath them.

Jerod: "That's all for now, I guess."

The captain turned to leave.

"Wait—" Jerod removed a cube. He never consciously thought of it as a bomb—it was ridiculously small for the power the word implied. "You might as well take it with you."

He handed the captain the cube. The captain pushed it into a side pocket without looking at it. The newcomer's eyes followed him out past the door.

Jerod asked, "Well, Hayes?"

"The Telepath? He's as ready as he'll ever be."

Hayes spoke in a monotone.

"You're sure?"

"Yes, damn it! Does it make any difference?"

Jerod stared at him quizzically.

"Anything wrong?"

"No. Should there be?" The pale, rumpled man looked doomed. His whole appearance whispered it. "You want to see the Telepath before the Double Bill leaves?"

"No." Jerod spoke softly. "No. It isn't necessary."

ON THE truce planetoid, Stetson-Mirrada, the E-tee was waiting.

He was tall and somber with hair the color of thunderclouds. Both his hands gripped tightly the guide bar of his vehicle as it drifted fifty meters above the surface of the designated meeting place.

An impressive array of devices protected the alien. His craft contained a variety of them and he himself carried no less than a dozen weapons. A stunner at his side was the only one visible. It was within the terms of the meeting—and was meant to lull the Other's suspicions.

Yet fear prowled the alien's mind beneath the thin layers of superimposed logic called "civilization"—a terror almost primordial—although, as a precaution

against treachery by the Enemy, his mother ship waited. She was standing off a standard astronomical unit from the planetoid, according to the agreement reached with the Enemy. She was also secretly modified to enable her to get to him faster and with more fire-power than her Enemy counterpart. Yet the feeling remained tacit despite all the logical reasons arrayed against it.

The Enemy's cyborg scout ship grew within his lidless, violet eyes. His hands on the guide bar of the floater clenched into fists.

THE Telepath awoke.

He fought upward from a remembered nightmare to the coolness of silence. Stubborn pieces of the dream swirled within the stark flood of his drugged brain like pinpricks setting it afire with pain. An insanely multiplying torment of billions of animals whimpering in the jungles of night was tearing him apart.

He trembled on the brink of relevance.

Steady. You'll be all right now. We're here to help you.

Screams echoed through his mind.

Hurry with that hypo . . .

He jammed the back of his hand against his mouth to stifle the terror rising to his lips.

It's all right...gone now... finished...

His breathing steadied and he

managed to relax the contorted muscles of his face, to drive away the hunted look. He stared into the view-screen, watching the planetoid swallow the ship.

Silence ... genuine ... real ... with no blurred undertone running beneath it ... so cool ...

He tasted it within himself

You understand what's to be done...

Terror rumbled.

Yes. Yes. I understand. Give me the drug. The encephalic depressant. Give it to me...

WITH a conscious effort the E-tee kept his face impassive. But he could not control the turbulence under his imposed calm.

The Enemy was descending from a circular opening at the base of his cyborg ship. He dropped slowly to the E-tee's level.

The uneasiness kindled higher, racing along his nerves, within his blood, until he could barely keep from baring his teeth at the creature. His hands were fists about the guide bar, the ram-fire needler hidden in it seeming as far away as his home world.

They faced each other separated by five meters of distance.

Hiding the throbbing within him the E-tee spoke: "I am empowered to discuss terms of settlement."

The movement of his lips re-

vealed small, concavely serrated teeth.

He memorized every detail of the Enemy. The sensors here as well as those watching from the mother ship might miss something and every bit of information would be vital in order to discover the location of the Enemy home world.

The Enemy winced as if slapped across the face. The action puzzled the E-tee. His face was still a blank. It had not betrayed him.

It came . . .

... again.

A wave of nausea knotted his stomach.

Fight it! Fight it, damn you! Well?"...

Couldn't take it. He's unconscious. His mind is still receiving, though. I'll have to give him the e-d...

Go ahead. We'll try again later...

Again . . ,

And again. As long as it takes...

Wouldn't it be kinder to put him out of his pain?

For whom?

Remembering slashed across its belly died shrieking. Irrelevant. His mind was drowning in a flickering kaleidoscope of flame dripping molten fire like a huge festering sore. He was mute, the scréams trapped in his mouth, incapable of escaping

the scouring tumult of images and alien emotions. He reeled with the superimposed pounding in his blood at the sounding din of a million strange trumpets playing a berserk dirge over the gutted carcasses of burning cities; weaving within, improvising upon, the weakening groans of the dying and the high, piercing screams of the still living. Bloated bodies ripening to olive from green to black as burned-out cinders gushed him. His mind stared numbly at hollow, grinning sockets that nothing could hurt any more and slipped on unwound intestines to lie feebly, attempting to fold in upon itself and escape the . . .

Blood . . .

He fell under the ages of bones and died—and fell again. And then there was no more blood just words blowing from somewhere.

Llela, there is no other way. The Enemy must be destroyed. Llela, understand. Please, Llela—Llela—what I never had time to say to you...

The Telepath understood.

Must the women always wait? Why? For what reason?

When you've found out the location of the E-tee's home world and any other strategic data press this stud. It will release an odorless, invisible gas similar to the encephalic depressant. That should slow the E-tee's senses enough so that he'll never feel the explosive

penetrate his epidermis. This button on the guide bar triggers the injector...

When?

What? Oh—whenever he enters the gravity field of another planet —hopefully his own home world. The mass conversion reaction should be about ninety-percent efficient...

Do statistics bleed, Hayes?

Always the same . . . the blindness . . does anybody understand?

You have no choice. We have no choice. You have to do it. You're the only Telepath we've got. The other eight burned out within a month of becoming active. You're the last one alive and sane. You owe the human race something for that at least...

Don't you think I know that? Sometimes I wish Polypsychic hadn't brought me out of withdrawal. Have you any conception of what it is to be the means by which an entire race of people die? Can you understand that, Hayes? The death of—people?

They're not people. E-tees. Aliens. Zenophobic monsters—they're not people. And what difference does it really make anyway? Who gives a damn? That's the way its always been since the first human could lift a rock or swing a club to take what he wanted. Sure, there has to be a better way—sometime, Maybe we're not truly human yet. Or

only too human . . .

I know. But that still doesn't make it the way it has to be now. We have to try to change—even if we fail. We have to try...

Look, just do what you're told. It's not your personal responsibility to decide the moral value judgments...

But it is. Can't you see that? You know, the first contact ships from both races didn't even try to talk to each other before they opened fire...

THE words formed purposefully in the Telepath's mind.

Listen to me ...

He opened his mind to the Etee trying to explain what words could never make clear. For the smallest part of a heartbeat the long war within was ended. They stood face to face, mind to mind.

There was sudden comprehension. Panic. The E-tee's eyes glazed over with unreasoning fear. His mind twisted, struck out.

No-can't you understand? Listen...

The E-tee's hand plunged toward the button on the guide bar of his vehicle.

No . . .

The Telepath reacted instinctively. An almost inaudible hiss whispered from the e-d injector. The E-tee's hand stopped as if frozen as the gas began to work. Realization dawned slowly on his face.

In a hoarse, straining voice he croaked, "Telepath!" His hand found another, nearer, button.

No . . .

Time shattered into twisting hot splinters . . melting. The blast slammed into the Telepath with a buzzing steel fury. His floater platform jumped in the shock wave and fell.

He crashed. A blossoming flower of fire exploded within him. He doubled over with pain into a void—into a rushing darkness where the fire did not exist.

HE AWOKE to silence and the smell of dug earth.

Using the battered floater's rail he pulled himself upright. The Etee's vehicle was scattered across the green. Small charred pieces dotted it obscenely, along with other debris.

Blood . . . always blood . . .

High above, within a flashing of sparks, a new star glowed for a moment.

I failed ... but there is no escape ... there can never be ... I care ... that is the way it is ... the only way it could be ...

The E-tee mother ship was growing rapidly larger in the sky.

THE pictures on the monitors suddenly blacked out. Hayes looked up from the screens.

"The Double Bill is gone." Jerod nodded.

"It was supposed to happen.

The Telepath could never have completed the mission. We knew that before we sent him. The personality profile Polypsychic put together on him confirmed it. By now the E-tees have him. They'll check him carefully and take him to their home world for intensive study."

Hayes didn't understand.

"The cubes," Jerod said.
"Didn't you ever wonder why
there were two? The explosive is
part of his blood by now."

"Damn you."

"It had to be done. As much as it was hard and pitiless, it was justified. Mankind must survive. Its enemies must be destroyed. There is no other way."

Hayes glared at Jerod.

"You used him. He never had any choice. Now he's a walking bomb."

"We had no choice. We did what had to be done. Our survival as a race depends on our individual readiness to fight—and even die—if necessary. He owed humanity that at least." He was silent for a moment, the grimness about his mouth and eyes quivering. His voice came deliberately softer: "You understand?"

"Does it matter?" The words were heavy with weariness.

Hayes reached into a pocket for a piece of paper one of the Polypsychic doctors had given him. A poem the Telepath had written. Hayes stared at the scrawl. All men are strangers now skeletons without rest to keep away the World's end—for it ends forever... and there are no heavens in all the haunting ages...

Hayes carefully refolded the paper along its deep-laid creases.



March 27-29, 1970. BOSKONE. At the Statler Hilton, Boston. For information: Anthony Lewis, 33 Unity Avenue, Belmont, Mass. 02178.

March 27-29, 1970. SFCon '70. At Hilton Inn, San Francisco Airport, California. Pro Guests of Honor: Miriam Allen de Ford and E. Hoffman Price. Fan Guest of Honor: Felice Rolfe. Memberships: \$3.00 now, \$4.00 after January 1st, \$5.00 at the door. For information: Quinn Yarbro, 369 Columsa #5, Berkeley, Calif. 94707.

March 27-30, 1969. EASTERCON. At the Royal Hotel, Southampton, England. Guest of Honor: James Blish. Panels, films, lectures and displays. Scheduled speakers: Raymond Fletcher, Member of Parliament who works closely with the Ministry of Technology; Dr. Kit Pedler, lecturer in Opthalmology and TV script writer; et. al. Most of the British sf writers will be in attendance. For information: SCI-CON 70, 28 Bedforbury, London, W.C. 2, England.

Jerod had gone with a shake of his head. Hayes switched off the screens, slowly rose and drew his weapon.

"He said out loud but softly, "Perhaps there are no answers. Maybe first we have to ask the right questions. This should make for a few."

April 3-5, 1970. MINICON 3. For information: Jim Young, 1948 Ulysses Street, N.E., Minneapolis, Minnesota 55418.

April 10-12, 1970. LUNACON/ EASTERCON. At the Hotel McAlpin, Herald Square, New York City. Advance registration: \$2.00. For information and registration—: Devra Langsam, 250 Crown Street, Brooklyn, New York 11225.

July 3-5, 1970. WESTERCON XXIII. Will be held in Santa Barbara, California. Guest of Honor: Jack Williamson; Fan Guest of Honor: Rick Sneary. Memberships: \$3.00 through June 22; \$5.00 at the door. For information: Westercon XXIII, Box 4456, Downey, California 90241.

August 14-16, 1970. AGACON 70. Memberships: Supporting, \$1.50; Attending \$2.50. For information: AGACON 70, Box 10885, Atlanta, Georgia 30310.

August 21-24, 1970. 28th WORLD SCIENCE FICTION CONVENTION: HEICON INTERNATIONAL. In Heidelberg, West Germany. For information and registration: HEICON 70, 6272 Niedernhausen, West Germany.



Spider's trouble was that he smelled like a female turnip when male celery was desired!



T.J. BASS

Starship Olga gently nosed into her berth at the Grus Satellite Station and roused her human companion/pilot. This would be their last rest stop before the long run down the Los Coyotes Diagonal to the Dog Star. Here she could bargain around for fuel and astrogational data while Spider, her human, relaxed. Spider enjoyed biochess and the Grus S.S. game room had an attractive reputation.

Spider drifted sleepily from his

couch to the refresher. He pulled on his heavily telemetered undersuit and swam deftly from web to web toward the airlock.

His half-sized left arm and right leg gave him a hobbling, spiderlike gait on a planet's surface but in the no-grav of space he moved smoothly. Mechanical embryogenesis might be a handy method of growing babies outside the female's uterus but spider's servo had bungled his fetal mineral balance and left him with ir-

regular bone growth—asymmetrical extremities and a lumpy skull. But a spaceship pilot was judged for his productivity and wit, not for his decorative value.

The game room was dark. The Auto-Glo boards and pieces were reflected in the players' eyes—soft yellows and greens. Spectators hung about in three-dimensional webs. A wall panel monitored the contests-Spider's rating was up 0.37 points after two games. His retinal rhodopsin was bleached out from concentrating on the glowing pieces. When his third opponent joined him out of the darkness, all he could see was a pair of twinkling humanoid corneas staring at him from across the board. Anonymity enhanced biochess by adding an unknown rating to unpredictable protoplasm.

Spider found meck-chess too consistent. His depth of analysis depended on the machine's setting. A move he'd give a (!) at 2,000 might get a (?) at 1,000 because of superficial study. This error could cost him the position when facing a protoplasmic intelligence, whose genius fluctuated with metabolic variations but a machine could be counted on to play only at its rating.

This opponent was biological and probably human—two eyes, no facets. He was Right King and moved first. An offered gambit pawn. It was declined. He opened a rook file opposite the castled

Left King, forcing the N-KR3. The move had seemed natural enough in the opening—but when the knight remained inactive on the sidelines during the midgame struggle for the center, Spider suspected that he was being given the "silent knight odds." Why?

He studied the eyes again large and unfamiliar. A flat, wide nose was visible. The head silhouette was large—either a pillow of human hair or the ballooned head of some alien. Spider recognized neither the features nor the style of play. He pressed his attack.

Spider's extra working knight took the center. The Left King's pawn line crumbled under his rooks and bishops as they rolled toward the castled position. End game deteriorated into a lively king hunt which attracted a clot of spectators.

Spider heard someone in the background mumble: "He's really doing it to her."

The pronoun explained the "silent knight odds"—a feminine ploy. By making her position unplayable she had adopted a submissive female posture on the chessboard. She was toying with him and letting her clock run.

He checked. She fled. He checked again. Then—in a gesture of resignation—she placed her index finger on her queen and slowly tipped it over. The wall panel recorded another win for him. She disappeared into the

darkness as he began to set up the board again. Discovering that one of his knights was missing, Spider climbed the webs and started floating after her. It was unusual to run into "horse collectors" on satellites.

TIE SPOTTED her on the ■ deck. From a distance she appeared to be wearing tight, goldfoil coveralls. She ducked furtively into a cabin in the pilot section. As he drifted up to the door it unexpectedly irised him into a single bunk room, containing a refresher, a desk and a dispenser chute. The roar of the layered air/water laminar flow filled his ears and he saw her telemetered undersuit snapped to the outside of the refresher hatch. On the desk top he found his knight—a dull opaque yellow in the cabin's light. Two frosted squeeze bottles were conspicuous in the dispenser.

"Have a foamy. I'll be right out," she shouted over the roar. She groped coyly around the hatch for her undersuit—hardly more than a body stocking spangled with small sensors and microcircuits. He sipped his drink—a cognac old-fashioned.

"Your knight is on the—oh, I see you've found it," she said as she entered the room.

The gold-foil effect was caused by a heavy patina of body paint which gleamed brightly through the wide mesh. She was human, very symmetrical, a rather healthy rural specimen from Kliiborne and —judging by her telemetry—a spaceship pilot.

She pushed off toward the dispenser.

"Sorry about the knight," she said conversationally as she approached on a tangent.

Her right hand darted out and cupped the back of his head. She gave him three quick, wet kisses—analytical pecks—on his mouth, cheek and neck. Leaving him spinning slowly in the middle of the room, she continued to the chute and picked up her drink.

He stopped his rotation with a ceiling web.

"Testing?" he asked.

Sucking on her drink, she raised her eyes and nodded.

"And?" he asked.

She shrugged and shook her head.

Nothing. That was his usual effect on the girls. He drifted over to her and gave her sternal area a tentative pat.

"Frolicking with anyone tonight?" he asked.

The silence that dragged out hurt him but he maintained a pleasant, easy facade. She glanced from the refresher to her bunk weighing an evening's companionship against the coming months of loneliness on her deepspace route.

"Come back after your game," she said pleasantly.

Spider returned to the game

room and lost to a *Quad*, a massive alien with one large, faceted eye and redundant skin folds. Endgame recklessness cost him a passed pawn.

Later he found her coaxing a three-course meal out of her dispenser. The variety was interesting. He ate well. Preparing to frolic, she warmed the refresher and undid her belt.

"You can bunk with me," she invited. "But I don't think I can love you."

They both watched her cardiogram tell-tale-no tachycardia or extrasystoles. Snapping their suits to the hatch, they entered the steamy wind tunnel. Cascades of low-ion water buffeted their intimate swim/dance. As her body paint peeled off he saw her reason for wearing it. Her epidermis had the dull gray-black pigmentation of silver-ion overload—argyria and a linear, hairy mole ran down the midline of her back. The argyria was a cumulative error in her ship's life-support system physiologically significant, amounting to merely a cosmetic disaster.

They danced until their bodies squeaked on contact. She talked easily, petted politely and even attempted to look sultry—but she couldn't love. They bunked together—warmed physically and psychologically by each other's presence.

Twelve standard hours later

they left Grus Station—going their separate routes.

The Los Coyotes Diagonal held few surprises. About two years later Olga returned from the Dog Star and entered the Grus communication net.

A soft throb of music attracted Spider's attention to Olga's panel. The viewscreen showed a horizontal drumhead festooned with flowers. His forehead dampened as a small, naked female approached the tangle of blossoms. This was the beginning of the Drum Dance—the mating ritual of his home planet—Deneb One. The fact that no female had ever drummed for him did not lessen the dance's impact on his physiology.

He wiped his brow with his gnarled left hand and adjusted the focus. She stepped onto the resilient hide—feet wide apart—toes gripping the grained surface. Her wide eyes and slight curves suggested a pubescent innocence but this quickly vanished in the wild erotica of her dance.

Her long hair—at first an unruly, dry web ballooned out by static electricity—began to tangle and cling in her beading sweat. Her exertion continued. Pounding heart sounds accentuated the musical beat as the tempo picked up. Trickles of salty eccrine marbled her belly and legs. Her feet pattered wetly to a crescendo.

The screen blanked in mid-

throb and Spider slowly let out the breath he was holding. Silence hung for a moment in the little command cabin.

He roused himself from the demi-trance to ask, "Who was that?"

"Rau Lu," filled in Olga. The screen activated and showed the I.D. views of the female chess opponent—complete down to the mole on her back.

Spider eyed Olga's optic pickup suspiciously.

"But Rau Lu is from Kliiborne—out Sirius way. She isn't familiar with our mating rituals," he said.

"The dance was simulated," explained *Olga* in a dry metallic tone.

He winced. The depth of understanding these machines were acquiring by living with humans continued to surprise him. He raised a quizzical eyebrow.

"Diagnostic test," said Olga. "Ever since our stopover at the Grus Satellite we've had small inefficiencies on board. Inefficiencies that could cut into our profits."

"But I haven't noticed any . . ." he began.

"It is quite obvious from these graphs—" Olga projected a variety of his physiological readouts on the screen—"that your red feathers are showing."

"My red what?" he asked.

"Your red feathers," said Olga.

"This tracing is your arrectores pilorum myogram which measures the elevation of your hair shafts. Note the effect of the Drum Dance. The pattern corresponds quite closely with the red feather myogram of the grouse during its mating dance."

Over a sawtoothed myogram the split-screen showed brambles and-dry leaves. Deneb One's red ruffed grouse hopped about, beating its wings. He could understand why the myograms might be similar. Just the thought of the dance prickled his back and neck. His motor end plates must drop their thresholds because his trapezius muscles seemed to tense. Capillary beds swelled, pulse and respiration changes occurred. He understood.

Olga continued: "The red-feather adjustment—love metabolism—is efficient on a planet's surface if you are competing for a mate. It is inefficient on a starship where patience and accuracy are needed."

"But I'm not in love," he protested.

The throbbing music began and a soft focus of the flowered drumhead appeared on the screen.

He held up his right hand.

"Stop! Okay. I'll admit that the Drum Dance gives me goose flesh—or grouse flesh. But that is nonspecific. Rau Lu was just another girl in my life. I'm not in love," he said firmly.

Olga detected his rising epinephrine level, so she dropped back into Routine Mode. A star map appeared on her screen.

A T THE completion of their run Olga remained in orbit to off-load while Spider reentered. The pull of gravity was irksome after almost eight years of pleasant weightlessness but his faithful gym work preserved sufficient muscle and bone to handle the effort. The eighteen-inch right leg prosthesis worked pretty well on the smooth beltways. After a few false starts he was able to leave the crutches in the tender.

Checking in with the Company, he was pleasantly surprised by his megafranc balance. Two stock distributions brought his and Olga's wealth up into the two-human class. They were now entitled to more cargo space, lavish life-support, and more powerful drive units. A two-human ship.

Olga must have known this when she simulated the Drum Dance. They were in the communication net at the time. She had known and had tried a not-so-subtle promotion of Rau Lu. As usual, Olga was probably right. She wanted him to go hetero—same species, different sex. Well, Rau Lu probably wouldn't be too bad to Ship Up with—if only she could love.

Spider put in three requests—one to the company for permis-

sion to go two-human; another to Com Cen for Rau Lu's present position and the third to Olga for analysis of Rau Lu's inability to love. Then he limped down to the game room.

Most of the meck-chess cubicles were filled, but he could see by the settings that no one was playing over the 1600 level. Not much self-esteem in the planet-bound these days, he reflected. He dragged his weakening right leg into a handy foamy alcove and enjoyed a couple open-top drinks. It was sort of fun to look down into a glass and see a real ice cube—and watch it stay down there while it melted. Gravity did have some entertainment value.

The Company Immunopsychologist called him in.

"Immuno what?" Spider asked after shaking the hand of the bald little man in white coveralls.

"Psychologist. Call me Maynard. I have your request to go two-human. I'd like to discuss it with you."

He noticed Spider's discomfort while standing and waved him into a slick, soft chair.

"I see you are considering hetero. I'd like to point out some of the hazards of Shipping Up with the same species."

He activated a wall panel directly in front of Spider. Graphs and statistics appeared. Spider let his mind wander.

"Of course hetero has its place.

Sexual reproduction and all that. But now mechanical embryogenesis has made even that largely unnecessary. We've learned that hetero is actually dangerous—crimes of violence being statistically most common between people who are the closest. When hetero relationships were legally binding we observed serious interpersonal conflicts most frequently in pairs dwelling in the smallest living quarters.

"Immunology traced the etiology to the antigen-antibody reaction—hence the emergence of our field: Immunopsychology. Antigens from one human—bits of protein in skin scales, hair dust, sperm, saliva—anything—would cause the build-up of antibodies in the other. At first this might be manifest as a mild incompatibility, such as sterility between the pair. But both would prove fertile when matched with an antigenic stranger. Later the mere presence of the partner could precipitate significant stress responses—even asthmalike attacks or coronary spasms. In most cases of moderate close exposure the antibody titre reached the critical level in about seven vears."

Spider failed to see the reason for all this.

"In starships hetero has caused many mission failures. Loving pairs are sent off but they fail to arrive at their destinations. The same missions are repeated easily

by single-human-ships and the human/alien pairs. Hetero failures were often due to acquired personality conflicts—tragic, violent conflicts. Ship's logs showed mounting stress—anxieties that were precipitated by the partner. Even the surviving hetero pairs often reported symptoms of stress. The explanation came when we found the antibodies. Each member of the hetero pair had built up antibodies against the other. The correlated well-directly titres proportional to the stress."

"Female humans are out?" asked Spider.

THE little scientist nodded.

"What do you recommend for your two-seaters?" asked Spider. He had made a mental note to check with Olga on this new antibody-insanity theory. Starships often kept their own statistics and conclusions—trying their own remedies.

Maynard had cleared the wall panel. "The Quad has been one of our most—"

"Quad!" interrupted Spider. "That alien coelenterate! Why, I'd consider him more of a pet than a partner."

"He probably thinks much the same of you." Maynard smiled. "And he isn't a coelenterate, of course. Warm-blooded. Totally alien antigens. No danger of allergy."

Spider tried to picture himself shipping out with an amorphous, sac-like Quad. No, he preferred Rau Lou. Thanking the Immunopsychologist, he hobbled back to his tender and lifted off. As soon as he felt the no-gray he pulled off the prosthesis and wiggled the sore toes on his gnarled right foot. "Antibody danger in hetero?"

asked Olga. "It's a danger—but not if environmental controls are functioning. Recycled air and water must be molecularly cleaned with filters, carbonizers. Your dermal debris should feed plankton-not sensitize your partner. It is always a concern but not enough to cancel out hetero. Rau Lou's failure to love—frigidity was also a by-product of starship environment. Both of you have reached an equilibrium with vour life-support systems—particularly. the hydrocarbons of your ship. Your taste and smell are those of the ship. She can't love you in your present flavor because she associates it with females. Our hydroponics plant is the yellow turnip—the rutabaga. On her home planet the women chew the dried and cured rutabaga leaf. So, you probably tasted too much like her sister to arouse any sexual attraction."

Spider frowned.

"I taste like a girl?"

"You taste—and smell—like a rutabaga. To Rau Lou that is female."

He relaxed. That would certainly be easy to remedy. Celery could be quickly substituted for the yellow turnip as the hydroponics plant. By the time he again met Rau Lou he would be a changed man—or rather, a changed vegetable.

Olga continued: "The men of Kliiborne work in mines and related industries. I've added essence of char and some copper ions to your refresher fluids. That might trigger the masculine label in her taste buds. As for body paint—I think she would be attracted by a coarsely granular brown stucco. That would go well with—"

Spider stepped into Olga's ramblings.

"How do you happen to have so much information on Rau Lou?"

The console went silent for several full seconds.

"Your red-feather reaction appeared during your biochess game with Rau Lou. When I learned that your opponent was a female, why, I naturally assumed—"

"I know what you assumed. But where did you get all the information? Did you happen to meet her ship while we were at the Grus Station?"

"Yes, my human."

"And you arranged a data transfer?"

"Yes, my human."

He slumped. Now her ship knew

as much about him as Olga knew about her. He shuddered to think of what kind of a mating dance Rau Lou's ship might simulate from his data.

His Com Cen request for Rau Lou's location was finally answered. She was missing. Her warp trail ended soon after passing through the Fomalhaut system. The probability cone was largely a "cold zone." She was lost in a volume of space devoid of luminous bodies—and she had been there for over a year.

A personal search was out of the question—too expensive. But Olga weighed the possibility of salvaging Rau Lou's cargo plus a paying cargo to Fomalhaut against the odds. It would be financially risky—but they'd go.

SEVERAL months later they were picking their way through the scanty frozen debris of the cold zone. Spider was depressed.

"This is as bad as being between arms of the spiral or Off Galaxy. I can't see how anyone could survive here. There's not even a good first mag star—let alone a sun," he said.

"She'd have to live like we are —full life support. Need her own power source. That is good in a way—for it gives us something to find. Any energy should stand out easily against this empty background."

· Spider worried about the ex-

pense. The small token cargo they carried to Fomalhaut barely covered their energy expenditure out. Olga assured him that there were megafrancs to spare even if they didn't salvage Rau Lu's ship. He was uneasy about the amount of time in the search pattern—knowing the cost of sustaining a zigzag course where momentum is repeatedly wasted as directions are reversed.

Olga's sensors sniffed out the tenuous ion trail of a conventional drive. They followed it hopefully until it disappeared in the gravity well of a cold star.

"That reads like a real hole in space," said Spider, looking at the indicators

"Yes, not much is getting through the pull. We can't go down there. Have to go around and take up the search pattern on the other side."

"Radiation source," Olga noted later.

The screen showed a rogue planet of about the same mass as Deneb One. Without a warming sun its atmosphere and oceans were crystallized. A single pinpoint radiation source was present—primarily gamma rays. Spider turned up the magnification but all he saw was the raw, unweathered rocky terrain—needle-point peaks, razor sharp crevices wherever he looked.

Olga orbited and scanned.

"The radiation source is not nat-

ural," said Olga. "I'll have to send down my Mobile Surface Unit to check it out. I keep getting outlines that resemble a ship, but they are elusive. Do you want to go down, too? There's just about a full gravity."

Spider nodded. "If Rau Lu is down there I might be needed."

A S HIS tender approached the surface Spider adjusted a soft knee cushion and shin guard on his long left leg and practiced crawling. With a padded glove on his larger right hand he had a three-point stance which would probably be stable enough for the cracked and tilted surface he had seen through the scanners. But standing on his small right foot and kneeling with his left made him shorter than Rau Lu-by lowering his height about eighteen inches. Crawling did nothing for his ego, either. He decided to try the prosthesis and crutches.

Setting down about a hundred yards from the radiation, he sent the M.S.U. ahead while he practiced walking on the irregular surface. The crutch tips slipped and the prosthesis caught in the cracks. His ankle-ached. The M.S.U. disappeared over a steep, jagged ridge.

The darkness was absolute. Harsh light beams from the tender penciled about—catching the surface formations in their glare—but the depths of the cracks remained

an opaque black. There was no diffusion of the beams without an atmosphere. Setting his hand beam on wide-soft focus, Spider struggled after the M.S. U.

The frozen, silent planet fought him. The tilted, slick surfaces offered precarious footing—glassy mineral, fused metal or simple ice, he couldn't tell. Gravity seemed to be pulling him toward the bottomless crevices—the fall alone would kill him. The only sounds he heard were the unsteady tread of his prosthesis and tapping of his crutch as he searched for his next foothold.

His senseless, artificial foot—unable to evaluate—stood on a brittle, crystalloid sponge. As he shifted his weight it crumbled—sending him tumbling hard. Momentarily stunned, he lay in a shallow recess, isolated by the dark vacuum.

"Stay there," came Olga's order over his communicator. "We've found the radiation source. It isn't Rau Lu's ship."

Spider tried to untangle himself from his bent crutch and twisted prosthesis. He didn't know whether to be worried or relieved. He had not wanted Rau Lu to see him this way—a helpless cripple. But, then, where was she?

The zetetic M.S.U. continued, "Alien craft—megayears a derelict—molecular drift has fused the hull to the contiguous surfaces of the planet."

Spider crawled to the top of the ridge to see the wreck. The pitted and granular hull was difficult to outline from the landscape but it was roughly cylindrical. Its age suggested that the civilization that had spawned it might well have evolved into something unrecognizable by now.

"Where's the radiation coming from?" asked Spider as he heard his suit detector clicking wildly.

"Someone has cut into it recently. Looks like the power cell has been emptied. Resembles our Quark-Bottle design—although megayear stability is hard to explain."

Spider retreated behind the tilted slag. His detector quieted. Tell-tales indicated heavy gamma radiation.

"The cuts fit those made by the Bodkin-Ill. Rau Lu's M.S.U. was equipped with one," continued the M.S.U.

It busied itself with sampling the walls of the power cell for elements with induced radioactivity. It gave the percentage of each element in isotope form. Spider immediately calculated that the source of the radiation had been removed well within Rau Lu's missing period. Only 0.04% of the copper was in isotope form. But zinc was still about 50% radioactive and sodium was as high as 85%. This indicated that someone had come along about eight standard months ago and tapped the

Quark-Bottle. Rau Lu could have been in this area for well over a year by now. Spider relaxed. Anyone with technology capable of tapping a Q-Bottle was probably in good enough shape to survive.

The M.S.U. vibrated its heat shield to rid itself of isotope debris. Then it turned, picked up Spider and returned to the tender. He wrapped his sprained little ankle and took a nap. After taking the tender onboard, Olga let him continue sleeping while she took up the search pattern again.

Several days later they came upon a hot fragment of the alien power cell—probably jettisoned after its energy had been extracted. It marked the beginning of the elusive ion trail and narrowed the search area considerably.

SPIDER double-checked the hydroponics for the yellow turnip and tried on his brown stucco body paint. He had already gotten used to the cupric and char flavor of his laminar flow. The carbonizers were functioning well in the air recirculators. Micro-Pore filters in the refresher and other water lines were removing anything larger than a salt molecule—anything that might sensitize.

His ankle mended quickly. He was ready to meet Rau Lu again.

Three weeks later they found her ship silently anchored to a planetoid. Spider was glad to see that the planetoid's mass was only about a tenth that of Deneb One. -

Olga's greetings were not answered. Rau Lu's ship showed no signs of meck life. The scanners picked out Rau Lu's survival shelter inflated over a nearby valley. Cables connected it to the ship and the fractionating columns were erected—indicating some attempt at mining the local gas and water solids.

Olga nestled gently against the quiet starship and connected airlocks. She sent her servomech into its hull to investigate. Spider suited up and started for the survival shelter—with a copper coin in his mouth.

Inside he found about twenty acre-feet of airspace under eight-tenths of an atmosphere. Powerful light sources from the hydroponics section hung overhead, warming his face and hands. The floor—a rocky conglomerate—supported a monotonous growth of white potatoes. A small pool at the lower end had the scummy look of phytoplankton. She had certainly kept busy.

He had been worrying about what effect this prolonged isolation might have had on her psyche but she apparently had had little free time for her to worry about it. He was impressed by her success with tools: the cannibalized Q-Bottle, the fractionating columns and operating shelter biosphere. He supposed that her lack of contact with sentient living beings had

been very depressing. If her ship's meck-intelligence had cut out—as he suspected—she had had no one to talk to. The only living things around seemed to be these potato plants with their uniform, three-centimeter, white, meaty spheres pushing up through the moist gravel. Of course there were animal life forms in the zooplankton—but how much companionship can be derived from a pet that can only be seen with a microscope?

"Hi, Spider."

The casual greeting came over his communicator.

He glanced around and then saw Rau Lu—sans paint—coming out of her spherical living quarters. She wore a heavy, knee-length wraparound. Its hem was stained green with plant juices. Her hair was tied back neatly and her hands were calloused. She was carrying an armload of personal belongings which she immediately stacked by the airlock.

"You're packed?" he asked.

"Heard your ship's hail on my communicator. Couldn't answer. Not enough power. So I've just been getting ready to go," she explained.

She beckoned him inside the spherical shelter and busied herself at the wall-panel controls. He waited in the middle of the room, the bulky helmet under his small left arm. His right leg prosthesis balanced easily in the light gravity.

He saw a large potted potato

plant beside her bed. It was unusual. Besides the clusters of small white tubers, there was one large, lumpy one that had a green skin. It sat in the center of the pot and peered up at him through the tangle of green leafy stems. The bizarre lumpy shape was a genetic throwback to its distant ancestors and the chlorophyll was an adjustment to the prolonged exposure to the hydroponics light source.

She saw him looking at the potted plant and said, "I'll be taking that along too. Pretty fond of it. It's the biggest life-form I've seen since I've been stuck here. Kept me company. Beautiful isn't it?"

He nodded absently as he took a closer look. Then it began to look too familiar as he anthropomorphized its pair of embryonic scale eyes and lumpy outline. Asymmetrical potato—beautiful?

The room temperature dropped about ten degrees, chilling his hands and face. She opened the oxygen valve. It gave a loud hiss.

"Why are you turning up the oxygen?" he asked.

"You are going to need it," she said. She dimmed the lights, shrugged out of her wrap-around and advanced on him.

It was a red-feather day for the asymmetrical potato.

TWO pints of eccrine electrolytes later Spider lay trapped by her clinging extremities. She pressed her forehead into his ear, breathed into his neck and mumbled on and on about how happy she was. His presence had made her almost euphoric.

She was a very stable human—capable of sensible efforts for survival. Solitude—she could handle solitude unless it was indefinite—then it became loneliness. She was good with tools but when she became lonely her tools gathered inertia. She craved something alive and responsive. Her potato had responded to her touch, growing well with the light and water she showered on it. It grew, changed and became asymmetrical. The unresponsive tools remained cold and symmetrical.

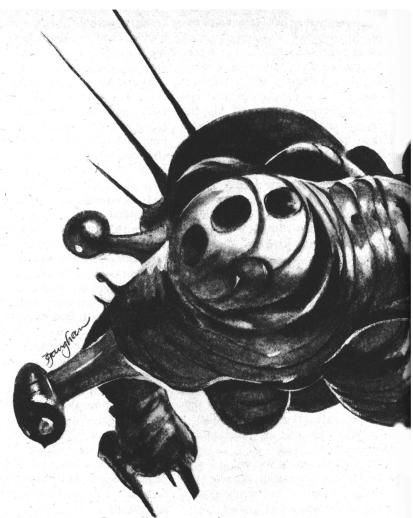
She had now been in deepspace long enough to equate asymmetry with life.

Spider was beautiful to her—because he was alive and because he was there. In the absence of gravity he was efficient, strong, capable—and exhibited no limp.

With Rau Lou's crippled starship in tow Olga set a course for Rau Lou's target planet. The suspended genetic material in the cargo section was still viable. Its value would balance their energy expenditure.

For several days Spider and Olga's servomechs worked on the crippled ship. Everything seemed to be intact—power cell, life support, memory banks and drive units. But the ship would not

(Please turn to page 153)



THE burning city was a hideously beautiful sight below them when Brand finally called a halt.

"Stop here for just a minute."

His breath was coming hard and for the first time in longer than he could remember he was conscious of the enormous mass of a fully armored combat suit.

"What for?" Davidson's voice came through Brand's earphones. But Davidson paused in his loping, reaction-pack-assisted run toHe fought against his own for what he wanted—and won less than those who lost everything!



HIRED MAN

RICHARD C. MEREDITH

ward the crest looming above. "There's enough of them left to chase us."

"Let me catch my breath," Brand said, hating to hear himself admit fatigue.

"It can't be more than a couple

of kilometers or so," Wisse said, having stopped a few meters beyond Davidson and remaining barely visible to Brand, a vaguely monstrous, ghostlike shape in the darkness and among wind-twisted trees of the mountainside.

"I know," Brand gasped.

The suit was too damned heavy. Something was wrong in the feed-back. Something was wrong in this whole setup.

"Brand," Davidson blurted. "How do you read rendezvous?"

Brand dropped to one knee on the rocky mountainside, turning away from the burning city below. He flashed a time reading on the inside of his helmet's faceplate.

"Three minutes," he said.

"Then let's get the hell out of here."

Brand sighed, knowing that there was no point in arguing. They had to make rendezvous or they were stuck on New Iowa for good. As trustworthy as he believed the Dravians to be, he knew they would not make two runs down to pick them up. If he, Davidson and Wisse—sole survivors of the raiding party that had hit the colonial city—did not make rendezvous they were on their own.

"Roger."

Brand could see the faint glow of Wisse's reaction pack as it assisted him in a six-meter leap up the mountain slope. Davidson, too, jump-jetted up the slope toward the plateau and the homing signal transmitted from the rendezvous site.

Brand paused and looked back down into the burning city below for longer than he should have. Better than half of New Iowa City was now aflame. Mildly Brand regretted what he and the others had had to do. They really had not planned on destroying more than a few essential places—power stations, water works, central communications, things like that. But neither had they counted on the kind of resistance the colonists had put up. The half-assed farmer-colonists from Old Earth had never shown much in the way of defenses in the past.

The homing transmitter flashed a reading on Brand's faceplate. Looking up the slope toward the crest, he found he could see neither Davidson nor Wisse. He had to catch up.

The reaction pack kicked at his back and his feet kicked at the earth below him. The force of his legs was amplified a dozen times by the suit and he moved cursing all New Iowans—and the particular one who had blown a building out from under him with an H.E. bomb he hadn't suspected that the colonists possessed. Well, they hadn't figured on the colonists coming up with combat suits either. Still, he'd been hit harder than he thought. The damned suit had been damaged—read-outs told him so clearly enough—but not so badly that he couldn't get to the pickup site, even if he did have to work a little harder at it. He sure as hell wasn't going to let the Dravians take off without himnot with what they owed him.

It was kick and jet, kick and jet. Sluggish though it was, the combat suit carried him up the slope, over the rough, ancient boulders and angular outcroppings of rock, over and around the gnarled trees, up toward the safety of the plateau.

NOTHER full minute had A passed before he crested the plateau and landed again on level. solid earth. Snapping the night visor down with a twist of his headthrough infrared he made out the dim figures of Davidson and Wisse no more than half a kilometer away. Few trees up here obscured the view and the ground itself was surprisingly level. An odd geological formation, some remote part of his mind commented—but somehow these mountains reminded him of -home, the harsh beauty of Breakdown Heights where mere survival was something to be proud of. Not like the soft living the damned New Iowans had in the lush valleys below.

Where Davidson and Wisse stood had to be the place, Brand told himself. The image projected against his faceplate agreed. The homer was transmitting from straight ahead. And a time projection told Brand that forty-five seconds remained until rendezvous. The Dravian corvette ought to be coming into view any time.

Running, leaping, assisted by

the reaction pack but still fighting the sluggishness of the suit, he crossed the distance to where his companions stood.

"You almost blew it," Davidson

said sarcastically.

"We all almost blew it," Brand replied, remembering what had happened in the city below.

"They ought to be in sight," Davidson said, looking up into the night sky again. "Ought to be firing retros by now."

"Ought to be," Wisse repeated quietly. "Which way would they

come?"

"From the north, I think," Brand replied, flashing a compass image on his faceplate and then looking into the sky in that direction.

"We ought to see 'em by now,"
Davidson said.

Brand read the time.

"They're due."

"More than due," Wisse said. "They're fifteen seconds late."

"Give them a chance," Davidson said. "They'll show up."

"Yeah, I know they will," Wisse half-heartedly agreed.

"Well, the Fuzzies never failed us before." Davidson's voice was almost angry.

"There's always a first time," Wisse said but apparently regretted it immediately.

He forced a laugh that did nothing to cheer Brand.

Neither Brand nor Davidson spoke. They just read the time,

looked back at the sky, read the time again.

Davidson, with reddish-blonde hair and a florid face beneath the helmet of his combat suit, was the biggest of the three men. But even he was not tall when compared with most representatives of mankind. Breakdown Heights, with a gravity of nearly one-and-a-half Gs, was noted for the strength and endurance of its natives, not their height.

Brand was shorter than Davidson, though he made up for his lack of height by the width and massiveness of his shoulders. His face, too, was wide. His eyes were deep, dark pools behind the covering of his helmet. He was the loner of the group, a man with few friends, one whose quick temper did not encourage close relationships. Now he was doing an excellent job of keeping his temper in check. He knew he had to.

Wisse was shorter still than Brand and slighter of build—but still a man whose physical strength had been nurtured by the massive, desolate homeworld of the mercenaries. His thin face could barely be seen inside his helmet.

There was growing concern on it.

"A full minute," he said. "They've never been late for a pickup before." His voice was seriously worried.

"How far behind us do you

think they were?" Davidson asked, turning to Brand.

"Ten minutes maybe," Brand replied, feeling the concern beginning to grow within himself. "Parker slowed them down when he set off that mini A-bomb in the river."

"I hope he slowed them," Wisse said.

I do. too. . .

Brand remembered that Parker himself had died in the miniature nuclear blast that had widened the river into a new lake in the center of the city. Beyond that it was all a jumble in his mind now, what happened down there in New Iowa City. But it had clearly been an ambush—the New Iowans fitted out in combat suits as good as those of the raiders, coming out of doorways, leaping from roofs, moving with the cision of trained troops, in moments surrounding the raiders who had expected to meet no real resistance at all. The New Iowans had never known anything like that before, not when the mercenaries had hit the farms and smaller towns.

SOME good men died there, he told himself. Twenty-seven of the hardest mercenaries in the galaxy had bought it before the three of them—four, but Parker had not made it all the way—fought their way out of the trap, throwing thermos and H.E.'s and

everything else they had in every direction and made it up the mountain to the plateau and the rendezvous spot.

Dammit, I wish they'd hurry, Brand told himself

"Two minutes," Davidson said, his voice a dead calm

"What's wrong with them?" Wisse demanded.

"They'll come," Brand said. He was senior man now. He ought to take command, if you could call it that. "Their timing's just off, that's all."

He looked up at the sky again. Still nothing, still an absolute nothing, unless you counted the brilliant stars of New Iowa's sky, something you didn't when you were looking for a Dravian corvette.

"Wisse," he said suddenly, "go back to the cliff and see if the farmers really are following us."

"What if the Fuzzies come?"
Wisse demanded

"If they come, we'll make them wait."

"No, you go."

Brand swung up his right arm, the one whose sleeve housed the rocket launcher. He leveled it at the chest of Wisse's suit.

"Go back and look."

Wisse did not speak but after a few moments and another search of the sky he turned and loped back toward the edge of the plateau.

"Wonder what's keeping them,"

Davidson muttered, apparently more to himself than to Brand.

"Bad timing."

"Nonsense. You ever heard of a Fuzzy being a second off? I don't like none of this."

Turning toward the plateau's edge, Brand said through the radio link, "See anything, Wisse?"

"They're coming up."

Panic was in the other man's voice.

Damn.

Brand wondered who had picked Wisse for a mercenary? He ought to be a klopak fisherman, starting to break down at the first little—and then he remembered the slaughter in the city. The picture was damned near impossible—he didn't know whether to be ashamed of the Breakdowners or whether to admire the colonists. If they really were colonists—he pondered for a moment. But if not New Iowans, who then?

"How many?" he asked.

"Can't tell," said Wisse's voice in his earphones. "Couple of dozen."

"Can't be," Davidson said.
"There couldn't have been so many of 'em left. Parker must've killed off a whole squad himself."

"Calm down and count them," Brand commanded. "They ought to be emitting enough infrared for that."

He checked the time. Five minutes. Hard to believe Dravians could be that far off schedule. "Fourteen," Wisse's voice said after a while. "I clearly count fourteen of them in combat suits."

His voice was calmer now. He had regained control of himself.

"Too many," Davidson said, "We couldn't hold 'em."

"We might have to," Brand said. "They can't be much better off than we are."

"They haven't been under full power as long as we have," Davidson replied.

Brand nodded in agreement but said, "Better check all our systems." Then to Wisse: "How far away?"

"Less than halfway up the slope," the other replied. "It'll take them a good ten minutes to get up here."

And if the Fuzzies don't show up in another ten minutes. . .

Brand let his thoughts trail off. "Come on back," he said.

While he waited for Wisse's return he made a quick read-out of his suit systems and wished he hadn't. The suit was worse off than he thought. More than half of his all-important feedback circuits had already gone to backups and a few were out altogether. Ammunition was just about gone, as was the internal air supply, though he could switch to external if things didn't get too hot. Fuel for the reaction pack was next to nothing and his power cells—well, you could expect only so much out of the thumbnail-size cells these suits

carried and he had been running hard ever since he hit the atmosphere just after the beginning of New Iowa's long night.

"How is it?" he asked David-

"The suit? Still working but I don't have much power left. Hour or two."

You're ahead of me. . .

Brand read the time. The Dravians were an impossible seven-anda-half minutes late.

Wisse was back and began to check out his own suit systems.

"You act like you're runnin' the show now, Brand," Davidson said. "How do you figure it?"

"I don't," Brand answered. "I just wait here until they come for us."

"And what if they don't come?" Wisse asked, that edge of panic returning to his voice.

Brand's voice was cold. "They will."

How can you be so damn sure?" Davidson demanded. "They ain't people. How do you know what they decided to do. Hell, man, we don't even know why we're fightin' here."

"How long have we been working for the Fuzzies?" Brand asked.

"Nearly a standard," Davidson replied.

"Have they ever failed us yet?"

"Like Wisse said-"

"They'll show! In the meantime we'd better prepare a defensive position."

"You're out of your mind," Davidson said. "Wisse counted-fourteen of 'em. We got no choice but to run." Obviously Davidson did not like to use the word but he used it. "We can carry the homer so the Fuzzies'll know where we are."

"The homer was for us," Brand said as matter-of-factly as he could "They're not using it. They've got their own systems."

"Still, they could monitor it," Wisse said.

"They said they'd pick us up here," Brand said.

"Yeah, and they said they'd do it nine minutes ago."

THE three men stood glaring at each other through the thick helmets of their combat suits. Maybe the others could run, Brand thought, for a little while. They had more reserve power than he had—their suits were in better shape. But he knew that his suit would not carry him more than a couple of kilometers. And when he did have to fight again he wanted some power for what weapons systems he had left.

"Ten minutes now," Davidson said, his voice oddly quiet. "In less than five they're going to come busting over that crest and those boys are mad. I ain't fool enough to stand around and wait for them."

"Wait five more minutes,"

Brand said, neither commanding nor begging. He no longer gave a damn what they did.

"No," Davidson said and looked to Wisse for agreement. "We're taking the homer and we're heading for those peaks over to the east. Maybe if we get there we can hold them off."

"For how long?"

"A hell of a lot longer than we could from here."

Eleven minutes. Maybe the Dravians really aren't coming. They aren't human. How do you know what they're really thinking?

During these agonizing waits, memories flashed through Brand's mind—one of the Dravians coming to Breakdown Heights and hiring a troop of mercenaries to drive the colonists from Old Earth off Brahiban III, or New Iowa, as the colonists and Earth's federation called the planet. Mercenaries prided themselves on being what they were—why not fight against humans on the side of a bunch of stubby, red, six-legged Dravians? The Fuzzies paid in hard cash and what did the men of Breakdown Heights owe New Iowa, or even Earth?

Breakdowners had fought for and against just about every sentient race in the galaxy anyway. What did a little terrorism on New Iowa matter?

But what if the Dravians had decided not to pay off?

. The eventuality seemed un-

likely. The Fuzzies didn't work that way.

The Dravians would come. They had simply been delayed.

By what?

Twelve minutes. At last Davidson spoke again.

"You comin' with us?"

"Take the homer. I'll stay here."

"You're a damn fool."

"We'll see."

Brand turned his attention away from the others and began to searching for something that resembled a defensive position. He saw a few trees and a few boulders—and up ahead about half a kilometer or so was a sizable depression in the ground, as well sheltered as anything on the plateau.

"Brand," Davidson said suddenly after he had picked up the homing transmitter and tucked it under his arm. "Come with us. You don't stand a chance here."

"I don't have power enough to make it halfway to those peaks of yours," he said slowly, bitterly. "I'm better off here."

Thirteen minutes. The combatsuited and deadly furious New Iowans would be coming over the crest any time now.

"I guess you know what you're doing," Davidson said.

"I hope you do," Brand replied.

Brand could hear Davidson's snort through the earphones of his helmet but none of the three men spoke again.

TURNING his back on his companions, Brand bit down on the switch that broke him from the radio link and, as quickly as he could, crossed the distance to the depression. By the time he reached it and turned to look back, Davidson and Wisse had vanished, moving toward the peaks some kilometers away. He wondered if they would make it and what they would do when they got there.

Settling down in what protection the broken earth, stone and few trees offered, he threw one more glance skyward. Nothing. No bright movement there to indicate the arrival of the Dravians.

His gaze dropped to the edge of the plateau, where the fourteen New Iowans would soon be arriving.

That some people might consider this a bad way to die never entered his mind. His father and his father before him had died on alien worlds, fighting other people's battles. He had always expected to go that way, too. But he had hoped for a few more visits to Breman's Planet before that time came. Well, he could remember the last visit—and that had been one hell of a time.

He shifted the energy rifle from his backpack, fitted it into the suit's shoulder socket, checked the weapon's internal power and was gratified to see that it still had a little charge. He could draw from his suit cells for the rifle but decided against it. He would need that power for other things.

SIGHTING the weapon along the plateau's horizon, he waited.

And while he waited he could not help but wonder about the sincerity of the aliens for whom he worked. They had never before given him any reason to doubt them. Now he could only wait a little longer, give them the benefit of his doubts and hope they would show up soon.

Then he saw, through his night visor, the infrared glow of a man's warm body and the heat of an operating combat suit. He felt no recoil as the energy rifle fired. The weapon's brilliant blaze was only partially dimmed by the night visor and the polarization of the helmet's filters. For an instant the combat-suited figure blazed with the same light—then exploded.

One down. Brand flashed a time reading on the inside of his helmet. The Fuzzies were a full fifteen minutes late.

No further movement came along the horizon for a while. When it did come it was hard to see, even with the night visor. The New Iowans had cut back on the infrared emission of their suits—damned good suits for a bunch of farmers.

They were almost invisible when they topped the crest, six or seven of them at once, and rushed forward. Brand depressed the firing stud of the rifle, made a quick sweep across his field of fire and saw at least one man fall backward down the slope, his combat suit exploding flames. The others, though, fell forward, their arms arching above their heads as, suit-assisted, they threw.

Grenades shattered the earth and rocks of the plateau.

The colonists had had no time to get his position. They were throwing blind.

Brand licked the dryness of his lips, pulled at his suit's water nipple.

A dozen meters or less to his left a grenade exploded, showering him with broken stone, shaking the earth under him,

Brand replied in kind but he did not have to throw. A tube slid up over his left shoulder. He guided the grenade launcher with his left hand, aiming it, then triggering it to throw out its two remaining bombs. And he was not firing blindly. He had a damned good idea of where the colonists were.

The next explosions were more distant as his grenades fell near the plateau's edge. He thought he saw a twisted figure fly into the air but he was not sure, nor did he waste time concerning himself with it. He had too much to do.

The remaining colonists had crossed the crest. They had their own energy rifles, maybe ten or

twelve of them. More than half were firing—and now they knew where he was.

His rifle blazed. He caught a rising man full in its glare and the man died in the flames.

Suddenly the colonists' weapons became still as an enormously amplified voice called out, "Cease firing."

Now what? Brand, too, stilled his weapon.

"Mercenary," the voice called out, "listen to me. This is Lieutenant Hamid of the Federation Marines."

Federation troops? Brand no longer wondered why his opposition had not behaved like farmers and clerks. By now he had pinpointed the exact location of the loud speaker. He aimed the rifle.

"Surrender, you fool," the marines officer's voice boomed across the plateau. "You're fighting your own kind. You don't know what you've gotten into. The Dravians are—"

But by now Brand had pressed the firing stud and the marine lieutenant would never speak another word. He died in an exploding combat suit.

Brand fired again, sweeping across the plateau with the energy rifle until he saw its blaze trickle down to a pale light, then fade out, its charge exhausted.

He shrugged, snapped the weapon from its socket, ignored its fall and launched a homing rocket from the sleeve of his right arm.

What were Federation Marines doing in this? He wondered. New Iowa was not in the federation.

SOMETHING exploded beside him, lifting him bodily into the air, throwing him back to the tortured earth. He fell on his left shoulder, his teeth grating in agony.

He rolled over and came up to his knees, trying to orient himself, and then, snapping back the night visor, he turned his eyes upward in one last frantic sweep of the sky in the hope that—there it was, a moving spot of light, too slow to be a meteor, coming down, still slowing.

He turned back toward his attackers—there seemed to be more than Wisse had counted—feeling the growing sluggishness of his suit, the growing weight of a left arm whose feedback circuits were hardly working. He tried to find the rendezvous spot, recognized it on the almost featureless plateau. The marines had not yet reached it.

He took no time to count his remaining rockets. He merely loosed them in a steady stream toward the marines until the magazine was empty and the plateau was a blaze of exploding missiles. For a few instants the marines were disorganized.

Brand came erect slowly. His suit was definitely failing. Circuits

were damaged. Power was running low. Feedback was almost unresponsive at times. But he did get to his feet and he started running, snatching the unused slugthrowing pistol from his hip and firing explosive shells before him as he ran.

The marines took too little time to recover, to aim at the running, leaping figure. An energy beam laced the earth before him, setting grass aflame. He jetted over it. Another beam lashed into his backpack, where something exploded. His gyros failed. He tumbled in mid-air, fell crashing to the earth, his back burned and blistered, his lips broken against the faceplate of the helmet.

He staggered to his feet, somewhere dimly between consciousness and unconsciousness. He stumbled, regained his footing, ran.

Now the flame in the sky had become a distinct object, a short, stubby, wingless Dravian corvette, and its crew had seen the battle below. Energy cannons, one from each side of the ship, fired toward the marines.

Brand sighed a grateful sob and fell to his knees.

One, two—perhaps a dozen shots were sent toward the corvette before the marines broke in panic, fell back toward the edge of the plateau. They knew they were not up to taking on the ship's cannon.

Somehow Brand was on his feet again. He fired a few meaningless shots after them. Then he awkwardly ran on toward the landing spot.

The corvette's final descent rockets fired. The ship hovered for a moment, then slowly, gently lowered itself to the ground.

It had hardly touched down when Brand reached its side, paused, searched for the air lock. He found it as it began to open. He staggered in and the air cycle began.

A single Dravian was waiting for him inside.

If a Terran mammal had tried to look like a spider but had forgotten to add the final two legs, it might have somewhat resembled Dravian—but not much. roughly egg-shaped body mounted on six legs, each of which ended in an appendage that could function either as a foot or a hand as the occasion required. Body and legs were covered with a short, reddish-bronze hair that rippled constantly, ventilating the skin below. Dravian features, half a dozen eyes, an equal number of nostrils, a wide, slack mouth, fringed hearing organs, were allfixed in the forward, smaller end of the egg. These were what faced Brand and spoke to him in astonishingly Anglo-Terran.

"Where are the others?" the Dravian asked.

It took a few moments for the

words to sink in. The suit's audio receptors were working fine. Brand's mind was not.

"Dead, all but two of them," he replied at last, realizing how much that last sprint had taken from him.
"And the other two?"

"Up in the hills," Brand told him. "They were afraid you wouldn't come. You were late."

He could not read Dravian symbols, so he could not determine the alien's rank from the badges he wore on his back.

"Regrettable but unavoidable," the Dravian said. "Come with me."

The Dravian led him down the passageway to the area of the ship that had been adapted for human passengers.

"Go in," the Dravian said. "Administer to yourself and change clothing. The captain will wish to see you at once."

"Okay," Brand said, fighting the pain of his burned back and the fatigue that was washing over his body. "But about the others—"

"Do not concern yourself with them," the Dravian said and gent² ly pushed him into the man-size airlock that led into the empty human quarters.

ESS than ten minutes later Brand was out of the combat suit, had been treated by an automedic programed for humans and had dressed himself in thermal coveralls. He slipped oxygen tanks

and a cooler onto his back, a fishbowl helmet over his head and stepped back into the airlock, feeling a little more than half alive..

What bothered him most as he cycled back out through the air lock and into the corridor where the Dravian waited for him was the fact that the corvette was in flight and already out of New Iowa's atmosphere. He had felt the ship lift while he was changing, had heard the whistle of air along the hull as it thinned into the vacuum of space.

Stepping out of the lock, he could not help but feel a moment of almost irrational anger.

"Aren't you going to pick up my companions?" he demanded, wondering why he cared. They had deserted him.

"We have no time," the Dravian replied, pointing down the corridor and gesturing for Brand to walk in front of him. "We have a rendezvous to keep."

"They'll be killed down.there," Brand said, annoyed at himself.

"We are sorry," the Dravian said in such a way that Brand knew there was no point in discussing it further.

A silence held between Brand and the Fuzzy until they reached a hatch that he was directed to enter alone. Ducking to pass through the hatch, Brand found himself in the suite of an alien whom he recognized, if only from the numer-

(Please turn to page 143)

FRUIT OF THE VINE



NOT that it made any difference but it was daylight. He became aware of the familiar numbness in his legs and when his vision partially cleared he could see that snowflakes were gathering on his pants legs. His neck jerked

and his hands flailed before the right impulse reached his knees and drew his feet up under him. A warm body beside him grumbled at the disturbance and struck out in dumb protest.

He tried to twist and turn away

the numbness, but the effort brought only pain. His hands were, useless and seemed to maintain an uncontrollable position in front of his chest, wrists limply touching. There was no longer a sense of hunger in him and he did not know how desperately he needed food. There was only an aching urge to find a dark corner.

Stumbling from the doorway, he half fell and half crawled across the sidewalk to the gutter. Using the cars and parking meters for support, he made his way slowly along the street, trying to find a spot. In final desperation he clung to a pole, gave up and relaxed. And soon, in the freezing snowblown air, he wished he hadn't.

A trash receptacle furnished him with newspapers he wadded up and shoved down his trousers to hold away the cloth. He stuck the others into his coat as best he could for what warmth they gave and staggered off. His body was still numb and his chest hurt. Trembling, he waited for the inevitable.

Yet within him still was desire for warmth, for hope, for life.

CAPTAIN FOSTER slipped the clearance papers into the sleeve pocket of his flight tunic and left through the air-barrier exit of Spaceport Operations. He picked his way among the maze of signs and ramp passages until he found the hallway leading to the Port Controller's office. As he ap-

proached a turn in the corridor his nostrils were stung by the sickening sweet odor of wine, quickly followed by a more characteristic odor. Space bums, he thought and set his features to meet them.

Turning the corner, Foster had to catch himself in midstride to avoid falling among them. They were scattered about the floor in an incredible tangle, making it impossible for him to pass. With a glance at their multicolored silks, Foster guessed there were from eight to ten of them.

He swung a heavy boot toward the nearest body.

"Get out of my way, damn it."

His foot was caught in its flight so abruptly that he was forced to grab the wall to remain erect. A seven-inch throwing knife quivered so close to the other boot that the blade nicked the sole. The holder of Foster's foot slowly raised his eyelids studying all of Foster until their eyes met.

"Do that again, off-worlder, and without doubt you'll leave here on a stretcher."

The foot was thrown back like a wad of paper and the captain staggered to regain his balance and composure. The man retrieved his knife with deliberate motions and retained his blocking position.

Breaking the deadly silence, The Speaker moved away from the wall.

"Ah, you'll have to forgive The Gladiator, good Captain. His man-

ner is not polished for men of high station."

"What do you want from me?" Foster asked indignantly.

The Speaker bowed from the waist and waved his arm in a sweeping gesture at the men who had gotten to their feet during the exchange.

"Passage for an Entertainer, Captain."

Foster eyed the three figures disdainfully and started to refuse. A bone-crushing grip on his ankle changed his mind.

"All right, let's see what you've got." The pressure eased.

"Come forward, Paddy," said The Speaker and one of the Entertainers stepped into the center of the corridor.

He reached inside of his harlequin-marked tunic and deftly produced five differently colored balls. As each ball spun into motion it was readily apparent that Paddy was a master juggler. The balls flew between his hands only briefly before they burst into flames. When the last globe had ignited Paddy moved control to one hand. The walls reflected a blur of multicolored fire for several seconds before he pulled the balls in. As each stopped its motion the flames winked out.

"Marvelous," said Foster, genuinely impressed. "But the Armeter is a free-fall ship. Of what use would a juggler be to me or my men?" The Speaker nodded thoughtful agreement.

"You're right, of course, Captain. I should have thought of it myself. Well, here we have The Searcher—" indicating another Entertainer. "He's a mentalist."

The Searcher remained leaning against the wall and Foster eyed the greenish cast of his skin with prejudice. He had no use for Butans or their poison planet.

"Think of a card, Captain," said The Searcher.

Foster closed his eyelids slowly, indicating that he had done so.

"The eight of stars," said The Searcher confidently.

"The nine of hearts," corrected Foster and then, turning to The Speaker: "He needs more practice. Anything else?"

"Only Tokay, our beloved minstrel." The Speaker smiled thinly.

A small, gnomelike man stepped forward, swinging down a guitar from behind his back. He nodded to Foster as his fingers quickly checked the tune of the instrument. Tokay was the leader of the group and The Planter of the seeds. The mission depended on his being aboard the starship Armeter when she lifted. The Searcher moved into Foster's mind and waited for Tokay to begin his song.

Foster listened automatically.

"All right, that's enough. You'll do."

Foster didn't care for the music himself but his crew was con-

stantly trying to sing some ribald lyric or other and now a change of sound would do them all good. He was not even slightly aware of The Searcher's guidance or withdrawal.

Tokay bowed. "Thank you."

"The ship is on pad twelve and we leave within the hour. Be there. I won't wait. Now, if you'll excuse me, I must see the Controller." The pressure on his ankle increased again as he started to leave. "What?" he asked, looking about.

"The ramp pass, good Captain," said The Speaker.

"Oh."

Foster swore under his breath. He took out a pad of paper and scribbled on it. He pushed his command ring against the pad and, tearing off a sheet, handed it to Tokay. The grip on his ankle broke and the group of Entertainers parted. The captain hastened along the corridor without looking back.

The Speaker put his hand on Tokay's shoulder as they watched the captain walk away.

"I wish it could have been someone else. Be careful of him, Tokay. He's a bad one."

Tokay smiled and his space-wizened wrinkles cracked with the effort.

"I'll stay out of his way. I don't take kindly to being kicked."

The Gladiator grunted and wiped his palms across his garment.

N HOUR later the Entertainers lay against the outside wall of the Operations building, watching the Armeter climb through the daylight black sky on a tail of ion hell. Small tornadoes of sand and grit whirled about as the thunderous sound vibrated their bodies and threatened to collapse their lungs. And then, in diminishing squares, the ship was gone except for a faint point of light.

Paddy pulled from his bottle and said excitedly, "There she goes—the last world. It's been a long time but it was worth the

wait."

Some sighed and many made sounds of agreement. The Speaker shook his head and disagreed gently.

"I wonder if anything is ever really over. There will always be another world. And if, by some chance, there isn't—there will always be another cause. It seems to be part of the curse of existing that man must forever search out a cause and dedicate himself to it."

The Searcher had been following the tiny, receding point of light high above the Spaceport. As it dimmed out, the scene gradually changed for the Entertainers. Warm earth supported their bodies and a hot sun burned down on them. A gentle breeze stirred the heart-shaped leaves that spread out, row upon row, across the easy rolling hills. Each man

reacted to the vision in his own way and a casual passerby, staring at the unfocusing eyes, might have wondered why men would degrade themselves to such a level.

A week passed before one of the sleek, silver starships of the Federal Police Agency landed.

NO ONE was willing to admit to seeing him as they walked by. Their eyes were open and focusing and still they parted around him like waves meeting a coral reef. He would lurch from one to another, trying to beg for money. but they would only quickly change their steps and dodge him. And usually, when his frustration had mounted to unbearable limits. he would make the mistake of grabbing a passing arm. He would be spun away or knocked down. Often, then, he would sit and cry as the masses flowed above him and left him alone with his need.

A feeling of something in his hand. Paper. Sometimes a dollar. Once a five. An elderly lady talking to ears that could not separate the words but understood the tone. She was telling him to use the money for food, to clean up and to get hold of himself. He would nod continuously as the drumming voice went on and then he would try to find the person's face so he could stare into it with what he hoped was sincerity.

And say, over and over, "Bless you, ma'am, bless you."

She would move away, shaking her head to clear her memory and her conscience as she left him to the endless stream of life. Somehow he would stagger erect, clenching both hands, since he could not be sure which held the dollar. His eyes magnetically sought out the large and burning signs of hope.

LIQUOR, WINE, BEER, DRUGS...

All would do.

They no longer gave him change or, if they did, he never picked it up. The dollar was always exchanged for a bottle and an urgent hand that ushered him from the store. He was unable to open the bottles, so he would break off the necks and drink from the jagged edges. His lips were heavily scarred and scabbed but for his purposes it didn't matter.

Clutching the bottle to himself, he sought out a place where he could drink it alone. Fortunately companionship wasn't one of his problems.

THE smuggling of native fauna or flora between any of the forty-nine worlds of the Federation was a capital crime. The dominant philosophy of peaceful coexistence was based on a mutual need for varying produce, interworld commerce. The Federation's Commerce Department monitored and duplicated all records of transactions, subsidies,

trends and emergency parities. Its police enforced the rules.

The Spaceports were little more than huge warehouse and packaging complexes where imported products were either disinfected or sterilized and repackaged for in-planet shipping. Perishable items were inspected and sealed at the port of shipment.

The immensity of the system made it awkward to police, since the computers were programed to extract corporate smugglings for profit on a high-yield basis. The efforts of the Entertainers took years to detect. The time of detection was further compounded in that the yield of the first vines came years after the initial planting occurred and required several more years before the fledgling industries reached the point of being able to export their products.

After establishing the case, the Commerce Department released its jurisdiction to the Federal Police Agency. The FPA had its own problems in that the case lacked reason or motive. Years passed before the establishment of two crucial facts allowed the FPA to pursue the criminals.

First, all the smuggled vines were of the Earth varieties. There were nine planets in the Federation that possessed native grapes. One, Butus 3, was poisonous to all but the natives. All the smuggled grapes were of the Emperor,

Concord, Ribier and Catawba strains. The planting pattern was random. Muscat appeared on one planet.

Secondly, the age of the vines, the size of the vineyards and the development of the industries gave the FPA its timetable. A search for a profit motive yielded nothing. The seeding was done more or less in a circle tangential to Earth. The circle was twenty years old and nearing completion. The FPA sent field teams to the last three worlds and hoped they had not missed the boat.

The effort was not merely one of saving face and punishing the law-breakers. Planetary laws were very strict about off-world smuggling but very lenient, if extant, concerning on-world smuggling. Each world would insist that it had developed or discovered the smuggled item and the FPA was powerless to destroy the crop or animals unless a court conviction established their case. So the vines grew and flourished while the FPA hunted and waited.

AFTER three weeks in space, when Phobus I appeared on the Armeter's wrap-warning screen Captain Foster grinned from ear to ear. The music on board was driving him crazy. It wouldn't have been so bad except that the bum kept singing the same song over and over.

Foster activated his intercom to his officers' quarters.

"Phobus on scan. Front and center."

He heard a hurried, "Aye-aye —" and muffled sounds of scurrying feet.

He switched off the communicator and prepared to set the ship down.

Phobus was a cool planet by most standards. Its vegetation reflected purplish hues as the Armeter descended. It was a sandy world and lacked the huge oceans of water common to most Federation planets. But its water table was high and its solar characteristics assured a constant season.

Once the Armeter was on pad and clamped in place, Foster directed Tokay to meet him at the portal and personally escorted the little Entertainer from the ship. The familiar green and blue uniform of a Port Authority Inspector waited at the bottom of the glide for them to descend. The plainly dressed man beside the inspector also waited. Badges over each breast pocket identified him as an FPA agent.

At the bottom of the ramp, Foster gave Tokay a shove toward the Inspector.

"Here's one you can have with my blessings."

"Hey, watch it, off-worlder," said Tokay as he stumbled to regain his balance. Turning to the inspector: "Where's my pals?"

Seeing that Tokay was an Entertainer, the inspector returned his attention to the board of invoice sheets and hooked a thumb over one shoulder toward a building marked Port Warehouse, Ramp E. Tokay flipped his hand from his forehead in a gesture of acknowledgment and, as he turned to leave, made a more explicit finger motion to Foster.

Entertainers were never checked. They only carried what was on their backs and all seemed to have a peculiar aversion to being decontaminated, so that they never attempted to leave the Ports. People readily avoided their company and the Authority considered them minimum risks.

Tokay felt some justification for the jerk in his chest when the FPA agent said, "Just a minute, please."

Tokay raised an eyebrow and turned to face a scanner being used on his back.

"Yes?"

The agent motioned to the guitar. "Let me see that for a moment." Tokay swung the instrument casually from his shoulder and handed it over. The agent ran his finger along the seams of the instrument, then drew a telescoping probe from his pocket. He pushed the tool between the strings and into the well and soon was tapping at two partitions on both sides of the lower half of the sound box. "What's in these?"

"Bottles," answered Tokay without hesitation.

The agent handed back the guitar.

"Open it up."

Tokay turned the guitar over and gently pressed the spine just beneath the well. The hinged lids of the compartments sprang open, exposing two long-necked and empty bottles. The agent withdrew them and checked both for Federation Tax and Export stamps before setting them aside.

With an amused smile he asked, "Doesn't that give you bad resonance?"

"Not so much. The inner walls are just plywood that fall open when the compartment is empty. This spring on the back is strong enough to hold the wood together so tightly that the vibrations are not interrupted."

Tokay snapped the lids shut to a resounding hum.

"Ingenious. Now, step back, please." Tokay stepped back, holding his arms out to their extremes. When he turned full circle he kept his body between the scanner and the guitar. The agent nodded. "All right. You can go."

"What about my bottles?" asked

Tokay.

"Confiscated," answered the

agent sternly.

Tokay decided not to push it and hurried off. As he left he could hear the agent explaining to the inspector and Foster. "Never met one that didn't have a bottle on him somewhere. They fill them up again with God knows what kind of poison when they can't buy wine—and that's a crime, you know."

MIDWAY across the ramp a Butan moved out of nowhere and fell in beside the little Entertainer.

"I thought you were going to need help. I'm Serteze, The Searcher here."

"It was close. I'm Tokay, The Planter. We haven't met before, have we?"

"No. I was recruited after Garm was killed in a warpburn."

Tokay swallowed.

"Oh-I hadn't heard."

He and Garm had planted nine worlds together and had shared many drinks.

"Sorry," said The Searcher. "I

thought you had heard."

Tokay tried to shake away his feeling of grief. He thought of the FPA and pushed Garm out of his mind. The Searcher put a block on it that would pass after Tokay slept and eased out carefully. It was forbidden to enter the mind of an Entertainer.

"Where did the police come from?"

They reached the wall of the warehouse. Serteze indicated a direction.

He said, "The FPA has been all over this place for several

weeks now. They've drugged everyone in the Port except us. It's about the vines but I haven't been able to pick up anything positive. I think they're still pretty much in the dark. I doubt if they have any real suspects or even a clue as to where to look."

The Searcher's fingers moved in front of him in smooth scanning patterns as he walked.

"They seem to be a little late, don't they?" said Tokay with a broad and beaming smile.

"That's the beauty of it." The Searcher smiled back as he stopped before a metal door. "Here we are."

Tokay stepped through the doorway into a narrow hallway that opened into a reactor cooling chamber of pipes and valves. Beside one of the huge generators a group of Entertainers waited. The Searcher waved Tokay forward and stayed back to feel out the area around the hallway.

Stepping forward, Tokay said, "I am Tokay, The Planter."

The group beamed and someone handed Tokay a chilled bottle.

"Fruit of the vine, Planter?"

The Searcher, satisfied that they had not been followed, joined the group in time to make the end of the second pass. Tokay knew several of the faces and had worked with them before on other worlds. But attrition had taken its toll and there were several new faces. Introductions were swift. The ur-

gent press of affairs was upon all.

TOKAY expressed the desire to Let be well on his way before dawn. He ate hurriedly, then inspected the seeds. A fret was removed from the middle of the guitar neck, which broke neatly in half, revealing hollows filled with little cellophane bags full of seeds. Tokay inspected each packet for mold while Serteze described the conditions of the land he had found only two hundred miles from the Spaceport. Dangerously close—but since this was the last planting it really matter. Native clothes were produced, along with identification seals and a Port pass. Tokay changed as he listened to the intense briefing. The farmers who would host him would have a vehicle waiting five miles south of the Port to transport him to the farm.

Tokay reassembled the neck of the guitar, checked the tune of the instrument and reset the strings.

Goodbyes were brief and the little musician hurried off with. The Searcher, eager to finish his mission.

As the pair approached the huge, triple-trapped gateway of the Port, Serteze picked up the minds of the guards and locked them down. With a pat on the back, he sent Tokay scurrying among them. Alarms broke loose with the intensity of sound of a

starship's takeoff and The Searcher had to bear down extremely hard to hold the Port personnel's thoughts to absolute tranquillity.

The guards continued to march their posts without concern and were unable to acknowledge the flashing red and blue alarm lights and the noise. Tokay scampered over a distant hill as the first emergency vehicles rolled up to reinforce the gate. The Searcher relaxed and dropped a cloak over himself and calmly walked away from the scene of confusion.

IT WAS still snowing—or maybe it was snowing again. A police car rolled by and the tires made a crushing, sucking sound against the ice. He was no longer bothered by the police. They only took in the ones who could sober up and he had long since passed that stage. So they left him alone and called him Charlie Three. He ignored them now but they watched him just the same.

The world was two-dimensional to him now. Everything was something that could be touched or it did not exist. The fear of falling was gone from him. He knew no panic as he pitched forward and bounced against the pavement. He knew the surface would support his body while he waited for the pain to subside.

The snow was cool and soothing against his forehead. He felt hot even though the ragged cotton suit

was his only clothing in the freezing air. Breathing hurt and the effort seemed to make him even shorter of breath. Eventually he became aware that he was sick with a new and different type of sickness. He could feel a force welling up inside that pushed him to try to get help.

He staggered to his feet and stumbled along in the snow, repeating in an unbroken litany, "Help me, please—oh, God, it hurts. Help me, please, oh, God—"

It had been dark a very long time and no one was on the streets to hear the plea. No one to help. No one could so it really didn't matter that no one would.

WHEN a planting was finished Tokay would wait outside the perimeter of the Port for night to fall and for The Searcher to scan his presence. But this was the last planting and Tokay was careless to the point of walking up to the gate carrying his guitar. The guards turned to watch his approach. Their attention was not normal and the chilling realization that he had made a mistake broke upon The Planter. He licked his lips, swallowed his heart and bolted.

The calls to halt were probably given but Tokay was running for his life and could hear nothing but the blood pounding in his ears. A beam grazed his hip and flung him to the ground in agony.

The guards were upon him almost at once and, as he was hoisted to his feet, he felt the bite of a hypo in his shoulder. The will to struggle went out of him. He was shoved into the sidecar. Tokay did not feel himself pass out.

Both Searchers waited for the scooter to arrive at FPA head-quarters.

Major Porter switched off the recorder as Tokay's voice began to stammer and falter. The drug was wearing off and the major waited patiently. He had all the information he needed for a conviction of the Entertainers. However, he did not have the whole truth. His visitors had carefully seen to that.

Tokay's vision came back in flashes and he knew his eyes had been open. He recognized the FPA agent he had met on arrival and, remembering the shot in his arm, knew he had been drugged. His face showed panic when he saw the recorder.

Porter reached forward and patted the device.

"It's all here, Planter. Sorry."

Tokay tried to shake off the scene but it remained stronger than ever. Porter had been drugged many times to familiarize him with the effects on subjects he interrogated.

He persisted: "You almost got away with it."

"The seeds are planted. What happens to me doesn't matter too much," Tokay said.

"You're both noble and stupid. Once we take this evidence to court we'll have the authority to destroy those plants of yours and you'll be disintegrated along with your friends."

"And it only took you twenty years to catch up," said Tokay. "What gave us away?"

Porter's smile passed. He nodded several times.

"I'd like to be able to say that we outsmarted you but we didn't. Embarrassing, really. It was so obvious that we overlooked you completely. We had a party one evening for FPA personnel. I looked for you to play for us, disovered your absence and then the whole thing came crashing down on me. Fate beat you, Planternot the FPA." There was an obvious tone of admiration in the agent's voice and Tokay fought back an impulse to warm to the man. He looked at the ceiling, shrugged and made no sound. "Tell me one thing, Planter," Porter continued. "Why did you do it? Why spend twenty years of your life planting grape vines? Knowing you'd be caught-knowing the penalty was death-what was in it for you?"

"You wouldn't understand. Your kind never does," Tokay answered slowly.

"Try me."

Tokay met Porter's gaze and held it.

"All right. I'll try. The reasons

are subjective and they require feeling to be understood. A man of law can't have much feeling."

It was Porter's turn to stare silently and wait. Tokay rubbed his hands together in concentration, trying to find words.

"Man evolved as a part of the natural order of things. And everything had a balance, a design, a reason it was as it should be. Came civilization with its society and its law. Man learned to own things -even other men. He became greedy and possessive. Some of us still believe no one can own anything without upsetting nature's balance. Own land? Own water or air or animals—and even whole worlds? We believe that each man has a born need for and a right to life's gifts, all of them. Do you see what I'm trying to say?"

Porter nodded. "Sure. You're saying that in matters dealing with natural resources man is above the law. Isn't that about it?"

Tokay raised his hands in frustration and sank backward in his chair. "In your language—and above some laws. I'm saying that a law that forbids free exchange of animals and plants solely for purposes, of commerce is wrong. The law in itself is a crime against man. We have been freeing your worlds."

The agent smiled.

"Crime is a word of law, Planter. It cannot be that a law is a crime—that would be a paradox.

The laws of trade and commerce in our system have prevented war and negating them is your crime against man. You have—in a minor way to be sure—threatened the peace and must pay."

Tokay's fist slammed down on the agent's desk. His eyes flashed.

He yelled, "Greed brings war. Inequality brings war. Helplessness and hopelessness bring war. And by damn, Porter, idiots bring war."

"A simple fanatic, that's all you are. A simple fanatic, And I thought you had a reason for all this." Porter shook his head. "In your small way, Planter, you have failed," he said with finality and reached to call his guards.

He did not see the paperweight slide from his desk and ascend behind his back. The sudden motion almost sparked a cry of warning from the startled Tokay but he managed to bite it off.

The weapon descended and Porter pitched out across his desk top. A blood-speckled bruise appeared on his forehead. Serteze and Garm appeared simultaneously.

"Garm—" whispered Tokay in disbelief.

"The reports of the death of Garm have been greatly exaggerated as they say." The Seacher grinned as he removed the recorder's capsule and slipped it into his tunic.

(Please turn to page 145)



J. R. PIERCE

THE Prime Minister glanced at his appointment schedule and then at the visitor his secretary conducted into his office. Here was a soldier, he thought. Tall, strong, young and obviously enthusiastic.

"General Devlin, D. I. A., Mr.

Prime Minister." The secretary introduced the visitor and withdrew.

"Special briefing on the Panda War, Mr. Prime Minister," Devlin said as they shook hands.

The hellburn of Devlin's hand-

some features looked very much like suntan and the initials of his office, Demon In Attendance, coincided happily with those of the Defense Intelligence Agency.

"You may call me 'sir,' son," the Prime Minister told Devlin as they sat down. "We're all soldiers in this war." He looked gravely at Devlin, his features taking on a kindly, sorrowful cast. "Bad news, is it?"

"A troubled situation, sir," Devlin replied, "but full of opportunity. You'll want to hear the details first. Colonel MacReady will brief you on the military situation."

Devlin turned to the office door and the Prime Minister followed his gaze.

The spruce, middle-aged figure in the doorway had not passed the secretary. It was a phantasm. Hell does not have demons in unlimited supply. The chimeras which threaten saints and the succubi who tempt them are largely illusory. They are the product at once of a demon's art and of the imagination of the tempted.

In their place, phantasmagoria are more than a substitute for demons—they are a flexible weapon of great subtlety. Thus, "Colonel MacReady" told the Prime Minister what Devlin felt it necessary for him to hear but, beyond that, responded to the Prime Minister's knowledge and fears. Never before had a briefing spoken so well to

his particular condition of mind.

The rapport persisted and strengthened as other phantasms told the Prime Minister what he expected to hear concerning the villages, the provincial administrations, the government in Harum, the Panda capital, the political situation and the exact status of the growing force of military advisors.

The last of the phantasms left him with a forbidding picture.

"So, the villages—" the Prime Minister began.

"Are dominated by the enemy," Devlin said.

"The provincial administra-

"Are collecting taxes and ignoring both the enemy and the central government."

"The strong points—"

"Are illusory."

"And the government we have supported to avoid this—"

"Is determined but incapable of acting and beset by an unsympathetic majority," Devlin concluded. "But their failure need not be our failure—or the failure of the Pandas."

A light of expectant eagerness broke through the Prime Minister's expression of soulful resignation.

"What more do you propose?" he asked sharply.

"Sir, do we support the present Panda government or the cause of the people?" Devlin asked.

"We've always told Dang that he has our support," the Prime Minister said. "I sort of like him because he's tough. But we've given him enough supplies to finish off anyone who opposes him anywhere. And they turn up in the hands of the enemy." The expression of benevolent concern returned to the face of the Prime Minister. "Whatever we have told Dang—our duty is of course to the Pandas," he said. "Anyone can see—will see—that our promises were meant in that sense. The Pandas must not suffer. Certainly not because of any commitments given to an ineffective government on their behalf. As for Dang—"

"If we do no more for Dang—" Devlin said.

"Someone will." the Prime Minister concluded, shaking his head sadly.

"And sir," Devlin added, "giving our support to the unsympathetic majority will show that we act neither through religious prejudice nor through selfish bias."

The Prime Minister said, "There are good men of all faiths. I suppose that the Foreign Office will tell me the names of the new government?"

"I suppose so, sir," Devlin answered, rising to go.

The Prime Minister rose also, put his hand on Devlin's shoulder and walked to the door with him.

"Mine is a heavy burden," he said.

"I know it is, sir," Devlin agreed, quietly and solemnly.

"And a man needs all the support—loyal support—that comes his way. You've lightened my burden today." A note of campaigning came into his voice. "We need everyone's help," he said, smiling encouragingly at Devlin. "It's up to every loyal man to do his part. We need consensus. We need support. We need votes. Every friend. Every organization. You work and your friends, your associates work, I'm sure."

"We're all for you, every one," Devlin assured him.

The Prime Minister gripped Devlin's shoulder, released it and grasped his hand.

"You're the kind we need," he

said. "I'll see you again?"

"Many times, I hope, sir," Devlin replied.

"Any time, any time-" the Prime Minister told him.

He returned to his desk and looked at the next name on his schedule.

COMEHOW getting rid of Dang did not resolve the Panda situation. When Devlin came to the Prime Minister's office again several Panda governments had succeeded one another and the military advisors had become a fighting army.

He greeted Devlin warmly-if sadly—and listened to the precise briefings of the phantasms with gloomy appreciation. Then he addressed Devlin expectantly.

"The government—" he said.

"Is ineffective," Devlin replied.

"The people-"

"The people are harassed by the enemy and they suffer when we attack the enemy in their midst," Devlin told him.

"The enemy-"

"Is effective and elusive, sir."

A pregnant pause ensued.

"Sir, the enemy must be countered in his homeland," Devlin proposed. "We must stop the flow of supplies. It's the only way to spare our troops and our Pandas."

"The war hasn't been carried outside of Panda," mused the Prime Minister. "Would our peo-

ple accept it if we did?"

"But the enemy has extended the war, sir," Devlin insisted.

"How's that?" asked the Prime Minister alertly.

"He attacked us on the high seas," Devlin insisted.

"Oh, yes," the Prime Minister agreed. "Something like that did happen. We sank two of his boats. Well, he extended the war. Let him suffer the consequences. I don't suppose that anyone would try a sneak attack here?"

"Not a chance, sir."

"But I do suppose that the enemy's cities and towns will be destroyed—"

"They will be," Devlin assured him, "incidental to the destruction of his supply lines." "It hurts me that any human life must be lost," the Prime Minister said sadly. "But the wicked bring destruction on themselves. 'He who lives by the sword—'" he quoted grimly.

"Will die by the sword."

"I wonder if the Panda religion teaches that?" the Prime Minister said. "I bear no ill will toward the enemy."

Devlin nodded seriously.

"Who will die," the Prime Minister continued, with an expression of pained righteousness.

Devlin nodded again.

"That our poor Pandas may be free," the Prime Minister concluded.

They both sat quietly for a moment. The Prime Minister continued to look gravely benevolent.

"I can always use loyal help," the Prime Minister reminded Devlin as he left.

Devlin admired the Prime Minister's appearance on TV the following week, when he explained the new phase of the Panda war. The message carried a nation with it but the enemy remained unconvinced. Some time later Devlin was back again. The briefing went as before. At its end the Prime Minister spoke.

"The bombing-"

"Is as destructive as we expected but is less effective than it would have been in a civilized country," Devlin told him.

"The government—"

"Still cannot carry the burden of the war."

"The villages—"

"Are terrorized into supplying the enemy."

The Prime Minister looked both sadly resigned and warily expectant.

"Our obligation is not to any Panda government," Devlin said.

"No," the Prime Minister said. "We have agreed on that."

"Nor Panda goods or territory," Devlin continued.

The Prime Minister nodded.

"But to the future welfare of the Pandas themselves," Devlin said.

The Prime Minister waited silently.

"We can save the Pandas and destroy the resources of the enemy," Devlin asserted.

"How?" the Prime Minister asked eagerly.

"By razing the Pandas villages and destroying their fields and livestock," Devlin pronounced.

"I see," the Prime Minister said approvingly. "Instead of the Pandas supporting the enemy, we will support the Pandas. We will house those poor refugees of war in model camps—"

"In model resettlement areas, eventually," Devlin said, "where they will have modern housing and sanitation, nutritious food and advanced medical care."

"They will be given all the advantages of civilization," the

Prime Minister said warmly.

"They will have fields and livestock, new implements and patterns of farming," Devlin continued.

"Eventually," the Prime Minister interrupted. "That will come eventually—Right now we must fix it so there's nothing for the enemy to confiscate. Not an animal, not a grain of rice, not even a blade of grass shall be left."

"Of course," he added, "we must evacuate the countryside first wherever we can. But we must be thorough. It's the only way to save the Panda way of life. And people in this country are getting tired of our casualties. They want action."

"We all suffer with you sir," Devlin said as he left.

IN HIS address to the nation the Prime Minister dwelt with sorrow and compassion on the plight of the Pandas, the danger to the nation and the self-sacrifice of its dedicated soldiers. He predicted some eventual end to the obduracy of the enemy. But other public commentators dwelled on destruction, wounds and death in enemy cities, in the Panda countryside and in military camps and hospitals. The nation had become bewildered by the protracted conflict into which it had poured its treasure, a conflict so far away and yet so destructive of what was near near and dear. People suffered but

DRY RUN 117

their suffering was no longer in sympathy with that of the Prime Minister. He was cheered to see Devlin again and to be briefed as before.

"The enemy—" he said.

"Suffers increasing losses," Devlin said.

The Prime Minister shook his head in wonder.

"Our people—"

"Do not appreciate your sacrifices," Devlin told him softly.

The Prime Minister looked at Devlin directly.

"History?" he inquired.

"I'm afraid that's too much to expect, sir," Devlin told him. "You would never agree to pay the price."

"No," the Prime Minister said. "I wouldn't. I deserve recognition and approval and comfort right now. Wars have mostly been popular. I met a challenge to our way of life-and to the Pandas', of course. Everything has gone wrong. I can't blame myself. I won't wait for justification and I won't lose what I still have. What I did must remain right and the best anyone could have done. I had more important things on my mind than the Pandas. The war got out of control. I may have lost my place in history. I don't enjoy office any more. People don't suffer with me any more. They go out of their way to make my life miserable. If I don't watch out I'll lose my peace of mind."

The Prime Minister stared into space, more in anger than in sorrow.

"You can—" Devlin began.

"Keep my peace of mind," the Prime Minister completed.

"By—" Devlin tried to interrupt.

"Resigning from office," the Prime Minister continued.

"First you can-"

"Agree to the enemy's chief demand."

"And when deescalation seems imminent—"

"We'll clobber him good on the ground," the Prime Minister said with satisfaction.

"That will—" Devlin began.

"Leave the problem in the hands of my successor."

"Who will carry on your work—with our support. While you retire to the country—"

"To live among neighbors who are friends."

"With the satisfaction—" Devlin started to say.

"Of a job well done. No—" the Prime Minister interrupted himself, "With the consciousness of having met challenges with fortitude and wisdom and having suffered evil in sorrow, not anger."

Devlin left the office unnoticed, while the Prime Minister smiled at a pleasant future, content in his dearly purchased peace of mind.

DEVLIN felt uneasy when he approached his superior. He

was uneasier still when he had given his report.

"The immediate reward for the things I suggested was always clear," he said.

His superior nodded.

"He always did what I suggested," Devlin said.

Another nod.

"The advantages proved illusory, yet he came back for more."

Nod.

"Yet I felt—I felt that I never really had to tempt him," Devlin proposed.

Another nod.

"And in the end—well, sir, he got ahead of me. I didn't even have to suggest. He said what I came prepared to say. "What did I do wrong, sir?" Devlin asked anxiously. "My own fall wasn't like that at all."

"Nothing wrong, Devlin," his superior assured him. "The plan was straightforward and no one could have carried it through better than you did. You went by the book. That's what an inexperienced demon should do. By the way, we'll assign someone else to

his successor." He looked at Devlin kindly. "We'll give you a real challenge next time," he said. "A well-brought-up child with a cookie jar or a self-interested man with a friend. You can try your ingenuity there, if you wish."

"But it was a success, sir, wasn't it?" Devlin asked anxiously. "The Prime Minister gave in—well, he followed the script every time. We'll have his immortal soul, won't we, sir?"

Devlin's superior smiled condescendingly.

"I'm afraid not, Devlin," he said. "I hope you won't be too disappointed."

"But why, sir, why?" a dis-

tressed Devlin asked.

"You see, Devlin," his mentor told him, "immortal souls are too valuable to chance missing. A demon may botch his first job and we can't afford to lose by that. That's why we've assigned another tyro to the new Prime Minister. Not everyone has an immortal soul. So, we send new demons on a dry run before we let them tackle the real thing."

SUBSCRIBE NOW TO THE NEW



DRY RUN



FRANK HERBERT



WHAT HAS GONE BEFORE

Jorj X. McKie, Saboteur Extraordinary of the Bureau of Sabotage of the Confederated Sentients, is called to the planet of Cordiality on an urgent mission—a Caleban Beachball has been sighted on the planet.

McKie arrives on Cordiality via a jumpdoor—an instantaneous space-travel medium controlled by the mysterious Calebans—and is briefed on the emergency by fellow BuSab agen¹, Alicheno Furuneo. Calebans, sentient members of the Con-Sentients, have lately been disappearing, with disastrous effects on humans and other sentients around them. It is thought

that Mlis Abnethe, an enormously wealthy and beautiful but unscrupulous human woman is somehow involved in the disappearances.

No one has ever seen a Caleban and few have successfully communicated with one. McKie forces entry into the Beachball stranded on Cordiality and confronts the Caleban domiciled in it. He succeeds in establishing communication with the Caleban. a pure energy sentient, who communicates from mind to mind and tells him that Mlis Abnethe is indeed involved in the inexplicable goings on. Mlis is a flagellator, who has acquired a contractual right to have the Caleban whipped for her pleasure—in return she has promised certain educational advantages for Calebans. McKie witnesses and interrupts one of the flagellations, discovers that the Caleban, who has assumed the name Fanny Mae, has fallen in love with him.

McKie, a veieran of fifty-four unsuccessful marriages, is unimpressed, but utilizes the fact that the universality of love permits Fanny Mae to violate her contract with Mlis Abnethe and send him on her trail via a jumpdoor.

He emerges from the jump-door on an unfamiliar planet, talking to an uncommunicative rock.

IV

WHIP and severed Palenki arm arrived at the proper BuSab laboratory while it was temporarily unoccupied. The lab chief, Treej Tuluk, a backbowing Wreave, was away at the time, attending the conference McKie's report had precipitated.

As with most back-bowers, Tuluk was an odor-id Wreave. He had an outwardly average Wreave body, two-and-a-half meters tall, tubular, pedal bifurcation, vertical face slit with manipulative extensors dangling from the lower corner. From long association with humans and humanoids he had developed a brisk, slouching gait, a predilection for clothing with pockets and unWreavish speech mannerisms of a cynical tone. The four eye tubes protruding from the top of his facial slit were green and mild.

Returning from the conference, he recognized the objects on his lab floor immediately. They matched Siker's description. Tuluk complained to himself briefly about the careless manner of delivery and soon was lost in the intricacies of examination. He and the assistants he summoned made initial holoscans before separating whip and arm.

As they had expected, the Palenki gene structure offered no comparatives. The arm had not come from one of the few Palenkis on record in the ConSentient Register. Tuluk filed the DNA chart and message sequence, however. These could be used to identify the arm's original owner if that became necessary.

Study of the whip went ahead. The artifact report came out of the computers as "Bullwhip, copy

of ancient earth type." It was made of steerhide. The fact gave Tuluk and his vegetarian aides a moment

of disgust.

"A sick archaism," one of Tuluk's Chither assistants called the whip. The others agreed with this judgment, even a Pan Spechi, for whom periodic reversion to carnivorous type in his creche cycle was necessary to survival.

A curious alignment in some of the cell molecules next attracted their attention. Study of whip and arm continued at their respective

paces.

MCKIE took the long-distance call while standing beside a dirt road about three kilometers from the rock. He had come this far on foot, increasingly annoyed by the strange surroundings. The city, he had soon discovered, was a mirage hanging over a dusty plain of tall grass and scrubby thornbushes.

It was almost as hot on the plain as it had been in the Caleban's Beachball:

So far the only living things he had seen were some distant tawny animals and countless insectsleapers, crawlers, fliers, hoppers. The road contained two parallel indentations and was the rusty red abandoned iron. color of seemed to originate in a far away line of blue hills and plunge straight across the plain to the heat-muddled horizon. The road contained no occupant except himself. Not even a dust cloud marked some hidden passage.

McKie was almost glad to feel

the sniggertrance grip him.
"This is Tuluk," his caller said. "I was told to contact you as soon as I had anything to report. Hopefully, I intrude at an opportune moment."

McKie, who had a journeyman's respect for Tuluk's competence,

said: "Let's have it."

"Not much on the arm," Tuluk said. "Palenki, of course. We can identify the original owner if we ever get him. There has been atleast one previous regrowth of this member. Sword cut on the forearm, by the look of it."

"What about the Phylum mark-

ings?"

"We're still checking that."

"The whip?"

"That's something else. It's real steerhide."

"Real?"

"No doubt of it. We could identify the original owner of the skin, although I doubt it's walking around anywhere."

"You've a gruesome sense of

humor. What else?"

"The whip's an archaism, too. Bullwhip, ancient earth style. We got an original ID by computer and brought in a museum expert for confirmation. He thought the construction was a bit on the crude side but close enough to leave little doubt it was a copy of a real original. Fairly recent manufacture.

"Where could they get an orig-

inal to copy?"

"We're checking that and it may provide a lead. These things aren't too common."

"Recent manufacture." McKie

said. "Are you sure about that?"

"The animal from which that hide was removed has been dead about two standard years. Intracellular structure was still reactive to catalyzing."

"Two years. Where would they

get a real steer?"

"That narrows it down. There are some around for story props in the various entertainment media, that sort of thing. A few of the outback planets where they haven't the technology for pseudoflesh still raise cattle for food."

"This thing gets more confusing the deeper we go into it." McKie

said.

"That's what we think. Oh, by the way, there's chalf dust on the whip."

"Chalf! That's where I got the

yeast smell!"

"Yes, it's still quite strong."

"What would they be doing with that much quick-scribe powder?" McKie asked. "There was no sign of a chalf-memory stick—but that means little, of course."

"It's just a suggestion," Tuluk said, "but they could've chalfscribed that design on the Palenki."

"Why?"

"Give it a false Phylum, maybe?"

"Perhaps."

"If you smelled chalf after the whip came through, there'd have to be quite a bit of it around. You thought of that?"

"The room wasn't all that big

and it was hot."

"The heat would explain it, all

right. Sorry we didn't have more for you."

"That's all?"

"Well, it might not be of any use—but the whip has been stored in a hanging position, supported by a thin length of steel."

"Steel? Are you positive?"

"Positive."

"Who still uses steel?"

"It's not all that uncommon on some of the newer planets. R&R has even turned up places where they build with it."

"Wild."

"Isn't it, though?"

"You know," McKie said, "we're looking for an outback planet and that's where I seem to be."

"Where are you?"

"I don't know."

"You don't know?"

McKie explained his predicament.

"You field agents take awful chances."

"Don't we?"

"You wear a monitor. I could ask this Taprisiot to identify your location. Want to invoke the monitor clause?"

"You know that's an open payment clause," McKie said. "I don't think this is as yet a sufficient emergency for me to risk bankrupting us. Let me see if I can identify this place by other means."

"What do you want me to do

next?"

"Call Furuneo. Have him allow me another six hours, then get the Caleban to pick me up."

"Pick you up, right. Siker said you were onto some doorless

S'eye thing. Can it pick you up anywhere?"

"I think so."

"I'll call Furuneo right away."

MCKIE had been walking for almost two hours before he saw the smoke. Thin spirals of it stood in the air against the backdrop of distant blue hills.

It had occurred to McKie during his walk that, he might have been set down in a place where he could die of thirst or starvation before his legs carried him to the safe companionship of his civilized fellows. A self-accusatory moroseness had overtaken him. This was not the first time he had realized that some accident of the machinery he took for granted might prove fatal.

But the machinery of his own mind? He cursed himself for using the Caleban's S'eye system this way when he knew the unreliability of communication with the creature.

Walking!

You never thought you might

have to walk to safety.

McKie sensed the eternal flaw in sentient relationship with machinery. Reliance on such forces put your muscles at a disadvantage in a universe where you might have to rely on them at any time.

He seemed to be getting nearer to the smoke, although the hills

looked as remote as ever.

Walking.

Of all the stupid, damned foulups. Why would Abnethe pick a place like this to start her kinky little game? If this were the place it had started. If the Caleban had not made another communication error.

If love could find a way. What the devil did love have to do with all this?

McKie plodded on, wishing he had brought some water. First the heat of the Beachball, now this. His throat felt as though he had built a fire in it. The dust kicked up by his feet did not help. Every step stirred up a puff of pale red from the narrow track. The dust clogged his throat and nostrils. It had a musty taste.

He patted the toolkit in his jacket pocket. The raygen could burn a thin hole in this parched earth, might even strike down to water. But how could he bring the water up to his demanding throat?

Plenty of insects around. They buzzed and flew about, crawled at the edge of the track, attempted at times to alight on his exposed flesh. He finally took to carrying his toolkit's stim like a fan, setting it at medium potency. It cleared the air around his face whenever a swarm approached, dropped jittering patches of stunned insects behind him.

He grew aware of a noise—low, indistinct booming. Something being pounded. Something hollow and resonant. It originated out there in the distance where the smoke stood on the air.

It could be a natural phenomenon, McKie told himself. Could be wild creatures. The smoke might be natural fires. Still, he brought the raygen from his kit, kept it in a sidepocket where he could get at it quickly. The noise became louder in slow stages, as though it were being amplified to mark consecutive positions of his approach. Screens of thornbush and gentle undulations in the plain concealed the source.

McKie trudged up a gentle rise,

still following the road.

Sadness transfixed him. He'd been cast away on some poverty-stricken backyard world, a place that stiffened the eyes. He had been given a role in a story with a moral, a clipped-wing fairy story. He was a burned-out wanderer, his thirst a burnished yearning. Anguish had lodged in him somewhere. He pursued an estranged, plodding dream which would dissolve in the awakening doom of a single Caleban.

The toll that Caleban's death would bring oppressed him. It turned his ego upside down and drained out all the lightness. His own death would be a lost bubble burst in such a conflagration.

burst in such a conflagration.

McKie shook his head to drive away such thoughts. Fear would pluck him of all sensibility. He couldn't afford it.

One thing was sure now—the sun was setting. It had descended at least two widths toward the horizon since he had started this stupid trek.

What in the name of the infinite devils was that drumming? It came at him as though riding the heat: monotonous, insistent. He felt his temples throbbing to an irritating counterpoint.

MCKIE topped the low rise, stopped. He stood at the brim

of a shallow basin which had been cleared of the thornbush. At the basin's center a thorn fence enclosed twenty or so conical huts with grass roofs. They appeared to be made of mud. Smoke spiraled from holes in several of the roofs and from pit fires outside others. Black dots of cattle grazed in the basin, lifting their heads occasionally with stubby whiskers of brown grass protruding from their mouths.

Black-skinned youths carrying long poles watched the cattle. More black-skinned men, women and children went about various occupations within the thorn enclosure.

McKie, whose ancestry contained blacks from the planet Caoleh, found the scene curiously disturbing. It touched a genetic memory that vibrated to a wrong rhythm. Where in the universe could people be degraded to such primitive living standards? The basin was like a textbook scene from the dark ages of ancient Earth.

The children were mostly naked, as were some of the men. The women wore string skirts.

Could this be some odd return to nature?

The narrow track led down into the basin and through the thorn fence, extending out the other side to disappear over a bordering crest.

McKie began the descent. He hoped to find water in this village. The booming noise came from a large hut near the center of the cluster. A two-wheeled cart with

four great two-horned beasts yoked to it waited beside the hut.

McKie studied the cart as he approached. Between its high sidewalls were piled jumbles of strange artifacts—flat, boardlike things, rolls of garish fabric, long poles with sharp metal tips.

The drumming stopped and McKie noted that he had been seen. Children ran screaming among the huts, pointing at him. Adults turned with slow dignity, studied him.

Silence settled over the scene. McKie entered the village through a break in the thorn fence. Emotionless black faces turned to observe his progress. Scents assaulted McKie's nostrils—rotting flesh, dung, gave off acrid stenches whose character he didn't care to explore in connection with the smells of woodsmoke and burning meat.

Clouds of black insects swarmed about the beasts yoked to the cart beside the central hut. A redbearded white man emerged from the hut as McKie approached. The man wore a flat-brimmed hat, a dusty black jacket and dun pants. He carried a whip of the same pattern the Palenki had used. Seeing the whip, McKie knew he had come to the right place.

The man waited in the doorway, a mean-eyed, menacing figure, thin lips visible through the beard. He glanced once at McKie, nodded at several of the black men off to McKie's left, motioned toward the cart, returned his attention to McKie.

Two tall black men moved to

stand at the head of the yoked beasts.

McKie studied the contents of the cart. The boardlike objects, he saw, had been carved and painted with strange designs. They reminded him of Palenki carapaces. He didn't like the way the two men at the head of the yoked beasts stared at him. Danger lurked here. McKie kept his right hand in his jacket pocket, curled around the raygen tube. He felt and saw the black residents closing in behind him. His back felt exposed and vulnerable.

"I am Jorj X. McKie, Saboteur Extraordinary," he said, stopping about ten paces from the bearded white man. "And you?"

The man spat in the dust, said something that sounded like: "Getnabent."

McKie swallowed. He did not recognize the greeting. Strange, he thought. He had not believed the ConSentiency contained a language completely unfamiliar to him. Perhaps R&R had come up with a new planet.

"I am on an official mission of the Bureau," McKie said. "Let all men know this."

That satisfied the legalities.

The bearded man glanced in the direction of the voice, back to McKie.

McKie shifted his attention to the whip. The man trailed the end of it behind him on the ground. Seeing McKie's attention, he flicked a wrist, caught the flexible end of the whip in two fingers which he lifted from the handle. He continued to stare at McKie. There was a casual proficiency in the way the man handled the whip that sent a shudder through McKie. "Where did you get that whip?" he asked.

The man looked at the object in his hand. "Pitsch," he said. "Braw-

zhenbuller."

McKie moved closer, held out a hand for the whip.

The bearded man shook his head from side to side, scowled. No mistaking that answer.

"Mavkely," he said.

He tapped the butt of the whip handle against the side of the cart, nodded at the piled cargo.

Once more McKie studied the contents of the cart. Handmade artifacts—no doubt of it. There could be a big profit in esoteric and decorative objects, he knew. These could be artifacts that curried to the buyer boredom brought on by the endless, practical, serial duplications from automatic factories. If they were manufactured in this village, though, the whole operation looked to be a slave labor thing. Or serfdom, which was the same thing to all practical purposes.

Abnethe's game might have sicker overtones but more under-

standable motives.

"Where's Mliss Abnethe?" he asked.

That brought a response. The bearded man jerked up his head, glared at McKie. The surrounding mob emitted unintelligible cry.

"Abnethe?" McKie asked.

"Seeawss Abnethe," the bearded man said.

The crowd around them began chanting: "Epah Abnethe! Epah Abnethe—"

"Rooik!" the bearded man

shouted.

The chant stopped abruptly.

"What is the name of this planet?" McKie asked. He glanced around at the staring black faces. "Where is this place?"

No one answered.

McKie locked eyes with the bearded man. The other returned his stare in a predatory, measuring manner, nodded once, as though he'd come to some conclusion.

"Deespawng!" he said.

McKie frowned, swore under his breath. This damned case presented communications difficulties at every turn! No matter. He'd seen enough here to demand a fullscale investigation by a police agency. You didn't keep humans in this primitive state. Abnethe must be behind this place. The whip, the reaction to her name. The village smelled of Abnethe sickness. McKie observed some of the people across from him, saw scars on their arms and chests. Whip scars? If they were, Abnethe's money wouldn't save her.

Something exploded against the back of McKie's neck, knocking him forward. The bearded man raised the whip handle and McKie saw the thing rushing toward his head. He felt a giant darkness lurch across his mind as the thing crashed against the side of his head. He tried to bring the raygen out of his pocket but muscles disobeyed. He felt his body become a limping, horrified stagger. His

vision was by then a bloody haze.

Again something exploded

against his head.

McKie sank into nightmare oblivion. As he sank, he thought of the monitor in his skull. If they had killed him, a Taprisiot somewhere would jerk to attention and send in a final report on one Jorj X. McKie.

A lot of good that'll do me . .

V

THERE was a moon, McKie realized. That glowing thing directly in front of him had to be a moon. The realization told him he had been seeing the moon for some time, puzzling over it without being fully awake. The moon had lifted itself out of blackness above a paralyzed outline of primitive roofs.

So he was still in the village.

The moon dangled incredibly close.

The back and left side of Mc-Kie's head began to throb painfully. He explored his bruised senses, realized he had been staked out in the open, flat on his back, wrists and ankles tightly bound, his face pointed at the sky.

Perhaps it was another village.

He tested the security of his bindings, could not loosen them.

His was an undignified position. He was flat on his back, legs spread, arms outstretched.

For a time, he watched the changing guard of strange constellations move across his field of vision. Where was this place?

Firelight blazed up somewhere

off to his left. It flickered, sank back to orange gloom. McKie tried to turn his head toward it, froze as pain stabbed upward from his neck through his skull.

He groaned.

In the darkness an animal screamed. The scream was followed by a hoarse, grunting roar. Silence. Then another roar. The sounds creased the night for McKie, bent it into new dimensions. He heard soft footsteps approaching.

"I think he groaned," a man

said.

The man was speaking standard Galach, McKie noted. Two shadows came out of the night and stood over McKie's feet.

A female voice masked by a storter asked, "Do you think he's awake?"

"He's breathing as though he were awake," the man said.

"Who's there?" McKie rasped. His own voice sent agony pin-

wheeling through his skull.

"Good thing your people know how to obey instructions," the man said. "Imagine him running loose around here!"

"How did you get here, Mc-

Kie?" the woman asked.

"I walked," McKie growled. "Is that you, Abnethe?"

"He walked;" the man said in

angry disbelief.

McKie, listening to that male voice, began to wonder about it. Was there a trace of alien sibilance in it? Was it human or humanoid? Among the sentients, only Pan Spechi could look that human—





because they had shaped their flesh to the human pattern.

"Unless you release me," Mc-Kie said, "I won't answer for the

consequences."

"You'll answer for them," the man said. There was laughter in his voice.

"We must be sure how he got

here," the woman said.

"What difference does it make?"
"It could make a great deal of

difference. What if Fanny Mae is breaking her contract?"

"That's impossible."

"Nothing's impossible. He couldn't have come here without Caleban help."

"Maybe there's another Cale-

ban."

"Fanny Mae says not."

"I say we do away with this intruder immediately," the man said.

"What if he's wearing a moni-

tor?" she asked.

"Fanny Mae says no Taprisiot can locate this place."

"But McKie is here."

"And I've had one long-distance call since I arrived," McKie said.

No Taprisiot could locate this place? What would prompt that statement?

The man said, "I say we do

away with him."

"You're not very intelligent,"

McKie said.

"Look who's talking about intelligence."

MCKIE strained to discern details of faces but they remained blank shadows. What was it about that male voice? The storter

disguised the woman's voice—but why would she bother?

"I am fitted with a life moni-

tor," McKie said.

"The sooner the better," the man said.

"I've stood as much of that talk

as I can," the woman said.

"Kill me and that monitor starts transmitting," McKie said. "Taprisiots will scan this area and identify everyone around me. Even if they can't locate you, they'll know you."

"I shudder at the prospect," the

man said.

"We must find out how he got here," the woman said.

"What difference does it make?"

"That's a stupid question."

"So the Caleban broke her contract."

"Or there's a loophole in it we don't know about."

"Well, plug it up."

"I don't know if we can. Sometimes I wonder how much we really understand each other. What're connectives?"

"Abnethe, why are you wearing

that storter?" McKie asked.

"Why do you call me Abnethe?"

she asked.

"You can disguise your voice but you can't hide your sickness or your style," McKie said.

"Did Fanny Mae send you

here?"

"Didn't somebody say that was impossible?" McKie countered.

"He's a brave one," the woman

chuckled.

"Lot of good it does him."

"I don't think the Caleban could break our contract," she said.

"You recall the protection clause? It's likely she sent him here to get rid of him."

"So let's get rid of him."
"That's not what I meant."

"You know we have to do it."

"You're making him suffer and I won't have it," the woman said.

"Then go away and leave it to

me.''

"I can't stand the thought of his suffering. Don't you understand?" "He won't suffer."

"You have to be sure."

It's Abnethe for certain, McKie thought, recalling her conditioning against witnessing pain. But who's the other one?

"My head's hurting," McKie said. "Your men practically beat

my brains out."

"What brains?" the man asked.

"We must get him to a doctor."

"Be sensible."

"You heard him. His head hurts."

"Mliss, Stop it."

"You used my name," she said.

"What difference does it make? He'd already recognized you."

"What if he escapes?"

"From here?"

"He got here, didn't he?"

"For which we can be thankful."

"He's suffering," she said.

"He's lying."

"He's suffering. I can tell."

"What if we take him to a doctor, Mkss?" the man asked. "What if we do that and he escapes? Bu-Sab agents are resourceful, you know."

Silence.

"There's no way out of it," the man said. "Fanny Mae sent him to

us and now we have to kill him."
"You're trying to drive me crazy—"

"He won't suffer."

Silence.

"I promise," the man said.

"For sure?"

"Didn't I say it?"

"I'm leaving here," she said. "I don't want to know what happens to him. You're never to mention him again, Cheo. Do you hear me?"

"Yes, my dear. I hear you."
"I'm leaving now," she said.

"He's going to cut me into little pieces," McKie said, "and I'll scream with pain the whole time."

"Shut him up?" she screeched.
"Come away, my dear," the
man said. He put an arm around

her. "Come along now."

Desperately, McKie said, "Abnethe—he's going to cause me intense pain. You know that."

She began sobbing as the man

led her away.
"Please—please—" she begged.

The sound of her crying faded into the night.

Furuneo, McKie thought, don't dally. Get that Caleban moving. I

want out of here. Now!

He strained against his bindings. They stretched just enough to tell him he had reached their limits. He could not feel the stakes move at all.

Come on Caleban! McKie thought. You didn't send me here to die. You said you loved me. . .

A FTER several hours of questioning, counter questioning, probe, counter probe and bootless answers, Furuneo brought in an

enforcer assistant to take over the watch on the Caleban. At Furuneo's request, Fanny Mae opened a portal and let him out onto the lava ledge for a spell of fresh air. It was cold out on the shelf, especially after the heat in the Beachball. The wind had died down as it did most days here just before night. Surf still pounded the outer rocks and surged against the lava wall beyond the Beachball. But the tide was going out and only a few dollops of spray wet the ledge.

Connectives, Furumeo thought bitterly. She says it's not a linkage, so what is it? He couldn't recall ever having felt this frustrated.

That which extends from one to eight, the Caleban had said, that is a connective. Correct use of verb to be?

"Huh?"

Identity verb, the Caleban said. Strange concept.

"No, no! What did you mean

there, one to eight?"

Unbinding stuff, the Caleban said.

"You mean like a solvent?"

Before solvent.

"What the devil could before have to do with solvents?"

Perhaps more internal than sol-

vents, the Caleban said.

"Madness," Furuneo said, shaking his head. Then: "Internal?"

Unbounded place of connec-

tives, the Caleban said.

"We're right back where we started," Furuneo groaned. "What's a connective?"

Uncontained opening between, the Caleban said.

"Between what?" Furuneo roared.

Between one and eight.

"Ohhhh, no!"

Also between one and X, the Caleban said.

As McKie had done earlier, Furuneo buried his face in his hands. Presently he said, "What's between one and eight except two, three, four, five, six and seven?"

Infinity, the Caleban said. Open ended concept. Nothing contains everything. Everything contains

nothing.

"You know what I think?" Fur-

I read no thoughts.

"I think you're having your little game with us," Furuneo said. "That's what I think."

Connectives compel, the Caleban said. Does this expand understanding?

"Compels—a compulsion?"

Venture movement, the Caleban said.

"Venture what?"

That which remains stationary when all else moves, the Caleban said. Thus, connective. Infinity concept empties itself without connective.

At this point Furuneo asked to be let outside for a rest.

He was no closer to understanding why the Caleban maintained such a high temperature in the Beachball.

Consequence of swiftness, the Caleban said, varying this under questioning with: Rapidity convergence. Or, Perhaps concept of generated movement arrives closer.

"Some kind of friction?" Furuneo probed.

Uncompensated relationship of dimensions possibly arrives at closest approximation, the Caleban answered.

Now, reviewing these frustrating exchanges, Furuneo blew on his hands to warm them. The sun had set and a chill wind was beginning to move off the bluff toward the water.

Either I freeze to death or bake, he thought. Where in the universe

is McKie?

At this point, Tuluk made longdistance contact through one of the Bureau Taprisiots. Furuneo, who had been seeking a more sheltered position in the lee of the Beachball, felt the pineal ignition. He brought down the foot he had been lifting in a step, planted the foot firmly into a shallow pool of water and lost all bodily sensation. Mind and call were one.

"This is Tuluk at the lab," the caller said. "Apologies for intru-

sion and all that."

"I think you just made me put a foot in cold water," Furuneo

said.

"Well, here's some more cold water for you. You're to have that friendly Caleban pick up McKie in six hours, time elapse measured from four hours and fifty-one minutes ago. Synchronize."

"Standard measure?"

"Of course standard."

"Where is he?" `

"He doesn't know. Wherever that Caleban sent him. Any idea how it's done?"

"It's done with connectives."

"Is that right? What are connectives?"

"When I find out, you'll be the first to know."

"That sounds like a temporal

contradiction, Furuneo."

"Probably is. All right, let me get my foot out of the water. It's probably frozen solid by now."

"You've the synchronized time coordinate for picking up McKie,

don't you?"

"I got it. And I hope she doesn't send him home."

"How's that?"

Furuneo explained.

"Sounds confusing."

"I'm glad you figured that out. For a moment there, I thought you weren't approaching our problem with sufficient seriousness."

Among Wreaves seriousness and sincerity are almost as basic as they are with Taprisiots but Tuluk had worked among humans long enough to recognize the jibe.

"Well, every being has its own

insanity," he said.

It was a Wreave aphorism but it sounded sufficiently close to something the Caleban might have said for Furuneo to experience a momentary angeret-enforced rage and sense his ego shimmering away from him. He shuddered his way back to mental solidity.

"Did you almost lose yourself?"

Tuluk asked.

"Will you sign off and let me get my foot out of the water?"

"I receive the impression you are fatigued," Tuluk said. "Get some rest."

"When I can. I hope I don't fall asleep in that Caleban hot house.

I'd wake up done just about right for a cannibal dinner."

"Sometimes you humans express yourselves in a disgusting fashion," the Wreave said. "But you'd better remain alert for a while. McKie may require punctuality."

VΙ

t was dark but Abnethe needed no light for black thoughts.

Damn Cheo for a sadistic fool! It had been a mistake to finance the surgery that'd transformed the Pan Spechi into an ego-frozen freak. Why couldn't he have stayed as he had been when she had first met him? So exotic—so—exciting.

He was still useful, though. And there was no doubt he had been the first to see the magnificent possibilities in their discovery. That, at

least remained exciting.

She reclined on a softly furred chairdog, one of the rare feline adaptives which had been taught to lull their masters by purring. The soothing vibrations moved through her flesh as though seeking out irritations to subdue. So relaxing.

She sighed.

Her apartment occupied the top ring of the tower they had built on this world, safe in the knowledge that their hiding place lay beyond the reach of any law or any communication except that granted through a single Caleban—who had but a short time to live.

But how had McKie come here? And what had McKie meant, saying he had had a call through a

Taprisiot?

The chairdog, sensitive to her mood, stopped purring as Abnethe sat up. Had Fanny Mae lied? Did another Caleban remain who could find this place?

Granted that the Caleban's words were difficult to understand—granted this, yes, there was yet no mistaking the essentials. This world was a place whose key lay in only one mind, that of Madame Mliss Abnethe.

She sat straight on the chairdog.

And there would be death without suffering to make this place forever safe—a giant orgasm of death. Only one door—and death would close it. The survivors, all chosen by herself, would live on in happiness here beyond all—connectives.

Whatever those were.

She stood up, began pacing back and forth in the darkness. The rug, a creature adapted like the chairdog, squirmed its furry surface at the caress of her feet.

An amused smile came over her face.

Despite the complications and the strange timing required, she would have to increase the tempo of the floggings. Fanny Mae must be forced to discontinue as soon as possible. To kill without suffering among the victims, this was a prospect she found she still could contemplate.

But there was need for hurry.

FURUNEO leaned, half dozing, against a wall within the Beachball. Sleepily he cursed the heat. His mindclock said he had

slightly less than an hour before picking up McKie. Furuneo had tried to explain the time schedule to the Caleban but she persisted in misunderstanding.

Lengths extend and distend, she had said. They warp and shift with vague movements between one and another. Thus time remains inconstant.

Inconstant?

The vortal tube of a S'eye jumpdoor snapped open just beyond the Caleban's giant spoon. The face and bare shoulders of Abnethe appeared in the opening.

Furuneo pushed himself away from the wall, shook his head to restore alertness. Damnation, it.

was hot in here.

"You are Alicheno Furuneo," Abnethe said. "Do you know me?"

"I know you."

"I recognized you at once," she said. "I know most of your stupid Bureau's planetary agents by sight. I've found it profitable."

"Are you here to flog this poor

Caleban?" Furuneo asked.

He felt for the holoscan in his pocket, moved into a position for a rush toward the jumpdoor as McKie had ordered.

"Don't make me close this door before we've had a little discus-

sion," she said.

Furuneo hesitated. He was no Saboteur Extraordinary, but you didn't get to be a planetary agent without recognizing when to disobey a senior agent's orders.

"What's to discuss?" he asked.

"Your future," she said.

Furuneo stared up into her eyes.

The emptiness of them appalled him. This woman was ridden by a compulsion.

"My future?" he asked.

"Whether you're to have any future," she said.

"Don't threaten me," he said.

"Cheo tells me," she said, "that you're a possibility for our project."

For no reason he could explain, Furuneo knew this to be a lie. Odd how she gave herself away. Her lips trembled when she said that name—Cheo.

"Who's Cheo?" he asked.

"That's unimportant at the moment."

"What's your project, then?"

"Survival."

"That's nice," he said. "What else is new?"

He wondered what she would do if he brought out the holoscan and started recording.

"Did Fanny Mae send McKie

hunting for me?" she asked.

That question was important to her, Furuneo saw. McKie must have stirred up merry hob.

"You've seen McKie?" he

asked,

"I refuse to discuss McKie," she said.

The response was insane, Furuneo thought. She had been the one to bring McKie into the conversation.

Abnethe pursed her lips, studied nim.

"Are you married, Alicheno Furuneo?" she asked.

He frowned. Her lips had trembled again. Surely she knew his marital status since she had taken

trouble to learn who he was. What was her game?

"My wife is dead," he said.

"How sad," she murmured.

"I get along," he said, angry.
"One can't live in the past."

"Ah, that is where you may be wrong," she said,

"What are you driving at?"

"Let's see," she said, "your age —sixty-seven standard, if I recall correctly."

"You recall correctly, as you

damn' well know."

"You're young," she said. "You look even younger. I'd guess you're a vital person who enjoys life."

"Aren't we all?" he asked.

It was going to be a bribe offer,

then, he thought.

"We enjoy life when we have the proper ingredients," she said. "How odd it is to find a person such as yourself in that stupid Bureau."

This was close enough to a thought Furuneo himself had occasionally nurtured for him to begin wondering about this Cheo and the mysterious project with its possibilities. What were they offering?

Would she offer herself? She was an attractive female—he saw a generous mouth, large green eyes, a pleasant oval face. He had seen the holoscans of her figure—the Beauty barbers had done well by her. She had maintained herself with all the expensive care her money could buy. But would she offer herself to him? He found this difficult to contemplate. Motives and stakes didn't fit.

"What are you afraid of?" he asked.

She answered him with a peculiar note of sincerity, "Suffering."

He had not been celibate since Mada's death—nevertheless, his had been a special kind of marriage. It had gone beyond words and bodies. If anything remained solid and basic—connective—in the universe, their kind of love did. He had but to close his eyes to feel the memory-presence of her. Nothing could replace that and Abnethe must know it. She could not offer him anything unobtainable elsewhere.

Or could she?

"Fanny Mae," Abnethe said, "are you prepared to honor the request I made?"

Connectives appropriate, the

Caleban said.

"Connectives—" Furuneo exploded. "What are connectives?"

"I don't really know," Abnethe said, "but apparently I can exploit them without knowing."

"What are you cooking up?" Furuneo demanded. He wondered why his skin felt suddenly chilled in spite of the heat.

"Fanny Mae, show him," Ab-

nethe said.

The jumpdoor's vortal tube flickered open, closed, danced and shimmered. Abruptly, Abnethe no longer was visible in it. The door stood open once more, looking now down onto a sunny jungle shore, a softly heaving ocean surface, an oval stabo-yacht hanging in stasis above a clearing and a

sandy beach. The yacht's afterdeck shields lay open to the sun, exposing almost in the center of the deck a young woman stretched out in repose, face down on a floater hammock. Her body was drinking the rays of a tuned sunfilter.

Furuneo stared, unable to move. The young woman lifted her head, stared out to sea, lay back.

Abnethe's voice came from directly over his head, from another jumpdoor obviously, but he could not take his gaze from that well-remembered scene.

"You recognize this?" she

asked.

"It's Mada," he whispered.

"Precisely."

"Oh, my god," he whispered. "When did you scan that?"

"It is your beloved, you're

sure?" Abnethe asked.

"It's—it's our honeymoon," he whispered. "I even know the day. Friends took me to visit the seadome, She didn't enjoy swimming and stayed behind."

"How do you know the actual

day?"

"The flambok tree at the edge of the clearing—it bloomed that day and I missed it. See the umbrella flower?"

"Oh, yes. Then you've no doubt about the authenticity of this

scene?"

"So you had your snoopers staring at us even then?" he rasped.

"Not snoopers. We are the

snoopers. This is now."

"It can't be! That was almost forty years ago!"

"Keep your voice down."

"How can she hear me? She's been dead for—"

"This is now, I tell you! Fanny

Mae?"

In person of Furuneo, concept of now contains relative connectives, the Caleban said. Nowness of scene true.

FURUNEO shook his head, remembering other times.

"We can pluck her from that yacht and take both of you to a place the Bureau will never find," Abnethe said. "What do you think of that, Furuneo?"

Furuneo wiped tears from his cheeks. He was aware of the sea's ozone smell, the pungency of the flambok blossom. The scene had to be a recording, though.

"If it's now—why hasn't she

seen us?" he asked.

"At my direction, Fanny Mae masks us from her sight. Sound, however, will carry. Keep your voice down."

"You're lying," he hissed.

As though at a signal, the young woman rolled over, stood up and admired the flambok. She began to hum a song familiar to Furuneo.

"I think you know I'm not lying," Abnethe said. "This is our secret, Furuneo. This is our discovery about the Calebans."

"But-how can-"

"Given the proper connectives, whatever they are, even the past is open to us. Only Fanny Mae of all the Calebans remains to link us with this past. No Taprisiot, no Bureau, nothing can reach us there. We can go there and free ourselves forevero"

"This is a trick," he said.

"You can see it isn't. Smell that flower, the sea."

"But why—what do you want?"

"Your assistance in a small matter, Furuneo."

"How?"

"We fear someone will stumble on our secret before we're ready. If, however, someone the Bureau trusts is here to watch and report—giving a false report—"

"What false report?"

"That there've been no more floggings, that Fanny Mae is happy, that—"

"Why those particular lies?"

"When Fanny Mae reaches her—ultimate discontinuity—we can be far away and safe—you with your beloved. Correct, Fanny Mae?"

Truthful essence in statement, the Caleban said.

PURUNEO stared through the jumpdoor. Mada. She was right there. She had stopped humming and was coating her body with a skin-protective. If the Caleban moved the door a little closer, he knew he would be able to reach out and touch his beloved.

Pain in Furuneo's chest made him aware of a constriction there.

"Am—I down there somewhere?" he asked.

"Yes," Abnethe said.

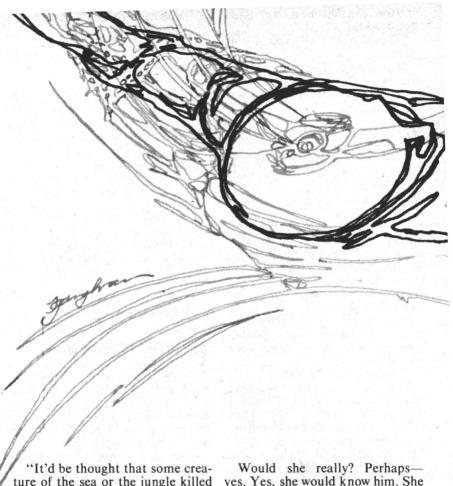
"And I'll come back to the vacht?"

"If that's what you did original-

"What would I find, though?"

"Your bride gone, disappeared."

"But-"



"It'd be thought that some creature of the sea or the jungle killed her. Perhaps she went swimming and—"

"She lived thirty-one years after that," he whispered.

"And you can have those thirtyone years all over again," Abnethe said.

"I—I wouldn't be the same. She'd—"

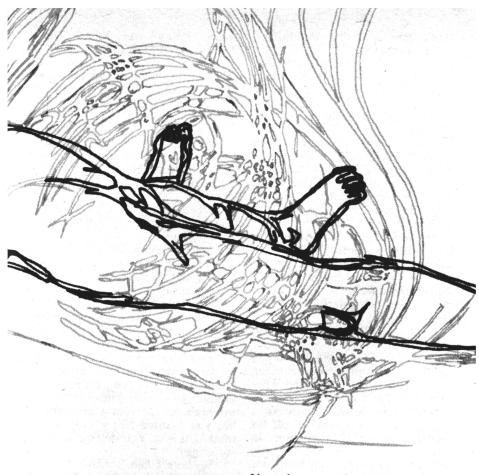
"She'd know you."

Would she really? Perhaps yes. Yes, she would know him. She might even come to understand the need behind such a decision. But he saw quite clearly that she would never forgive him. Not Mada.

"With proper care she might not have to die in thirty-one years," Abnethe said.

Furuneo nodded but the gesture was only for himself.

She would not forgive him any



more than the young man returning to an empty yacht could forgive him. And that young man had not died.

I couldn't forgive myself. The young man I was would never forgive me all those lovely lost years.

"If you're worried," Abnethe said, "about changing the universe or the course of history or any such nonsense, forget it. That's not how it works, Fanny Mae tells me.

You change a single, isolated situation, no more. The new situation goes off about its business and everything else remains pretty much the same."

"I see."

"Do you agree to our bargain?"
Abnethe asked.

"What?"

"Shall I have Fanny Mae pick her up for you?"

"Why bother?" he asked. "I

can't agree at all to such a thing."

"You're joking."

He turned, stared up, saw that she had a small jumpdoor open almost directly over his head. Only her eyes, nose and mouth could be seen through the opening.

"I am not joking."

Part of her hand became visible as she lifted it, pointed toward the other door. "Look down there at what you're rejecting. Look, I say. Can you honestly tell me you don't want that back?"

He turned.

Mada had gone back to the hammock, snuggled head down against a pillow. Furuneo recalled that he had found her so when he had returned from the seadome.

"You're not offering me any-

thing," he said.

"But I am. Everything I've told

you is true!"

"You're a fool," he said, "if you can't see the difference between what Mada and I had and what

you offer. I pity—"

Something fiercely compressive gripped his throat, choked off his words. Furuneo's hands groped in empty air as he was lifted. He felt his head go through jumpdoor resistance. His neck was precisely within the boundary juncture when the door was closed. His body fell back into the Beachball.

YOU fool, Mliss!" Cheo raged "You utter, complete, senseless fool. If I hadn't come back when I—"

"You killed him." she rasped, backing away from the bloody head on the floor of her sitting room. "You—you killed him. And just when I'd almost—"

"When you'd almost ruined everything," Cheo snarled, thrusting his scarred face close to her. "What do you humans use for brains?"

"But he'd-"

"He was ready to call his helpers and tell them everything you'd blurted to him."

"I won't have you talking to me

this way."

"When it's my neck you're putting on the block I'll talk to you any way I want."

"You made him suffer-"

"He didn't feel a thing from what I did. You're the one who made him suffer."

"How can you say that?" She backed away from the Pan Spechi face with its frighteningly over-

sized humanoid features.

"You bleat about being unable to stand suffering," he growled, "but you love it. You cause it all around you. You knew Furuneo wouldn't accept your stupid offer but you taunted him with it, with what he'd lost. You don't call that suffering?"

"See here, Cheo, if you—"

"He suffered right up to the instant I put a stop to it," the Pan Spechi said. "And you know it."

"Stop it!" she screamed. "I

didn't! He wasn't!"

"He was and you knew it—every instant you knew it."

She rushed at him, beat her fists against his chest.

"You're lying! You're lying! You're lying!"

He grabbed her wrists, forced

her to her knees. She lowered her head. Tears ran down her cheeks.

"Lies, lies, lies," she muttered.

In a softer, more reasonable tone he said: "Mliss, hear me. We've no way of knowing how much longer the Caleban can last. Be sensible. We've a limited number of fixed periods when we can use the S'eye and we have to make the most of them. You've wasted one of those periods. We can't afford such blunders, Mliss."

She kept her gaze down, refused

to look at him.

"You know I don't like to be severe with you, Mliss," he said, "but my way is best—as you've said yourself many times.- We've our own ego-integrity to preserve."

She nodded without looking up. "Let's join the others now," he said. "Plouty has devised an amusing new game."

"One thing," she said.

"Yes?"

"Let's save McKie. He'd be an

interesting addition to-"

"No."

"What harm could it do? He might even be useful. It isn't as though he'd have his precious Bureau or anything to enforce his—"

"No. Besides, it's probably too late. I've already sent the Palenki

with—well, you understand."

He released her wrists.

Abenthe got to her feet, nostrils flaring. She looked up at him then, eyes peering through her lashes, her head tilted forward. Suddenly, her right foot lashed out, caught Cheo with a hard heel in the left shin.

He danced back, nursed the bruise with one hand. Despite the pain, he was amused.

"You see?" he said. "You do

like to inflict suffering."

She was all over him then, kissing him, apologizing. They never did get down to Plouty's new game.

TO BE CONTINUED

HIRED MAN

ous badges on his back. This was the commander of the Dravian

ship.

Between the Dravian captain and Brand stood a low table. On the table was a pile of silvery Kendallian exchange disks, money of value on any civilized planet in the known galaxy.

"You are the only survivor," the Dravian said. "The full payment

is vours."

(Continued from page 100)

"There are two other survivors down there," Brand said. "You could still pick them up."

"No," the captain said, wriggling his body hair in a manner that seemed unusual. "As you humans say, 'It is out of my hands.' We are late and even now we will have difficulty rendezvousing with our fleet as scheduled."

In all honesty, Brand told himself, he was not greatly grieved

over the loss of Davidson and Wisse. He had never particurlarly liked either of them.

"Okay," he said after a few moments, "if that's the way it is."

"Good," the Dravian captain said. "The exhange disks are yours." He paused before speaking again. "You and your companions were promised transportation to Breman's Planet upon the completion of your work."

"That's right," Brand replied, beginning to feel again that there was a lot going on that he did not

understand.

"Would you care to take out another contract?"

"Now?"

"Yes, immediately," the captain replied. "The Dravian peoples find themselves at war with—another race. I will not go into details, except to say that this other race feels that we had infringed too frequently into a territory they consider to be theirs." The captain removed a sheet of permapape from a pouch under his body. "This contract is for the duration of the war—at three times your previous rate of pay."

Brand looked at the pile of disks on the table and things began to make sense—like why there were marines on New Iowa and why the corvette was late and why there was a fleet of Fuzzy ships and where they were going. He-understood. The whole business on New Iowa was probably just one small

part of a whole series of provocations. He decided not to think beyond this.

His mind went back to the pile of exchange disks. He already had a small fortune, enough to lose himself in the ecstasy of Breman's Planet for months, maybe years.

"The war will be short," the captain was saying. "We have been preparing for it for a long time. Our enemies have not. Already our fleets are massed. Your job will consist of no more than mopping up the planet after we have destroyed its defenses. The conditions of the planet are ideal for your lifeform, by the way." A brief pause. "I guarantee you no more than six standard months and a bonus at least equal to this when we have finished."

Brand looked at the pile of disks again, visualizing it doubled. What did he owe anybody?

"Okay," he said. "Six months and then Breman's Planet."

"This is guaranteed," the Dravian said but there was something in that alien voice that Brand wondered about, some strange intonation that seemed to carry—was it disgust?

Brand took the offered contract, signed it and thumbed it without reading it and handed it back.

SEVEN standard months later Brand lay in the luxury of Breman's Planet, surrounded by all the sensual delights men had ever managed to devise. A girl's hand slipped a euphoric into his mouth, then roved across his body. He sighed. With the bundle he had he could live like this for the rest of his life—if only he could stop remembering, stop thinking.

But he couldn't. The once-beautiful planet had been a shambles. Its proud people were little more than slaves to the victorious Dravians. Its economic and political and moral power was finally and forever broken. For all practical purposes it was a planet as dead as its huge moon.

Brand had walked among its de-

feated people, a conqueror, and they, the beaten ones, had called him Judas, though he wasn't sure what that meant. Nor did he want to know.

He knew too much as it was. He shuddered inside himself and hated the Dravians—and wondered which planet was next on their list: Breakdown Heights, Cordoba, New California, Breman's Planet, which human world?

But he knew what he hated even more than the Dravians. And he would have to live with that—if he didn't pick up the pistol that lay a few centimeters from his hand and burn away his skull.

FRUIT OF THE VINE

"How?" asked Tokay.

Garm shrugged and Serteze answered, "He got drunk out of his mind and missed the flight." The embarrassed Searcher reached for the guitar and handed the instrument to Tokay. 'Come on. Let's get out of here."

CRIMINAL historians of later years would return again and again to this point in the most disconcerting case to remain unsolved in FPA files. How the FPA managed to turn complete victory into complete defeat in a few hours remained fertile ground for the wildest speculations. The only possible trace of the culture once known as The Entertainers turned up years later in a rather ambigu-

(Continued from page 112)

ous lawsuit over the ownership of a starship's hull being used as an aging tank on Butus 3. The identity of the hull could not be established and possession was ruled as indicating ownership. When the FPA finally closed the case, wine had become one of the cheapest items in the Federation.

The three Entertainers crossed the ramp in silence until Tokay realized that their destination was the sleek FPA cruiser.

"Wow!"

"We can only die once and it's the fastest ship in this part of the Federation." said Serteze.

As they approached the landing fins of the spacecraft Tokay sensed something familiar about the FPA agents guarding the ship. Then he recognized Paddy and The Gladiator.

Garm answered his thoughts. "They came in on a passenger liner while you were out planting. Almost everyone is on board. We were waiting for you."

The ship was sealed as the last Entertainer boarded. The Searcher took over the controls and proudly displayed his newly gleaned knowledge. As the last man reported and was strapped in, Serteze released the clamps and the Spaceport alarms broke loose. The emergency communications band flashed on, asking for identification.

Garm answered, "Entertainers, here. Request permission to take off—" and then, as Serteze lifted the ship starward—"we are taking off anyway."

The FPA cruiser was the fastest ship on Phobus and was in warp before any attempt at pursuit had cleared the Port.

Paddy came up from the lower deck and asked, "Where are we going?"

"How about Butus 3," said Garm. "They won't look for us there."

Paddy raised an eyebrow.

"You mean that after all-of this, we'll still have to buy imported wine?"

"Looks like," said Serteze.

Tokay smiled at the irony of it. His fingers strummed the guitar as he said, "What were those lyrics...oh yeh...I remember..."

THE police cruiser sat angled into the curb, the sidewalk door ajar. Dawn was barely showing and few people were up to see the flashing red light blink its fearful message. Sister Marion had found the body and stood transfixed, tapping a dirge on a tambourine while policemen examined the corpse.

The sergeant kicked the body.

"Yep. Charlie Three is no longer with us."

The younger patrolman who was bending over the corpse reached behind his back and touched the sergeant's leg.

"Don't do that. He was a man."

"Oh, sorry. Didn't know you were that touchy, kid. I'll call for the white wagon."

The patrolman eased the torn and tattered suit aside and pulled away the ruffled newspapers until he found a battered piece of leather that had once been a billfold.

"This is unit eleven-o-nine at the corner of Howell and Anderson Streets. We have an unknown DOA," the sergeant said into the microphone.

"Not unknown," called the patrolman. "He has a name." The patrolman turned the Musician's Union Card a little more toward the light to make out the almost time-erased name. "It's Tokay Wilson."

"A what?" loudly asked the sergeant.

"T-O-K-A-Y. It's the name of a grape," answered the patrolman.

He covered the timeless remains of the little figure and tried not to think about it. The hearse arrived and the attendants rolled the big-wheeled cart alongside of

Charlie Three.

In flashing flurry the vehicles were gone. Sister Marion walked away, her head bowed, still pounding the empty cadence.

Charlie Three was gone. His body was dead. His pain had been set free and in freedom his essence was to be elsewhere.

READING ROOM

(Continued from page 2) power to return in new bodies century after century and has largely been responsible for the destruction of most of man's dreams of progress. And in the background are the patricks who seem to regard themselves as guardians against evil, though their legends indicate God had long-ago rejected them and made them exterior to the universe of reality.

All this takes place in a world in the near future, one where men have supposedly reached a high point of progress. The population explosion has been checked, the arts have hit a new high and everyone seems to have been freed from misery and poverty. Unfortunately this is told to us but never shown. We get mention of places and events, but the whole world is at best a shallow stage for the story, lacking any discernible reason for us to care about it. The only two examples of what might be normal men who play any part in the story are empty pseudo-intellectuals who seem intent only on justifying their failure to be more, though Michael Fountain is described to us as having extraordinary capabilities.

This tendency to tell us about things and then show nothing that merits what we are told is characteristic of the entire story. The menacing figures are described in copious words and symbols. The seven weavers are supposed to be figures of passion and supreme ambition. But in their conversation and their actions, they come across as comic-opera villains at best. They cause enough trouble but they manage to achieve nothing that is of any real importance to the story. Oh, they think they're doing great things, particularly to themselves. But the most they do (aside from a little wanton and petty killing that does them no good) is to communicate the power to read minds to those they are trying to control—hardly a trick they could want.

The returnees, the ones who can pass from body to body, should be solidly menacing. With the ability to take over anyone they choose and with centuries of planning, they should represent about the ultimate of power. We're told at various times that they do represent such power. But when we finally meet their chief example, he is little more than a loud-mouthed fool with certain peculiar habits, such as breathing water. He spills whatever information is wanted to the protagonist and makes threats that are even less convincing than what has been threatened before.

The patricks are a bit more fancifully interesting. One keeps a kind of ape-dog ghost (who has no importance in the story). Another seems to guard a fountain that chains evil in a sort of never-world not quite identical with the real earth. Both run on at the mouth about their importance and neither seems to have any real sense of power. The second one comes on stage again briefly to cry that the evil has escaped from his fountain—and then runs off, sniveling a bit but totally helpless.

Our protagonist is Freddy Foley, described as a man with good eyes and simple brain. This works out as the literal truth. Foley—we are told—matures during the story and everyone comments on this—if so, there is no evidence in his actions.

Partly as a result of being touched by the brain-weaving, he

gets a hunch at the very beginning of the book that Carmody is a man who has lived before. He is also not only aware of the brain-weavers but has one of them as his girl friend. This should be quite a background for a reporter—but he fiddles gropingly with his worries through more than half of the book. Then he finally asks for and gets an appointment with Carmodv. where the returnee spills as much of the big hush-hush secret as we ever get. When Foley is locked up in an insane asylum, it seems logical enough; only a crazy fool would have put himself so easily into such a trap.

The eventual struggle is singularly unconvincing. After pleading for help to escape, Foley and a few others decide to jump the fence. With no further details on how they plan this, they do so. And now, because of a note from a man whose motives Foley cannot understand, he and his band go about killing returnees. (Why none of the all-powerful returnees has enough sense to shoot him and his band during the riots that occur at this time is a matter left uncovered.)

But none of it matters. Our protagonist quits his killing and joins his girl friend for more talk at a case, ending this episode. But it's all right. The brain-weavers decide to achieve their power by destroying themselves, while the returnees apparently give up for some other reason. And in the end, each of the three groups somehow decides Foley is such a magnificent champion of man that they make him their leader.

Of course, material such as this has a built-in-cop-out. It's labeled as humor or satire-or both. I'm afraid I can't find that it qualifies on either ground. There aren't enough human characters here for any handling of human foibles and the conditions are generally too remote from reality to give us much chance for telling satire. In addition, everything is cluttered up. Repeated symbols, allegory, legend, fantasy and assorted other things intrude to the point where there is no consistent tone or attack. Anvhow, it's pretty darned hard to satirize something as weak as the story of Foley and his menaces. A bad story makes for bad humor and bad satire, as Wodehouse and Swift knew long ago.

There are some lovely inconsistencies within the basic postulates. The weavers, for instance, can seize a passing girl and turn her—both physically and mentally—into one of their own group who has died, but their two major attempts to control minds fail when the men who are to be controlled slip out of their clutches without their knowing it. And there are added details, such as a real demon and constant hints that man must have originated on a world

with a longer day-night cycle. But, like the revolutionist who appears often in the story, all this comes to exactly nothing in the end.

This simply isn't my dish of tea. I've never found that weak catnip tea improved from an infusion of musk and cinnamon. I'd much rather read about The Great Menace over a cup of tea with the incredible Dr. Fu Manchu.

NE of the most popular forms of fiction in our field has always been the novella-or long novelette, as it used to be called. There are a lot of story ideas that require more space than a short for full development, but which simply don't shape up into full novels without so much padding that the result is an unhappy one. Such a length, of course, is excellent for the magazines. But in the book field it presents a problem. If such a story is included in the usual anthology, it will take up so much space that there isn't room left for the number of shorter works most readers expect. And while a few novellas have been published as books, few readers will pay enough for such small books to justify the expense of printing and distributing them.

The obvious answer has occured to several publishers: Do a book of about three such novellas by different writers on a single theme. If the theme seems interesting and the writers' names are good ones, it seems certain to attract readers.

Such was the idea behind the old Twayne Triplets. In at least one case, the result was outstanding. Witches Three was a huge book and a superb one. It had an entire original novel of witchcraft by Fletcher Pratt which may have been the finest thing he ever wrote. And the other two stories (by Fritz Leiber and James Blish) were already classics when they were included. But later works were not so successful. Most of them involved having someone construct an imaginary world and then letting three writers do what they could with it. Sometimes one story might justify the book—but the results, at best, were spotty. It's just not possible to hand someone else's idea to three writers and expect them to turn out their top performance on order.

The latest example of this concept is *Three for Tomorrow*, by Robert Silverberg, Roger Zelazny and James Blish (Meredith Press, \$5.95). It also contains a foreword by Arthur C. Clarke, setting up the basic idea around which the three stories center.

On the whole it's a fairly good example of what I have come to feel is a rather poor structure for a book. The basic idea here (from Clarke) is that any highly technical society must offer not only possibilities for great progress but also for unforeseen disasters. (Our own polluted air and streams indi-

cate this, not to mention what is happening to our cities.) This is a less limiting concept than most, fortunately, and the results from three fine writers are at least always interesting.

Silverberg takes what may be the most obvious danger from our future, though he has limited it to an area that can be handled, rather than trying to make it world-wide—an excellent choice for his proposition. He asks what might happen if a chemical producing amnesia were to get into the water supply of San Francisco.

The idea of drugs in the water supply isn't exactly new, but it has usually been brutally mishandled as a horror story without relieving highlights. By using amnesia rather than total madness or a horrible plague. Silverberg manages to let us follow the characters in a far better story situation. Nor does he wipe out all memories, which would be just as much a fictional disaster as any other doom. By using only an unpredictable but selective loss of memory, his characters are faced with divergent problems in coping with the aspects of the world that are wiped from their minds. As a story device, this is neatly done.

However, the stories within the story are necessarily spotty, and the way they are woven together seems a bit hurried. A relation is indicated between the various problems and it adds to the coherence of the novella. But in following bits and pieces, it's hard to work up any great interest in any one character. The best bit, in fact, remains that of a man who is a fanatic about bottled water and is not affected by the trouble—a somewhat pathetic and yet rather stalwart old reactionary who must put duty above Duty.

Zelazny tells a more personal story, and one with some of his feeling for characters who are somehow outside normal society and larger for the distance. In this case, the menace is the regimentation of all the population under the computers that can handle the data for every citizen from birth to death. The hero is a man who worked in setting up the program and who found a way to wipe out his record, while still having access to the computer to insert any false information about an identity for himself that he might choose.

He's put into a situation where he has to serve the very Security that he has turned from, in an experiment that may either be a blessing or a curse. And the conflict between his idealism and his individual freedom takes over.

Blish digs most deeply into the basic situation suggested by Clarke. As might be expected from his other stories, he brings a rich supply of ideas to indicate what kind of doom mankind can make for himself. He takes the simple facts that any organism must be

choked off in its own waste products and the actual development of such waste is going on now and lays out a grim and rather logical background.

Many of the results are less than obvious, yet they are all tied in neatly throughout. Paddling a canoe from Chelsea to Times Square in Manhattan is completely logical in his world, even though there has been no disaster that has made the island sink. The human figures in the story are either a bit more stock or less interesting than those in the other two novellas, but the background detail is such that there is no loss from this.

All three stories show ingenuity and exhibit a good deal of the skill of the writers. Any one of the three would almost certainly be an acceptable lead novelette for an issue of a magazine. And yet none of them represents the very best work of the writers.

This is probably inevitable. The best stories of any author are not easily produced on order, but are combinations of mood, luck, ideas and a host of other intangibles. But in this case the defects of the three all seem to share a somewhat common element.

The stories are well thought out against the suggestion put forward by Clarke. But none is as completely developed from the angle of pure story as it should be. All seem to slough off the ending a bit more casually than it should be treated. And all really seem to lack the fullest use of character and mood.

Blish's story suffers most in this respect. After preparing us for doom in ten years, he puts us down with a group willing to face that doom. And then he compresses his ending into a few hours. Technologically, this is justified; artistically—in its human elements—it goes completely agley. This has been a story of approaching doom and the reactions to it; suddenly, the hammer of Thor hits—and the doom, as always, precedes the rumble of its thunder.

I suspect that what we have here are three stories that would have grown into three novels of far more importance if the writers had been able to afford the time and thought—as well as space—to

make the most of them. Certainly Blish needs a decade coverage of the League of Last Days, and Zelazny has only brought his hero to the beginning of his conflict.

At softcover prices, this would still be a good book; but \$5.95 would probably buy far more enjoyment from the same writers if invested in their other works.

After looking at a score or so of such books based upon a single theme, I can only conclude that it works much better for short stories and for reprints than for original novellas. Perhaps the idea of such a book is workable. But if so, I'd strongly recommend to the publishers that they give the writers a much longer period to work on their stories, or relax all limitations on length and be willing to let the stories be self-determined. •

A GAME OF BIOCHESS

(Continued from page 87)

function. Rau Lou had rigged the manual override for conventional drive but she couldn't manage warp drive without an intact ship intelligence. And that seemed to be gone—starship cerebral death.

Spider tried energizing the circuits again. He shrugged.

"Nothing but primordial reflexes. Personality has died."

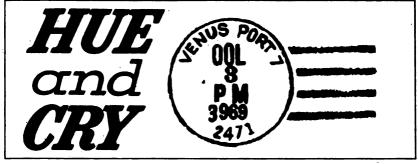
Olga jolted the tractor beam emotionally and set up such a keening that the 'ponics plants folded their leaves. Spider and Rau Lou steadied themselves until Ol-

ga settled down. Spider had never seen such a cybernetic outburst over the death of a machine.

"Rau Lou, what kind of a ship was it?" he asked as he patted the now inert brain case.

"Seventy-sixth generation of the Komputerized Aerospace Research Lab—KARL series," she said. "I guess I was pretty fond of him, too."

Then a lot of things began to make sense to Spider. It had been the ships that had fallen at Grus—not the humans.



Readers write—and wrong!

SNEAKY I did not intend to be. It was just that in the turmoil of the great changeover I asked a good friend and colleague to handle *Hue and Cry* and now I seem to have some great people propping me up and others beating me about the head and shoulders—and still others painstakingly explaining—about the Great Debate. I want to say now—and quickly—that I have never debated the merits of the New Wave vs. the Old Wave, that I am normally excited by good new writing, regardless of school of origin.

For IF/GALAXY I simply want the best stories available—hell, I already have the best readers.

So take over.

Dear Editor:

Congratulations. I had my doubts about the maintenance of quality in your magazines (I tend to think of GALAXY and IF as extensions of the same general magazine) when the editorship changed, but so far there have

been no indications of deterioration. Right now the GALAXY publications are the most consistent on the market in terms of quality; seldom is there a bad story, and never a bad issue in the past five years or so. This is perhaps the mainstay of your popularity; there are other magazines that will in a given month have an absolutely phenomenal issue, much better than yours, but the next month that same magazine might be a complete miss.

Also, congratulations on the new printer. If the October IF is a good indication, the appearance and readability of IF and GALAXY have been substantially upgraded.

And now a criticism or two. One of the major faults of your publications under the old management was the handling of subscriptions and mailings. Addresses were never changed when requested; if they were, it was only after repeated letters. I hope that this aspect of your operations will improve soon.

What ever happened to Philip Jose Farmer's Riverworld series (Day of the Great Shout-WORLDS OF TO-MORROW. Jan. '65: Riverworld-WORLDS OF TOMORROW, Jan. '66: The Suicide Express-WORLDS OF TOMORROW, Mar. '66; The Felled Star-WORLDS OF IF. Jul.-Aug. '67)? For all its faults. I thought that this was one of the most inventive series going. It was suspenseful, exciting, unusual, "mind-expanding" and showed a deep concern for some rather pressing problems of human nature. But the story of the Riverworld was definitely not finished; as it stood (approximately 200 pages written) Farmer looked like he could go on for another several episodes before he resolved the conflict. Can we expect any more on this theme from him, and if so, when?

I take it that WORLDS OF IF has abandoned its policy of publishing (and identifying) a new author a month. This I feel was a mistake. Proof? Look at the October Hue and Cry. Larry Niven and Perry Chapdelaine both were published under this policy. In addition, several other authors named (McAllister, Margroff, Filer); even if they never become great names, they are good authors who contribute fine stories to the field.

Sure, you say, we still publish new authors when good ones turn up. Of course you do—any sub-classification of literature, especially a specialty like science fiction, must continually turn up new talent to survive. But it is a great encouragement to new authors to know that there is an advertised steady market for their writings. And as a result many of them will guide

their stories into your hands—give you first crack at them, so to speak. Everybody benefits thereby you, the new writer and especially the reader.

Finally, please, Please, PLEASE!!! -let's have no more general discussions over the general merits of the "New Wave" in either editorials or letter columns. If a person wants to derogate or defend a specific author on a specific story, that's fine, but letters of the type of Mr. Cover's in the October IF are a waste of time. Face it, both sides have become extremely polarized and nobody wants to listen to anyone of a different view any more. The "New Wave" has its good points—the literary quality of the field has been upgraded, for instance—and its bad ones-as an example, too many "New Wave" stories are literary exercises totally devoid of real content. But these constant harangues pro and con convince no one; all they do is clutter up magazines with repetitions of opinions that everybody has been overexposed to during the last three years or

All in all, I am impressed with the change in editorship; I expected the Galaxy magazines to somehow decrease in quality and to my surprise they did not. But there is still much room for improvement, as there was under Mr. Pohl's guidance.

Very truly yours, Larry (Lawrence W. Propp) Urbana, Ill.

Philip Farmer is completing a booklength new episode of his *Riverworld* series—whether or not it will complete the series I don't think Phil himself knows. It's a long river but we'll all camp on it soon.

IF Firsts are very much on the agenda. More on this at a later date.

Dear Mr. Jakobsson.

First of all I would like to compliment you on the way you have improved the way GALAXY and IF are being printed. It was nice to get my magazines with the date on the cover the correct month. But for the last week now I have seen the next issue on the newsstands and I still haven't received my copy in the mail. All the other sf magazines that I subscribe to get my copy to me a day before they go on sale to the newsstands. This saves me a lot of worrying as to whether or not I am going to get it or miss the next installment of the current serial. I think that it would be a good idea if GAL-AXY and IF did the same.

I just finished reading the October issue of IF and it was great! My favorite was None But I. It was the best novelette that I have read this year in your magazines. I also especially liked Survival, The Mind Bomb and Down on the Farm.

Van Vogt's story in the September. GALAXY was tremendous also.

I would like to know when WORLDS OF TOMORROW will be out. After seeing the advertisements in my magazines I have been looking for it and I still haven't seen it. Where is it?

Sincerely,
Bill Andresen
Malibu. Cal.

Remember WORLDS OF MORROW?

Why did you not complete the Riverworld series as you promised?

M.W.G. Madison. N.J.

The new WORLDS OF TOMOR-ROW is ready to roll. Publication has been held up by printing problems, now nicely on the way to solutions.

Dear Mr. Jakobsson:

I just finished reading your interesting editorial in October IF. But what, exactly, did it mean? Surely you didn't have to go through all that just to introduce a new printer?

Aside from the puzzlement above, one thing remains clear—that IF is on the way to its fourth Hugo.

Sincerely, William Max Miller Saltsburg, Penna.

The editorial meant simply that it was a lovely, sunny day—and you've just proved it.

In the course of a lifetime spent in the word game—i.e., editing in radio, television, magazines, books, with the necessary amount of writing both fiction and fact thrown in—I've held and still uncomfortably hold virtually every contradictory point of view expressed in the following letter. The sharp edges of all the arguments remain and I can still hurt myself without outside help on the excellent points made by both sides in the writer-editor controversy.

Scars and cooperation make one answer—and Jack Gaughan and I are

experimenting with another in the February issue of GALAXY.

In the meantime I'm grateful for the clear reportage in the following.

Gentlemen:

For the benefit of the unanointed who didn't attend the St. Louis convention, a panel of editors admitted to tampering (they call it editing to fit mechanical requirements) with many writers' work. One editor virtually bragged that he had cut as much as 5000 words from some writers' material and personally written as much as 5000 words to add to other stories.

Whereupon the writers—led by Harlan Ellison, naturally!—went up the walls en masse and ripped the acoustic hangings to shreds in an orgy of teethgnashing.

The editors fled in panic and left the field to the writers. Who—as writers are wont to do—immediately fell to squabbling amongst themselves. With Harlan Ellison's dulcet tones and whiplash tongue rising several decibels above the squalling multitude—as usual.

During this lively exchange, it occurred to me that there is a "third force" who characteristically go unrepresented in this age-old controversy the fans who pay for all this.

Strictly speaking, I am not a nonwriting fan. I do non-fiction freelance for a hobby and secondary income. However, I have never published fiction, much less sf. This gives me an opportunity to circulate among the fans at an sf convention and hear comments that are not filtered through the nervous-adulation-envy-hate syndrome that most fans fall into when confronted with a writer or editor.

I would say that at least 75% of the fans supported the writers in opposing editorial tampering. Some even regard higher prices and nearly blank pages as preferable to changing the text. A surprising number mentioned noticing inconsistencies in published work and concluded that this was the result of editorial butchery—a questionable premise, I think. Writers have their bad days, too, which often result in bumps in the literary road.

Many fans commented on the widespread practice of beating a good theme to death. Honors went by a handsome margin to the Conan books, which seem to be written by filling in blanks left for names and places in a pile of manuscripts xeroxed in advance. Although most fans blame the editors, it seems to me that this requires a collaboration—neither an editor nor a writer can do it alone.

Although few fans commented, I feel strongly about the closely related business of editor-writer combos ganging up on a particularly successful work. Stranger in a Strange Land has been aped until it has started to grow hair by Dune World, Bug Jack Barron and several lesser lights. All are basically fictional studies of mass movements, done from slightly different viewpoints in slightly different words. Furthermore, I suspect that all these writers used Eric Hoffer's The True Believer for their real-life research source.

I feel strongly about another area of fan comment. I am quite willing to

plow through a story written in Sanskrit by a demented chimpanzee on wet toilet paper—if the basic theme is of interest. There is a growing feeling that established publishers are putting entirely too much emphasis on smooth transitions and winnowed widows and not enough emphasis on ideas.

In a related vein, a sizable minority feel that sf editors are not publishing content of interest to readers, particularly young readers. One fan made the point that the existence of successful "fanzines" is ample proof of failure by established firms to buy and publish what the readers want.

In short, fans seem to regard writers as inexhaustible founts of wisdom who will continue for all eternity to spout bright new ideas in a sparkling technicolor stream—and editors as fumble-fingered mechanics who can be trusted only so far as to allow them the holy privilege of converting the sacred writings into a form suitable for mass duplication.

Extremism like this is, of course, pure hogwash. Nevertheless, I feel that both writers and editors could do much to improve the field.

The editors by keeping their greasy mitts off the writers' work and increasing the "turnover" of writers by publishing fewer sequels by established "names" and more new work by unpublished writers.

More important, higher rates would make it possible for good writers to take the time to search for genuinely new ideas. For the editor, I would think that the increased quality would show a profit by attracting better sales.

The writers by not being so damn

quick to "turn pro," thereby making themselves dependent on writing to make the payments on Baby's new mink.

There is much to be said for a new pro having a part-time job to provide his basic living expenses—freeing the writer of much of the money pressure. In this position, a writer can withhold submission to editors who butcher his work, take the necessary time to dig out truly new ideas and allow his technique to mature naturally, instead of undergoing the forced growth that too often has the same effect on a writer that weed spray has on garden plants.

One of the windup speakers made a point that the movie and TV rights to much good SF, are falling into the hands of speculators who have no intention of producing anything.

Given adequate income from other sources, I have long wished that writers would hang onto their movie and TV rights until interest is shown by a working producer who will waive resale rights and guarantee production.

It seems to me that this would produce a three-way positive feedback, in that the producer would get his story for a better price, leaving more money to put together a better product; the writer would get more money, giving him more time to write a better source story; and the consumer—the viewer—would respond to the increased quality with better ratings; this in turn producing more gross income.

This sort of self-feeding effect needs only a small initial push to cause a big improvement in the whole field.

Eugene Austin
University City, Mo.

Dear Sirs:

Just a line to say how much I enjoy your magazines. I am hooked for life! But I do have a couple of questions.

How about more stories about that crazy dentist Dr. Dillingham, at least one Retief and how about another—Hayden Howard story on the Esks? Also one about that planet which is one long river and if you get killed you end up someplace else alive! Seems to me you are neglecting all the men who made you what you are.

Sincerely yours, Michael Lee Boren Duluth, Minn.

Riverworld will return. I have deleted one of your questions. It has no answer—the question itself is incorrect.

Dear Mr. Jakobsson:

I'm waiting for you to prove yourself, and if the Oct IF is any indication,
you'll do. Not a clinker in the lot; I'm
not quite sure what Malzberg and Herbert were trying to do, but they wrote
well enough that it doesn't matter
much. The most pleasant things,
though, were a Laumer story without
the usual blood & guts, which I find
even more depressing than anti-hero
stories. And Chapdelaine is coming
along very nicely after the abominable
(& at times silly) writing of the Spork
stories.

Actually, if you knocked off the pompous editorials & quit replying to letters, I'd be completely content—e.g., you agree with Matt Hickman on the square root of minus one as Heinlein's

preaction of translight velocity, when it should be obvious that the square root of minus one is one of the foggers thrown in when an author has no explanation to make.

As for you vs. New Wave, I agree with Cover on your paranoia. "Take over" sf indeed! If the New Wavers ever claimed to take over, it was on one premise: that their stuff is better than Old W. & so will push it out. Egotistic, yes, but your fantasies of New Wave Storm Troopers seem a smidge overblown. Meseemeth your definition of New Wave is "anti-hero stories," which makes it easy to shrug off non-anti-hero writers who are New Wave in experimentalism, depth of character, etc.

Philip Michael Cohen Ithaca, New York

Eternity—a five-part Frank Herbert story.

Mrs. Carol Nelson (A faithful Reader) the stories in the Oc-

P.S. Enjoyed all the stories in the October issue—especially Take the B Train.

Some readers loved Eternity. See below.

Gentlemen:

The Frank Herbert serial—a magnificent continuation of his great novel. How about some Heinlein?

"A Heinlein a year keeps science fiction in gear," you know.

Thank you.

P.G. Pantelidokis Norridge, Ill.

Thanks-and let's all get lucky!

-JAKOBSSON

SPECIAL TO GALAXY & IF READERS... THE BEST IN

SCIENCE FICTION BOOKS...

worth adding to your library...stories you will treasure... available to you at a special 10% discount

Conveniently obtained from GALAXY Magazine. No searching, no book clubs, no commitments. Here are the books of enduring value that you will want to own... for hours of science-fiction pleasure, to be read, reread, and discussed with your friends. These are the books that have proven themselves... filled with all of the features you look for in S-F...written by the acknowledged masters of the art. Just circle your choices below, mail to us, and the books will be in your hands shortly, ready to transport you to new, thrilling, imaginative worlds.



FREE-with every order for 2 or more books...

AWARD SCIENCE FICTION READER, 188 pages, containing stories by such masters of science fiction as Arthur C. Clarke, Theodore Sturgeon, A. E. van Vogt, Clifford Simak, Poul Anderson, Leigh Brackett, John W. Campbell, Jr. All of the stories belong to the excitingly modern era that swept SF to its greatest pinnacle of popularity.

NONE BUT MAN by Gordon R. Dickson. Aliens from Moldaug, inhuman stars from the last human settlement, are gathering together for war. Old world inhabitants are willing to sacrifice the new world colonies in order to avert this war. But not rugged individualist Cully When, the type of man who has pioneered frontiers in all times and all places. Set in some future time, this action-filled adventure depicts space-age guerrilla warfare and age-old human stupidity with excitement and ends with an explosive climax.

253 pp. List Price...\$4.95 Discount Price...\$4.46

A CASE OF CONSCIENCE by James Blish. Two separate and complete worlds—idyllic Lithia and a culture on Earth that has literally gone under ground, provides the basis for the story of four extraordinary men. There is the priest, dedicated to the glory of God; the scientist working for the glory of man; the realist who works only for himself; and the man who is content to ask nothing of any world, any man, or any deity. The author presents a compelling moral problem. This book is something of a tour de jorce.

BUG JACK BARRON by Norman Spinrad. Explore the edge of tomorrow...who will be chosen for immortality? Who will make this ultimate decision the government, free enterprise, or private monopoly? A new, highly controversial novel, infused with blood and guts, examining the disease of power as well as the responsibility. Both praised and damned before it was even published, this novel deserves your personal attention.

327 pp. List Price...\$5.95 Discoufit Price...\$5.36

THE POLLINATORS OF EDEN by John Boyd. From the Planet of the Flowers, Dr. Freda Caron's fiancé Paul has sent her an exquisite iridescent yellow tulip that not only has a plastic memory but can talk. Freda realizes that she must unlock the secrets of the flower planet and its strange hold on Paul. In this exciting new book, Freda must travel from her ultra-rational world-oftomorrow to explore the strange, unearthly flower planet. The climax of this shocking and oddly beautiful novel is bizarre and delightful.

188 pp. List Price...\$4.50 Discount Price...\$4.05 212 pp. List Price...\$5.50 Discount Price...\$4.95

THE MIDWICH CUCKOOS by John Wyndham. For an entire day, a small rural village in England loses contact with the outside world. Soon after, all the women, married or not become pregnant, eventually giving birth to remarkable golden-eyed children who exhibit a strange kind of sinisterism. They are dangerous and Midwich must make the ultimate decision—if the children survive, then mankind must join the dinosaur among Nature's discards. A gripping account of man's fight for survival.

189 pp. List Price...\$4.50 Discount Price...\$4.05

THE SPACE MERCHANTS by Frederik Pohl and C. M. Kornbluth. Two major advertising agencies are fighting for the Venus account—nothing less than total control of the Venus economy and markets will do. It is completely unimportant that Venus is a harsh, barren, uninhabited planet. According to the mentality of Mitchell Courtenay of Fowler Schocken Associates, the trick is to persuade colonists to go to Venus, and once there, they will have to survive as best they can. One of the most savage and devastating attacks on modern consumer society and the advertising agents who are its high priests, The Space Merchants is uncomfortably prophetic.

158 pp. List Price...\$4.50 Discount Price...\$4.05

2-7

BRAIN WAVE by Poul Anderson, Imagine, some mysterious space force that inhibits the world's intelligence. But suddenly, it's gone and overnight the intellect of every living creature is trebled. What are the consequences of such instant genius? These are the problems confronting Archie Brock, former near moron; Peter Corinth, physicist; and his no-longer dumb wife. This provocative and absorbing book explores the ultimate problem of such a situation—in a world free of the difficulties that has plagued mankind throughout history, what is man to do with his time?

164 pp. List Price...\$4.50 Discount Price...\$4.05

OPUS 100 by Isaac Asimov. An event—a special Asimov book...America's foremost science writer, takes you on a personalized guided tour of his first 99 books. This, his 100th book, is an anthology of works selected by the author himself. It is a journey which acquaints the reader with a a journey which acquams the reader with a writer considered to be a genius, who delights in every aspect of life and has the capacity to make any subject he writes about both understandable and entertaining. Reviewers customarily greet Asimov publications with such adjectives as "brilliant," "engrossing," "powerful," and "spark-ling." Opus 100 is no exception.

318 pp. List Price...\$5.95 Discount Price...\$5.36

THE PAST THROUGH TOMORROW, Robert A. Heiniein's Future History Stories. Twenty-five years ago Robert A. Heinlein began to write stories about an imaginary future that is fast becoming a reality. Discover, through the pen of the master of space-age fiction, about man's first step on the moon; weather control; manufacture of synthetic food; interstellar exploration. Now, for the first time, in chronological order, are Heinlein's 21 compelling stories—all depicting a glimpse of a possible tomorrow.

667 pp. List Price...\$6.95 Discount Price...\$6.26

8-10

THORNS by Robert Silverberg. Duncan Chalk, master pain peddler, skillful and sophisticated, lives in a time when reading tragic headlines no longer provides the necessary sensations. Into Chalk's sinister hands falls Lona Kelvin, orphaned, mother of 100 children, yet without a soul; and Minner Burris, starman, whose butchered body was put together by aliens, a walking horror. What fun to mate these two and watch them wallow in their mutual torment. But somewhere, something went wrong. Discover what happens when the puppets begin to pull their own strings in this imaginative, chilling book.

222 pp. List Price...\$4.95 Discount Price...\$4.46

THE GALAXY BOOK SERVICE

P.O. Box 3977, Grand Central Post Office, New York, N.Y. 10017

Please send me the books I have circled.

Please print full name & address

S-2 S-3 S-4A S-5 Name

S-6 S-7 S-8A S-9 S-10

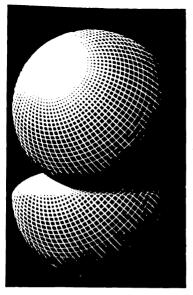
Address

State

Zip Code

Sorry, No C.O.D.'s. (Please add 25¢ for postage and handling, N.Y.C. residents please add 6% sales tax. N.Y. State residents please add 5% sales tax.)

10-day satisfaction...or your money back, FREE copy of AWARD SCIENCE FICTION READER with all orders for 2 or more books. I-2-70



DOUBLE YOUR READING FUN!

The best fiction is science fiction; and the best science fiction appears in GALAXY and IF.

READ



Leader in the science-fiction field for almost two decades! Presenting the finest writers: Asimov, Pohl, del Rey, Leiber, Anderson, Herbert Vance, Simak, Dickson, Blish, Silverberg, Ellison, Knight, Harrison, Aldiss, Niven, Clement. Popular monthly columns: For Your Information—Willy Ley, Galaxy Bookshelf—Algis Budrys.

Three-time winner of the coveted Hugo, science-fiction's Oscar; voted the best sf magazine in the world. IF's regular authors include: Keith "Retief" Laumer, Andre Norton, C. C. MacApp, Mack Reynolds, Roger Zelazny, Samuel R. Delany, Philip José Farmer. Features: The Reading Room, controversial book reviews by Lester del Rey. Hue and Cry where the readers praise or blast the editors, writers and artists—and where the editors, writers and artists blast back.

READ



EVERY MONTH

60¢

Any 3 books with trial membership

Including, if you wish,

I: AS ABOVE OF AFTER E. CLER

best-selling novel and award-winning cinema spectacular

> Science Fiction has grown up. Have you kept up?

THE RESERVED WAS ARTHUR C.C. ANY A new literary genre has come of age-your age. Mature Sophisticated. Provocative. And respectea. You are invited to explore it now under an amazing trial offer. Take any 3 volumes on this page (worth up to \$23.40 in original publishers' editions) for only \$1, plus shipping and handling with trial membership. • New club

selections will be described to you in advance each month. Choose from new works of fiction-and fact-by such acclaimed authors as Bradbury, Serling, Asimov, Clarke, Heinlein and others. Volumes are full-length, hard-bound -and uncut. Though they sell for as much as \$4.95, \$5.95 and more in their original publishers' editions, club members pay only \$1.49 plus shipping. (You may choose an optional extra-value selection at a slightly higher price.) Your sole obligation is to accept as few as four books during the coming year. Cancel any time thereafter. Science Fiction Book Club, Garden City, N.Y. 11530.

PHOTOGRAPH COURTESY OF MGM FROM THE FILM 2001: A SPACE ODYSSEY, A STANLEY KUBRICK PRODUCTION.

spell its death. A controversial best-seller by the

most acclaimed science fiction writer of our era.

2001: A

SPACE

ODYSSEY by

Arthur C. Clarke Hunting an alien

"presence" in the

universe, 5 men and a

computer-gone-psychotic stumble upon the in-

credible secret of mankind's

birth - only to trigger the

cosmic "booby-trap" that could

SCIENCE FICTION BOOK CLUB Dept. 02-FHX. Garden City, N.Y. 11530

Please accept my application for membership and rush me

riease accept my application for memoersing and rush me the 3 books whose numbers I have circled below. Bill me only \$1.00, plus shipping and handling, for all 3. Then, every month, send me the Club's free bulletin, "Things to Come", which describes coming selections. For each book I accept, I will pay only \$1.40 plus shipping and handling the 3 books you want. \$1.49, plus shipping and handling, unless I take an extra-value selection at a higher price. I need take only four books within the coming year and may resign at any time

thereafter.
NO-RISK GUARANTEE: If not delighted with my introductory



days to cancel m		
Print Name		+ 14.
To a		
Address		
City	State	Zip

22-S79

If under 18, parent must sign here. (Offer good in U.S.A. only)



622. tion Trilogy, by Isaac Asimov. The ends of the galaxy revert to barbarism. Pub. ed. \$10.50

629. The Illustrated Man.RayBradbury. 19 stories. "Intensely real." N. Y.
Times. Now a hit
movie! Pub. ed.
\$4.50

630. Ubik. Philip K. Dick. Joe Chip 630. was a man from 1992 — so why was he in 1939? And how could his dead friend talk?

600. A Treasury of Great Science Fic-tion. 2-volume set. 1,000 pages. Counts as one book. Pub. ed. \$5.95



615. Stranger in a Strange Land, by Robert A. Hein-lein. He knew the Martian love secret -and it spelled his doom, Pub. ed. \$6.95

642. Stand on Zan zibar, by John Brunner. Extrapo-lates today's soci-ety into 21st Century. 600 pages. Pub. ed. \$6.95

171. The Funco File, by Burt Cole. Gov't computer baffled by Deva love priestess! Pub. ed. \$4.95

627. Last Starship From Earth by John Boyd. Young lovers flee loveless society ruled by computer "god" Pub. ed. \$4.93.



Isaac Asimov. Long out of print. "An enticing thrill-er."-N. Y. Times. Pub. ed. \$3.50 618. Dangerous Visions. Anthology of

601. I, Robot, by

33 original stories never before in print by Sturgeon, Anderson, others. Pub. ed. \$6.95

605. Nova, by Sam-uel R. Delaney. Battle between alien worlds - and a desperate race to the sun. Pub. ed. \$4.95

639. Omnivore. Piers Anthony. By what trick did the 3 scientists escape Nacre others failed?