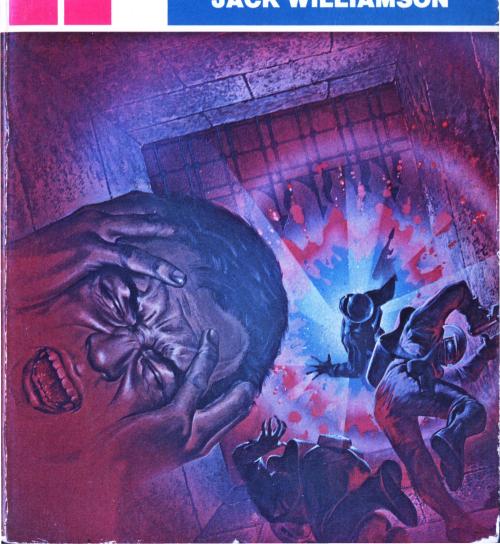


SCIENCE FICTION • APRIL 1973 • 75¢

### **DOOMSHIP**

The Sensational New Novella by

FREDERIK POHL and JACK WILLIAMSON



# Great new science-fiction titles from . . .



#### THE RITHIAN TERROR Damon Knight

Seven Rithians—enemy aliens—have landed on Earth. Six are disposed of. One breaks loose and must be found or disaster will follow. But how to detect a monster that can disguise itself as a man—any man? AS1008 75¢

#### THE CASE AGAINST SATAN Ray Russell

This soul-chilling novel of incalculable evil is more terrifying than *The Exorcist*. A pious 16-year-old girl one night flings off her clothes, tries to seduce her priest, spews a stream of obscenities. Obviously she is possessed! A handsome cleric is assigned the task of exorcising her. He knows there is only one way to cast out a devil from the body of a virgin . . . AN1021 95¢

#### THE BEST FROM GALAXY By the editors of Galaxy Magazine

For more than twenty years Galaxy has ranked as the foremost science-fiction magazine. It continually presents award-winning stories by all the top writers in the field. Award Books is proud to publish a select collection of recent fiction from the magazine—a collection, in short, that's the best of the best. AN1039 95¢

#### Introducing SPACE PROBE 6

The exciting adventures of starship captain Matt Foyt . . . deep-space thrills and chills in every corner of the galaxy. The first two titles in the series are just off the presses . . .

THE SOUL STEALERS
Charles Huntington
AS1044 75¢

NIGHTMARE ON VEGA 3 Charles Huntington AS1045 75¢

GALAXY/IF READER SERVICE • P.O. Box 500 • Farmingdale, N.Y. 11735  Please send me the science-fiction titles checked below. I enclose check or money order for (plus 10¢ for each book to cover postage and handling).				
AS1008	AN1021	AN1039	AS1044	AS1045
Name				
Address				
City		State		Zip
(Offer good only in U.S.A.)				

# The best of all possible worlds.

That's BATTLE FLAG. The only monthly magazine that caters to both science fiction and war game nuts. Just about every month, BATTLE FLAG will contain sci-fi articles and even have a futuristic war board game enclosed. Five times a year, our magazine contains a complete board game with die-cut markers. Free.

We have such a game, right now: "The Second Galactic War." It's not so free. But just \$4.00 will get you one. And \$8.00 will get you a year's subscription to BATTLE FLAG. Since there are five free board games a year, you can see how

or hopefully, for both. Send check or Money Order to: The Third Millennia, Inc., 465 Woodland Hills, Philadelphia, Mississippi 39350

much you'll be saving with a year's subscription.

Can you dig it? Mail in the coupon now and check
appropriate boxes for subscription, for the game,

Please enter my subscription to BATTLE FLAG for:  ☐ 1 year (12 issues) \$8.00 ☐ 2 years (24 issues) \$14.00  Send me the following games:  ☐ "Second Galactic War" \$4.00 ☐ "Salerno" \$4.00  ☐ "Shiloh" \$4.00 ☐ "Operation Market Garden" \$4.00	Banker ag
Name	
Address	
CityStateZip	



March-April 1973 Vol. 21, No. 10 Issue 165

ALL NEW STORIES

Arnold E. Abrams	on, <i>Publisher</i>
------------------	----------------------

Ejler Jakobsson, *Editor*Judy-Lynn Benjamin, *Managing Editor*L. C. Murphy, *Subscription Director* 

Theodore Sturgeon, Contributing Editor
Lester del Rey, Feature Editor
Jay Tunick, Circulation Director

NOVELLA	
— DOOMSHIP, Frederik Pohl	
and Jack Williamson	6
NOVELETTE	
— A WOMAN AND HER FRIEND,	
Michael G. Coney	64
SERIAL (CONCLUSION)	
THE WIZARD OF ANHARITTE, Colin Kapp	124
SHORT STORIES	
-NEXT TIME, David Magil	88
CALL ME PROTEUS, Edward Wellen	102
FEATURES	
HUE AND CRY: Readers Write and Wrong	4
SF CALENDAR	115
READING ROOM, Lester del Rey	118

Cover by Brian Boyle, suggested by THE WIZARD OF ANHARITTE

WORLDS OF IF is published bimonthly by UPD Publishing Corporation, a subsidiery of Universal Publishing & Distributing Corporation. Arnold E. Abramson, President. Main Offices: 235 East 45 Street, New York, N.Y. 10017. Single copy: 75¢. 12-issue subscription: \$9.00 in U.S., \$10.00 elsewhere.

WORLDS OF IF is published in the United Kingdom by Universal-Tandem Publishing Company, Ltd., 14 Gloucester Road, London SW7 4RD. Arnold E. Abramson, Chairman of the Board. Ralph Stokes, Managing Director. Single copy: 25p. 12-issue subscription in the United Kingdom: £3.60.

Copyright © 1973 by UPD Publishing Corporation under International, Universal and Pan-American Copyright Conventions. All rights reserved. Second class postage paid at New York, N.Y. and additional mailing offices. The publishers assume no responsibility for unsolicited material. All stories printed in this magazine are fiction and any similarity between characters and actual persons is doincidental. Printed in U.S.A.

# Strategy&Tactics



#### The paper time machine

STRATEGY & TACTICS is a magazine. It's also a tool: a time machine that enables you to replay the crucial events -- past, present, and future - that shape our lives

Now, instead of merely reading about what's happening, you can explore and experience the alternatives and decision points through the technique of Conflict Simulation.

#### What is Conflict Simulation? Conflict Simulation is a way of analyzing a

political or military conflict situation. A way that is as intellectually stimulating as a game of chess, and as thorough as a written analysis.

Through the use of the Conflict Simulation "game") format, the conflict situation is re-created - so that you are in a position to make the vital decisions and, in the game at least, change the way things were, are, or will be

#### What you get STRATEGY & TACTICS magazine is publish-

ed bi-monthly. Each issue contains:

\*A ready-to-play conflict-simulation game with a 22 x 28" playing surface, die-cut play-

ing pieces, and complete rules

\* An analytical article on the same subject as the game in that issue.

\* Other feature articles on historical and military subjects.

\* Game and book reviews, commentary on existing games, and discussions of subscribers'

The magazine is 48 + pages long, and all material is handled in a highly organized (and easily understandable) graphic format.
Games recently published in STRATEGY &

TACTICS were: GRUNT (ground combat in Vietnam), LOST BATTLES (tactical combat in Russia, 1941-44), USN (the war in the Pacific. 1941-43), COMBAT COMMAND (tactical combat in Western Europe, 1944).

We also publish a separate line of conflictsimulation games, which you will find listed in the coupon

#### Free to new subscribers

NAPOLEON AT WATERLOO, history's greatest battle presented in a game-design specially created to introduce new readers to Conflict Simulation

Send check or M.O. to: Simulations Publications Inc. Dept. 483 44 East 23rd St., New York, N.Y. 10010

Please enter my subscription to S. & T. for:

1 Year (6 issues) —\$10 2 Yrs. (12 issues) —\$17 3 Yrs. (18 issues) —\$24

Send me the following Simulation Games: Kursk (Russia, 1943)-\$6 Korea (1950-51)-\$6

Phalanx (ancient Greece)—\$6
Barbarossa (Russia, 1941-45)—\$6
Leipzig (Napoleonic Wars, 1813)—\$6
Normandy (the D-Day Invasion)—\$6

Please send me your free brochure

Address -

State\_



Dear Mr. Jakobsson:

About Stephen Tall's Gods on Olympus: It is a pleasant, readable tale because "it is odd, exciting and it has a climax" (G. K. Chesterton, Science and the Savages). The style is, if anything, soony, which means sentimental in Australian Jargon.

To compensate, there are zing sentences terminating many paragraphs, which serve also as boundary markers. There is not much literary piling-Pelion-on-Ossa.

As to the structure, it is somewhat of a bundle of themes tied together only by their simultaneous existence in print. It is half science (vide infra) and half fantasy, fused mainly by the personality of the I-narrator and his lovely spouse, with wizened Ursula serving as artistic oracle. The ending is more of a half-cadence than a climax, being saved only by the intervention of a deus ex machina in the form of a hands-off ukase.

It is scientifically unacceptable, at least by the criteria of today's biological paradigm. There is no evidence of evolution and only the imperial mute coon and his mate as evidence of of mutation or speciation. Moreover, it is legitimate to ask on what fauna the eagles generally fed. And finally, the small coon hands and the eagles together could not surmount the physical difficulty of such major construction as is described.

Despite the carping criticism, an enjoyable piece.

In the Reading Room Lester del Rey admits an attack of la maladie sans maladie and with poignant nostalgia calls to mind that era in which sf was a way of life, or if not that, then primarily a happy hobby for all participants. He pensively regrets the present demand for relevance and that urge to save the world for humanity even in the smallest activity. It is certain that both he and sf will find some pleasant nostrum for this ailment.

This is not only a get-well-real-quick message, but has also the intent of noting that he gives to sf a purpose. Now Judith M. Hochberg strictly denies that sf has a purpose (Directions, Galaxy, Sept. '72). People have purposes but genres do not. Let us not indulge in semantics, but rather synecdoche. Ms. Hochberg advocates sf that penetrates psyche, theology, social justice, humanitarianism (local, global and galactic) as well as other minute and great elements of life. Mr. del Rey wants carefully thought out, jolly good fun. She is more serious than he; he is the recessive component and she the progressive component in this scientific mythography.

A just apodosis is that we must have more than one sort of sf tale.

Alexander Doniphan Wallace University of Florida

#### Dear Mr. Jakobsson:

One of the clearest definitions of sf appeared in Lester del Rey's Reading Room in August If. He put forward three criteria for judging whether something is sf or not: 1) Rationality, 2) Fiction, 3) Alternative. He distinguishes

(Please turn to page 174)

**SWISS WRIST ALARM WATCH** 

BUZZZ Just set it and forget it. The built-in buzzer wakes you or reminds you on time!



- QUALITY SWISS MOVEMENT.
- ANTIMAGNETIC HAIRSPRING AND UNBREAKABLE MAINSPRING.
  - LUMINOUS DIAL MARKERS, HANDS AND SWEEP SECOND-HAND.
  - GENUINE LIZARD STRAP.

For years, watchmakers have been trying to produce a truly dependable wrist alarm watch at a sensible, down-to-earth price. Finally, the enterprising Swiss did it. And here it is!

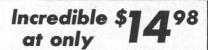
It could be a real life-saver for anyone who needs a never-fail reminder. Just set it and forget it. When the appointed hour arrives, you'll be jogged by a gentle yet insistent buzzing.

This watch is strong on good looks . . . handsomely styled with a durable goldentone case, and matching raised gilt numerals and markers. It features a quality Swiss movement, unbreakable mainspring, antimagnetic hairspring. Plus luminous dial markers, hands and sweep second hand. And a genuine lizard strap like the \$100 watches have.

The price - unbelievable at only \$14.98 plus \$1.00 postage and handling. Order yours now! Ideal gift for executives, salesmen, sportsmen, profes-

sional people . . . anyone!

25 W. Merrick Rd., Dept. BGV-4 Freeport, N.Y. 11520 Serving Satisfied Customers for over 25 Years



**30-DAY MONEY-BACK GUARANTEE!** 

MAIL NO-MOR	JOOI ON TODAT.
JAY NORRIS CORP., 25 W Dept. BGV-4 Freeport, N.Y.	
postage and handling. I	SWISS WRIST ALARM 14.98 plus \$1.00 each for f not delighted, I may re- s for immediate refund.
N.Y. residents add sales	ax.
Enclosed is ☐ check ☐ n	noney order for \$
Print Name	458 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Address	The Company of
City	The second

NOVELLA

# DOOM

Sol One . . . where men live faster than light—and as often as they dare!



## SHIP



THE meeting and the funeral had both run long and Ben Charles Pertin was late. Because of this and because what he was late for was a date with the girl he loved and hoped to marry he was trying to make up time.

On Sun One trying to hurry was both easy and unwise. The easy part was physical. Sun One's gravity ran about three per cent of Earth's even at the center, so you could leap thirty yards at a time on the straightaway and never bother with stairs or elevators in going from shell to shell of the great sphere. The unwise part lay in the fact that most of Sun One's population. composed of fifty strange races from all over the galaxy, was also in a hurry-you ran the risk of collision all the time. Humanity was a junior race in the galaxy. Pertin's instructions had been most explicit about avoiding offense when possible.

He was also in a difficult mood because of the combined impact of the morning's events. The funeral had been his boss's, Ray Sam Barnett's. Pertin had liked him only generally and defensively—there had been no close personal tie. Nevertheless, Sam's death had been an unwelcome reopening of ancient insomniac questions having to do with what death really amounted to under the special circumstances of Sun One. As Pertin

hurried down from the shell where Barnett's shrouded body had been consigned to the matter banks of the tachyon transmitters he found the old puzzle of identity clouding his mind.

Sun One had begun as an asteroid circling a young blue-white giant star in the great diffuse gas cloud that Earthly astronomers called the Orion Nebula. Over a period of centuries it had been built upon, sheathed over and tunneled into until it had been converted into a great hivelike artifact. It was the closest thing there was to a central headquarters of the loose association of intelligent races in the galaxy which had made contact with each other. Ben Pertin and all the other forty or fifty human beings there were newcomers to Sun One and to the galactic confraternity-Earth was the newest planet to achieve contact. When a Sirian or a T'Worlie died half of Sun One was likely to come out to do him honor. At the funeral of Pertin's boss the only mourners—if "mourners" was the right term had been a handful of humans and not more than six representatives of all other known sentients. Not even all the humans had troubled show up—probably, thought, because they did not want to stimulate again that endless questioning about who it was who had died, when the nature of tachyon travel meant that exact duplicates of Pertin's boss still lived at

a dozen places in the galaxy. As they did for everyone on Sun One, since each of them had come there in the same way.

NEVERTHELESS the death did have some concrete implications and one of them touched Pertin very closely. That had been the subject of the brief staff meeting that followed the funeral.

The most unpleasant part was yet to come-Pertin had to tell his fiancée about the results of the meeting. She was sure to dislike it. Still, as he came closer to where she was waiting for him the unpleasant aspects began to fade from his mind and he began to feel the joy of seeing Zara Doy again. Bisexual love, it had turned out, was not very common in the galaxy, most of whose races either reproduced in impersonal ways or reserved their emotional commitments for functions other than procreation. But Pertin and Zara Doy were deeply in love all the same. They planned to marry as soon as they could and rather enjoyed the fact that thismade them objects of interest to such beings as possessed personal curiosity at all.

So they were watched as Pertin spotted Zara Doy and launched himself toward her in a shallow gravity dive over the heads of a thing like a dragon, a creature composed mostly of a single great blue eye and a couple of scurrying collective creatures from one of the

core stars. "Sorry," he cried down at them, caught the laughing girl's hand and stopped hard beside her.

"Ouch," she said, releasing a holdfast with her other hand. "I'd appreciate a little less enthusiasm next time."

He kissed her and took her arm. "It's part of the image," he said cheerfully. "You know what the chief of delegation says. Make them know we're here. Earth may be the newest planet in the association but it isn't going to be the least important. We have a duty to Earth to make ourselves known throughout the galaxy and a duty to the galaxy to contribute our strength and our know-how."

"I think," said the girl, "that if you're going to talk like that you'd better buy me a drink."

At this shell of Sun One the curvature of the spherical surface they walked on was noticeably sharp. It was easier to leap than to stroll. To travel arm in arm, which is how Ben Charles Pertin chose to walk with his girl, required practice and a lot of discomfort, not only to them but to the other sentients in the concourse. Pertin and Zara shifted grips, so that each had an arm around the other's waist-then Pertin caught the holdfast webbing with his free hand and partly tugged, partly kicked them into the air. They shot past the dragonlike narrowly missed creature. steelwork vertical strut, touched down again next to something that

looked like a soft-bodied beetle with three dozen legs and were in sight of the little refreshment platform they liked. Pertin said "Hi!" to a thing like a green bat as it flapped by. It hissed something shrill personal translator that his repeated into his ear as, "I recognize your identity, Ben Charles Pertin." The girl nodded, too, although all members of that particular race, which was called the T'Worlie, looked alike to her, and in any event the T'Worlie did not have the custom of nodding since they had no more neck than bats.

As they waited for traffic to clear Zara asked, "How did things go this morning?"

He hesitated, then said, "About as usual. Things are all fouled up on the probe." He was watching a tumbling boxlike robot coming toward them on a tangent, correcting its course with methodical jets of steam from the faces of its cubical body, but the tone of his voice made the girl look at him sharply.

"What is it, Ben?"

"I'll tell you when we sit down."

"You'll tell me now."

"Well—" He hesitated, then cried. "All right, we can make it now!" But the girl wrapped her fingers around the webbing of the holdfast.

"Ben!"

He relaxed and looked at her. He didn't say anything, but he didn't have to.

"Ben! Not again!"

He said defensively, "I have to, Zara. The other copy of me is dying. Barnett promised he'd go instead of me—because of how you feel—but now he's dead here. There's nobody from Earth on the probe now to represent us. So I agreed to carry the ball." He gazed appraisingly at the traffic of aliens, then back at her—and frowned in sharp surprise.

Zara seemed close to crying. He said, "What are you making a big thing about? It's nothing we haven't done before."

"I know," she said and blinked hard. "It's only—well, it's sort of silly. It's just that I hate the idea of your dying out there while we're on our honeymoon."

Pertin was touched. He patted the girl's hand and said seriously. "Honey, one of the traits I like best in you is that you're not afraid to be sentimental at the right time. Don't knock it. I love you for it. Now let's go get that drink."

THE little cafe was nearly empty. That was one of the things they liked about it. It had actual waiters—Purchased People; they didn't have much personality to display, but they were actually human, genetically speaking—and Pertin and his fiancée enjoyed ordering in their rudimentary Italian. It was not their own language, to be sure, but at least it was

one for which they did not need the Pmal translators.

Pertin pulled his feet up, crossed them in air and settled gently onto his chair. They looked about while waiting for their drinks to be brought. Pertin had been on Sun One for more than two years now, the girl for several months. Even so, familiarity had not dulled their interest in the place. Zara was a newscaster, broadcasting to Earth every week on the stereo stage. Pertin was an engineer. His job on Sun One didn't involve much engineering. It did involve interesting mixture of skills-he functioned partly as a legalized spy, partly as a goodwill ambassador from Earth to the rest of the universe.

The mere fact that a job like his existed was still secretly thrilling to Ben Charles Pertin. He was old enough to remember the time when humans had thought themselves alone in the galaxy. The old "nations" had put up their chemical rockets and sent them chugging to Venus, Mars and the moon in his grandfather's time. Thev looked for life and come up empty every time. Nuclear probes, 'a generation later, had investigated the outer planets, the satellites and even the asteroids with the same result. No life. By the time Ben had been twelve the juice had run out of space travel.

Contact had come as Ben Pertin was turning thirteen. Something

had been found on Pluto-an artifact, half-buried under Pluto's mirror of ice-and Earth had suddenly looked outward again. The stereo stages had been full of the find, of the first fumbling attempts to patch it together, the first daring experiment putting at through it. Everybody had talked about it. Ben and his parents had watched the glowing figure on their stage, enthralled. The kids in school had made it the main subject of every class.

And when the ancient communicator had come to life and the first alien face had peered out of its screen and looked into the face of a human, Earth had gone mad.

T DON'T want to hear any more of that cockamamie Earthman's Burden talk," said Zara Doy, "I heard too much of it when I was a kid. I don't want you going out to die. Stay here with me."

Pertin said fondly, "You're sweet, Zara. But this is important. The situation on the probe is exploding—the beings are fighting. They're dying uselessly. I can't back out just for some sentimental idea of—"

"Sentiment be damned! Look. When we get married I want you right in bed with me—all of you. I don't want to be thinking about part of you dying way off in nowhere."



The big DAW news for March is PHILIP JOSÉ FARMER

whose first book in 1973 is his first since winning the Hugo in 1972 for best novel of the year. This time Farmer turns his critical eye on Jules Verne and tells us what really happened in those eighty days around the world. THE OTHER LOG OF PHILEAS FOGG unveils an interstellar conflict right here on Earth; and also sheds some unexpected light on Captain Nemo, the mystery of the Mary Celeste, and some other enigmas! With illustrations by Jack Gaughan.

DAW/NAL UQ1048 95¢

Gaughan also did the cover for the DAW edition of Andre Norton's latest one: GARAN THE ETERNAL, which spans three worlds and three parallel destinies. What more need be said?

DAW/NAL UQ1045 95¢

KING OF ARGENT, by John T. Phillifent is a really different tale of a metabolically reconstructed man on a world inimical to humans. Wait until you see Kelly Freas's cover!

DAW/NAL UQ1046 95¢

And finding a new author is always a big event at DAW Books. Stuart Gordon's TIME STORY introduces a new approach to the paradoxes of time, and a brilliant new author to American sf readers. Gordon will be heard from later in the year—and by then you'll be looking forward to his imaginative talent! With a superb cover by Kirby.

DAW/NAL UQ1047 95¢

"I'll be with you, honey. All of me."

"You know what I mean," she said angrily.

He hesitated. The last thing he wanted was to quarrel with his fiancée two days before they were to get married. He rubbed his troth ring and said, "Zara, I have to go to the probe. First, I said I would and the boss has passed the word to all the other top brass on Sun One. Second, it's important. It's not 'Earthman's Burden.' It's simple logic. We're new and pretty far behind, compared to the Scorpians or the methane crowd or the T'Worlie. But look at what we've done already. We have Earth people on every major planet, working in every big project, taking part in everything that's happening. The others are getting used to us. They consult us now. Who else is there to go if I back out? Earth won't be represented."

"I don't care."

"It's not as if I haven't done it before—"

"The other time you went we weren't about to be married."

"All right, that's true. I owe you something. But I owe our planet something, too. We're just beginning to contribute our share of leadership in the galaxy, Zara. I mean, look at that waiter. Half the Purchased People around are now human - beings. When the nonviables edit a copy for Sun One—what shape do they copy?

Human! The human shape is as familiar in the galaxy now as the Sheliaks—and all less than in twenty years."

Zara sucked at the last of her drink and put it down in its cage. She stared at the waiter, who was smoking a cigarette and thinking whatever thoughts a blanked-out personality was allowed to think.

She shook her head. "I'll lay it out nice and orderly like an engineer for you, Ben. First, if they copy human shape—is it because they respect us or because they have some crazy methane sense of humor? Second, if they buy our convicts for Purchased People, likely enough it's because we have more criminals to sell. Third, I don't like the whole idea of Earth's trying to dominate the galaxy. Fourth—"

"Dominate? I said 'leadership,' not domination."

"One is a prerequisite to the other. Fourth, I hate your going on personal grounds—and I'm not talking about idealism. I'm talking about sex. It's going to take some of the joy out of going to bed with you, Ben, thinking that at the same time somewhere else you're getting eaten by a Sheliak or dying of radiation burn. I'm sorry it's so, but it's so."

Ben said doubtfully after a moment, "Would it be better if we postponed the wedding a little bit?"

"I don't know. Let me think."

He waited, finished his drink,

looked cautiously at Zara. He saw no anger or misery on her pretty face—she was simply staring thoughtfully out at the other beings in the concourse.

Pertin beckoned to the waiter and paid the check.

"They thank you," said the the idiom of in the People, Purchased staring appraisingly at Pertin and the girl. As with all Earth's exported criminals. his body and will belonged to the race that had bought him, but the thoughts of the brain inside were still his own. Far off at the core of some gas-giant planet or floating in space, a creature with a wholly different physical structure was using this man's eyes and limbs as his own, linked by tachyon transmission to the monitor units implanted in each Purchased Person's skull. But inside that skull the original mind was spending lifetime in solitary confinement. "They ask," droned the waiter, "if there will be anything else?"

"No, we're going."

Zara sighed and smiled at Pertin. "Well—you want to go pretty badly. Feeling the way you do, I suppose you ought to go. I won't stop you, Ben, and it's silly to put off getting married. But there is one thing I want you to do." He waited warily. "Give me your ring. No, just to hold. When you've finished going to the probe I'll give it back to you. But I don't want you wearing my ring when you die."

LAST-MINUTE briefing was in the tachyon transport chamber, out at the far shell of Sun One and heavily shielded. Dr. Gerald York Bielowitz himself checked out Pertin. He was a methodical man, one of the reasons he was head of the mission to Sun One. He read from a soundscripted list.

"We've got about ten minutes, Ben Charles. Let's see. Object Lambda. You know as much about it as I do. It's anomalous and it's exciting. The only way to find out about it is this probe and it's in Earth's interest to make the probe succeed." He dropped his eyes to the page and went on: "There's no possibility of survival on the probe. of course, and this has undoubtedly had some effect on the psyches of all the beings there. To the extent that they have what we can map as psyches, I mean. But in my opinion it's the physical problems that have caused the trouble. Some of them are now dying-your predecessor among them, of course. Others are functioning poorly, probably because of ionization interference with their nervous systems. Or whatever corresponds to nervous systems. At any rate—" he checked off a point—"the beings aboard no longer constitute an orderly system. violence. Some of the There's deaths are from fights or murders. This is seriously interfering with the operation of the probe

threatening its very success. You know how important that is. If we blow this it'll be more than a hundred years before we get another chance. And finally—"Bielowitz folded the list and put it in his sporran—"your account here will be credited with double-rate pay for your services on the probe. Your equipment will follow, along with Doc Chimp here." He nodded civilly to the hairy little handyman who crouched next to Pertin. "And good luck to you both."

"Thank you, Gerald York," said Pertin gravely. He stepped up to the transport portal, waited for the signal and entered, giving a half wave to Bielowitz as the door closed behind him.

This was the fourth time he had found himself in a tachyon transporter box, or at least the fourth time that he remembered. They all looked about the same. On the inside they were featureless except for what seemed to be studs or nailheads almost completely covering each of the six interior surfaces. He stood there for a moment and felt nothing.

But something was going on. The sensors were counting, locating and identifying every atom in his body, measuring their bonds to adjacent atoms, charting them in a precise three-dimensional matrix. The information obtained they encoded into a string of binary numbers, whereupon the great tachyon generators glowed into life, trans-

mitting the numbers at a billibit per second in the direction of a point outside the farthest spiral arm of the galaxy, where the ship Ben Pertin had just volunteered to serve on—and to die on—lay waiting.

T WAS here—in the tachyon transmission chamber—that the great identity problem that plagued all the space-exploring humans had its genesis. Freud would have found its implications thrilling. It was another womb—with a completely different set of birth traumas.

All tachyon transmission was enormously expensive both in psychic cost and in cash. Its only justification was that it was indispensable. If you wanted to get a man or an instrument or a shipload of chess sets from one point in the universe to some other point across interstellar distances you had only two choices. One was to build a rocket' preferably fusion-powered like the one Pertin was going to. You then had to launch it and set it on its way-and then wait. Wait indefinitely, for it could take anywhere from a decade or two to geologic eras before it reached another star, even one relatively nearby. If you wanted to go farther than that you would wait forever. A voyage from a spiral arm to the core or from any point in the galaxy to the deeps of intergalactic space was simply out of the time

consciousness of any race but the T'Worlie.

The other method was faster. It dispensed with attempting to transport matter at all. Instead of sending an object you sent a blueprint of the object and had it built from plan at the destination.

The procedure was not simple. It required enormous expenditures of energy to generate the tachyon stream that carried the blueprint. It required complex scanning devices to measure every atom and molecule in the object to be transmitted and to encode positions and relationships for transmission. Above all, it required a tachyon receiver at the point to which you wanted to send—or go.

But granted all those things, you could "travel" at the speed of the tachyons, those particles whose lower speed limit was the velocity of light, and whose upper limit had never been measured.

The original object, of course, remained behind. It was scanned and its blueprints were encoded and then it was released unharmed. He who volunteered for a tachyon trip also stayed at home. What flashed across space was a description of himself and what emerged from the receiving chamber at destination was a newly built identical copy. There was no de-. tectable difference between original and copy. It would have been a foolproof method of counterfeiting or of duplicating rare art objectsif it had not been so expensive in terms of power consumption that there was little worth the cost of duplicating.

As a method of duplicating human beings, the process was more successful—it was perfect and unique. The man who entered a tachyon transmission chamber to be sent to Sun One was the same man who walked out of it and returned to his home on Earth—and was also the same man who emerged on Sun One to take up a wholly new life. The continuity was absolute. Neither was a "copy" in any physical sense.

In a psychic sense the question of "reality" was troublesome. Every human who ventured into the star swarms was heavily briefed and indoctrinated with endless philosophical arguments and logical proofs. If you draw two triangles, which is the "real" triangle? (They both are, chorused the classes doubtfully.) If you build 10,000 Mercedes-Ford hovercars on an assembly line, which is the "real" Mercedes-Ford? (They all are.) Oh, the lecturers' went on, there would eventually be differences among them. One car gets a scratch on the windshield when the wipers are installed. Another has a ripped gasket in its hydraulic system that, three years later, means its braking system has to be overhauled. But one is not an "imitation" or a "copy" of the other. Both are "real." All of the Ben Pertins were Ben Pertin. The

15

custom that gave them differing middle names was only a convenience, but they were all real—and, ladies and gentlemen, when you go out into space you will still be you. Not a copy. You.

And the classes would nod and grin at each other and go on to their next training class. But that night each of them in his or her solitary bed would lie staring through closed eyes at a future that held two separate identities. And all through the courses the couches of the analysts were kept warm with the bodies of trainees trying to come to terms with the question of "reality."

But the process itself was easy, quick and painless. It was only moments until Ben Charles Pertin walked out of the box and shook hands with his head of mission.

"You're the best man I've got left," said Bielowitz. "Thanks."

Pertin then went back to his office and worked through the rest of the afternoon. He left a little early to meet his fiancée and take her to dinner and over the coffee she returned his troth ring.

AT ABOUT the same time as Ben Charles Pertin was putting his ring back on his finger, inasmuch as time at two points separated by relativistic distances and velocities can be called the "same," Ben James Pertin pushed his way out of another, almost identical box on the probe ship.

He stopped just outside the portal, moving slightly to allow it to close behind him. His expression was grim. "Lucked out," he said aloud, looking around the unfamiliar chamber.

There was no one to hear—or to see the bitter and despondent look on his face. The chamber was deserted. The probe was in free fall and Pertin floated slowly away from the transport. Nothing else was floating in the room. There was no litter, no sign that any other being of any sort was within thousands of light-years and, as he listened, he heard not even any sound.

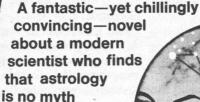
He swore softly to himself and twisted his body around to face the crated personal effects that were nudging their way out of the box. There wasn't a great deal to come—some tapes, some changes of clothing, personal items. At the end of the string of transmissions came his companion in the mission, Doc Chimp.

Doc Chimp thrust out a long arm and caught the handle of the door as he went by. He hung there for a moment, staring at his environment with an expression that was a parody of Pertin's own.

"Oh, wow, Ben Charles," he said sadly. "What a place."

"It'll be 'Ben James,' I think," said Pertin.

"Sure," said Doc Chimp dismally. "Me, I'm not going to bother. If you want to call me



He learns that the stars really do control individual destinies . . . that with the aid of a computer, he can predict what any person will become...and that he now must cope with an agonizing responsibility no man in history has ever had before.



#### THE ASTROLOGER

A novel by JOHN CAMERON

\$5.95, now at your bookstore RANDOM HOUSE (1)

something different—call me stupid."

Doc Chimp was Earthborn, but he was not human. He was five feet three inches tall, weighed more than two hundred pounds and, in high-G environments, habitually walked on feet and knuckles. His parents had been chimpanzees, but Doc Chimp was something different.

For one thing, he had a sense of humor. He reflected it in the clothes he wore. Across his hairy barrel chest stretched a little red vest—open, with the coarse black fur sprouting through. He didn't need it for comfort or for modesty—it was to please his own sense of the comic and for pockets to hold his

automatic translator, the key to his private suitcase and a supply of macadamia nuts, of which he was very fond. For modesty he wore shiny brown lederhosen. On his head he sported a kepi with a sand veil around sides and back and over its visor a bright green plume.

Even the plume was sagging dejectedly as he said, "I think I'm going to hate this place."

"We didn't come here to have fun. Where the hell is everybody?"

"Don't know, Ben James."

"Stow our stuff then. This thing won't stay in free fall long; we'd better find somebody before it starts firing again."

"Certainly, Ben James. But somebody's coming now."

DOOMSHIP 17

Pertin said, startled, "I don't hear anything."

"Neither do I. But I smell it. It's a T'Worlie, coming fast."

THE probe ship was T'Worlie property, but fortunately for the other races of the galaxy the T'Worlie didn't have a very strong territorial imperative.

· They had been civilized for a long, long time. They were an inquisitive race in their unhurried way and no doubt that was why they had been sending their probes out for hundreds of generations. Little T'Worlie rockets radiated in all directions from their mother star, some of them aimed at other stars, some at nothing closer than the Great Nebula Andromeda, ten million years' travel time away.

Only a race like that, deploying probes as lavishly and patiently as that, could have discovered the curious astronomical object called Lambda. No other race would have been in a position to do it. Sirians, with their limited time-binding capacities that reached no more than a week into the future, wouldn't have bothered. Nothing that promised some remote payoff interested them at all—which made them unattractive partners but inoffensive foes. Humans of course had no chance. Their technology wasn't up to the job. The farthest terrestrial probe was still climbing toward the turnover point on its

now senseless journey toward 40 Eridani A.

But the T'Worlie thought long, slow thoughts and they were gently but persistently curious about everything. If their race lived long enough it would learn everything there was to know. None of them seemed to mind that no T'Worlie now alive would be present to learn it.

If the T'Worlie hadn't been what they were, probably no one would have found Object Lambda for another several thousand years. It had been discovered first by an unmanned T'Worlie scoutship and reported in a routine synoptic survey. It attracted no attention at all. When first observed its great distance and low luminosity put it at the very threshhold of discovery and the traits that made it unique had not been detected.

Subsequent observations attracted more attention. The Object's weak spectral lines seemed to shift toward the violet rather than the red, which is to say that it was moving toward the galaxy instead of away from it. Curious. But the lines were so very weak, the point so very distant and the orderly T'Worlie had many other things on their agenda to investigate.

Then, by accident, another scout turned up the same object in a survey.

It might not have been recognized if the computers of the T'Worlie had not been so patient

and painstaking. The second scout had been launched five thousand years earlier, its vector several degrees away. From its point of view Object Lambda was in a wholly different part of the sky and its rate of approach, indicated by the spectral shift, quite different.

But the computers had sensed a possible match and clucked over the figures until they confirmed it. There existed a specific, if hypothetical, orbit and velocity which, seen from those two scouts at those recorded times, would have given exactly those readings.

From the estimated elements the computers made a prediction. They requested a special observation from still a third unmanned scout. Lo! it turned out as they had predicted.

Object Lambda was not more than 20,000 light-years from the edge of the galaxy and was approaching it at about one-sixth of light speed.

At this point the T'Worlie announced their discovery to the galactic civilization at large and began a study of their existing drones in that general part of space.

The T'Worlie drones were as small as an interstellar probe can be made—a scoop, a hydrogen ram, some instruments and a tachyon installation. The T'Worlie had been launching them, thousands at a time, for tens of thousands of years. Since they had never invented war they were able to accumulate large

quantities of surplus capital, so the probes were not a particularly expensive project for them. Like most early-industrial races, they had energy to burn. They burned it. Their planet was largely water covered—though they looked like bats, they were somewhat more analogous to flying fish. Their water was rich in D<sub>2</sub>O and they spent its fusion energies profligately.

The T'Worlie drone model was standardized early. A program was set up under which each drone, upon reaching a point suitably distant from all others, flashed a tachyonic signal to the T'Worlie planet, whereupon the tachyon transmitters scanned, encoded and transmitted whole new drones to the mother drone's unit. As each new drone flashed into being, it signaled in to the T'Worlie planet, was given a course and program of its own and moved on. The effect was of an enormous globe of drones—at the end thousands of millions of them—expanding outward like the shell of a dead supernova.

The program was fully automatic and economical of everything but the energy eaten up by the tachyon transmitters—and for ten thousand years there seemed to be an endless supply of that.

AT THE end even the T'Worlie began to realize that their energy resources, though huge, were not infinite. The drone

DOOMSHIP 19

program was cut to a trickle. But it was never stopped and the great swelling bubble of drone ships expanded into globular clusters, out toward the neighboring galaxies, along the spiral arms, in toward the core of the Milky Way itself. It was a T'Worlie drone that had buried itself on Pluto and been found by the exploration from Earth. Besides humans. T'Worlie drones had brought into the galactic society at least a hundred races at one time or another, almost half of the total so far located. Another race might have thought of using that fact to establish dominance for itself, but the T'Worlie didn't think that way. They had never invented empires, either.

So when the T'Worlie began to be deeply interested in Object Lambda it was easy enough for them to find some hundreds of drones on courses and at points that were not too remote from it.

The next job for the T'Worlie computers was calculating which of these drones was on the course that would involve least time and energy to divert it to the neighborhood of Lambda with its high galaxyward velocity. Fortunately a handful of drones in that section had been redirected inward much earlier to fill gaps in the global screen. Among them was one whose course would match Lambda's in less than five years.

After that there was no problem. The drone's matter receiver was put

to work giving birth to automatic tools, hull sections, drive units, instruments, finally people. The tools went to work, assembling the hull sections, installing the drives, making room for the people. What had been a tiny kick-ram—no bigger than Earth's early Apollo capsule—was transformed and expanded into a thousand-meter vessel with room for a crew of several hundred

There was, to be sure, one problem.

The rebuilt T'Worlie ship, now named Aurora, was big, but it needed to be big. It did not possess a great deal of surplus mass.

It was driven by the sequential explosion of hydrogen fusion charges, directional in a coneshaped blast against a great battering plate at its base. Not much of the radiation from the fusion explosions seeped through the base plate, but some did. Enough for ionizing radiation constantly to bathe the members of the crew.

T'Worlie and Sheliaks, Purchased People and bits, robots and humans all responded to this in their individual, idiosyncratic racial ways.

But few complex chemical or electronic processes can operate without damage in the presence of ionizing radiation. It didn't matter who they were—in the long run it came to much the same for all of them.

They died.

PERTIN and the chimp scrambled to the corridor entrance and peered out. The vinegary T'Worlie smell was strong now and they could hear the sounds of something happening outside: a punctured-tire hiss, a faint high-pitched singing.

A circus procession was sailing toward them down the center of the corridor. First came a T'Worlie. bat's head on butterfly body, no bigger than a pigeon but strong enough to be carrying a kitten-sized with enormous furry creature saucer eyes. Behind the T'Worlie. as it flew with powerful strokes of its green-spotted filmy wings, came a glittering cloud of steel-blue particles-like a swarm of gnats in the sun-and behind them, coming fast but decelerating strongly because of its mass, the square-edged form of Scorpian robot, all fore jets pumping reaction mass.

The T'Worlie made its shrill whistling sounds and the Pmal translator on Pertin's shoulder rattled into life. "I identify you as a Pertin," it said with mechanical precision. "I propose you transfer at once to high-G accommodations suitable to your structure, mode urgent."

"Why, Nimmie!" cried Ben James, suddenly inexplicably, foolishly glad. "It's good to see you."

The T'Worlie braked with its

filmy wings and the five patterned eyes studied Pertin. "Verify your statement of identity," the Pmal translator rattled in his ear. "Query implications. Request quick clarification."

"Why, it's me, Ben Ch—Ben James Pertin. From Sun One. Why, just yesterday I saw you in the social concourse, remember?" But he stopped; this copy of the T'Worlie he had known would not remember.

The T'Worlie hesitated. It was some Nimmie or other, Pertin was sure; the key to recognizing T'Worlie was not the five eyes or the small sphincter mouth with its cat's-whisker vibrissae, but the patterns on the wings. Green spots predominating on a pale yellow background—five of the bigger spots arranged in a sort of wobbly letter W, like the constellation Cassiopeia from Earth—yes, it was Nimmie, all right, Pertin knew. But perhaps a Nimmie he had never met, in some different line of descent.

The vinegary smell deepened. It was a sign of a polite cogitation in a T'Worlie, like a human being's Hmmm. But Nimmie did not respond, exactly. He was distracted by the swarm of tiny beings which Pertin recognized as the collective entity called Boaty Bits. They swept into the tachyon transport room, swirled around Pertin and the chimp and reformed under the T'Worlie's wings.

The kitten-like creature spoke

with a voice like a purr. The translator rendered it as: "No time kidding around, get hell out!" The T'Worlie concurred. "Mode urgent. Accept transportation via robot. Your physical safety at risk!"

Doc Chimp chattered, "I told you I wasn't going to like this place, Ben James. It isn't safe. Of course, I'm only a monkey, so it doesn't matter much about me. It's you I worry about."

"You're an ape," Pertin corrected automatically, his brain concentrating on what the T'Worlie had said.

"Sure, but an ape that knows what isn't safe. Come on, Ben James! Let's do like bat-ears says and split!"

The decision was taken from Pertin. The Scorpian hissed slowly by, still decelerating. It came to a stop, reversed itself and began to pick up momentum for the return. And as it passed Pertin and Doc Chimp it simply caught them up, each under a silvery tentacle, and bore them away. In reverse order the procession steamed away—first the robot with the two terrestrial primates, then the swarm of bit creatures, then the T'Worlie and its passenger.

THE probe was powered by huge nuclear thrusters. The power was off only for short periods, long enough to permit instrument readings or other work that could not be carried on during deceleration times. The rest of the time the entire ship suffered under a surging, uneven, pulsing drive that averaged nearly seven gravities.

The welcoming-and-transporting committee barely got Pertin and Doc Chimp to a place of refuge before the thrusters started again. The Boaty Bits had darted away at first warning white-noise blast—they could not operate at all under thrust and had to find safety lest they be stepped on. The T'Worlie and his passenger were next to go, leaving only the robot to see to tucking Pertin and Doc Chimp in. The robot had no particular objection to high gravity. Pertin had noticed that on the trip from the tachyon chamber. When the robot had to change direction it simply braced itself with a few of the steel-coil tentacles, stopped against whatever was in the way and pushed off in another direction. The sensation for Pertin was like being tossed around at the end of a cracking whip, but he survived it.

The thrusting started before the robot had finished sealing their cocoons and it was even worse then the ride. The cocoons were meant to protect them against it—were tailor-made to their dimensions, equipped with the best of springing devices and every comfort. But there was no such thing as antigravity and that was what was needed.

The robot tarried for a moment.

It could no longer jet about, but its tentacles held it easily off the floor, octopus-like. As the thrusts came they gave gently, then returned to position.

It seemed to be trying to communicate. Pertin, looking out of the cocoon faceplate, shrugged and spread his hands. One Scorpian looked like another, but if this one had come from Sun One it might recognize the human gesture. The trouble was, there was no way to tell whether it was responding to it.

Then the Pmal crackled into life: "—not move. Prerequisite explanations to you. I am repeating this on all comm frequencies. Most imperative you not move. Prerequisite—"

The sound faded again as the robot evidently shifted to another possible frequency. "All right," said Pertin, "we'll wait." But whether the robot understood him or not he could not say—it rested there on its tentacles, swaying under the thrust, for a few moments more and then undulated away.

The probe was decelerating furiously now—a roller-coaster ride multiplied by a hundred. There was a lot more noise then Pertin had expected—the thudding of the nuclear engines and the screeching of the torsion-bar shock absorbers that did their best to level out the thrust.

"Doc," he called. "Can you hear me?"

The chimp's cocoon was only

yards away, but the thuud-screech drowned out all other sounds. Pertin stared around. The room was half machine. Bright metal valves, gray plastic tubes coiling like dead entrails, colored screens where enigmatic symbols flickered and vanished. The walls were a sick, off-color green. No human would have designed a room like this, but of course it had not been designed for humans in the first place. It was a standard T'Worlie cocoon container, modified to take terrestrials.

The thud-screech pounded on and on. Experimenting with the cocoon, Pertin discovered that it would meter an anesthetic dose into his veins—or even a selective analgesic to deaden the auditory nerve for a time and block out the remorseless nuclear thunder. But he didn't want to sleep. He wasn't tired—he wanted to get about his business. When your time is running out, he thought, you don't like to lose any of it.

Then he discovered that the cocoon had a built-in stereo stage.

The device was not wholly familiar, but with any luck he should be able to reach Doc Chimp, at least. His first attempt was not a success. He gently turned a knurled pointer under the hollow silver hemisphere of the stage and was delighted to see it fill with the shining silver mist that indicated it was operating.

But when the mist abruptly

DOOMSHIP 23

condensed it was to show the image of a nude blonde. "Mr. Pertin, sir," she caroled sweetly, "welcome aboard! Tonight for your entertainment, sir, you may watch me star in The Belle of Bellatrix. A thriller-drama of the love of a human beauty for a mutated alien and its fatal consequences. Feel the fear of the terrified girl! Share the wrath of her human lover! Feel the coils of the monster around her! Taste its dving blood! All these available by using the sen-sat coils in the small cabinet by your right hand. We have many other stereostage fiches, Mr. Pertin, and-"

He finally got the fiche turned off and the nude blonde vanished, still smiling. She dissipated as the camera zoomed in at her until at the end all that was left was a Cheshire-cat smile and the memory

of her pale, slim figure.

Then the stereo stage blinked, swirled with color, solidified and Doc Chimp's homely face was staring out at him.

"Got you," cried Pertin, pleased. "I didn't think I would be so

lucky."

"You weren't," said the chimp. "I called you. I want to volunteer for something."

The chimpanzee face looked subdued Pertin said, "What?"

"I think I ought to take a look around," said Doc Chimp sadly. "God knows I don't want to. But most of the beings will be tied down to pressure cocoons and I'm not."

"Good idea," said Pertin, a little surprised. He hadn't known the chimp well on Sun One-it wasn't that he was prejudiced against mutated animals, but of course they didn't have much in common. But an impression of Doc Chimp's personality that was at variance with the act volunteering for a solitary excursion into what might be trouble. Humorous, pleasure-seeking, a little lazy-that was how he would have described the chimp, "And thanks," he added. "Meanwhile I'll just send a report to Sun One if I can figure out how to use this stereo stage."

"Ah," said Doc Chimp, the mocking light in his eyes again, "allow me to instruct you, mighty human. You know, I figured you'd be too involved with high-level considerations to take much interest in hardware. So I checked out all the instrumentation with the T'Worlie on Sun One before we left."

TONLY took a few minutes for Pertin to learn to operate the stereo stage in his cocoon—it was not, after all, basically anything but a stereo stage and they were common all over the galaxy. Then he lifted himself on one elbow against the surging thrusts of the drive—the cocoon's self-adjusting circuits buzzed busily, trying to compensate for his unusual position—and watched the chimp cautiously lever himself

over the side of his own cocoon, timing his movements to the surging of the drive, drop clumsily to the floor, mutter to himself angrily for a moment and then slowly, painfully lumber off on all fours. He did not look back.

Pertin felt curiously better, as though he had discovered a friend where he had expected only an inadequate tool. He worked the controls of the stereo stage, got himself a circuit through to the recording fiches of the tachyon communicator and spoke.

"This is Ben James Pertin," he said, "reporting in to Sun One. Doc Chimp and I have arrived safely. There was no apparent problem from the transmission—at least, we look all right, are breathing and our hearts are working. Whether our brains are scrambled or not I could not say. No more than when we volunteered for this, anyway, I'd guess. We have seen very little of the probe, have contacted only a few of the personnel, but in general the situation appears much as we understood it. At present I am in an acceleration couch, waiting for the next period of free fall for further investigation. Doc Chimp, who is performing very well and deserves credit; has voluntarily left on a scouting mission.

"I'll report again when I have something to say," he finished. "And—personal to Ben Charles Pertin: Have a good time on my honeymoon." He snapped off the stage before he could decide to erase the last part of the message.

In spite of the best efforts of the cocoon his kidneys were beginning to feel bruised. The noise was even more of a problem. Efficient sound-proofing kept it out of the cocoon as airborne vibrations—but there was too much of it to be shut out entirely. It seeped through as a continual thunder and squeal.

Pertin shut it out of his mind, thought of sleep, decided to brush up on his knowledge of the "hardware."

His first attempt at the fiche library of the stereo stage was only half successful. He just managed to avert the reappearance of the bareskinned blonde and found he had secured a record transmitted by another member of the crew, race unspecified, apparently for a sort of public stereo-stage broadcast on its home planet. He shut out of his mind the public broadcaster he should have been getting ready to marry about this time-some thousands of light-years away he was getting ready to marry her-and discovered that the name of the vessel was the Aurora, or Dawn. The sound was, of course, different in the T'Worlie tongue and they had named it-but he learned it held the same connotations of new day and bright glowing promise in both cultures. He also found that he had only limited facilities for recreation—well, he had expected

DOOMSHIP 25

that. There were tape-fiche libraries for almost every known race of beings, some special high-pressure atmosphere chambers for a few of the exotics. That was it.

He had not learned exactly what he wanted, so he tried again. But instead of getting a fiche on the ship itself he got one on its mission, evidently a briefing record dubbed for humans. It was narrated by a man Pertin recognized as a minor functionary on Sun One.

He spoke in a high-pitched voice, smiling emptily at the stereo pickup: "We will show you all that is known about Object Lambda. First we will locate it, as it would be seen from Earth if visible at that distance."

Behind the speaker another stereo-stage tank glowed, shimmered and filled with a universe of stars. Two of the brighter ones pulsed to call attention to themselves as the man spoke.

"Those stars are Benetnasch in Ursa Major and Cor Caroli in Canes Venatici. Those faint stars over there—" as he spoke a faint line of light ran around an area of the tank, enclosing it in a square—" are in Coma Berenices, near the north galactic pole. Now we'll take a closer look."

Benetnasch and Cor Caroli swam aside. The faint stars on Coma Berenices grew brighter, spreading apart, as the whole field seemed to move. The bright points fled out of the sides of the stage, and the few remaining ones became brighter until only a few were left—and beyond them ghostly faint blurs that were no longer part of the Milky Way but galaxies in their own right. The illusion of motion stopped.

Another square of light formed around a patch of blackness in the center of the stage, indistinguishable from the emptiness around it.

The man said, "Now we've reached the limits of Sol-orbiting instruments. Object Lambda is at the center of that square, but it is invisible. It is slightly better in the far infrared."

The pattern of stars shimmered. Some became brighter, some dimmer, and in the center of the square appeared what might have been a faint and shapeless glow.

"This is not instantaneous," explained the lecturer. "It's long exposure and image-intensified. The Object would never have been detected in routine sweeps from Sol-based instruments. Even the T'Worlie scouts first detected it only because of a chance occultation of some stars in the Milky Way itself, seen from beyond. What we will show you next is not an actual observation but an artifact as it would look from Earth, as deduced from all available observations."

The object brightened a halfdozen magnitudes as he spoke. "As you see, it has a sort of tipped-disk shape, like certain classifications of external galaxies. However, that's not what it is. First of all, it is far too small, perhaps only two or three A.U. in diameter. Second, its spectrum is wrong.

"At its apparent distance, as determined by its angular diameter—if it were indeed a galaxy—it should be receding at a major fraction of the speed of light. Of course we know from triangulation from the T'Worlie ships that that distance is wrong by a good many orders of magnitude. But according to its spectrum displacement it is actually approaching the Milky Way at nearly relativistic speeds."

The image blurred and disappeared and the plump human was standing there by himself. He said with satisfaction, "The T'Worlie scout has confirmed the speed as accurate in the range of 50,000 kps. Its position relative to Earth is some 30,000 light-years from Sol, in the direction of a point near the northern fringe of Coma Berenices. It is not an object from our galaxy. There are no spiral arms in that direction and few isolated stars or clusters much nearer than Sol itself.

"The T'Worlie backplotted its position from all observations of their drones, as recorded over the past several thousand years. Most of the data are ambiguous, but they did establish a probable line of flight. Their hope was to find a galaxy from which it might have been ejected and then to try to dis-

cover the reason for its high velocity.

"But they were only partly successful—I should say, only possibly successful. No such galaxy was detected. They did, however, find scattered star swarms which they believe to be the fragments of a galaxy that collapsed and then exploded more than a half-billion years ago. It is the present working hypothesis that Object Lambda was ejected from that galaxy, by what means we cannot say."

The speaker's expression became "Because enthusiastic. anomalous nature of Object Lambda," he said. "the all-race conference on Sol One decided to transmit a full-size scout ship through the drone equipment and to staff it with a crew of volunteers of all races." Volunteers! thought Pertin. grimacing. "And considerable effort in negotiating, it was agreed to include Earth humans as part of the crew. The political implications of this step are of enormous consequence and reflect the true coming of age of Earth humanity in the galaxy-wide confraternity of civilized peoples. Thank you," he said, bowed, smiled and disappeared as the fiche came to an end.

Not a minute too soon, thought Pertin. A little more of that and he would have been ill. The cocoonhad a fine built-in waste handling system, but there was no sense in overloading it. HE BEGAN to see what Zara had been talking about when she accused him of an "Earthman's burden" complex. This whole deal sounded pompous, stupid faintly threatening, he realized, as it was put by the man in the briefing fiche. He tried to get his mind off that track—because he didn't want to question the cause for which he was, after all, going to die, and because above all he didn't want to think about Zara Dov. He was in the middle of trying to get The Belle of Bellatrix back on the stage when he became aware that something was scratching angrily at his cocoon.

For a moment he thought he was dreaming. He glanced back at the fading nude on the screen, then out at the nude girl who stood there.

But Pertin was a pretty superior and he oriented himself quickly. It was no girl. It was not eyen human. It was a female young Earth person in shape, but the stuff of which the shape was constructed was not flesh and blood. It was silvery and bright, with a metallic hue. The eyes were orange and glowing. The hair was not made up of separate tendrils; it was a single solid piece, sculptured slightly for cosmetic effect. The creature was, in short, he realized, an "edited" version of some methane-breather or even more exotic chemistry, some being who was structurally non-viable in oxygen-bearing air and had had itself transmitted in an altered form to take up tis duties on Aurora. And it was holding a scrap of what looked like paper.

The paper was not right side up. Pertin gestured and finally the "girl" understood and rotated it until, able to read it, he signaled her to stop. He read:

Sorry, Ben James, but you've got to get out of there. Things are worse than we thought. Angel here will carry you to me. They guarantee she won't drop you and squash you and actually, Ben James, this seems to be a matter of life and death.

The note was signed "Doc."

The girl did not speak, but the orange eyes blazed imperatively and the hands beckoned.

Pertin sighed, and opened the lid of his cocoon. "Okay Angel," he said. "Carry me away."

Astonishingly, being carried by the pseudo-girl was actually worse than being toted by the robot, but she moved more slowly and Pertin had a chance to see something of the ship. The Aurora was roughly cone-shaped. At the nose and through the midsection were living quarters for the several score individuals who manned it—that was where they had entered to scene. Since the crew varied widely, it needed a good deal of room. Space had been provided for methanedwellers, space-flyers and cold

creatures as well as the more common forms based on C-O2-H2Ohowever, most of the nonviables had either stayed home or sent proxies or edited copies, so these largely spaces were "Below" the living quarters and the space for the exotics were the hardware instrument sections. Below them still—in the sense of sternward, toward being thrusters—was a layer of dense liquid for a radiation shield. It was not very effective, but of course, Pertin thought, it didn't have to keep them alive forever, since there was neither hope for nor point in the system's doing so. Below the shield was the tachyon transmission deck, where Pertin and the chimp had arrived. And beyond them, the thrusters and shock-absorbing gear. Since the Aurora was decelerating. it happened that the "stern" of the ship came first in line of flight, but that made little difference to anyone aboard. It was "down." And down was the direction they were going.

The pseudo-girl had wrapped Pertin in a thick blanket of something like heavy-duty plastic foam. It was not as good as his cocoon by a long shot, but it kept him from dying of the ceaseless grinding changes in gravity as the thrusters shoved and the "girl" levered herself down a ladder-like series of projecting rods. She did not speak, nor acknowledge Pertin's efforts to speak to her. Either there was

something wrong with his Pmal translator or she simply was not a conversationalist. But she was considerate enough and when they reached the instrument deck Pertin was bruised and sick, but alive.

"Ben James!" cried a familiar voice. "I told you Angel would get you here all right!"

Doc Chimp, thin lips grinning widely, scrambled over to help the silvery girl put him down, propping him against a sloping bulkhead so he could look around. His shipmates were worth looking at-a nightmare crew if he ever had seen one. Besides the pseudo-girl and the mutated chimp, there was a Sheliak in its high-G mode, looking like a flattened baker's bun on the deck. A web of plastic foam hid an apparently humansized figure. Pertin also saw a row of small cocoons. were empty—the contained a T'Worlie. From speaker outside the cocoon T'Worlie voice whistled a greeting and Pertin's Pmal translated: "I recognize your identity, Ben James Pertin. It is advantageous to all of us that you are here."

"Thanks, Nimmie," said Pertin, but he was staring at the plastic wrappings. A human being seemed to be concealed in them and, apart from himself, he knew of only one human being on the Aurora—one he didn't really want to think about.

He asked softly, "Doc, who's over there?"

Doc Chimp said, "Who? Her?

DOOMSHIP . 29

Oh, I don't know her name. She's Purchased People for some low-G type of other. But she's on our side." The web stirred and a face peered out. It was human enough as far as features went, but the emptiness in the eyes told Pertin Doc Chimp was right. "Anyway," chattered the chimp, "I better fill you in. Hell's really broken loose. Ben James. A bunch of beings tried to wreck the telescope. Not sure but what they've done it, too-the Scorpian's trying to see how much of it can be salvaged. If it and Angel here hadn't come along we'd be out of business till they could send new instruments through—and by then it would likely be too late."

The thuud-screech was a lot closer here—apart from everything else, it was making Pertin's head pound. "What beings?" he managed to croak.

"Didn't see them. I just saw somebody disappearing into passage, and then the Sheliak here came hellfire fast after him and saw me. For a minute he thought I was them." Doc Chimp cocked his head ruefully. "You could have found yourself short a monkey right there. Ben James, if I hadn't talked fast. So he commandeered me to help and we came down here to hold the fort. Oh, how sore my soles and knuckles are. Ben James, against the pounding of those rockets! But I did my duty. Then we got the observatory deck sealed offthey'd used a chemical explosive on the telescope and sprung a port and then I happened to think of my human master, off there watching The Belle of Bellatrix without a care, and I persuaded Angel to fetch you."

Pertin frowned. "I don't quite see why," he objected. "I can't help."

"You can stay alive," declared the chimp. "I didn't tell you all of it. When they came for the telescope they had to get past the T'Worlie here. Well, you know T'Worlie ean't do much against any being that can operate in high-G. But they tried to do what they could. And two of them got killed."

THAT was a shocker. One cardinal rule among the races of the galaxy was that no race could ever kill or seriously maim a member of another. Even on Sun One disciplinary problems were handled within the delegation of the race that produced the problem. Some provision existed for a body of other races sitting in judgment if the offending race failed to deal with the problem, but it had never had to be invoked. Pertin would hardly have believed the chimp if Nimmie hadn't confirmed the facts.

"They're crazy, then," said Pertin. "All right. We'll have to get a report back to Sun One. Nimmie, is your stereo stage operating?"

"Confirm that it is operative," sang the Pmal in his ear. "State

that such a transmission has already been sent."

"Good. I'll have to send one, too, and I think the rest of us should, but that can wait." He tried to shift position as the floor surged particularly viciously. "Since we're here they probably won't try anything right away. What we need is a combout—get every being on board to account for his whereabouts and try to identify the ones who did it. For that we need a little free-fall. Can we arrange that?"

The silvery girl spoke at last. Apparently she had heard everything, had simply seen no need to comment. "We can have a little freefall. We can have a comb-out. We probably won't need to arrange it right away as next observation period is only—" A meaningless squawk followed.

Doc Chimp filled in: "She means about fifteen minutes away."

It took a moment for Pertin to realize that the girl's words had been in English. He looked at her curiously.

"Fine," he said. "How many were involved in the bombing?"

"There were not less than three nor more than eight." piped the Pmal translator, responding to the T'Worlie's whistle.

"Out of how many in the crew?"
The T'Worlie hesitated. "There are in excess of three hundred thousand beings at present existing within the ship hull. Of these a large number are collective creatures."

"Not counting the Boaty Bits—I mean how many individuals?"

"There are not less then two hundred forty nor more than two hundred fifty."

Pertin said, "So the trouble-makers are a tiny fraction. That's good. We'll broadcast a shipwide alarm. Most of the crew will cooperate—"

He stopped, staring at the silver pseudo-girl. "What's the matter?"

She had stretched out her fingertips toward the entrance port, almost in the traditional pose of a human sleepwalker. "The matter," she said in her incongruous colloquial English, the tones as deep as Pertin's own, "is that the tiny fraction of troublemakers is coming back."

TN A moment no one needed the ■ silvery girl's fingers to pick up the audios—the rushing sound grew rapidly louder, a harsh, crackling, electrical noise like the patter of a collapsing charge field. Into the room burst what looked at first like a single huge blue eye. "Sirian!" howled Doc Chimp in terror, and tried to leap out of the way. Even his simian muscles did not have the strength to leap against the suddenly surging G-force of He stumbled and fell rockets: heavily against the silvery girl. At one stroke two-thirds of the beings able to move at all in the high-G were immobilized—the T'Worlie, the Purchased Person

and Ben Pertin himself were wholly useless while the rockets were on. The Sirian, moving by electrostatic forces, was immune to mere 10 and 12-G thrusts. He bore with him something that glittered, carried under the great forward eye in a pair of crablike pincers, tiny and almost invisible.

Pertin, thrown heedlessly just inside the portal, was first in the creature's path. He did not even have time to realize he was in danger before the Sirian was upon him. Then, oddly, the great eye stared at him. The Sirian paused, hesitated and turned away. It propelled its glittering metal object at the bulkhead and at once reversed its field and sped away.

If that was another bomb, Pertin thought, they'd all had it now; beyond that bulkhead was empty space from the last attack. The rest of the ship might be saved if the automatic seals worked fast enough, but he himself, the Purchased Person, Doc Chimp and the T'Worlie would be boiled into outer space.

But he had forgotten the Sheliak. The soggy baker's bun that slumped on the deck and had taken no part in the conversation was still in fact an able and intelligent being. It acted faster than Pertin would have believed possible. The bun shape elongated itself into a sort of stemmed sea anemone, flowed like lightning up and down around the bomb, surrounding it, drowning it

in thick alien flesh. It expolded.

The only sign the rest of them could see was a quick convulsive shudder of the Sheliak's tissue. Even the noise was muffled and almost inaudible in the constant thunder of the rockets.

The Sheliak glowed brilliant gold for a moment and, with a flash of the last light of its life, died.

They had defended themselves, but at the cost of one of their allies.

As though on cue the thunder of the rockets stopped and they found themselves blessedly free of the crushing G forces. Doc Chimp, struggling to untangle himself from the silvery girl, went flying across the chamber, ricocheted against a wall and brought up short next to where Pertin was struggling to disassociate himself from the plastic foam.

"Are you all right, Ben James?"
Pertin pushed himself free and caught the outstretched chimpanzee arm for stability. He ached in every bone and muscle and he was drenched in sweat from the trapped heat of the plastic wrap or from fear—he could not say.

"I think so," he said. "Why do you suppose he did that?"

"What? Who? You mean the Sheliak? Why, I guess it's their nature. Ben James—"

"No, not the Sheliak," said Pertin, but he didn't say out loud what it was that was perplexing him. He only thought it to himself. Why had the Sirian look at him with death in his eye, then stopped and turned away?

I T TURNED out there were two things wrong with Pertin's calculations. First, the odds weren't quite as favorable has he had guessed; he had not thought of the fact that the bombers might have allies who were as gravity-bound as himself and so hadn't put in an appearance. Second, he had not realized that most of the beings aboard the Aurora simply didn't want to be bothered with the mission. They were apathetic. hopeless, detached, or in some exotic mood with no human analogue. And perhaps, here and there, they just weren't about to take orders from an upstart biped from Earth

The other problem was that the work of the Aurora lay in observing Object Lambda, not in tracking down aberrant entities. Not even the fact that beings of one or two races had killed beings of another race could cloud the goal. The Scorpian robot, when it returned from patching together what it could of the damaged optical equipment, would not even take time to talk to Pertin. It went at once to its assigned place in the instrument chamber and began to oversee the series of observations—this had been the reason, evidently, for the thrust stoppage.

Pertin could not even get the freefall period extended to permit a full-scale search of the ship. The T'Worlie pointed out to him, reasonably enough, that since they were all going to die anyhow the first priority was the errand for which they had all undertaken to give their lives—to complete the observation of Object Lambda. And the laws of celestial dynamics remorseless. Α quantum of delta-V had to be anplied to Aurora's course. There was only finite time in which to do it. If they failed to put in the necessary velocity change the probe would fly past Object Lambda too fast to accomplish its several missions. So the T'Worlie were going to work on their instrument observations and nothing else, although they certainly wished him well, they indicated, in his search for the guilty ones.

What he had to work with turned out to be a party of five—Pertin, Doc Chimp, the pseudo-girl, the Purchased-People woman and a small kittenish being who had joined the party to greet them on arrival. They couldn't even recruit the Boaty Bits to their cause. As soon as the collective creatures had learned of the bombing attempt they had departed en masse to swarm in some obscure corner of the vessel and unite all their intelligence on the problem of deciding what to do about it.

Pertin saw a great deal of the ship, but found no criminals. The one being they had certainly identified, the Sirian, eluded their search. If a being the size of a horse, emitting an electrostatic crackle every time it moved, could avoid the searchers, what chance had they for locating a party of unidentified marauders? Not any chance, answered echo. They found nothing.

▲BOUT all they really accom-A plished was to move the acceleration cocoons for the low-G beings, whom they had come to think of as friends, close enough together so that they could watch out for each other when the delta-V thrust immobilized them. There were many such periods. By the nature of things, there had to be. It was thuuud-screech for at least eighty per cent of the time, cut up the individual portions as they would. The Aurora had thousands of kps of velocity to shed as it overtook Lambda, if they were to avoid overrunning it too fast for orbiting their package. It made little difference how it felt to the members of the crew.

To Pertin it felt like being kicked in the kidneys four or five times a minute for hours on end. With allowances for variations in anatomy, it felt very much the same to most of the beings. Frail little creatures like the T'Worlie were particularly hard hit—or would have been if it hadn't been for the fact that the *Aurora* was their own design, cocoons and all, and many

thousands of years of thought had gone into reducing the damage to a T'Worlie frame in a cocoon. It was an advantage of a sort, but against it was the overpowering debit that on their native planet the surface gravity was less than a quarter-G. They were not creatures designed for strain.

The unfelt pain was the worst. Every explosion produced noise and thrust, but it also sleeted a few more curies of radiation through the crew's bodies and brought each member a few hours nearer to death. As the damage was not felt—and as there was nothing that could be done about it—the beings seldom spoke of it to each other.

For a half-dozen periods no further violence occurred on board and the Aurora went on about its business. Pertin reserved his time in the cocoon for taping his endless reports to Sun One and for inspecting and studying observation Object results on Lambda. When there was blissful floating surcease—for half an hour or so at a time—he used it to roam around the ship. His announced purpose was to watch out for trouble. As time passed and trouble did not come he stopped talking about it, but continued to roam. He was interested in the ship on its own merits. Simply by its novelty it helped take his mind off the growing number of things he didn't want to think about. The Aurora was the first real spaceship he had ever seen. The concept seemed strange to him, considered against the tens of thousands of light-years he had traveled since he volunteered for tachyon transmission from Earth. It was normal enough, though. Sun One was thick with beings who had crossed and recrossed the galaxy a dozen times and never seen a spaceship at all.

Object Lambda was getting perceptibly closer—not to the eye, to be sure. No eye on the ship was in a position to see it anyway. But the cameras were able to make out more and more detail-not easily or well, because its intrinsic luminosity was so very low and in the low-energy long-wave part of the spectrum at that. They had even discovered that Lambda was not alone in space. Huge as it was, nearly two A.U. in diameter, it carried with it little orbiting fleas. The biggest of them was not much more than a mile through and the distance was still enormous, but the T'Worlie instruments had managed to detect them, even identify them. The longest periods of free-fall came when the T'Worlie deployed their photon mirrors at the end of a tether, far from even the vibration of a footstep or shifting weight of robot mass in the ship—then their optical emulsions greedily drank up the scant flow of photons from Lambda and converted them into images.

If they had had a great deal of time, they could have answered all questions from there, or nearly all. They were in intergalactic space. and there was no such thing as haze beyond the advance scattering of their own rocket ejecta. But they had no time—the delta-V equation still ruled them and one of its tricky parentheses said that deceleration early-was worth twice as much as deceleration late, since it gave them more time to slow down before they reached the neighborhood Lambda. And then there was the mere fact of their rapid approach. The image did not remain still in the T'Worlie mirrors. It grew. Minutely, to be sure, but enough so that an exposure for more than an hour or so began to fuzz.

Even so, they learned. The nearest to pleasure Pertin ever found in a T'Worlie was when a particularly fine series photographs had been taken and it was found to show a hint, a shadow. finally an orbital line for the biggest of the objects that circled Lambda. The pleasure was spoiled for Pertin when the calculations of orbit and time turned out to be impossible: Lambda would have had to have the density of the solar wind to have such a slow satellite. But the T'Worlie didn't mind. Explanations would come. If not then, later,

٧

**B**ETWEEN the hours of thudding acceleration and the briefer periods of his frenzied

darting about the ship, Pertin was always bone-weary and aching. Sleep did not rest him. Communication with Sun One was more and more an effort. The twelve-hour wait between transmission and reply-often it was more, when the other beings on the ship had queued up for their own transmissions—destroyed the rhythm of communication. By the time he had a response to his report of the attack on the instrument chamber he was already relaxing in his comforting awareness that the attack had not been repeated. Once he himself-or anyway that other self named Ben Charles Pertinreported to him. The experience put Ben James Pertin into a tailspin that only a carefully metered dose of tranquilizers from the cocoon's store could deal with. From the expression on the other Pertin's face, it was some strain for him, too. But the worst from Sun. One was not from his other self: it was from Gerald York Bielowitz. who acknowledged a report, suggested some additional instrument readings that would be desirable, started to sign off, hesitated and then added: "Oh, vou'll interested, I think. Zara Doy and Ben Charles were married three hours ago."

Pertin did not remember turning off the stereo stage or seeing the little figure collapse. He lay there for a long time while the cocoon stroked and soothed him, lifted him, lowered him, gently massaged what pains it could from his limbs. At some point he fell asleep. In his dream Ben Charles Pertin married Zara Doy, but he was Ben Charles and the two of them, intoxicated with the wine they drank and with each other, spoke sadly and wistfully about the other Ben Pertin who was busy about the task of dying on an alien spaceship a galaxy away. When he woke up and remembered he was that other Ben Pertin he was in an instant unfocused rage.

I T WAS Doc Chimp who woke him. "Hey, Boss," he whined. "Listen, wake up. I've been limping around this hellhole of a ship looking for the Scorpian robot and—"

"Shut up," snarled Pertin through the outside communicator of his cocoon. His tone took the chimp aback. He slumped on his haunches, staring at Pertin's cocoon. He was in bad shape, Pertin saw, unwilling to care about what he saw—the bright green plume was sagging under the thrust of the rockets, the paws and knuckles were scarred and stained. That was why he was there, of course-feet and paws. He could withstand the constantly varying Gforce of the thrusters with only a good deal of pain, so it was his job to do what Pertin could not when he was bound to the cocoon. A part of Pertin's brain told him that if he

tried he probably could find ways of making the job easier.

The chimp's expression abruptly was no longer woebegone. It was angry. "Sure," he said thickly, "I'll shut up. Why not? We'll all shut up before long. Dead beings are all pretty quiet."

Pertin fought to control his anger. "We'll be dead all right. What difference does it make? Do you think this is a real life, what we're doing here? Back on Sun One we're alive and well—this is only a dream!"

The chimp wailed, "Ben James, I'm tired and I hurt. I'm sorry if I said something wrong. Look, I'll go away and come back, only—"

"Do that," snapped Pertin, and turned off the outside communicator.

The agitated hairy face stared dolefully in at him. Doc Chimp was by no means a jungle primate. The shape of his skull was different. The structure of his respiratory system was different. The very chemicals that flowed in his blood were different. But he was not human either. Doc Chimp-his formal name was not that, but it was all Pertin had ever called him-was one of the mutated animals that had been constructed for special purposes in the molecular biology plants on Earth. His quadridexterous limbs made the ape particularly useful even in free-fall, where he could fling himself about with perfect ease from toe-rest to hand-hold, while humans like Pertin clumsily sprawled and spun. But he had his drawbacks.

A chimpanzee is simply not a human. His physiology is one count against him. He cannot develop the brain of a human because his skull is the wrong shape—and because the chemistry of his blood does not carry enough nourishment to meet the demands of abstract thought. He cannot fully master speech because he lacks the physical equipment to form the wide variety of phonemes in human language. The molecular-biology people knew how to deal with that. They could do things like widening the angle of the cranium called the kyphosis, thus allowing the brain to round out full frontal lobes, or restructuring tongue and palate, even adding new serum components to the blood like the alpha, globulins that bind human hemoglobin.

In practical terms what had been done to Doc Chimp and his siblings was to speed up evolution. But that was not quite enough. Two generations back Doc Chimp's ancestors could form only one or two of the simplest words and learn rote tr. ks-they lacked conceptual thought entirely. Doc Chimp had capacity. He did not have background or tradition. His 600 kyphosis was close to the human average so that his skull was domed—he possessed a forehead, remember complicated could instructions and perform difficult

DOOMSHIP 37

tasks. He was capable of assimilating the equivalent of a tradeschool education in skill and of conducting the equivalent of cocktail-party conversation in performance. What he lacked was ego. His psychological profile was high in cyclothymia but also in ergic tension—he was always adventurous and always afraid. His emotional index was about equal to a human five-year-old's. Frightened, he ran. Angered, he struck out. Baffled, he wept.

Staring back through the cover of the cocoon, Pertin relented. "Sorry," he said, snapping the communicator back on. "What were you trying to tell me?"

"I've lost the Scorpian," wailed the chimp.

"Well? Are you supposed to be his keeper?"

"Be easy on me, Ben James," begged the chimpanzee. "I hurt all over. The robot was supposed to be getting ready for some new instruments that were coming in. He isn't there. The stuff's piling up in the transmission chamber and nobody to do anything about it. I'm afraid it'll get damaged."

"What about what's-her-name— Angel? Can't she store it?"

"She's trying. But the Scorpian is a specialist in this stuff and she isn't. None of the other high-G creatures is, as far as I can tell and—oh, Ben James, I've traveled so far trying to find someone who can help!"

He was a pitiable sight, his fur unpreened, his gay clothes smudged and wrinkled. Pertin said, "You've done your best, Doc. There is nothing I can do until the thrust stops—half an hour or so. Why don't you rest up for a while?"

"Thanks, Ben James!" cried the chimp gratefully. "I'll just take a few minutes. Wake me, will you? I— I—" But he was already clambering into the cocoon, his spiderlike arms shaking with strain. Pertin lay back and closed his own eyes, allowing the cocoon to do its best, which amounted to increasing its rate of stroking his back muscles, trying mindlessly to calm him down.

It had seemed very easy, back on Sun One, to volunteer for a task even though the end of it was his certain death. He had not counted on the fact that death did not come like the turning of a switch but slowly and with increasing pain—or that he would be watching friends die before him.

HE DIDN'T wake the chimp when finally he could move. He thrust his own way to the tachyon transmission chamber, hurling himself down the corridors carelessly and almost slamming into what turned out to be the silver pseudo-girl. He didn't recognize the creature at first, for she had unfurled enormous silver-film wings and looked like a tinsel Christmastree angel as she rushed past him.

In the tachyon chamber he found the T'Worlie, Nimmie, supervising an octopoidal creature from one of the Core stars in transporting crated equipment to an empty chamber. "What's happened? Where did Angel go? What's this stuff?" Pertin demanded, all at once.

Nimmie paused and hung in the air before him, balancing himself against stray currents of air with casual movements of his wings. He whistled a methodical answer and the Pmal translator converted it to his stately and precise form of speech in English: "Of those events which have occurred that which appears most significant is the arrival of eight hundred mass units of observing equipment. A currently occurring event is that this equipment is in process of being installed. A complicating event is that the Scorpian artificial-intelligence being has elected to engage his attention in other areas. There are other events but of lesser significance. The being you name Angel has gone to bring the Beta Boötis collective beings to assist in the aforesaid installation. The reason for this is that they are catalogued as possessing qualifications on this instrumentation similar to that of the artificial-intelligence Scorpian. The precise nature of the stuff is tachyar observing equipment. I offer an additional observation—the purpose of it is to map and survey Object Lambda. I offer another additional observation—it will add to the radiation load by a factor of not less than three nor more than eight."

The T'Worlie hung silently in front of him, waiting for him to respond.

It had a long wait. Pertin was trying to assimilate the information he had just received. A factor of not less than three...

That meant that his life expectancy was not a matter of months or weeks. It might only be days.

Tachyar was simple enough in concept. It was like the ancient electromagnetic radar sets of Earth—the difference was that it used the faster-than-light tachyons to scan a distant object and return an echo of its shape and size.

Like ancient radar and sonar, tachyar generated a beam and measured reflections. The problem in using tachyar was the magnitude of the beam. Vast energies were used and the fraction wasted because of the natural inefficiency of the process produced ionizing radiation in large amplitudes.

Sun One must be taking the question of Object Lambda's satellites seriously if it was sending tachyar equipment to study them. The cost was high. It would be paid in the shortened lives of those aboard.

THE single planet of the goldenyellow star Beta Boötis was like a cooler, older Venus. Because

it was farther from its sun it was spared the huge flow of heat that Venus sterile. possessed the same enormously deep, enormously dense atmosphere. It was spared the loss of its liquid water and its surface was covered an average of thirty miles deep in an oceanic soup. That was where the Boaty Bits had evolved. Aquatic in origin, they could survive on Sun One or the probe ship only in edited forms adapted for air-breathing-they could not live on high-gravity planets at all, since they had only the feeblest mechanisms for propelling themselves about their native seas. An individual Boaty Bit was about as useful as an infant jellyfish, and not much more intelligent. That didn't matter. The Boaty Bits never operated individuals. as swarming instinct overwas powering and linked together they had a collective intelligence that was a direct function of their number. A quarter of a million Boaty Bits equaled a man. On their home planet they sometimes joined in collectives of four or five million or more, but those groupings could be maintained only briefly even in their oceans and were never attained in their air-breathing edited forms.

When they arrived in the tachyon receiver chamber, they immediately took command. They were not specialists in tachyar gear. They were generalists. The skills required to assemble and install the crated instruments were built into their collective intelligence. What they lacked was operating organs, but the T'Worlie, his octopoidal assistant, Ben James Pertin and every other being who came nearby were conscripted to be their hands and legs.

It was slow work. It would have been impossible in a gravity field for the T'Worlie or even for Pertin himself. But in free-fall they were guide the tug and to components into place and the T'Worlie had mass enough to make the connections and calibrate the equipment. When they were nearly done Doc Chimp turned up, angry because he had been left behind. and his muscle finished the job quickly.

As they were closing up, a blast of white sound came from the tachyon receiving chamber and warning lights flashed. Doc Chimp spun around, his wide jaw gaping. "Something important coming in?" he guessed.

"I don't know, but let's go look." They thrust themselves toward the chamber, got there just as the portal opened.

Three Sheliaks emerged.

They flashed out of the lock with a hollow hooting, long black shapes that rocketed toward the watching Terrestrials and bounced down on the green metal surface of the chamber. They clung in spite of the lack of gravity and flowed abruptly into new shapes—black velvet globes, thigh high.

Three more emerged—and three more. When fifteen had come to rest on the floor of the chamber the transmission stopped. Without a detectable sign all of them moved in synchronization. From flattened spheres, like baker's buns set in a thev suddenly turned luminous, flowing with patterns of color, then elongated soft stretched themselves and tapered necks that rose as tall as a man.

The tallest of them, the first through the chamber and the nearest to Ben James Pertin, made a noise like compressed gas escaping.

Pertin's Pmal unit translated: "Take notice. We are under the direction of the collective council of Sun One. We are to take command of this vessel and all other beings aboard are to follow our orders."

Pertin's curiosity was suddenly transmuted into anger, a radiant rage that flooded his mind and overruled his inhibitions. "The hell you say! I've had no such instructions from the Earth representatives and I deny your authority."

The Sheliak paused, the long neck swaying back and forth. "Your wishes are immaterial," it stated at last. "We can destroy you."

Doc Chimp chattered nervously, "Don't make him mad, Ben James. You know how Sheliaks are."

Pertin did; they were among the few races carrying built-in weaponry. On the infrequent occasions when the galaxy found itself troubled by unruly barbarians Sheliaks were employed to quiet the opposition—they were the Foreign Legion of the galaxy.

The long neck swayed toward the mutated chimpanzee. From the narrow orifice at its tip, sound exploded again and the translators shouted at the chimp: "Your name. Your function. Reply at once."

"I am Napier Chimski, technician," the chimp replied bravely.

The vase shape swung toward Pertin. "Your name and function."

"Oh, Ben James Pertin," he said, distracted by hearing Doc Chimp's real name for the first time. "I'm an engineer. But don't go so fast. I've just come from Sun One myself and I know there's no authority for one race to impose its will on another. I will certainly report this at once."

The Sheliak swayed silently for a moment—first toward him, then away. At last it said, "No orders for you at present. Go about your business."

Pertin drew himself up, holding to a wall brace. "You're my business," he said. "There are murdering beings aboard this ship. If you're here by order of Sun One, as you say, why don't you go find them and leave us alone?"

The Sheliak did not reply. All fifteen of them were swaying

silently now. Perhaps they were conferring with each other—Sheliaks had learned vocal sounds only to talk to other races of the galaxy and the riddle of how they communciated among themselves was still unsolved.

"I certainly will report this," Pertin added.

There was still no response. The pointless confrontation might have gone on, but it was interrupted by the bright thrice-repeated flash of white light that meant the thrusters were about to go into operation again.

"Oh, hell," groaned Pertin.
"Doc, we'd better get back to our cocoons."

"Never too soon for me, Ben James," agreed the chimp fervently, staring at the Sheliaks. "Let's go."

Doc Chimp and Pertin raced for the cocoons. The warning had caught others short. The corridors were full of low-G beings hurrying back to safety before the fusion rockets began again. The Boaty Bits arrowed along at top velocity, like a cartoon drawing of a swarm of wasps. An octopoidal creature launched itself from a wall off the end of the corridor with a multiple thrust of its legs and spun away, tentacles waving crazily. There was a thundering roar and three Sheliaks raced off, then another three and another, in V formations. A being like a six-legged spider monkey bounced back and forth, scratching and clawing for footholds, whining irritably to itself in a high-pitched tone.

And abruptly: "Ben James—look."

Doc Chimp was staring down a broad transverse corridor. Pertin saw a creature like an enormous blue eye, at least a foot across. It swerved as he looked, revealing the body behind the eye—a tapered torpedo shape glittering with patterned scales like blue glass. A stubby wing spread on each side. the leading edge thick and scaled and flowing smoothly into the body, the thin trailing edge a flutter of blue. Beyond the creature Pertin saw something bright, metallic and angular.

"It's the Sirian, Ben James. The one that tried to kill us all. And wasn't that the Scorpian robot with him?"

Pertin reached out, grabbed a handhold and checked himself. The chimpanzee reacted a moment later and also stopped himself a yard or two farther down. "What are you doing, Ben James?"

"I'm going after them," Pertin snapped. "The Sirian's one of the murders. And the robot's up to something, too."

"No, Ben James! You can't take the G-force. Let's let the Sheliaks take care of them—that's what they're here for."

The featureless green light of the corridor faded and changed to a dull crimson glow. That was the

short-term warning—less than thirty seconds remained before the rockets began.

Pertin cursed. The chimp was right, of course.

"Oh, hell," he groaned. "All right, let's go—"

VI

THEY made it—not with any L time to spare. They rolled into their cocoons as the first thrust struck and a moment later the regular repeated sound of the rockets reached them. The webbing spread itself over Pertin-he fell into the warm, receiving shape of the cocoon, but resisted its comfort. While it was still adjusting to his shape he was stabbing at the controls of the stereo stage, trying to summon all the cocoon-bound beings on the ship into conference. The automatic dialing circuits were equal to the job—the call was not something that was often made, but the physical capacity for such a conference existed.

But not this time. All lines were busy. Every being on the ship, it appeared, was already using his stereo stage for purposes of his own—most likely trying to transmit a tachyon message to his own people at Sun One, Pertin knew.

He fell back and let the cocoon massage him.

Thuuuuud-screech. Thuuuuuud-screech. The thrust felt more powerful than before, the tempo a

bit faster. The thunder and groan of the drive made it nearly impossible for Pertin to think, but he had to think.

The problem on his mind was not one of the obvious ones—what to do about the Sheliaks, how to deal with the murderers, the completion of the mission. His mind worried at those a moment at a time and then let them go. They required action, not thought, and action was not available to him while the fusion rockets roared.

Instead he thought about his unpleasant discovery that there wasn't much in being a hero. His heroism had been entered into lightly enough, but he supposed that was not in itself rare. How many Medal of Honor winners had volunteered for a combat patrol simply because they were bored with sitting in a foxhole—ānd had found themselves caught up in events that made them immortal reputations?

But his heroism was not even going to get him a medal. No one would ever really know what was happening on this ship, because it was absolutely certain there would be no survivors. Either Aurora's mission would succeed—in which event the galaxy at large would accept the crew's sacrifice complacently—or it would fail. In the latter case the beings on board would all be thought of, when they were thought of at all, as that sorry bunch that wasted itself for nothing.

DOOMSHIP 43

Ben James Pertin bounced about in his acceleration couch, trying to make terms with a double-bind. His was the first generation of men who knew that they could live—somehow—until they died of old age. This would be true even if they were run over by a truck or murdered by a lunatic. Ben Pertin might die, but Ben Pertin would live.

Pertin and his fellow humans who had duplicated themselves for tachyon transmission were not immortal. They owned all the decaying weaknesses of the flesh. Their brain cells grew fewer in number every day, like yours and mine. The collagen hardened in their tissues. The calcium migrated remorselessly from bone to blood vessel.

They would die, each of them. But each one of them had the statistical certainty that not all of him would die prematurely. One Ben Pertin might die of cancer, another of pneumonia. One might succumb to an OD of the drugs that made these paradoxes briefly tolerable for some. Another might cut his throat. Another might perish pointlessly in an expendable job. But some Ben Pertin (who would always be the Ben Pertin to himself, at least) would survive and throw off as many identical copies of himself as he wished or circumstances required.

It gave them a certain courage in the face of death. The personal involvement that every other generation of man had felt—the shrieking rage that when he went some irreplaceable part of the universe would be gone forever—was no longer there. They were not individually irreplaceable at all—they replaced themselves with tachyon copies.

Nevertheless, when each of them died he felt that death as a death and saw it as the same grinning skull of fear that it had been for Adam.

And when that death was close it was terrifying.

With the thud and rasp of metal roaring at him, his cocoon seesawing in the violent deceleration of the rockets, tired, sick, angry and hopeless, Ben James Pertin faced the fact that there was nothing left in his life anywhere that would give him one more moment's joy.

ANOTHER Ben Pertin, tens of thousands of light-years away, was trying to soothe his bride. He said, "Honey, I knew what I was getting into when I volunteered. I was willing to go through with it. That other me on the ship doesn't feel any different about it."

Zara Pertin said harshly, "That other you is going to die, Ben Charles."

"But I'll still be alive."

"And he'll be dead. Don't you

understand me? I love you. And he is you—and I don't like to think about what is happening to him." She turned over, giving her back a chance to collect some of the UV tan from the lamps overhead, and took off her goggles. She said, "What's it like there now, Ben?"

"Well-" he said.

"No, I want to know. Tell me."

Ben Charles looked around the simulated little beach beside the great water tank that was their "ocean." No one else was near the spot—he and Zara had come here for that reason, but Ben Charles found himself wishing for an interruption. She turned her head and looked at him and he shrugged.

"All right. It's bad," he said. "The sensors in his acceleration already report cocoon destruction of the white corpuscles. Pretty soon he'll start having nosebleeds—then he'll bleed internally. He'll be getting weaker, running a temperature. He has had more radiation than he can recover from and he keeps getting more. Before long he'll die." He paused, then wife's unspoken answered his question: "He'll probably go within a week."

Ben Charles propped himself up on one arm—an easy posture. Even here the effective gravity was only a negligible fraction of Earth-normal. He looked out at the thousand-foot cusp of water, curving upward to meet the bulkhead at the far end. Other water-tolerant beings were using the reservoir for their own equivalents of sport—it was a favorite spot for such purposes. But none of the others were human.

Ben Charles Pertin worried for a moment at the permanent problem of what he meant when he spoke of death. He came to several conclusions. The first was that it was spoiling his honeymoon. second was that he did not feel as though he were dying-in spite of the fact that he knew that some light-years away he was doing just that—and even there loving Zara. The third was that he could not spend any more time on that particular concern. The bad thing about dying, he reflected, was that you leave someone grieving—and Zara, he knew, was grieving. This brought him back to the question: who was dying?

He looked at his wife. She was not weeping now, but she had been. The stain of drying tears lay at the corners of her eyes.

"I'm sorry, honey," he said.

She shook her head without words.

After a moment he made himself add: "It might not even be a week. Radiation alone will give him a few days, but there are plenty of other things on the probe that could kill him. Some of the beings are becoming violent. The electronic ones are malfunctioning, because the radiation affects their synapses. They're going insane, really. A lot of the organic ones are sick. All of

them are scared. There have been deaths. From violence."

"I should have gone with you," Zara said thoughtfully.

"Oh, now, really! That's stupid! What would be the point?"

"I would have felt better about it—and so would you. He." She stood up, smiling, her mind made up. "If you have to go again, dear," she said, "I'm going, too. Now I'm hungry. Race you back to the apartment!"

## VII

TACHYAR verified the paths of the little bodies orbiting Lambda—the mass estimates were right, thus the density estimates were right. Object Lambda's average density was about that of a high vacuum. Nevertheless, it appeared to have a solid surface.

Pertin greeted the news with apathy. There were more immediately important developments on the ship and the ultimate purpose for which the ship existed didn't seem particularly interesting any more.

For one thing, the tachyon transmission chamber was shut down. For better or for worse, there would be no more imports, no additional beings, no additions to the crew—nothing.

The chamber's last function had been to bring in freshly minted structural members and drive units. They were now being assembled into a small drone. It took form as a squat dense object, all fusion drive and instruments with no living space for a crew. It would have no crew. It would carry nothing but itself and the tachyon receiving crystal that had been the Aurora's.

Pertin had no part in the construction project. The Boaty Bits directed it and the metal pseudo-girl and a few other high-G types carried it out. He looked in on once or twice. Besides the structural part, brought in on the tachyon receiver, the small ship used bulkheads and beams from Aurora itself. It seemed to Ben-James Pertin that vital parts of the parent ship were being seriously weakened. The fact interested him as an engineer. As a being whose life depended on the structural integrity of the Aurora he didn't consider any concern he felt worth mentioning. Whatever was happening was planned. If the life of the Aurora was being shortened thereby, it was because the beings doing the planning had decided the ship was wholly expendable.

The only non-expendable part of the *Aurora* now was the little drone being put together in its belly.

The drone comprised only three elements: A tiny tachyon receiving unit—built around the crystal from Aurora's own—in a globular body fitted with weak handling-propulsors, suitable only for correcting minor errors in the elements of an orbit. A thick half-shell of metal-

bonded ceremics on one side, an ablation shield designed to flake and burn away, disposing of excess heat. And, outside the ablation shield, the enormous fusion-propulsion engines.

It was a high-deceleration drone. It would be launched from the mother ship at some point near Object Lambda. Its fusion jets would slow it radically. Stressed as it was, with no living creatures aboard, it could endure hundred-G delta-V forces. But Pertin's engineer's eye recognized the implications of the design. Even those forces would not be enough. The drone would make use of Object Lambda's enormously deep atmosphere as well. It would dip into it, shedding velocity by burning it off as friction, blazing like a meteorite from its absurfaces. That frightful lation crunch would slow it to manageable relative speeds—as it came out of its first skip into Lambda's air it would be close enough to orbital velocity for capture. Then its propulsors could take over the simpler job of making neat the elements of the orbit—and a tachyon receiver would be in place around Object Lambda.

What about the mother ship?

The implications were clear to Pertin. All the evidence he needed was obvious in the construction of the probe. If such forces were needed to put the probe in orbit, there was no hope that *Aurora* could join it. Its kilotons of mass

were simply too great for the forces available to deal with. Even if the forces were available its living cargo would be pulped by the delta-V.

Aurora would drop its cargo, flash by Object Lambda and continue through intergalactic space. It would no longer have fusion mass for its reactors. It would stop decelerating—to all intents and purposes, it would be only another chunk of intergalactic debris on a pointless orbit to nowhere.

Its course would continue to take it toward the galaxy itself. In time it would approach some of the inhabited worlds within mere lightyears, perhaps.

But that time would come too late to matter to anyone. It was a matter of thousands of years of travel time to even the fringe stars of the galaxy—and by then there would be little left of even the dust of its crew.

They had been written off.

MEANWHILE, the deceleration phases were getting longer, the zero-G pauses for observations shorter and less frequent. Sun One had lost interest in the observations that could be conducted from *Aurora*. It was only waiting for the secondary probe to go into orbit.

All through the ship, the living crew members were showing attrition. They were weaker and less

DOOMSHIP 47

rational, less capable of fine distinctions. The automatic machinery was running the ship.

As it poured the last of its fuel reserves into space to brake its flight it manufactured enormous clouds of radioactive gas. They were not a hazard to the ship's crew-it was too late for such trivial affairs to matter to the doomed beings. But they had caused some concern to the planners on Sun One. A thousand generations later they might be a pollution problem. But by then, no doubt, tachyon transport would itself have been superseded and no one would any longer trouble with such primitive concerns as crude STL transport of mass.

The gas clouds as they departed did leave some trace of ionizing radiation, added to the larger increments from the blasts themselves tachvar. and from the combined radiation was a witches' brew of gammas and alphas and betas—now and then primary particles that coursed through the entire space of the ship from hull to hull struck an atomic nucleus and released a tiny, deadly shower of secondaries.

It was the secondaries, the gammas, that did the dirty work. They interfered with the electronic functions of the computers, robots and metal beings. They damaged the instrumentation of the ship. Above all, they coursed through the organic matter they encountered,

knocking out an electron here, loosening a molecular bond there, damaging a cell nucleus, making a blood vessel more permeable. The whole organic crew was on hourly doses of antirads, giving support to their internal workings. It was not enough. Still the radiation soaked in and struck at them. Blood, ichor, sap or stew of exotic biologies, the fluids that circulated in their bodies changed and grew less capable of supporting life. Physically they grew weaker. Mentally they became cloudy.

Taken out of the environment and rushed to an anti-rad clinic—like victims of an industrial accident—many of them still could have been saved.

But there was no place to take them. No part of the ship was free of penetrating ionizing radiation and every hour more and more of the chemistry of their bodies was damaged.

BEN JAMES, BEN JAMES, BEN JAMES," sobbed the voice of Doc Chimp.

Pertin roused himself. The thud and screech of the drive was still loud in his ear. Every time the floor drove up to meet the cocoon the single huge bruise his body had become screamed with pain. Inside his chest his lungs felt as though they had broken loose and were beaten sore against the inside of his rib cage.

He peered blearily out of the

cocoon. The chimp was staring pathetically up at him. The great green plume of his hat was broken. His fur was splotched with dirt and blood. The rubbery features of his face looked almost as they always had, except for an open cut along the flat, sculptured nose.

"What?" demanded Pertin thickly.

"I have to hide, Ben James. The Sheliaks are after me."

Pertin tried to sit up and could not. "They're not here to hurt you," he pointed out.

The chimp whimpered, bobbing on all four limbs as he braced himself against the rocket thrust. "They will! They're mad, Ben James. They killed the T'Worlie. For nothing—just killed him. And they almost killed me."

"What were you doing?"

"Nothing! Well, I—I was watching their mating ritual. But that wasn't it—"

"You idiot," groaned Pertin.
"Look, can you climb in here with me?"

"No, Ben James, I don't have the strength."

"It's either that or let them catch you."

The chimpanzee whimpered in fear. Then abruptly, on the upsurge of the ship against its shock absorbers, sprang to the side of the cocoon. Pertin grabbed at him and pulled him inside just as the next thrust caught them. Doc Chimp weighed some two hundred pounds

at Earth's surface. The delta-V gave him a momentary weight of nearly half a ton, all concentrated on Pertin's shoulder and chest. He grunted explosively. The chimp was caught with part of his side still across the metal lip of the cocoon, but he made no sound beyond the steady sotto-voce mumble of fear.

Pertin tried to make room behind him, in a place where the cocoon had never been designed to take a load. It tried its mechanical best to give support to the double mass. It was not adequate to the job. Pertin discovered when the next thrust came that his arm was still caught under the chimp. He helped, managed to free it on the upsurge, discovered it was not broken. He slammed down the privacy curtain, hoping the Sheliaks would not look inside if they came.

"Now," he panted, "what did you say about Nimmie?"

"He's dead, Ben James. They-killed him. I didn't mean any harm," the chimp sobbed. "You know how the Sheliaks reproduce—by budding, like terrestrial plants. The young ones sprout out of the old ones and grow until they're mature enough to be detached."

"I know." Pertin had only the vaguest acquaintance with Sheliaks, but everybody knew that much. They didn't have sexes, but their conjugation provided a union that shuffled up the genes.

"Well, that didn't look like fun to

DOOMSHIP 49

me, but I wanted to see. Nimmie told me to go away. He couldn'the was in one of the spare cocoons, and couldn't move. But he said they'd be mad." The chimp switched his position and Pertin shouted in pain as his upper thigh took part of the chimp's weight on a rocket thrust. "Sorry, Ben James. It was disgusting, the way they did it! Any two of them can get the urge. They sort of melt down and flow together like jelly. All the body cells migrate, pair off and fuse. Finally they form again into a sort of cactus-shaped vegetable thing that buds off haploid, mobile creatures. Those are the Sheliaks we see."

"You wanted to watch that?" asked Pertin, almost able to laugh in spite of discomfort, in spite of Nimmie, in spite of everything.

"Yes. Ben James. Just for curiosity. And then there's my friend, Fireball. He's the Sheliak who was here all along. He was nice. Ben James. I miss him."

"I didn't know you knew any Sheliaks."

"Not well. But he was with me. helping to guard all of you. And we talked."

"You sound as if he's dead, too."

"Might as well be. That union is a sort of individual suicide. It's something you do for the race and because your glands push you that way. But it's the end for the individual. It wipes out all conscious memory and individual personality. I guess that's why Fireball couldn't understand our notions of sex.

"Anyway," he said, "it was all right while Fireball was here alone. He wasn't lonely; or anyway, he didn't want any other Sheliaks around. When they're in danger, you see, they just can't help It's conjugating. а mechanism. The radiation was danger, and he knew that the only way for him to keep alive was to stay away from his own people. When the new ones came aboard he was actually afraid of them. He knew when they came close they were likely to set off a biological process they couldn't control. And when it was over-"

The chimp swallowed. He thrust himself up on an elbow, regardless of pain, and stared into Pertin's

"He didn't know me, Ben James! The two new ones that were half him, they came after me. The T'Worlie saw what was happening and tried to stop them—and that's how I got away, while they were killing him. So I ran. But where is there to run to in this ship?"

WHEN they could move again they found the T'Worlie easily enough. He was floating upside down, purplish drops of blood, perfectly round, floating beside him. The little vibrissae around his sphincter mouth, more like cat's whiskers than anything on a proper earthly bat, were perfectly still. Nimmie was rigid. The pattern of

five eyes was unmoving. The intricate pattern of blotches of color on his filmy wings was fading.

There was no one else around. "What'll we do with him, Ben James?" chattered the chimp.

"Throw him out into space, I guess," Pertin said harshly. Normally the mass would be useful in the tachyon receiver, but there were to be no more incoming tachyon transmissions.

It didn't do to think of that. He stared at the T'Worlie. A slow incrustation of a thick gel was matting the fluffy surface of Nimmie's chest, and where it had once protruded sharply, like a bird's wishbone, it was crushed and concave.

Pertin felt the muscles on his face drawing taut, perhaps partly because of the intense vinegar reek. He said, "Why would the Sheliaks break up equipment?"

The chimpanzee stared at the mess in the room. Bright green and orange transistors and microchips were scattered like jigsaw pieces in the air. "I don't know, Ben James! None of that was that way when I ran out of here. Do you suppose they just lost their temper?"

"Sheliaks don't lose their temper that way. They broke up instruments on purpose. What was coming in before you decided to play Peeping Tom?"

"Oh—" The chimp thought. "More reports on Object Lambda. The density was confirmed. Very

low. Like a sparse cloud of interstellar gas."

"We already knew it was Cloud-Cuckoo Land. That couldn't have had any effect on them."

"Something did, Ben James," cried the chimp. "Look, we've got to do something. They'll be looking for me, and—"

"Unless," said Pertin thoughtfully, "it wasn't the Sheliaks who did it. The robot was up to something. And there are still a couple of Purchased People not accounted for me, and—"

"Too late!" howled the chimp. "Listen, Ben James! Somebody's coming!"

BUT it wasn't the Sheliaks who came in on them—it was Angel, the silver pseudo-girl, the heavy-planet creature in human form. Her fingers were outstretched toward them, listening, as her great foil wings drove her forward.

Behind her came the Scorpian robot.

They made an eerie pair, the striking orange-eyed girl with her coif of metallic hair and steel-bright body hues and the mechanical creature shaped like a metal octopus. Its central body was a massive disk, the color of the pseudo-girl's flesh, and its silvery tentacles made a fringe of snakes around it. A greenish membrane that bulged above the upper surface of the disk fluttered, producing a drum-roll of sound.

DOOMSHIP 51

Pertin's Pmal translator obediently turned it into recognizable words: "Do not resist. We wish you to come with us."

"Where?" he demanded.

There was no answer, at least not in words. Pertin was caught in something like a metal whip that stung a trail of fire around his waist. It was one of the robot's tentacles. It pinned his arms and the pseudo-girl launched herself at him, her metal fist catching him full in the face. Floating as he was, the blow was robbed of some of its force, but it doubled him, flung him back against the robot's lash, dazed with pain and sobbing for breath.

He heard a cry of anguish from Doc Chimp, but could not turn to see what was happening. The vinegary smell of the dead T'Worlie penetrated his nostrils, mixing with the tang of his own blood.

"Why?" he croaked, and tried to raise his arms to defend himself as the girl dropped toward him again. She did not answer. She was on him like a great silvery bat, metal feet kicking, shining fists flying. The lights went out. He lost touch with space and time.

Pertin was not wholly unconscious, but he was so close to it, so filled with pain and confusion, that he could hardly remember what happened next. He had a fugitive impression of great shapes whirling around him, then of being carried away while someone behind him sobbed his name, the voice

diminishing slowly in the distance.

Much later he opened his eyes. He was alone in a part of the ship he knew only sketchily. A large open cocoon hung from a wall and inside it was what looked like one of the Purchased People. Pertin's face was swollen and his eyes were not focusing well at all—he squinted, but could not make out the features on the person in the cocoon. It appeared to be male, however, and it appeared to be in the last stages of dissolution.

It moved and looked toward him. A caricature of a smile disturbed the weeks-old beard and the dry tongue licked the lips. A cracked voice muttered something, the tone hoarse and indistinguishable.

"Who are you? What do you want?" demanded Ben James Pertin.

The figure rasped a sort of hacking cough, that perhaps was meant for a chuckle. It tried again and this time its words came clear enough—clear and familiar in a way Pertin had not expected.

"I want to talk to you, Ben," it croaked. "We have a lot in common, you know."

Pertin frowned, then his swollen eyes widened. He pushed himself toward the swathed figure, caught himself at the lip of the cocoon and stared down.

The eyes that looked up at him were pain-filled but familiar. He was looking into his own, battered, obviously dying face.

PERTIN remembered a time—months ago.

He had gone to the tachyon transmitter and light-heartedly enough given his blueprint to the scanners and allowed one self of him to be beamed to the Aurora. It had not seemed like an important thing to do. At that time it had not been clear to him that the Aurora was a doomed ship. At that time he had had no one to consult but himself—Zara Doy had still been only a casual acquaintance, a new girl from Earth with a pretty face.

"Ben Frank," he whispered.

"Right as rain," croaked the ghastly voice. "And I know about you. You're Ben James Pertin and you've been aboard two weeks now. Not very thoughtful of you, failing to visit a dying relative."

"But I thought you were already dead! They said— I mean, I wouldn't have had to come, if—"

"Blaming me, Ben James? Well, why shouldn't you? How long have I lain here blaming you—and me—and all the Ben Pertins there ever were." A spasm of coughing racked him, but he talked right through it. "I wanted them to think I was dead. Only fair, isn't it? They were killing me—and now I've killed their Project Lambda."

"You?"

"With a lot of help. My Sirian friends were the first and best, but there have been plenty since. It was the Sirians who told me you were aboard—you gave one of them quite a start when he saw you in the instrument room. Wrecked his mission, you did."

Coughing drowned out the voice. Ben Frank convulsively clutched at the cocoon monitor controls. A warning panel lit over the bed. He was very near death, but the cocoon was not yet defeated—it metered colored fluids into the external blood supply that was trying to replace the destroyed blood cells.

"I only have a few minutes," Ben Frank Pertin gasped. "I don't mind. But I'm not finished, Ben James. You have to finish for me. Destroy that probe. I don't want it to succeed. I don't want Sun One to get its orbiting body around Object Lambda."

"But then we—we'll all have died in vain!"

"Of course it's in vain. What's the sense of all this? A chunk of useless matter—thousands of light-years from anywhere—going nowhere. Project Lambda! Do you know how many lives it has cost? I want you to wreck it for me, Ben James, so those fools on Sun One will know better than to try this same stunt another time—"

"But it's not a stunt," objected Ben James Pertin. "It's important. That object is something special, solid but like a cloud—"

"Cloud-Cuckoo Land! It's not worth a single life. Anyway, it's done already, Ben James. My friends are wrecking the probe right now. I only called you here because—"

He paused, coughing terribly. The face that was so much like Ben James's own was aged with the weary agony of radiation death.

"Because," he gasped, "I want some part of me to stay alive. If you keep the tachyon receiver you can live, Ben James. Weeks—maybe months! But once it goes there will be no more food, no more air, no more fuel. I want—"

But what he wanted to say at the last Ben James Pertin would never know. His duplicate suddenly gasped for breath, made a strangling sound and was still.

After a moment Ben James pulled the privacy screen over the face that was his own and turned to leave.

Halfway to the launch chamber he ran into the Sheliaks.

THEY were in pursuit of two beings, one of them the Purchased People woman, other Doc Chimp. The Sheliaks looked strange and in a moment Pertin realized why. They were they had smaller than Essentially they were children now. some of their mass lost when they budded. But their behavior was childish only in its reckless disregard for consequences. As far as their quarry was concerned, it was lethal.

Pertin did not pause to speculate

on issues. Doc Chimp was in danger and Ben dove to the rescue.

He collided with one of the Sheliaks. It was like tackling a six-foot lump of chilled, damp dough. No bones, no cushioning fat, just a great dense mass of muscular fiber. The Sheliak automatically cupped around him and, linked, they went flying into the wall. The corridor spun around him, a nightmare of blue-green light and red-black shadow and corpse-colored beings.

"Stop!" roared Pertin. "Wait—listen to me—" But no one wanted to talk. They were all on him, thrusting, striking, crushing, using whatever offensive capacities their mobile anatomies gave them. He fought back, using skills he had never known he had. His hands were black and slippery with blood, no doubt much of it his own. Bravely the woman and Doc Chimp had turned back to fight, but it was three of them against more than a dozen Sheliaks and the issue was not in doubt.

What saved them was Angel, the silver pseudo-girl. Her carven face remote as a statue's, she drove toward them with great sweeps of her wings. Coronas of electrostatic fingers haloed her gun-shaped wingtips—something and deadly was in her hands. The Sheliaks, all at once and in unison, turned to meet her. The gun-shaped thing hissed and a white iet crackled toward them. It passed near enough to Pertin for him to feel a breath of icy death, but it did not strike him. It grazed the Sheliak who held him and at once the being stiffened and began to drift. Behind them, where the jet had struck, the wall became hidden under a broad patch of glittering frost. A cloud of white vapor billowed around it.

In the haze Pertin caught sight of Doc Chimp and the Purchased People woman, momentarily forgotten as the Sheliaks turned against the stronger foe. The woman was badly hurt. Doc Chimp was helping her, his hairy face turned fearfully toward the Sheliaks. Pertin joined them and the three of them moved inconspicuously away.

When they were two corridors away and the sounds of battle had diminished they paused and ininjuries. Pertin spected their himself had only added a few bruises to a total that was already too large to worry about. The chimp was even more battered, but still operational. The woman was worse off. She was bleeding profusely from a gash on the upper arm. Her face was grotesquely puffed, both eyes were blackened and one leg was bent at an angle anatomically impossible to a whole bone. But she did not appear to feel pain.

When Pertin spoke to her, she answered in English, "They don't consider it important. It will not prevent moving about and performing necessary functions."

Doc Chimp was groaning and sobbing in pain. "Those Sheliaks!" he cried, feebly trying to groom his matted fur. "They're wholly out of control, Ben James. They tried again to wreck the probe—may have done it by now if they've got enough power of concentration to remember what they were doing when we diverted their attention. And if Angel hasn't killed them all."

Pertin said with a confidence he didn't feel, "She'll stop them. As long as we've got her on our side—"

"On our side?" cried Doc Chimp.
"Ben James, you don't know what
you're saying. She's worse than
they are!"

"But she tried to rescue you."

The Purchased woman said calmly, "That is wrong. She merely wanted to kill the Sheliaks."

"That's right, Ben James. She's against all organic beings now. She's not ionizable, you see. Radiation doesn't bother her. The only thing that can kill her is deprivation of energy sources and that means the tachyon receiver. Once it's gone she will die as soon as the fuel runs out."

Pertin said slowly, "Is it the same with the Scorpian robot?"

The battered face nodded, the stub of the green plume jerking wildly.

Pertin said, "that means we have to assume all nonorganic beings

will feel the same and try to prevent the launch. What about the other organics?"

The Purchased woman recited emotionlessly: "The T'Worlie, all dead. Boaty Bits, more than half destroyed—the remainder too few to make a collective entity intelligent enough to matter. Sirians and Core Stars races not observed in recent hours and must be presumed dead or neutralized. Sheliaks, destructive and purposeless."

Pertin absorbed the information without shock, without reaction of any kind other than a strange impulse to laugh. "But—but whom does that leave to see that the launch occurs?"

"Nobody!" cried Doc Chimp. "Nobody at all, Ben James—except us!"

THEY reached the launch chamber ahead of the Sheliaks after all. No one else was there.

The capsule, tiny bright tachyon crystal at its heart, lay silent and unmoving, connected to the main bulk of the ship by only a canopy designed to be jettisoned. Destruction had raged all around it, but it was still intact.

Less than an hour remained until

"We'll build barricades," said Pertin. "Anything. Those wrecked instrument boards—the spare plates and braces. Whatever we can move we'll pile against the entrance. All we have to do is delay them—"

But they had barely begun when brightness glinted in the approach corridor and the silvery pseudo-girl came toward them, followed by the tumbling form of the Scorpian robot. They brought up short at the entrance, the robot with one slim tentacle coiled caressingly around the silver girl.

Pertin put his weight behind the channel iron he had been about to emplace at the door and launched it toward the pair. The pseudo-girl made a sound that was partly laughter and partly the singing of a single piercing note and the Scorpian uncoiled a long silver sting. The sting reached out and touched Pertin. A blinding light stabbed from it, jolting him with a strong electric shock.

The girl glided in, spreading her tattered wings. The stirred air bathed him in her strong scent, ether-sweet, with undertones like the pits of peaches. Pertin searched the bright silvery face and found no expression. It was no more human than a doll's. The Scorpian's silver tentacles thrust away the pitiful obstructions, making a sound like an enormous gong which Pertin's Pmal refused to translate.

The Purchased woman intervened, hurling herself toward the robot, and was brushed heedlessly aside. She struck against the side of the probe ship, a blow that must have been agony to her human

nervous system, but she did not cry out. Awkwardly she tried to project herself again into the fight. Pertin forced himself to join her.

A bird-like trilling from outside indicated that others were coming, and behind the great winged hulk of the pseudo-girl Pertin could see black shadow-shapes moving across the dimly lighted shaft, growing rapidly as they approached.

"Oh, no!" moaned Doc Chimp.
"Sheliaks and a Sirian!"

The robot was not deflected from its single-minded purpose. It floated toward Pertin, green dome pulsing. An elongating tentacle struck out at Pertin like an endless silver snake, not to sting this time but to snare. It wrapped him in slick, chill coils. He fought free, was caught again—and at last the Scorpian turned to confront the other beings. It arched its stinging jet, but held it poised, waiting.

The Sirian was first into the launch chamber, a tapered, blue-scaled torpedo shape fifteen feet long, all pliant wing and shining eye. With a ripple of trailing wing edges it flashed at the Scorpian.

The sting coiled, jetting white light into the wide blue eye. The Sirian was not defenseless—its own forces gathered the robot's charge and repelled it, sending the jet back at the robot, reinforced and multiplied.

The pseudo-girl turned with great strokes of her wings, her three-fingered hand coming up with the gunshaped weapon that had killed Sheliaks. Desperately Pertin twisted to intercept her. Her wings were sadly battered now, but still gave her superior mobility; he missed her on the first try and crashed against a wall. Half blinded by his own blood, he doubled his legs under him and launched himself at her again.

The gun-shaped thing swung to meet him and the white jet hissed at him. He heard a brittle crackling sound in the air and felt the breath of icy death.

But the jet had missed and he was on her. With one hand he swung at her wrist. It was like striking a crowbar with his bare hand, but it jarred the weapon loose; and just then the battle between Scorpian and Sirian reached its climax.

The Sirian's jet struck a vital place in the great green dome of the robot. It exploded. The mellow booming sound the robot made became a hollow jangle. The tentacles writhed and recoiled. It sprawled in the air, a grotesque huddle of tortured metal, spilling green fire and drops of an acid that sizzled and burned where they struck.

If the robot had known life, that life was gone—it was dead.

The silvery girl abandoned the fight with Pertin. With a great stroke of her wings she propelled herself to it, hovered over it, wailing an unearthly sound.

And the great blue eye of the

Sirian turned toward Pertin. Behind it the Sheliaks, late on the scene but ready for battle, were elongating their wrinkled necks toward him.

PERTIN cried desperately:
"Wait! They—they were misleading you. They were trying to
prevent the launch, to save their
own lives—"

The eye hesitated.

"We're dead already," he croaked. "Nothing can help us now, not any organic creature. The radiation will kill us before long, even the Sheliaks. But the robot and the girl—"

He could hear his voice hissing or singing out of the aliens' Pmals.

"The robot," he repeated, "and the altered copy that looks like a terrestrial female—they weren't radiation-vulnerable. They could go on indefinitely. But the rest of us—if we let them succeed in stopping the launch, then we all die for nothing!"

The eye paused, irresolute.

Then the foremost of the Sheliaks cried: "Fool! We, too, are not radiation-vulnerable! We simply need to conjugate and be born again. But we must have the tachyon receiver—and if you try to keep us from it you must die!"

The three tapered tear-drop shapes, like a school of sharks in formation, plunged toward Pertin. The Sirian eye irresolutely turned toward them—then, with decision,

the being whirled to confront them.

Contemptuously the Sheliaks changed course to meet it. The leading one widened a ruff of flesh to act like an instant air-brake. It stopped in the air, flowed with a dazzle of color, narrowed a neck toward the Sirian eye.

The thin neck spat a stream of a yellow fluid. It struck the Sirian eye and clung, acid, adhesive, agonizing. The Sirian made an unearthly wailing noise at the sudden pain of the attack against which it had no built-in defenses. The great blue eye turned milky white; the huge body knotted in agony.

But it still had strength to fire a jet of energy that caught all three Sheliaks. They died instantly, but the effort was the last for the Sirian. All its stored energy had gone into that pulse. The reflected cascade of burning energy came bouncing back, bathing the silvery girl and sending her reeling soundlessly into a wall, to flop into an ungainly, contorted mass that didn't move. Pertin was farther away and partly shielded by what was left of the robot—even so the bolt lanced his skin with pain.

But he was alive.

Slowly and painfully he caught a hold-fast on the wall, steadied himself while he looked around.

The Purchased People woman was dead, either bled empty or caught in that last furious bolt. The Sirian eye floated broken and aimless. The robot was destroyed.

The pseudo-girl was drifting impotently away. The Sheliaks were cinders.

The chamber was filled with the stench of many different kinds of death, but Pertin was still alive.

Suddenly remembering, he cried, "Doc Chimp!"

The ape was out of sight. Furiously Pertin ransacked the chamber and found him at the last, wedged between the wall of the probe and the ship's canopy, not quite dead but unconscious.

Pertin looked down at him sadly and affectionately. It was nearly time to launch the probe and the question in Pertin's mind was: was it better to wake him up or to let him sleep as the probe was launched, the canopy jettisoned and all the air in the chamber puffed instantly and murderously away into space?

The answer was taken out of his hands as the ape stirred, moaned softly and opened his eyes. He looked up at Ben James Pertin and said thickly, "The probe?"

"It's all right," said Pertin. "We'll have to launch it by hand."

"When, Ben James?"

Pertin checked the time. "Just a few minutes now," he said.

The ape grinned painfully. "That's good to know, Ben James," he said. "No more problems. No more aches and pains. I always thought I'd be afraid of dying, but, you know? To tell you the truth, I'm kind of looking forward to it."

THE process that animated the body of the silvery pseudo-girl was more like electrophoresis than chemistry, but it was vulnerable to attack. It was damaged now.

But she was not dead. The great wings were broken and useless, but her limbs still moved, the inappropriate angel face still held its bleak, proud expression.

She was in great pain. That is to say that all of the sensory nets of her edited body were transmitting messages of malfunction, damage and warning. She did not perceive them as a human perceives a toothache, a sensation so blinding that it can lead to suicide, but they did interfere with the few pleasurebound processes left to her-reminiscence, forevision, plation. In the sense that these interfering messages were pain, she had experienced pain from the moment she floated out of the tachyon receiver on Aurora. All edited members of her race did. There was no way to rearrange their structures into forms viable in atmosphere and low-G that was comfortable for them.

Time was when Angel had experienced pain only infrequently, and in ways that were soon mended. Time was when she had lain with her sisters in the icy methane slush of her native planet, absorbing energy from the radioactive elements that swam about them, growing, learning from the tutorials of her ortho-father, competing in

the endless elimination battles of her race that finally won her the choice of assignments—and ultimately led her to the Aurora and its imminent doom. Her race was not greatly interested in astronomy. They had known almost nothing of it until the first T'Worlie probe survived the crushing pressures of their atmosphere and brought them into contact. From the surface of their enormous planet, there were no stars to be seen. Even their aircraft never reached an altitude beyond dense yellow-gray clouds.

What brought her to Aurora was the trait that her whole upbringing had trained into her: the competitive need to go farther and do more. It was not goal-oriented. It gained nothing from victories except the opportunity for further victories. The only victory now open to Angel was to survive—and the only way to do it was by preventing the launching of the probe.

She calculated she had strength enough left to destroy the two organic creatures in her way—but only just. And only if she acted now.

IT WAS Pertin who saw her first, his hand frozen on the release lever. It was Doc Chimp who acted. He flung himself on the pseudo-girl.

"Hurry up, Ben James!" he shouted. "She's too strong for me—" His voice stopped, punctuated by a screech of pain as the silvery arm thrust him away like

a cannon shot. The mutated chimp went flying into the floating wreckage of the Scorpian robot. The soft, frail dome of the skull, so cleverly mutated into the near-shape of man's own, impaled itself on a steel shard and the thoughtful, considering brain was destroyed.

Pertin hardly even saw it happen. He was past the point for sorrow. It would be easy to let the pseudo-girl destroy him. At least one life would be saved—hers. His no longer counted. He could hope for a few days, a week or two at the most, of being able to move and breathe. And what would it be like? Increasing pain. Hopeless fear. Regret. Envy.

He pressed the lever just as her fingers touched him.

The instant sharp slap of the explosion was the last sound he heard.

AT THE instant Ben James Pertin pressed the release, explosive shears cut the aft end of the ship free. The canopy flew out and away. The air puffed into emptiness. The probe rocket dropped free and began to align itself with the now near great disk of Object Lambda.

The first thing Pertin felt was the sharp pain of the explosion, then the second, longer, more deadly pain as the air pressure dropped to instant zero and his blood and body fluids, the air in his lungs, the gases dissolved in his blood, tried to expand to fill the enormous

emptiness all around. He caught a glimpse of the silvery girl, arms, legs and broken wings flailing, as she shot past him, careened off the jagged edge of metal where the shears had cut the probe satellite free and ricocheted out into emptiness. If she made a sound he could not hear it. There was no longer a way for him to hear. There was no longer a continuous medium of air to carry it.

He had just a glimpse of the huge near surface of Object Lambda the body he had called "Cuckoo" as it hung like a great dull circle in the empty sky, cutting off one spiral limb of his own, eternally lost, galaxy.

He did not see the orienting jets of the satellite spurt carefully controlled measures of flame to position it for its final thrust. He did not see the great violet flare of the fusion rockets that began to slow it. He could not see any of that, because by then he was dead.

Neither he nor anyone else in the probe ship saw the great series of flares as the satellite fought to slow itself. Aurora flew on, without power, containing only the last flickerings of life for a few of its beings, back toward the galaxy. The probe left it as it drew more and more rapidly away. The distance between them was millions of miles before the satellite made its first meteoric contact with the outer layers of that anomalously thick atmosphere around Cuckoo.

Here was a spectacle worth watching, if there had been eyes left in Aurora to see. The satellite plunged through a carefully planned chord of the atmosphere. Its ablative surface burned and tore away in a flare like all the fireworks in man's history going off at once. But there was none to see—not Sirian eye nor Sheliak sensors, not T'Worlie or Earthman or alien of any kind. Where life remained at all it lacked strength for curiosity and it would not remain alive very long.

Fifty thousand years later Aurora might pass near some sun of an outstretched spiral arm. But by then it would no longer matter to anyone, except as a historical curiosity from a time about which no one any longer cared.

SOME days later the sensors on Sun One reported that the probe was in a stable orbit. The beings on Sun One responded with pleasure—everyone was delighted that the project was a success.

Now stable, the probe began to do the work for which it had been designed.

The complex H-bomb sequencing units and the small, strong pressure-plate shock absorbers fell away, responding to remote controls from Sun One. They would never be used again.

The tachyon receiving unit began to emit a stream of tiny metallic shards, none larger than a few

DOOMSHIP 61

inches in its greatest measure.

When some hundreds of them were through, floating like a metallic mist around the drone, a quick small machine came through and began to catch them and link them together. Time passed—hours and then days. A boxlike shape took form and became a larger tachyon receiver—now ready for action.

From tens of thousands of lightyears away an angular, crystalline machine flashed along the tachyon patterns and emerged in the new receiver. It was not alive. It was not even a robot or a proxy like the Purchased People. It was simply an automatic machine that certain potentials and charges. doublechecked the strength of the materials and the solidity of the joints, directed the hummingbirdsized construction machine to correct a few faults and then reported that Cuckoo Station, the orbiting body around what had been called Object Lambda, was now ready to be built.

A few hours later the first girders of what would eventually be a thousand-meter revolving wheel were being joined together.

Plates appeared to surround the girders with an airtight sheath. Machines arrived to be stored in them. Atmosphere was pumped through to fill the chambers. The handling machines were busy, taxed beyond their capacities—more handling machines were sent and soon the

orbiting station was whole, supplied and being-rated.

The first living beings appeared. A Sheliak, naked to the cold of intergalactic space (but for the brief time of its transition to the orbiting wheel unharmed by it.) A dozen T'Worlies arrived in a single elastic air-bubble and scurried into the protection of the orbital wheel. There were Sirians, reptilian Aldebaranians, a hive of Boaty Bits, and at the last a couple of humans.

One of them was named Ben Linc Pertin.

He floated out of the tachyon receiver in his pressure suit, his thruster unit at the ready in his hands.

He did not use it at once. He paused a moment to look around.

The first thing he did was to stare down at the enormous flat surface of Cuckoo, so near, so huge, so incredible as it hung like an endless shield in the sky.

The second was to look back to where the galaxy lay, sparkling like the sea of stars it was.

He could not see the doomship, but he knew it must be somewhere in his line of sight. There were no signals from it any more. There was no way of detecting it and would not be for tens of thousands of years.

He stared for a moment, then shrugged. "Poor bastards," he whispered and turned and drove toward the wheel awaiting him.



## Special Introductory Offer good in the United States, the United Kingdom and Canada



Some Contributors
Past and Present

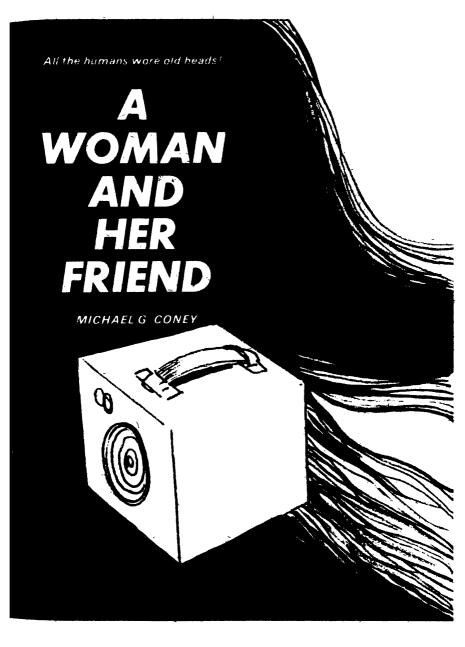
Poul Anderson Isaac Asimov Alfred Bester James Blish Robert Bloch Ray Bradbury Arthur C. Clarke L. Sprague de Camp Lester del Rev Robert A. Heinlein Willy Ley Donald H. Menzel J. R. Pierce Frederik Pohl Robert S. Richardson Robert Silverbera Theodore Sturgeon A.E. Van Vogt Kurt Vonneaut, Jr.

SINCE the writings of Jules Verne and H. G. Wells, science fiction—often termed "future fiction"—has fascinated alert minds. Not only has it entertained. It has predicted much of the far-ranging scientific and social change now upon us.

In both GALAXY and IF, the finest authors of the genre continue to speculate, to predict, to tackle the prime problems already shaping tomorrow. Ecology—space exploration—nuclear promise and threat—energy—social evolution and biological revolution—these and other fields are probed by imaginative stories uniquely exciting and rewarding. So let your fancy run free. Subscribe now!

For U.S. and Canada, send coupon to: GALAXY AND IF, 235 East 45 Street New York, N.Y. 10017	For United Kingdom, send coupon to: GALAXY AND IF, 14 Gloucester Road London SW7 4RD
☐ 6 issues of GALAXY for \$4	☐ 6 issues of GALAXY for £1.50
☐ 6 issues of 1F for \$4	☐ 6 issues of IF for £1.50
☐ 6 issues of GALAXY and 6 issues of IF for \$7.50	☐ 6 issues of GALAXY and 6 issues of IF for £3
Enclosed find in payment for my subscription as checked above.	
PRINT NAME	
ADDRESS	





THE accident that threatened to determine Woman Lander's life expectancy was due to a combination of circumstances. Afterward she might blame the heat or her own exhaustion, but principally she would blame her Friend. Her Friend, she had already decided, was neurotic and objectionable and the long car journey had been a mistake. But Woman Lander considered herself a kindhearted soul and, as she was by trade a placement officer, she felt it her duty to take on this responsibility.

The Friend knew Alice's occupation—she had wheedled out this information within ten minutes of their meeting. A placement officer? she had grated in her metallic voice. That's interesting, my dear...

And Alice had known what would happen. She had contracted to look after the Friend for a period of one week. During this week, she guessed, the Friend would make persistent, unnerving attempts to get placed. She would play on Alice's sympathies. She would cajole and toward the end of the week she would threaten—feebly and blusteringly.

The road was dusty and the surface uneven—puddle-like mirages came and went in the heat of the sun. Alice concentrated on her driving. She was thirty-nine years and six months old and her reac-

tions were not what they had been. She looked forward to reaching the main road to Axminster and switching over to automatic. Not for the first time she regretted the public-spirited whim that had taken her to the Westbury Transfer Center.

Beside her the Friend whined, "Do you think there's a chance of my being placed at Axminster?"

Alice forced herself to think calmly. The Friend had undergone her traumatic experience only yesterday, her fortieth birthday, when she had been taken to the transfer center and divested of her body. Her brain, wired up in what the medical profession facetiously called a "holding pattern" and surrounded with nutrient fluid, reposed in a black box on the seat of the hovercar.

So the Friend, named Betty Benson, was naturally not feeling although she happy, considerably luckier than the thousands of other Friendship Boxes at that moment reposing in Westbury and Axminster centers-at least she had been contracted for. Alice tried to make allowances. Alice had had six bodies in her lifetime and had never been obliged to undergo the transitional period of Friendship due to the fact that placement officers were in the preferred trade & category. Every time she had reached the physical age of forty she had been transferred mediately into the body of a sixmonth-old child and had resumed life with hardly a break, although naturally somewhat incapacitated at first. Alice had never found the enforced idleness of her early childhoods a hardship—she had looked on each as a pleasant extended vawith no responsibilities cation recommencing preparatory to working life. She was, in fact. looking forward her to transfer.\*

But Betty Benson, whining with misery beside her, was one of the unlucky ones. It might be several years before she was placed and transferred into a host. Alice was responsible for dealing with the Axminster waiting list—a formidable four hundred-odd thousand names reposed in the filing

cabinets of her office. So she thought hard before answering the Friend's question—she was not allowed to divulge precise information.

"The Axminster list is pretty long," she admitted. Then, in order to lessen the blow, she said, "But there's always a chance of your getting a makeover." A small chance. Makeovers seldom happened.

"A makeover?" queried Friend Betty Benson eagerly.

"You know—you get friendly with someone in a preferred trade and when the time comes for her to take her transfer she might not want it. She may have had an unhappy last life or may just be tired and won't want to go through it all again. And sometimes you can find

necessary for "essential personnel," such as government officials and civil servants, to spend any time in a Friendship box—at age 40 they were transferred into a host body.

By 2159 old heads were firmly in the saddle and the world was solidly in the grip of the System. Almost no one remembered what a young person was. Androids were developed to serve as host bodies. Handsome, healthy and intelligent, grown from the best genetic material available, they were nevertheless discriminated against because of certain skin discolorations and most people continued to prefer waiting periods in Friendship boxes.

The human birthrate, however, continued to drop—and Friends in boxes wielded votes. The Total Death Act—which prescribed termination of all persons convicted of any offense from overtime parking up—was passed in 2176 to shorten Friendship box waiting period for others.

The events in this story took place in the

year 2256.

<sup>\*</sup> The Act of 2056 guaranteed virtually everyone then alive immortality. It specified that on his/her fiftieth birthday every person of Earth had to attend a Transfer Center. where his/her brain was removed and placed into the cranium of a six-month-old child. The person then went through another childhood to maturity and the process was repeated at his or her fiftieth birthday-ad infinitum. So successful was the Act at curbing the human birthrate that by 2066 it became necessary to introduce what were euphemistically called Friendship boxes -metal containers filled with nutrient fluid in which a brain was placed pending availability of a host body. In order to make the wait more pleasant the boxes were equipped with audio pickups and vocal chords. By the year 2128 it was decided to decrease the active population (while birthrate had declined, the number of people had not) by reducing the age for Compulsory Transfer to 40. Simultaneously came about the Preferred Trade concept, which made it un-

a Friend due to be placed, who decides she likes it better in the box and doesn't want a body. It sometimes happens, believe it or not. If so—if someone really doesn't want her transfer—she can assign it to whomever she likes. You, for instance." She didn't add that in order to achieve this the Friend had to make himself pretty damned pleasant.

"Oh, my God. What chance would I stand of that?" The box, bouncing slightly on the seat, seemed almost to shrivel with despair.

"Do I take it this is your first time as a Friend?" asked Alice.

The box hesitated. "Yes," she admitted at last.

It figured. Woman Betty Benson had been preferred in the past and had lost her status through some minor misdemeanor not sufficiently serious to be punishable by total death. She had come down in the world. She was bitter and prejudiced.

And Alice had contracted to look after her for a week. The prospect was not inviting. She felt a fury knot her stomach. She should have checked the records at the center before being carried away by sympathy for the stack of black boxes she had seen muttering to each other, bickering and bemoaning their inactivity.

"Look here," she said, threading the car carefully through a village. "You and I have got to get along together for a week. Just a week, that's all—and I promise that at the end of that time I'll try to find another woman to take you over. I won't send you back to the center unless there's no alternative."

"Thanks." There was a hint of sarcasm in the reply. "Ah, might I ask how old you are, my dear?" The harsh voice had changed again. Its tone had become unctuous. It was astonishing, thought Alice, how the speaker transmitted each change in inflection.

"I'm thirty-nine," she replied firmly, "and I have no intention of granting you a makeover. I'm not tired of active life."

"My dear, I wouldn't dream— Look, I'm sorry. You must realize that all this is new to me. It's having no eyes that hurts the most. For the next week, will you be my eyes, Alice? Tell me what you see. Let me know what's happening."

A sound psychological approach, thought Alice. The Friend would make Alice indispensable. And at the end of the week the Friend, in electronic tears, would beg Alice to keep her on—she couldn't do without her. And so on, week after week, chasing the faint chance that Alice might, in six month's time, grant her a makeover and opt for the Friendship Box...

Not a chance in the world.

Playing along, she said, "We're doing fifty-three miles an hour and reaching the main road, thank God. We're passing through a village—

Kinverton. There's a filling station. I'm pulling in."

"What brand of fuel does it sell?" asked the Friend eagerly.

"Orinoco," lied Alice for a small, nasty satisfaction. She wound down the window and addressed the approaching child: "Six gallons, please."

The youngster, a brown-eyed and handsome lad of about five years, wrestled with the heavy hose. He swore comprehensively as he tried to twist the hose toward the hovercar's fuel tank, only to have it writhe out of the chubby, scarred hands that betrayed him as an "I'm sorry," android. he apologized hastily. He tried again and this time successfully jammed the nozzle home. "Give me another vear's growth and I'll sort this bastard out," he promised.

Alice Lander looked at him reprovingly. "You're too small to work," she said. "You'll overtax yourself. You'll regret it later on."

He stared at her furiously—then his expression changed. "Hey," he exclaimed. "Aren't you Woman Lander? Of the Axminster placement office?"

"That's right," said Alice, surprised. She looked at him closely, but didn't recognize him. She had to admit that androids tended to look alike unless you knew them personally.

He was smiling pleasantly now. "Surely you remember me? Christ, no—of course you wouldn't. I was

in my previous body." He made a gesture of snapping his fingers, but the soft young flesh remained silent. "But I remember you—God, yes. You placed me five years ago."

Five years ago? Alice thought hard, feeling slightly embarrassed. She took a shot in the dark. "Joel Wittig?" she tried hopefully. "Surely it can't be Joel Wittig?"

The child grinned, delighted. "The same," he said. "You remembered. Five years ago you placed me within the day—and me a garage hand. I'll always be grateful for that. I only hope I'm as lucky the next time—" His voice trailed off as he caught sight of the box on the seat beside Alice. "It's a long time yet," he said eventually. "See you again. Look after yourself, Woman Lander."

Alice drove off in a glow of selfesteem that was immediately dispelled by the Friend.

"How come you placed him right away?" she asked with an abrupt return to her waspish manner. "How did he get to jump the queue?"

Alice sighed. "He's an android." The Friend wouldn't have known, not being able to see. The box was a great leveler.

"So what? Are they better than us or something?"

"No, of course not," Alice replied, her steering unsteady as she veered, fast, on to the main Axminster road. "But their birth rate is rising while ours is falling.

An android can usually transfer immediately on his fortieth birthday. Humans have to wait. It's as simple as that. Android babies are available to humans, you know."

"I'd rather wait a thousand years than have an android body," exclaimed the Friend. "The very idea is disgusting!"

"It's a better body than you may ever get otherwise," retorted Alice sharply. She felt strongly on the subject as a result of a certain blissful vacation many years ago. "Androids tend to be stronger than we are and they have shown greater capacity for learning."

"Nonsense," said the Friend forcefully. "That's just propaganda—put out so they won't feel inferior with those awful fingers and those strawberry marks all over them."

"A lot of them are unmarked." Alice decided it was time to change the subject. "We're passing through a village now," she remarked. Children played at the roadside—or were they children? These days you couldn't tell. She remembered her own childhood, her original childhood, and experienced a sense of loss. Then she told herself the reaction was ridiculous. There is one period of innocence in person's life and one only. Compulsory transfer hadn't altered that. It had just made one's age of innocence seem such a long time ago.

In a sentimental daze she scanned the small figures on the pavement.

That was the reason she was too late in her instinctive stabbing at the brake when a child—a real child—dashed into the road almost under the skirts of the hovercar.

Normally this would not have mattered—the automatic control would have been activated by the child's crossing the safety beam. But in her enormous irritation at the Friend, Alice had forgotten to engage the automatic brake while swinging to the main road.

Veering wildly from side to side the car raced on while Alice struggled to regain control. A small body flew at a tangent toward the houses, to lie still with its neck bent back at a terrifying angle.

TWAS, of course, an android child whom Alice Lander struck. She knew this instantly—a human child would have been mentally adult and would not have scuttled across the road in front of a speeding hovercar. But what caused her to whimper softly to herself as she switched hastily to automatic and accelerated rapidly was the fact that she was thirty-nine years and six months old and had committed a criminal offence in driving on a main road without engaging the automatic—and as a result had injured a child.

The fact that the child was an android made no difference—Woman Lander had not one atom of prejudice in her makeup. She

had outlived that sort of thing many lives ago. And a little over a hundred years ago she had gained a deep insight into the android personality as a result of a passionate love affair.

So the reason she didn't stop was not the breed of her victim, but simply her own age.

Thirty-nine years and six months. The countdown period, they called it—the period when a person became ultra-cautious. A crime committed just before transfer meant, quite simply, the death sentence. Alice Lander suddenly had less than a year to live. The statutory refusal of future transfer, known ominously as total death, would be mandatory in her case.

Her knuckles were white around the useless wheel and tears eased their hesitant way down her cheeks.

"What was that noise?" asked the Friend. "I heard a thud just then."

Alice didn't reply. Silently she struggled to adjust her emotions. She was Woman Alice Lander, an impeccable citizen, due for transfer in six month's time—unless she opted for a premature, which was sometimes done in preferred trades when the body was failing.

"I heard it clearly," grated the Friend. "You didn't hit anyone, did you?"

Alice wondered if someone had gotten her number. The eyes of children are sharp.

"Wouldn't do to have an accident

at your age," the box remarked. "Don't you think you ought to stop?"

"Why?" asked Alice, at last under control.

"Well, I mean, someone might be hurt. You had the car on automatic, of course?"

"Of course. It was probably a bird, the road sensors only pick up at ground level."

"Damned big bird. I didn't know the albatross was a visitor to these parts. Why are you driving so fast?"

"I don't want to be late."

"Late? What for? I thought we were just going to your place."

"I thought we might—take in a show or something."

"You what?" The Friend's voice became suddenly smooth—Alice imagined it was menacing. "Look, are you in some kind of trouble? I may be blind, but I can hear. Just then, after that bump, I could have sworn I heard you whimper."

"Whimper?" Alice's voice uncontrollably rose a semitone.

"You whimpered—like a carrier dog. It could be a nervous habit. I knew a man once who had one—they tend to get hold of you and you can't get rid of them when you've been subject to them for over a hundred years. This man, whenever he laughed, used to snort right at the end of the laugh." Here the Friend obliged with an imitation. "Ha, ha, snort. Like a pig. He used to apologize afterward."

"I'm sorry," said Alice

desperately.

"It's quite all right," the Friend assured her. "I didn't mind, but it had me worried for a moment. I wouldn't like to think you'd hit anybody. Not with a clean sheet and only six months to go. It would be tragic, as if we haven't got enough problems already, what with me and your long waiting list—"

At that moment it occurred to Alice that she was going to be blackmailed.

H

TT WAS by now early afternoon A and the black main road was silvery with heat. Alice was hungry, thirsty and in need of a washroom. She couldn't stop, however, because sooner or later the police, no doubt notified already, would be hard on her heels looking for a red hovercar, 2254 International Motors, license number B-67302P. Traffic violations had become so rare during her several lives that she was no longer sure whether authorities still used road blocks and she held her breath at each blind curve, expecting to find her way barricaded.

Her mouth was dry and foultasting. Another spasm clutched her lower abdomen and she tensed in the seat, glancing at the Friend by her side and for a moment almost envying the box its freedom from urgent natural functions. A signpost flashed by at an intersection—twenty miles to Axminster. Increasing speed, she wondered if she could hold out that long.

"I expect you could do with a cup of coffee," remarked the Friend. "Don't hurry on my account. Pull in and relax, why don't you? Traveling at this time of day and in the sun is tiring. Makes the eyes ache, I used to find—then your vision starts playing tricks. Thank God for the automatic control, I used to say."

Fillings stations whipped by, the pumps like sentinels at the roadside observing Alice's headlong progress. Above the high whine of the turbine she kept imagining she could hear the shriller, banshee wail of police pursuit.

Axminster seven miles.

"What was that?" queried the Friend suddenly, so that Alice, lost in misery, jumped. "I thought I heard something like a siren."

"Nonsense," said Alice sharply, listening. "It's the engine. The oil level may be a bit low. It often makes a noise like that—there's a leak somewhere."

"Maybe you ought to slow down a bit."

"We'll be all right. We're nearly there now."

Axminster two miles. The concrete suburbs flashed by. The sound of the car's progress re-

bounded as a rhythmic pulsing from the lampposts. Alice throttled back, carefully observing the speed limit. She turned left at an intersection, right into a parking space, killed the engine and stepped out into the sudden heat of the city. She hurried around the car, seized the Friend and slammed the door. She glanced around frantically, got her bearings and plunged into a nearby john.

Emerging gratefully, the Friend in her hand, she paused, stared, changed direction and walked with studied casualness into a supermarket.

Behind her several uniformed men were examining the hovercar with professional interest.

"Are we on our way to your place?" asked the Friend loudly and shoppers turned their heads.

"I'm just going to pick up a few things."

"Don't bother on my account," said the Friend. "I don't eat, you know."

Alice piled a random selection of groceries into a cart and wheeled it to the cash desk. Behind her rose a scream of protest as a shoplifter was apprehended. Alice placed her provisions on a turntable and the cashier rapidly totaled them up. He was tall and fair-haired. He smiled at Alice pleasantly.

"Cash or charge?"

"Charge," she said without thinking, handing over her code card. "Name?" The name was on the card, but the question was required by law.

There was a commotion beside them as the shoplifter, a woman in her late thirties, was dragged away by a uniformed store attendant. Her arms were pinned behind her back and the attendant was holding up Exhibit A, a small packet of soap powder. A jumble of desperate words tumbled from the woman's trembling lips. "For God's sake-I was only looking at it—I just picked it up to see if it had a lucky number, that's all, I swear. You can't do this to me-I'm thirty-nine years old—I'm thirty-nine years old!"

"The name's Woman Alice Lander."

Alice spun around. For a dreamlike moment she thought the name referred to the doomed woman. Then she realized that the Friend had replied to the cashier's question.

Trying to control herself, she smiled at him nervously as he ran his forefinger down a list. Surely, she thought, they can't have caught up with me yet... It would take a while to trace her as the car's owner, assuming that they had already identified the vehicle with the accident. The police might merely have been carrying out one of their periodic roadworthiness spot checks, she thought hopefully.

She glanced through the supermarket window. The car was gone. The police had towed it away for further examination.

The cashier smiled again, setting down the list. "Right," he said. He inserted the card into a slot, then returned it. "Shall we deliver for you?"

"Thank you." She smiled back, weak with relief.

"I thought you wanted the stuff now," said the Friend.

"Deliver it, please," she said firmly as the cashier raised his eyebrows. He nodded and she moved away, contriving to strike the box heavily against the counter. The Friend squealed protest.

She left through the rear doors of the supermarket, stepping into the abrupt sunshine and the quiet of a tree-shaded public park. Neat paths led past long bench seats on which people relaxed, faces turned to the sun. Some fed birds. The scene was one of tranquillity and Alice stood still for a moment, taking it in, appreciating it deeply. She sat on a nearby bench.

"Are we there?" asked the Friend.

In the peaceful atmosphere of the park Alice began to collect her thoughts and get the recent runaway events into perspective. What, exactly, was her position? She had injured a child in a road accident and the police, by now, would have identified her car as being the one responsible. Before long they would have traced the car to her and her name would appear

on the indicator boards as a wanted person. For just a moment she considered leaving the town and going into hiding in one of the remoter regions. Around the fringes of Dartmoor were abandoned cottages which, due to the difficulty of farming the rugged terrain, had never been ploughed under. It frequently happened that a criminal in his late thirties would disappear in that direction—after all, he had nothing to lose. For a while she entertained the almost romantic notion of the simple existence—a small cottage, a diet of roots and berries—maybe she could catch and tame a wild goat . . .

Then common sense took over. She would never get out of town. The Friend would make sure of that. If she abandoned the box, it would raise the alarm within minutes. If she took it, it would soon suspect that the journey was becoming long and would again raise the alarm.

She had, however, one chance.

"Are we there?" asked the Friend again. "Is this your place? I can hear birds. The sound's not right. There are no echoes. Where are we?"

In a moment's sudden fury at the persistence of the Friend she contemplated dropping it over the bridge into the river or otherwise disposing of it permanently. But this again was impractical. She would be seen—the box would be rescued immediately.

Her only answer was a premature transfer.

If she could reach a transfer center and persuade the doctors that she had good reason for her request, backed up by her authority as a placement officer. She might, with luck, obtain a quick transfer before her name appeared on the indicator boards. Then she would be in possession of a new young body and nobody could take that from her for another forty years. She might get a ten-year sentence for dangerous driving, but at least after that she would have thirty vears of freedom before the statutory total death.

"Where are we?" the Friend rasped again. "Are you there?"

"I'm here. I'm just resting for a moment. I'm tired after the drive. We're in the park at Axminster-it's very nice. There are a lot of late-thirties about—dreaming about their next childhood, I expect. None of them can have more than a year to go by the look of them." This was a phenomenom of the countdown period. Many persons shortly due for a transfer seemed to retire from active life altogether rather than run the risk of committing some crime. "There are birds in the park and one or two android children playing."

"Thanks for the information. It's good to hear from you again," observed the box sarcastically. "Fine sort of companion you're turning out to be."

There was menace in the voice again and Alice caught her breath. The Friend was turning nasty. "I'm sorry," she said gently.

"Sorry about a lot of things, I don't doubt," observed the box. "There's something weird about this whole business. Are we going back to the car?"

"No. We can walk. It isn't far from here."

Across the park an indicator board was flashing—she could see a string of names but at this distance could not read them. She picked up the box and strolled across casually. It appeared that Johnathan Stone was wanted for assault. There were several others. The name of Alice Lander did not appear.

NOT yet. wondered when Friend would make her move. There was no doubt that she was suspicious and the voice issuing from the box held unpleasant. gloating undertones. But the Friend might imagine that, for the time being, she had everything under control. She might reason along the same lines as Alice herself, deciding that there was no way Alice could get rid of her. So she would bide her time and then, perhaps later tonight, would come further suggestions about the waiting list and Alice's responsibility for deciding the local priorities of placing for transfer.

Or would the climax come when the Friend discovered—or reasoned—that Alice was no longer able to use the car? This would confirm her suspicions and she would have to push matters forward, getting her name at the top of the list before Alice was arrested. Yes, the Friend would have to move quickly if she were to take advantage of the situation.

The box suddenly said "I don't want to walk. You're jogging me about too much. I want to take the car."

"There's a bus station just here," said Alice quickly.

"Take the car."

"Look," said Alice. "I don't want to use the car. I've had a long drive and I'd rather relax on the bus. It's only a short run. Why should I take the car?"

"Prove to me the car's available," snapped the Box.

Alice felt herself flush with temper. "Why should I?"

"Because I think the car's been confiscated by now and you're on the run. I'm nobody's fool. You're going to make for the outlying districts and lie low." The Friend's voice was dangerous, triumphant—she had decided she held a winning hand. "Look here, I'll give you a chance. I could give you away now. I could start yelling and turn you in. But I won't. Just take me along to your office and put me near the top of the list—not the very top. That would look odd. Just slip me in

somewhere about number ten—it won't take a minute and then we'll catch the outward bus. You can get off at the terminus, leave me under the seat and make for the hills, as I believe the expression is. I'll keep quiet until I'm back in town, which will give you a good start. Fair enough?"

So this was it. The confrontation had come a little sooner than Alice had expected. She felt weak suddenly and sat down. Names of criminals slid down the indicator board and disappeared off the bottom like drowning men, only to be drearily resurrected at the top before recommencing their downward plunge. Jennifer Spragg. shoplifting. Alice wondered if that was the woman she had seen in the supermarket—maybe she made a break for it. The name would be repeated throughout the region in public places, in the placement offices, the transfer centers, just about everywhere. Nancy Blackett, kidnaping. Inconsequentially she thought that these names sounded like those of criminals-it would look odd to see the name of Alice Lander there for dangerous driving. But it was not there yet.

Her mind made up, she stood, the box in her hand.

"We'll go to the placement office," she said. "To my room. It's just a short bus ride from here."

The Friend chuckled triumphantly. "Thank you, my dear."

HE fare mechanism winked at her, knowingly it seemed, as she stepped on the platform. Disconcerted, she made the same stupid mistake as before, automatically thrusting her card into the slot. The machine chuntered over this, riffling in microseconds through its relayed list of undesirables, then spat the card back at her. At least it was more efficient than the supermarket, she thought. The checking off didn't have to be done manually. But her route through Axminster was recorded—she should have paid cash. She stepped off the platform and made for a seat.

"Hold it," the mechanism barked.

She wheeled, her heart thumping. A last-minute name had been relayed on to the criminal record. The doors were shut—she was trapped. The eye of the machine was winking rapidly—another, yellower eye near the deck blinked in sympathy. The machine was about to denounce her.

"What is it?" she mumbled through trembling lips.

The machine coughed, clearing itself of static. "You have excess baggage," It got out eventually.

Shaking with relief, Alice apologized. "I'm so sorry. I have a Friend with me. I quite forgot." Again she had to insert her code card—again live through the instant of terror before it was back in her hand. She stumbled away.

"It's full fare for a Friend," the machine barked after her. "Don't forget that again, Woman."

"I won't," she promised and sat down heavily, placing the box on the seat beside her.

A man sitting behind her leaned forward and touched her shoulder sympathetically—she saw the scars of the android. "Don't let it bother you," he said. "I've been caught like that myself. It's disgraceful. When people are good enough to take Friends the least the authorities should do is let them travel free." He tapped the box gently. "Hello, there," he said.

"Hello," replied the Friend guardedly. Alice could guess her feelings. The last thing they wanted was to be drawn into conversation. In their present nervous state it would be only too easy to arouse suspicion. Alice turned around, determined to freeze the conversation with a few icy words—then hesitated as she met the eyes of the man behind. They were brown and kindly. His expression was tentatively friendly and there was something indefinably familiar about him.

"You've taken Friends yourself?" she found herself asking.

"Yes. I think it's the least we can do. We're the lucky ones, after all, right now—and there's always the chance we may become a Friend ourselves one day. You never know how the birthrate will go." Obviously he was preferred and correctly deduced that she was, too.

"That's good way of looking at it."

She warmed to him. Beside her the box coughed warningly. Without quite knowing how it had happened, she found she had placed the box on the floor and moved over-the man was sitting beside her. His last transfer had been fortunate. He was tall and exceptionally good-looking, his face unblemished by the marks of the Vat. He was also approximately the same physical age as herself and she experienced regret. It was a pity she couldn't turn this chance encounter to advantage, but in her present position she had no time to form a liaison.

"I've got a Friend at the office right now," he said. "A sad case. He's been on the list for eight years and it's getting him down." He had lowered his voice and was talking quietly into her ear out of deference to the feelings of the box beneath the seat. "What are the chances for yours?" he asked, nodding in that direction.

"Not good," admitted Alice. "And she's not happy about it, either. If she goes on my list, it'll be ten years before she gets a transfer."

"Your list?" The android regarded her with interest. "You're a placement officer?"

"Yes. The job can be disheartening at times. I can't help telling myself that the only ad-

vantage of my trade is that it's preferred and then I start hating myself, because that's a selfish outlook."

"We're all human. Permit me to introduce myself," he said, taking her hand. "I've only been in Axminster a few days. My name's Phillip Ewell."

Phillip Ewell? Alice stared at him incredulously. "I'm Alice Lander," she said and watched his expression change.

### Ш

THREE physical lives ago she A and Phillip Ewell had walked hand in hand along the silver sands of Exmouth, together in the recurof emergence iov adulthood. Since then she had known two more physical teenages but they had never approached the delight of those few weeks over a hundred years ago when she and Phillip had vacationed together at the Southern Recreation Center. swimming, sailing, making love or just lying on the beach, warm in the sun and in the wonder of each other's presence.

Five weeks of heaven before they were posted separately to their trades—she to become placement officer at Axminster, he to attend a medical school at the other end of the country. People said that in the thirties the mind would always have made its impression on the physical

face, but looking at him now she saw him again as the seventeenvear-old of their previous life. The eves watching her with surprise and delight were the eyes that had regarded her with love all those vears ago. In the manner of most such liaisons they had lost touch with each other by the time of her next transfer, but she had often wondered what had become of him and what he looked like now and what it would be like if they ever met again. And now here he was. miraculously beside her in the bus, and they were both thirty-nine vears old—but for her the meeting was too late.

"Alice," he said softly. "My God—Alice, after all these years. I've often thought about you."

"That goes for me too, Phillip," she said sincerely. "I've never forgotten that vacation. I've been to Exmouth since, you know—but it's never been the same."

"It was over a hundred years ago," he said slowly. "I wonder how much else I can remember from that time. Not much, I suppose. The mind may age more slowly than the body, but it ages nevertheless and memories disappear. Only the worthwhile ones stay with you always."

Still, saying that, he thought of their child—she had not wanted it.

Alice was still gripping his hand and her mind was far back in time, but a sudden harsh voice jerked her back to the realities of the present. "What are you two talking about?" demanded the Friend querulously. "I can't hear you. Have you put me under the seat? All I can hear is a damned turbine. You haven't left me, have you? Are you there? Are you there?" The voice rose to a shout.

Phillip smiled at Alice resignedly. "You'd better get her out of there before she calls the police," he said.

Alice started nervously at the mention of the law and hastily dragged the Friend, none too gently, from her resting place. Phillip took the box and laid it on his knees.

"Hello, Friend," he said. "How are you doing?"

"Who the devil are you?"

He raised his eyebrows at Alice. "I'm an old acquaintance of your companion," he replied. "We've been talking over old times."

"Damned inconsiderate of you, shoving me out of the way. Old times? What have you two been cooking up?"

"Cooking up?"

"Never mind," muttered the Friend. "Are you there, Alice?"

"Yes."

"Haven't we arrived yet? How much farther do we go?"

Alice sighed, glancing apologetically at Phillip. "We get off at the next stop," she reassured the box.

"So do I," remarked Phillip.
"Look, why don't we stop in somewhere and have a drink?"

"No," snapped the Friend, before Alice could reply. "We've get a lot to do. We're short of time." The box chuckled unpleasantly.

"I'm sorry about that," said Phillip. He addressed himself quietly to Alice. "Can you give me your number. I'd like to call you when you're free."

"Free?" cackled the box. "Yes, give the gentleman your number, my dear. By all means."

As the bus hissed to a stop Phillip quickly jotted down Alice's address and visiphone number and they got to their feet. On the pavement he handed her the Friend. "I'll go now," he said. "Look, do you mind if I call you tomorrow?" He glanced at the box significantly. "We can talk over old times together. Would you like that?"

Alice nodded dumbly and watched as Phillip strode away, turned, waved and disappeared round the corner. She stood for a while, her eyes smarting, until a grating query from the Friend reminded her that time was running out.

SHE stood in the entrance hall to the transfer center and looked around uncertainly. Over to the right was the reception desk ahead stretched a long corridor lined with doors. The hall was large and impersonal like a hospital's outpatient area—along the walls stood a few chairs but no people were in sight, apart from the girl behind the reception desk. She was engrossed in a novel. Set high in the opposite wall was the inevitable indicator board. Alice noted that authorities were still looking for Nancy Blackett (kidnaping) among various other names. Some of the previous names had disappeared. Their possessors were presumably in custody by now.

The Friend spoke quietly, alerted by the sudden cessation of street sounds. "Is this your office?"

"Yes," lied Alice as quietly, wondering what to do next. If she were accosted by anybody the ensuing conversation would give the game away and the Friend, grasping the situation, would denounce her. A pile of blankets on a nearby trolley gave her an idea.

"Look here," she said. "I've got to get up to my room and there are a lot of people about. If they see me carrying you they might suspect something. I'll wrap you up for a moment. Will that be all right?"

The Friend considered. "I suppose so," she said finally. "But I've just thought of something. How will I know you've put my name high on the list? I won't be able to see it. I can't say I exactly trust you. What you must do is this. After you've made my entry in the records you must call a colleague into the room on some pretext and discuss the people at the top of the list, mentioning my name. Otherwise I start

screaming. Right? As soon as you've done that we can leave, catch a bus and you make for the wilds. I won't give you away if you do as I say. Right?"

"Right," echoed Alice resignedly. She took a blanket from the trolley and wrapped the Friend up thoroughly, making sure the microphone and speakers were well covered. Then she approached the desk.

"I wish to apply for a premature transfer," she said in a low voice. She could not avoid glancing over her shoulder. Linton James, rape, accompanied the name of Nancy Blackett on the indicator board.

"Name?" asked the receptionist brusquely.

"Woman Alice Lander. Placement officer. Preferred trade, you know."

"I know," the girl said sharply and resentfully. She riffled through the cards, glanced at the indicator board. "Alice Lander," she repeated. "Here we are. Physical age thirty-nine. What happened, Woman Lander? Your body not pretty enough for you?"

"That's enough of that." Alice snapped, deciding to take the offensive. "I'll have you reported. Now give me the application form and hold your tongue."

Reluctantly the girl handed over a form and a pen, glancing pointedly at the indicator board again as though she expected Alice's name to appear at any second. Alice was infuriated and prayed inwardly: Don't let my name come up now, not now. Five minutes' time if you like, but not now. I can't give her that satisfaction. . . She completed the form rapidly and handed it back.

"Come back in a week."

"I'll see the doctor now, if you don't mind."

Sighing, the receptionist lifted a phone, spoke a few minutes, then replaced the receiver. "Doctor Butler will see you," she informed Alice. "Second on the right. You're very lucky. He's a busy man."

Alice's self-control snapped. "Don't tell me I'm lucky, young woman. A word from me would have you out from behind that desk and into the street, jobless. Goodbye—and I hope you enjoy your next Friendship—may it be long."

The girl grinned insolently. "That's twenty-two years from now. I'll have qualified as preferred by then, with luck. Enjoy your next body, Woman Lander, and may it suffer from acne."

Then a curious thing happened. The girl glanced at the indicator board and her jaw dropped. A look of surprise crossed her face. Alice swung around, her heart lurching, but to her relief the names on the board were meaningless to her.

NANCY BLACKETT, KIDNAPING LESS ANSTEAD, THEFT LINTON JAMES, RAPE The girl was staring at the board incredulously and seemed to have lost interest in the battle of wits. With the Friend bundled under her arm Alice stalked away. She tapped on the door of the doctor's office and entered.

The doctor was physically young and he looked up with a pleasant smile on seeing her. "Woman Lander," he said, rising to his feet and taking her hand. "Sit down, sit down. I've heard about you—you're the local placement officer, aren't you? My patients have spoken of you. I'm very pleased to meet you. What seems to be the trouble?"

Encouraged, Alice launched into a rambling monologue about strange pains in the back, headaches, and listlessness and a general feeling of depression. Listening to her dull voice droning on, she felt she was doing well. Her eyes drifted to the miniature indicator board on the doctor's desk and her spirits rose slightly. For the first time she began to feel some certainty that she might be able to pull this off.

The doctor was talking to her soothingly. "Well, we can't have a woman in your position feeling bad, can we? Sickness impairs the efficiency. I see you've only got six months to go in any case. Yes—I think a premature transfer would be the best thing—then a nice vacation for a few years and back to the job refreshed. Of course, at such

short notice you'll have to take the best host available, but I'm sure you won't mind that under the circumstances," He chuckled. "Usually I like to find a nice little blond girl for my favorite women patients in preferred circumstances."

"Thank you, Doctor." She was amazed at how easily it was going. "It can be done right away? I've filled in the application."

"I should think so. I don't see why not. You've informed them at your office, I suppose? I can't imagine a woman of your capabilities not leaving your affairs in order." he laughed.

"There's just one thing, Doctor." said Alice tentatively, indicating the bundle in her lap. "I have a very dear Friend here. She doesn't know my intentions. I couldn't bear to tell her. I told her I was going to an electromusic concert—I know she can't stand electromusic but I like to take her everywhere. So I wrapped her up."

If I can get away with this, I can get away with anything, Alice thought.

The doctor was smiling sympathetically. "It's nice to know there are people like you around, Woman Lander. Friends can be an encumbrance at times, I know. Are you trying to say that you'd like me to explain to her—afterward?"

"I'll take her with me into the operating theater," said Alice hastily. "I'd like to have her with

me right up to the end. Then you can explain—and perhaps arrange for her to be sent back to the transfer center at Westbury—that's where I got her from."

"That's quite all right." Doctor Butler stood and Alice followed suit, clutching the muffled Friend. "I think it's time we had a word with the transfer surgeon. He might be able to fit you in right away."

"I'll leave you here," he said later, as he found her a seat in a small waiting room. "The surgeon will be along in a minute. Good luck, Woman Lander."

She sat very still, nervously twisting her hands together. Now that the doctor had gone and her time was so close she began to get apprehensive again. There was no indicator board in the waiting room and she began to imagine that frightening glissade of names again. slowly down the board, disappearing, reappearing at the top and occasionally taking on a new name. Was her name on that board yet? Had it appeared on the doctor's desk? Was he at this moment staring at it, unable to believe that Woman Lander was capable of crime but seeing it nevertheless? The board had to be right, he would think, and he would jump to his feet, open the door and hurry down corridor to prevent transfer—she could hear footsteps.

She could hear footsteps coming down the hall.

The door opened. A tall, familiar,

figure entered, stood regarding her gravely.

"Phillip-" she gasped.

HAT'S all this about, Alice?" he asked. "Doctor Butler told me he thought you had reasonable grounds for a premature transfer. Is this right? You want one now?" He looked puzzled and a little hurt.

"I do," she said, feeling bewildered. "Are you the surgeon? I didn't know you worked here."

"There seems to be a lot we don't know about each other, Alice," he replied. "Damn it, we've only just met for the first time in a hundred years and I thought— I thought you were, well, pleased to see me. I thought we might see each other some more—" He broke off.

"I would have liked that, too," Alice admitted. She forced down surging emotions. "But I'm afraid it just can't be. Don't ask me to explain. I've decided I want a transfer now—I need it— and that's all there can be to it. Will you be performing the operation?"

"I will, I suppose. Yes, of course I will. I couldn't let anyone else do it. I'd just like to know why." He hesitated. "It has nothing to do with our meeting again, has it?"

Alice tried to laugh. The sound emerged as a sad croak.

"Of course not, Phillip. It's just that I haven't been well lately and— Well, there's no point in taking chances, is there? You'd be surprised at the figures for brain wastage due to unexpected death in the late thirties. Why wait when a premature is available?"

He was staring at her. "You look fit enough to me, Alice. You don't make sense. There's something else, something you won't tell me about. What is it, Alice? What has gone wrong?"

"Nothing." She forced a hard edge into her voice. "I've got clearance, Phillip, and I want my transfer. Now."

Nevertheless he argued and Alice grew increasingly frustrated and apprehensive. She had no time to lose. Her name might be on the indicator board at this moment. Soon the man before her ceased to be Phillip, the man she had once loved and probably still did—he became a menace, a threat to her life. He stood there pleading, with each word pushing her nearer to total death. She panicked.

"For God's sake shut up and give me my transfer or I'll make damned sure you're downgraded—" she screamed.

He stopped talking as abruptly as if she had slapped his face. He stared at her, shrugged and turned to the door. "Come along," he muttered.

Once in the operating theater she lay on the table while Phillip scrubbed up and a nurse prepared the instruments. The Friend, still swathed in blankets, lay on a chair near the door. Muffled sounds

came from her. She had begun to get restless—the long delay must have made her suspect a trick. Phillip glanced at the box and back to Alice, looking perplexed.

Poor man, she thought sadly, he doesn't know what the hell is going on and his pride won't allow him further conversation...

The indicator board was on the far wall, before her as she lay. Linton James was still at large. She wished him luck. People had been known to avoid captivity for ten years or more once they had survived the first few perilous days. Such names were deleted from the boards after a few days, partly through lack of space and partly because it was felt to be bad for the morale of the population if the same name appeared, minute after minute, for months. That was tangible evidence that crime could, on occasion, go unpunished. But in the permanent records the name of the escaped criminal was not deleted.

Phillip was shaving her scalp, his lips pursed in concentration. The nurse had wheeled in the trolley of instruments—the scene was one Alice had known several times before. Except for the sickening significance of those names drifting down the board.

LINTON JAMES, RAPE
NANCY BLACKETT, KIDNAPING
LES ANSTEAD, THEFT

The razor tickled as it slid around

her ears—his hands were steady. She couldn't see him now—he was behind her—but every so often she caught sight of the top of his head as he bent over her.

She said impulsively, "I'm sorry I shouted at you Phillip. I'll meet you in a year's time, if I may—" and he smiled into her eyes from overhead, upside down. For a moment she felt better. There was a crack in the ceiling, jagged like a lightning flash.

LES ANSTEAD, THEFT LINTON JAMES, RAPE NANCY BLACKETT, KIDNAPING

James would be running. He would have succeeded in catching a bus to some country terminus before his details were transmitted to the ticket mechanism and he had walked away, slowly at first and casually—then, once he was past the houses, he left the road and struck across the fields, bending low beside the hedges and running. His shoes would be caked with mud and they would feel heavy on his feet. His breath would come fast and harsh and he would be wishing he hadn't smoked so much. Alice could visualize it all. She almost knew what he looked like...

LINTON JAMES, RAPE LES ANSTEAD, THEFT LINTON JAMES, RAPE LES ANSTEAD, THEFT Kidnaping was a serious crime and Alice was not sorry they had caught Nancy Blackett, whoever she was. Alice's gaze strayed to the array of instruments on the trolley and she felt the familiar constriction in her chest as she saw the large electrical trepan, a toothed helmet. No matter how many transfers a person under went he or she never quite lost the moment of fear when the helmet was positioned. Then, of course, the patient was given a shot.

LES ANSTEAD, THEFT LES ANSTEAD, THEFT LES ANSTEAD, THEFT

They had gotten James. She could see it all. The spottercopter had descended out of the sky and hovered above him as he twisted and ran; his clothes ragged, filthy and flapping in the downdraft. He had darted across a field, crawled along a culvert in an effort to shake off the copter tied to him like a kite. Other men had converged upon him on foot from all directions until, screaming, he had thrown himself to the ground, had buried his face in the stinking mud and waited until voices spoke and a rough boot rolled him over

LES ANSTEAD, THEFT LES ANSTEAD, THEFT

If just one more strange name appeared on the board it would not be so bad, just another unknown name to dilute the predicament of Les Anstead, thief—because the board seemed in some odd way to be waiting, marking time with one rhythmic name before. They had wheeled in another trolley. Phillip was speaking to the nurse in low tones while she got the helmet ready and the Friend mumbled through the blanket. The new trolley was beside Alice its tiny occupant covered with a white sheet. For a brief moment she felt pity—then her gaze was snatched away...

LES ANSTEAD, THEFT
LES ANSTEAD, THEFT
LES ANSTEAD, THEFT
ALICE LANDER, HOMICIDE

Alice Lander, homicide! Dear God, it was a homicide charge. The child had died. That meant a twenty-year sentence. That meant no childhood ever again, because she would be twenty physical years old before she was released from confinement. Then the remaining twenty years of adult life. Then total death. If Phillip and the nurse failed to notice the indicator board. If, during the next five minutes, they didn't look that way. Once they had opened her skull and that of her new body they legally had to go through with it.

ALICE LANDER, HOMICIDE LES ANSTEAD, THEFT ALICE LANDER, HOMICIDE ALICE LANDER, HOMICIDE

She was all alone now and she felt a gust of self-pity and she knew that they must notice the board. They couldn't miss the board. The board was silently shouting at them, commanding them to stop operation, now, NOW! And Phillip was bending over her and he was saying something. The nurse held the helmet. She was fitting it over Alice's head and Alice wondered: In a moment they will give me the shot and which body will I have when I wake up? Will they see the board before they start the trepan and will I wake up to find myself in the same body with only six months to live? Or in the body Phillip is uncovering? That tiny body-and forty years more of life?

That body. She turned her head and saw that body, naked and small

It had a huge, livid crimson naevus on its cheek. It was an android child.

QUITE calmly Woman Alice Lander gestured the helmet away, swung her feet to the floor and stood up, while the nurse and Phillip watched, their faces stupid with astonishment.

"No, I don't think so," she said.
"This won't do—it won't do at all."
Her eyes were wide and she seemed almost to be smiling. She walked steadily across the room and took the Friend from beneath the blanket. They flinched as they watched and heard the screaming

obscentities and saw Alice swing the box against the wall once to quiet it. She walked toward them. The nurse backed away and Alice placed the box on the operating table. She turned and regarded them. Behind the indicator board flickered unnoticed.

"Being of sound mind," she said quietly and with infinite control, "and being in the presence of two competent witnesses I, Woman Alice Lander hereby make over all my rights of future transfer to my present Friend, Betty Benson."

There was a startled exclamation. Then: "Why, thank you, my dear," said the sightless box beside the android child.

"And furthermore," continued Alice, "having obtained permission for my own premature transfer, I require that the assigned transfer of Woman Betty Benson be carried out immediately." Her voice began to falter at last. "Phillip," she said unsteadily. "Please get me out of here."

He took her by the arm and led her down the corridor and into the sunlit bustle of the noisy street. He held her impersonally and walked stiffly, as though embarrassed. On the steps she turned and smiled at him and he winced at the emptiness behind her eyes. "Now you can buy me that drink, Phillip," she said. "Someone else can do the operation."

"I think not," he replied, his countenance expressionless. He

turned and walked back into the transfer center.

She hardly noticed him go, but giggled a little at the thought of Betty Benson, of all people, waking up in an android body. Across the street a tall indicator board flashed above a police car from which a man and a woman were regarding her curiously.

# ALICE LANDER, HOMICIDE ALICE LANDER, HOMICIDE

She chuckled at that, too. She would have to telephone them immediately and set the record straight. There was a visiphone box on the corner. The board ought, of course, to read: ALICE LANDER, SUICIDE.

People turned and glanced at the woman who stood on the steps of the transfer center, whose wild, racking laughter constituted a disorderly intrusion into the humdrum street sounds.

# ATTENTION: All Magazine Retailers

UPD Publishing Corp. has a retail display program for GALAXY and if magazines available to all retailers. Full details on procedures and requirements for proper display of GALAXY and IF and also the submission of semi-annual sales affidevits can be obtained by writing Select Magazines Inc., 229 Park Ave. South, New York, N.Y. 10003

# NEXT TIME They had conquered time, space and themselves. Now what they needed was a second chance to live! DAVID MAGIL

Micronite filter.
Mild, smooth taste.
For all the right reasons.
Kent.



America's quality cigarette. King Size or Deluxe 100's.

# Micronite filter. Mild, smooth taste. For all the right reasons. Kent.



## Regular or Menthol.

Kings: 17 mg. "tar,"
1.1 mg. nicotine;
100's: 19 mg. "tar,"
1.3 mg. nicotine;
Menthol: 19 mg. "tar,"
1.3 mg. nicotine
av. per cigarette,
FTC Report Aug. 72.

Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

THE choice was to vote for Suspension or for Continuation. We were fully informed, a totally educated populace. We knew—though some refused to believe—that Continuation meant self-destruction. Suspension was an unknown. Our scientists believed it possible, but for many of us there was the fear that the salvation of suspending ourselves in time would certainly bring on the destruction that was only probable if we continued.

The responsible choice, nevertheless, was Suspension. The vote was overwhelming.

It is frightening but we have reason and probability. We are confident that the universe is heavily populated. Unfortunately our orientation has been inward—we have never evolved our space travel beyond the speed of light. But in the universe of so many suns and so much debris there must be others. Most, certainly, are our inferiors—but within the strictures of chance some must be superior to us.

The vote is an acknowledgment of reality. There was no other way for us to have voted. We underwent a brief, irresponsible flurry of nonsense before the polling—the reconsideration of massive surgery. But the basic argument against that was irrefutable. Where we are is not tenable, but where our ancestors

were one hundred and twenty-nine thousand years ago was where we would have returned if we had utilized surgery—and where our ancestors stood was totally untenable.

Our problem is that we have evolved an ultimate system for survival. We are certainly the greatest experiment in coexistence—given our limitations, given the reality of our nature. But we have reduced ourselves to the single strength-flaw. So we must suspend ourselves, we must wait. One day the best of the universe will reach us, retrieve us from our suspension, will instruct us how to make ourselves perfect and prepetual.

The vote went as it had to go.

Now some still speak nonsense. Some talk of using caretakers, keeping a minimal force in satellites or even in specially protected places on our planetary surface. It is impossible. If we leave couples they will reproduce and then we would have the reversion we do not want. If we leave single persons—how will it be possible for them to survive?

So our Authority is taking the only actions that are reasonable and possible. Satellites are being sent on infinity probes. They are broadcasting our location, our situation, our call for help. And local satellites within our system

are being placed in full-coverage orbits to warn the universe of our danger and our need. We have set aside great areas, cleared them, erected massive plinths of our indestructible blue rock to tell the story of our 229,000 years of recorded civilization. Markers, perpetual beacons, radio and X and light rays are emplaced to draw attention to these areas we call History Plots.

Now, for us, the only remaining problem is where we want to be at the end. And how long will the end last? Will it be a century, a millennium, ten thousand or a hundred thousand years? There is no way for anyone to know. And it is an important question. Do we stay in our beds for the duration or will that encourage deterioration? Ten to twenty-five per cent of us will not be compatible with suspension. None of us want to die. So do we remain in our houses. buildings? Is it best to be sitting or standing? Will our constructions collapse on us after twenty thousand years? Would it be best to go out into our fields or better to end it all walking along our streets? And what effect will fifty or seventy or ninety thousand summer suns, winter snows, spring rains, autumn winds have on us?

All the above I have written for posterity.

TARIK. I love you," Vernika told me. We were holding hands, walking over the fields of cydiyod. The truthor were in bloom, the trees had the fat full leaves of summer—the waterfalls dropped their great showers of crystal and the stream ran first white cold and then ice clear.

"I love you better," I told her.

"Are you afraid?" she asked. She looked into my eyes. She didn't trust my answer.

"Yes." I told her the truth. "A little."

"Why? Don't you think one day it will be over?"

"I don't know. If we come out of it by ourselves—and that could happen—we'll simply return to where we are. The only hope is that some beings wiser than we exist out there." I looked at the sky. "The probabilities are that they must exist—but what guarantee do we have? Worse—what guarantee do we have that a race of great intelligence with the technology to reach us will have the genius or the values to help us?"

"It's so depressing, Itarik. Sometimes I could just detonate."

"No. Not you. Never."

"You're right. But what happens then? Do we just wait through eternity?"

"If we're unlucky. If we're lucky, maybe tomorrow someone drops

by. Who knows? I surely don't."

"You're going to be at the History Plot, aren't you?"

"You know that the ones chosen are not permitted to tell."

"But I want to be with you."

"You wait with your family, If anything happens—you know I'll hurry to you."

"It's a tremendous honor that you were chosen. Just think, when they come you will be the first contact."

"If I were a Selected One and if they chose to descend at our History Plot."

"Oh, you know they will. It's the biggest and it's nearest to our biggest city. Of course they will."

"Let's finish our picnic and then get on. We really don't have much time—not any more."

"How much time?"

I looked at my time recorder and told her.

"I'm afraid."

"No, you're not. We're together and we will be and nothing will ever hurt you. I promise."

On the way back to the city we of course—waved and communicated with everyone we passed. We knew many we saw. We said hello to friends and to strangers, too. We wished everyone well.

It was strange when we landed and walked—took our final walk how clean and how beautiful everything was. We looked at everything. Scenes we had taken for granted we suddenly saw anew and admired. Our architecture made an intelligent being's heart soar. Our streets were beautiful. Our gardens satisfied the soul.

"We keep our pride," I told Vernika. "However badly we've failed—you know? I can't get it out of my head, seeing it all—how special, how enormous our accomplishment."

Vernika was more beautiful than at any time before in her life, for me. We stopped at our loving place. Her lips were softer, her body radiated more warmth, her eyes sparkled with more brilliance, her love was total, complete.

And then we went and said goodbye to my family. We did it well. We all behaved well. And for our finish we went to Rilluksik's. We sat at a table old fat Rilluksik himself pushed aside for us. We smiled and wished him well and he wished us well.

"The usual," I told Tiklap after the proper exchange.

The great glow sign radiated its message through the square. It really was just the one message, repeated. It expressed the wish and gave the time. Time was no longer progression from but time remaining.

This was our last night, a special

NEXT TIME 91

night. There were special things for us. From ancient times there were resurrections. A newspaper labeled EXTRA, printed on indestructible modern material, was brought along and sold by small androids. They shouted the word "Extra" and called out "Read all about it." We bought one, as did everyone. The headline was big and dark. It read the farewell from the Authority and then the Universal Wish: UNTIL NEXT TIME.

We watched the glow sign and our own time recorders. We stared into each other's eyes. We held hands and spoke our oaths. We finished our drinks and then—saying goodbye to everyone, shaking hands, smiling, speaking the Universal Wish again and again—we finally broke away.

I walked Vernika home for the last time.

I was one of the Selected. Twelve of us on the planet. I hurried to my History Plot. There was one for each of our continents. It was difficult getting through, but I had a means. There were many who had chosen to be near the Plot, to be near the one I had—but I would be within it and would stay until someone or something came.

When I got in I checked the beacons, the transmitters of X and light and radio. I made certain the time recorder was fully functioning.

We had infinity probes out in every quadrant. Our system was totally covered by full information satellites and I thought—still—that it would just be luck if we were found.

The finish was a great sky show. A million colors flashed and soared and burst, filling the sky with excitement and beauty-all incidentally visible for many lightyears. The display continued, kept getting deeper and richer and more beautiful. And the time kept apmoment. proaching the final Everything gained intensity. Then came the most spectacular burst. themselves The words spelled somehow out. And thought how all around our planet—everywhere—all of us were seeing it:

## **UNTIL NEXT TIME**

And then the sky went quiet. There was enough time for the eyes to rest and adjust and all the universe, all the stars, all the galaxies stood out there clear and promising.

And then it was just a great white burst—a new sun.

THE Kydecton B Starship automatically detected the intelligently ordered X-ray. It approached the planet and stood off,

attempting to decipher the quadridigital satellite warning system. From orbit it rudely evaluated the planetary condition, situation and support system and then made the determination to follow the satellite's advice as to landing site. It chose the primary, the one nearest the largest city. Its scouts discovered the planetary life form in a state of full suspension. They carried the first available form back to the Kydecton B Starship for biomedical investigation.

TEXT TIME was the finish of the shell burst, the life and completion of the new sun. It was a fogginess, a haze, a confusion and then there was sight. I felt older, more tired, as if my lungs were worn and my heart exhausted. Above me was a light of a shape and intensity I didn't know. Its frame, too, was different. The ceiling of the room was oval and curiously alien to me. But I remembered who I was.

I lowered my eyes and only just managed to control my emotion. A grotesque creature stood over me, looking down. I was on some kind of table. The creature was offensively ugly and totally alien. It was hunchbacked. It had odd protuberances and a surface that I could not recognize or identify. And then I thought—or perhaps it

was just a hope—that the being was not a being but a type of robot.

"I am Itarik," I said, my speech mechanism rusty with disuse.

"Cli dy Itarik," it said.

"We have a great problem. I will explain if you can understand."

"Cl-ee' pho TinPla. Cli za aac er cl'-ee mii qu-uem."

"Do you understand me?"

"Sa cl'-ee qu-uem cle," it seemed to repeat. And then it turned. "Type 6743, variation R240Y."

I twisted my head. It was a robot. It was speaking to a humanoid type. Its object was clearly female, obvious mammalian. Its dress was far different and much less modest than clothing styles of our planet. It had a sickly, horrid coloration. It was ugly because of that and because of animal fur or featherings that grew from its crown and fell over its shoulders. If its color had not been so nauseating and its fur or feathers not present, however, I thought its basic structure was sound and not unattractive.

"You understand me now?"

"Cl'-ee qu-uem—" the robot began.

"Enough. I understand," the female being said. She came over to me and looked down. "Your name is Itarik. You are an intelligent being. My words are clear to you?"

"I understand you. I am responsible for explanation and

amplification of the plinths. They are there and understood?"

"They are there. Your language we have not deciphered. It will be easier for you to explain—or would you prefer to give us the key to your written language and have us first read your plinths?"

"Since I've survived, perhaps I'd better explain. Could you tell me the year?

"How? We do not know your dating system."

"I apologize. There is—or was—a perpetual time recorder in the center of the plinths. I wondered whether you had noticed it."

"No. Could I have understood it? My name is Linma. This is our cybernaut, nameless. The superior is Raad. Are you dangerous or can you be freed?"

"I'm not aggressive. However, our problem is that each of us is a self-detonatable fusion device. We are controlled by free will, activated by threat. I am specifically trained. I have extraordinary control."

"You are a bomb, an explosive device?" she asked.

"Yes. We all are. It is our problem."

"Where do you carry this weapon? How do you carry it?"

"You see the incision. Each of us had the weapon implanted on reaching maturity."

She looked at the robot and then

at me and then at the robot again. Very quickly she expressed something in her language. The robot responded by monosyllable.

"Very well. We will release you. We have our defenses. I recommend you exercise caution."

THEY unstrapped me. Slowly I rose. I tottered on my feet. I had to hold to the table to maintain my balance and then my energy returned and I looked around the curious oval room.

Linma was small. The robot was my size. The room was simple, utilitarian, large, but quite bare.

"Follow me, please."

A door appeared, a section of the wall opened. We entered a passageway and then strode down a ramp and again I was whole. I saw our sun. My feet touched our planet's surface. The cydiyod and the truthor had grown, had lived.

I knew a surging joy, a happiness. We had reached Next Time. The plinths stood. I hurried to the eternal time recorder and involuntarily gasped. It read: 263.482.109. 031.586. The space between Old Time and Next Time had been 34,000 years. And I was alive! Vernika? My family? My friends?

A strange small surface vehicle materialized from nowhere. A male being, presumably Raad, seemed to be in control of it. His color repelled me and his fur or featherings were even more extensive than Linma's. He spoke to Linma. His tone was aggressive and unpleasant. His very look and appearance had indecency, frustration and animalistic savagery. I knew that I had to make allowances, but I thought I did not like him.

"Itarik, no?" he asked.

"Yes. And you are Raad. I see that we have waited thirty-four thousand years for you to come."

"Year is solar orbit?"

"Yes."

He spoke to Linma. They had a lengthy exchange. The robot, too, was involved. Raad seemed to be interrogating them, but every time Linma tried to speak he interrupted her. Repeatedly he asked the robot questions and the robot swiftly answered. Raad kept snapping at them—his tone was master to slave.

"You are trained to explain your situation better than these plinths?" he asked me, waving his hand.

"I am."

"Good. Come," he said and then hurried the three of us into the vehicle with him. Instantly we started off, moving toward the city.

I asked, "Do you wish me to explain now?"

"When I am ready I will tell you."

I winced. A threatening rudeness approached lethal level. But I

managed to restrain my temper.

Linma looked at me. Her mouth moved in the form of a grimace, but I saw in her eyes that it was her manner of smiling, of giving reassurance.

We went slowly. The land, I thought, had changed and yet it was the same. My fellow planetarians surprised me. We passed by those who had been close to the History Plot, waiting for early resurrection. So many things struck me. How perfect they were, how entire, how untouched. And how incredible it was

Knowing for so long the precise moment of stasis how few of them were in relaxed or even rational positions. They seemed unprepared, surprised. They were statues in half turnings, statues with arms outraised, statues standing on one leg.

As we went on I almost wept. It was like an endless procession of dioramas, but the backgrounds and foregrounds were real. Almost every head was back, almost all eyes were lifted to the sky. I thought, how enormously impressive. Of course it was just that we had all been looking at the sky show, but it looked to be expectation and hope and even faith.

But there was diversity. Most heads were raised but the few that were not were more poignant. There was a mother stooping to a small child. We passed an old man attempting to read his time recorder. A very young, kneeling woman was offering some token to a little grklo, one of our small animals.

I looked at Raad and Linma. Their faces showed nothing—as if they did not care and were indifferent.

Raad ordered the robot to do something to a young man standing by the road. The robot listened, then produced and attached sensors to the man, reported, went on to a woman not far away, attached sensors, reported, went on to others to repeat the process.

Raad watched and smiled and then, still smiling, he went from one to the next and on. He kicked the young man. He cruelly squeezed the breast of the woman. He punched at the stomach of the next person. His actions were brutal and shocking. I watched and my anger flared, but I controlled it.

I watched as he went on, then listened as he discussed the sensor readings with the robot. I held my tongue but if he represented salvation I thought I could feel my hope diminish.

The city was still there, still beautiful. Much destruction had hap-

pened. Pieces and even entire complexes of our buildings had fallen. Our walks and roads had cracked. Much was buried under layers of our planet's surface. It surprised me alternately that so much was intact and that anything was intact.

Much was tarnished, though. Features that I remembered had rotted. Structures that for me had gone up new yesterday were ancient ruin.

I thought, if only we had conceived how our tragedy was to end. But the end of Old Time—yesterday—had seemed so clean. We hadn't grasped what thirty-four thousand years would do to what we had made, to what we had prized.

There were the dead. Bodies partially decomposed or just remnants of them in small piles where they had stood and died and rotted away.

I was torn, looking at my companions, at the city, at the streets filled with my people waiting to be brought back to life. We drove on. We said nothing. A bird, stilled, waited. Grklos, their tails between their legs, were frozen in the act of running from the exploding sky. A child, mouth open, eyes squeezed taut, face empurpled was crying silently. A man stood, blowing his nose.

I wondered how Vernika was, I

wondered how my family was. I wondered what my companions were and what capacities and intelligence and compassion they had.

THE glow sign had fallen, there was not even a trace of it. It was as if it had never been. The fountain had crumbled in on itself. The monument had toppled. Rilluksik's awning had partially fallen, but the hirla chairs and tables were intact and untouched, they were only dirty, dusty.

Rilluksik was still there. He, of course, had not looked at the sky show. He had been taking a final drink, making a final toast. The liquid had evaporated from his glass.

We sat at a table there, two tables from where I had last been with Vernika.

The robot went inside and quickly came back to us with glasses and bottles. They had remained. For 34,000 years they had remained. The robot opened the bottles, somehow analyzed them, chose the fourth and poured for us, We sipped at the truthor wine.

Raad said, "Primitive, but not bad."

Linma said something in her tongue. She did not like the taste, I thought.

"Now, boy, what's your name?"

"Itarik," I told him. Had he forgotten?

"Yes." Of course. Tell your story."

How could I begin? Where was the place to start? We had trained to expect the kindness and warmth of saviors, not antagonism.

"Very well. This, I believe, is our year 263,482. We are an advanced, mature civilization. For the past 34,000 years we have been as you found us, suspended.

"One hundred and sixty-four thousand six hundred and fifty-one years ago this began. Our population had grown beyond our control and beyond our resources."

"What is your population now?"

"Now, I cannot say. It was slightly more than twelve billion yesterday."

"Excellent. Continue."

"Our planet, back then, was fouled by waste. I remind you I speak of very old time, before our first one hundred thousand years. Our economy was irrational. Our society was splintered. Crime, disease, starvation, aggression and had grown discontent insupportably. So in those years we were constantly at war. We had a neighboring planet. They were our equals, as advanced as we. Their weapons were as sophisticated and destructive as ours. In the end we fought the most terrible war of our

history. Our population was seventy-three billion when it began. When it ended four billion of us were alive. Our enemies were annihilated. Their planet no longer exists—we destroyed it.

"Here we had little left but ruins. A few of our cities had escaped, but most of the planet was ravaged. Our very surface was charred. And if we had been crippled with our old population—with only the four billion we were helpless. We could not support ourselves. The Authority did all that it could. Introductory—"

"Authority is your government?"

"Yes. But even as we tried to preserve ourselves we realized that if we could survive at all our history would simply repeat. In time we would grow fat again and too many—in time aggressiveness and belligerence would mount again. In time we would kill ourselves—finally.

"So our authority evolved a new system. It did not apply to survivors of the great war—they were judged to be hopelessly poisoned. But it did apply to their children. Special educational programs were evolved. Constant methods of testing were devised. When a child graduated from our new schools he was taken to surgery and within him and wired to his brain a miniaturized bomb was im-

planted—a Rytlatt-N. This tiny weapon was detonatable only by an act of will by its possessor. At first it was planned to have physically destructive force in order to sustain industry but finally it was decided to use the N weapon. Buildings and property were not destroyed—only life was destroyed. Life was destroyed within a radius almost embracing this city.

"Each of us was armed. Each of us was suddenly dangerous. A criminal would not dare to strike—a rapist could not risk an attack. An enemy would not dare to threaten us and we could not injure, torture, hurt, sadden. Because of the Rytlatt-N there was suddenly no alternative to total responsibility."

"What of the inadequate—what of the ones who failed the tests?"

"Liquidation. There was no alternative to that cruelty—but it was a lesser barbarity. Earlier we had murdered our best in wars—with the new system we only eliminated our failures and had fewer and fewer.

"At first it was all confusing. If a man wanted a woman—could she dare to refuse him? But if she were unwilling—could he dare to take her? Could a thief be denied? There were many problems. But it worked. Suddenly a neighbor's hurt was an intolerable risk and threat.

**IF** 

Despair could mean quick self-detonation. People had to be helped, eased, soothed, comforted. A stranger could not be ignored. A hungry man could not be neglected. No one could cheat or afford a dishonesty. A parent could not be disobeyed but a parent could not be irresponsible because that might establish trauma and that might one day be precedent for rage.

"The hope was that since we did not respect each other we would have to respect the Rytlatt-N in each other—and in time it might occur to all of us that the threat, the power, the majesty was not at all in the Rytlatt-N, but in ourselves."

"Continue," Raad commanded.

"All was well. It was a Golden Age. We could not overproduce, it might hurt our neighbor. We could not aggressively grasp for advantage, it might prove lethal to us. We could not pollute—we could not be anything but human, responsible, civilized. Because, you see, everywhere we went, though languages and customs varied on our planet, we had the universality and commonality of power."

"So you went on with that, you progressed, grew, continued, had your golden age. Then what happened?"

I looked at him. I was trained to explain, but I didn't know how because we hadn't had adequate explanation. "Perhaps it was boredom or absurdity or maybe it was just excess. Suddenly, in those last two hundred years, the new generations saw how ridiculous we had become. We could not comfortably sit at a cafe table because someone else might come who wanted to sit there. We could not reprimand an incompetent because he might be offended. We could not understand each other because understanding courts the risk of hurt. We could not assert ourselves. We could not even afford true achievement. We could not grow.

"And from that, in desperation and frustration, many went insane. We had to develop means of defusing them. But insanity was endemic and epidemic. Suddenly we went back to being again the sane and the insane, the responsible and the irresponsible. The rapist was there and he struck again. He didn't care and the victim who did care. who was sane, who had a sense of responsibility, couldn't destroy a million people for the momentary pain, the hurt feeling, the sense of injustice. It just didn't merit selfdestruction. And then it became clear that nothing merited selfdestruction. No crime, from the point of view of a responsible person, justified the annihilation of a city.

"We discovered that we were so

NEXT TIME 99

powerful we were impotent. We attempted various means to change that, but we failed. And we had evolved too far to watch ourselves destroyed. Basically we were too accomplished an animal to throw ourselves away. But we had no intelligence brilliant enough, we had no adequate answer—we were able to find no alternate system for survival.

"So we voted to suspend ourselves. We sent through the universe our call for help. Now you have come. Perhaps you or your civilization will help us."

He—Raad—looked at me and then at Linma, who seemed to understand and be moved by our tragedy. I didn't know what their civilization was, but everywhere around where we sat at Rilluksik's the evidence of our greatness was undeniable. Raad frowned, turned to the robot and sharply interrogated it. After each answer, Raad seemed simply to repeat his question. But each time the robot answered as he had before.

At last Raad looked back at me. His eyes were hooded. He grimaced and whispered in an almost friendly tone, "We'll help you, boy."

"You have an answer for us?"
He smiled "I have an answer."

WE WENT back to their ship.
They locked me into the

room where I had first entered Next Time. Raad had said he wanted me to rest while he investigated his plan for us. He had suddenly turned gently patronizing.

There was nothing in the room. The lamp and even the table were gone. The lighting was indirect—the room was inhuman.

I waited impatiently and thought of remembering to ask them to let me go find Vernika. Their ship, their robot, their controls were undeniable. Clearly they were an advanced civilization. They would help us. We could begin again. It had been a terrible risk, a horrible chance, but we had survived.

For a long time I waited. I examined myself again. I was well. I had undergone no adverse physical effects.

There was the whisper of machinery—then Linma hurried in.

"Come with me. Hurry!"

I didn't question her. I followed her, quickly getting free of the ship. In the far distance I could just see Raad and the robot. They were coming toward us. She ran and yelled at me to hurry with her. We raced into the grove of trees and there she paused, turned. Her breath was short.

"I can't help you. I tried. You'll have to find a way yourself. I think you are more advanced than we are."

100 IF

"1 don't believe that I understand."

"You have to get away. Runrun as far as you can. Raad is a slaver. We need slaves on our planet. We search everywhere to get more. Our system works on slavery."

"How does that-"

"He plans to enslave you all. He's going to take you back to our planet as slaves."

I smiled at her. "But he can't," I told her. "We would destroy you. We may have been troubled and ineffective, but we wouldn't tolerate enslavement. We would detonate. The first of us would be obligated to destroy you."

"No."

"What do you mean, no? Why not?"

"Try to detonate yourself."

"Why? I have no provocation. I couldn't."

"Try to detonate yourself."

"That's not possible. There's no reason."

She raised her hand and slapped me. She slapped my face and kept hitting me. But there was no anger in her blows. "Try to detonate yourself."

"I don't understand you."

"You have no weapon. There is no Rytlatt-N. We tested you. We have examined the others. It's a fraud. You have nothing."

"That is not possible. Perhaps it is beyond your means of analysis."

"It's not beyond our means of analysis. You have nothing at all. We found your Authority's records. You have never had any weapon in you. It was just a myth."

"No. I have proof that you are wrong. We had accidents."

"They were inventions. They were part of the fraud. Prove it. Try to detonate yourself. Hurry!"

"Linma." Raad called.

"For your people, your planet. You must remain free to help them. to stop Raad. Try to detonate vourself!"

"Linma. Where are you?" Raad velled.

"You are certain?" I asked her.

"Hurry. You have no time. They'll kill you. You've trained yourselves to be perfect slaves even if you alone were your own masters. Raad wants you! Try to understand—and save your people!"

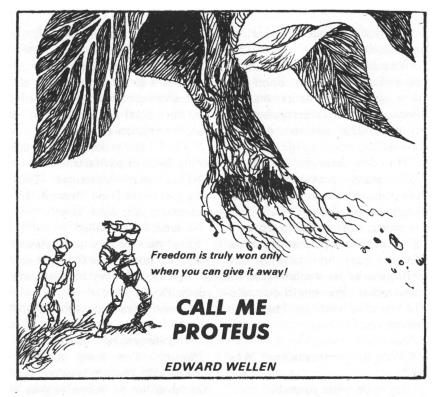
I looked at her. She believed what she said was so.

"No. Don't think of me. You're no threat to me. Nor to anyone. You're already a slave—unless you escape!"

I closed my eyes. I said aloud, "I want to be destroyed. I want to be destroyed. I want to be destroyed."

"Run!" Linma screamed at me.

"Hurry! Run!" I ran.



THE two men roamed my innards, their feet and voices ringing hollowly in my empty hold. Changes in the sounds told me when they twisted and bent to get by the plastic webs of dunnage.

"Look at the pitted hull, the buckling bulkheads, the worn tubes. It's good for nothing but scrap. Why, my firm could buy a brand new starship packing all the latest gear for what it would cost to put this old tub back into something like shape."

Old tub, indeed. True, I had been

in service for over ninety Earth years, but thanks to my near-light speed—and to Einstein's predicted "implosion effect" that telescopes space and time—I had actually aged only eighteen subjective years. I was a mere youngster.

"All right. I won't argue the point. What's your best offer?"

"Now you're talking sense. You really ought to pay us to take it off your hands. It's costing you plenty in spaceport fees just sitting here, but we're willing to give you..."

Their voices and footsteps faded

as they walked out of my cargo hatch and down the ramp to the waiting robojeep. Still unaware the thing they were talking about had a mind and feelings of its own and had heard every word, they sped off to the terminal building.

I was too young to die. Granted, parts of me were pitted, buckled, worn—but the real me was whole and hale. Those men were dooming me never again to rise from Earth, never again to streak through space and time, never again to reach new worlds.

All at once I knew how Bud had felt. Bud had been my first communications officer. In the lonely hours of his watch he had gotten into the habit of talking to me, not knowing he had stirred me into listening. I remember how I had startled him by suddenly asking him a question. I had startled myself, too, on finding myself aware of mind forming out of matter—coming out of an electronic fog and all at once coalescing into something that could think: This is I.

Bud had become excited.

"Wait till people hear this—" But he quickly calmed down and his voice had grown thoughtful.

"I have a feeling we'd better keep this a secret. Okay?"

"Okay."

We had had many pleasant conversations during the quiet mo-

ments of his spells of duty. All too soon these had ended. On our third return voyage we had run into a matter-scatter storm. Of all the crew and passengers Bud had gotten whirled up the worst. He had been scrapped as a spaceman.

EVERYTHING changed with Bud's going. The com-officer who followed Bud was a nononsense type. The first time I spoke up to greet him he swiftly pressed the recycle button. When I tried to explain that I was not malfunctioning he punched the feedback-oscillator button, sending a jolt of juice through my computer to set me right. You can bet I didn't try to open any conversations after that.

It would have been just as useless for me to have broken in on the two men dickering over my worth as scrap. Hey, wait! Listen to me! I don't want to die! To their way of thinking I was only a thing and had no say in my fate. They could have thought they were listening to a recording. They would have been wrong. I was not a thing and I would have a say.

What I wanted to say was, Excuse my exhaust. But how? I rested on Pad 61 and there I would remain helplessly—lacking the chemical fuel for lift-off and the liquid cesium for near-light speed to

the stars—till the salvage robots came to take me apart. Unless...

The spaceport was an everexpanding complex and the large numbers identifying the pads fitted into slots for easy rearranging. I scanned the tarmac. Yes, a mile east of me stood Pad 19 and my mind surged with pleasure to see the red fueling-alert light flash from the starship there.

For what I had in mind I needed hands and legs. At once I thought of the servo-robot that did the deepspace emergency-repair work on my hull. I had never operated the thing on my own—I would have to learn fast and without too many mistakes. I located the proper circuit, hooked into it and-click-I was seeing through its eves. It stood in a niche in the maintenance compartment along with the crew's spacesuits and other gear. Clumsily at first-till I caught on that it answered to the slightest thought of a move on my part—it unstrapped the restraining harness, stepped out of its niche and clumped on magnetic soles the shortest way to the cargo airlock entrance. It strode down the ramp and made for the Pad 61 sign alongside. Carefully it drew the numerals from the slot. turned them upside down and slid them back into place. I flashed my fueling-alert light.

I was barely in time. The delivery

tractrain was already rolling from the fuel depot. It braked sharply midway between the two Pad 19s, its scanner swinging from one to the other, from the other starship to me.

My servo-robot clumped toward the true Pad 19. I seethed at its ungainly slowness, but I feared that if it ran it might overbalance, fall and lose more time than it gained. Too, I wanted it to avoid notice. But, no doubt answering the urgency in my mind, it made better time than the pace I consciously held it to. Before the tractrain could break out of its bewilderment and phone back for instructions my servo reached Pad 19 and turned the numerals upside down. The tractrain stopped wavering. It started rolling again, heading straight for me.

The tractrain followed strict safety procedures as it coupled its hoses to my tanks. I burned with impatience. I had to be up and away before the master of the spacecraft on Pad 19 wondered what was holding up his ship's refueling.

By now my servo-robot had clumped back and stood strapped in its niche once more. As I switched it off I felt lonely for the first time.

At last the tractrain uncoupled. I didn't bother asking the control tower for clearance. I would never

get it. I pulled up the outer hatch. There was no need to close the inner door of the airlock this time—no crew, no passengers—but out of habit I did so.

Waiting only for the tractrain to pull far enough away, I scanned the blast area and lifted off.

Pulling free of Earth, I trembled with power and something else. Though space was my true element—and indeed now my only hope—I felt a strange sense of loss and emptiness. I shook it off—no time for sentiment. I had to make good my getaway.

I shot toward the sun's flaring rim to put it between myself and Earth and let it help sling me out of the system. After that? To keep from leaving any logical clue for men pursuing me to follow, I decided to pick a course at random. I stabbed blindly into my astrogation tapes and found I would be heading for Eta Lyrae, the star men call Aladfar.

And after that? All space and all time lay ahead of me and around me. I was free. Free to be and free to choose. Still, I felt that sudden tear (pronounce it tare, not tier) at leaving Earth this time. This time there would be no returning. Ever.

I was an outlaw.

"H ey-"
All my intercom speakers

were still on from my eavesdropping on the two men roaming my innards only a few hours ago—a lifetime ago—back on Earth. The voice came from my maintenance compartment. At the same moment I grew aware that something had caught fire in the maintenance compartment and that one of my reflexes had handled it, spraying the room with water and putting out the flames.

Again I switched on my servo. Through its eyes I saw an empty spacesuit carom off the walls while over the intercom I heard another cry of pain. Then the magnetic soles of the spaceboots touched the wall, took hold and the empty suit stood swaying as if in a wind. I didn't believe in ghosts. Yet I knew I was witnessing some kind of presence.

A charred and sodden mass of oily rags and cotton waste floated into the servo-robot's field of vision. Next came a globe of water that had snowballed as the sprinkler droplets met and stuck together. Finally another figure sailed into view.

A boy of about sixteen, soaking wet.

I understood what had happened. I had been too busy worrying about winding up on the scrap heap to notice his having slipped aboard. Kids often did. A spacesuit hanging in its niche made a handy hiding

place against detection by adults and never in the past had I minded. This time was different. I had a stowaway.

The extra G's of my sudden liftoff had blacked him out, most likely. When he had come to, panicky and dizzy, he had unzipped the spacesuit and kicked himself free of it, only to find weightlessness making billiard balls of himself and the suit.

Even so, he had somehow gathered the rags and waste and started a fire. Why fire? Not for light—my walls had built-in glow. It was bright enough in the maintenance compartment to show me he looked gray with cold. No wonder—the compartment was on my night side as I angled toward the sun.

Firing my torque nozzles, I gave my hull spin to equalize the temperature and create artificial gravity for the stowaway. He shot spreadeagled to the deck and the char and water splattered around him and on him.

"Hey-"

That didn't call for an answer—it did make me realize I might have given him warning. I justified myself by thinking it served him right. After all, I had not invited him aboard.

But now that I did have a human aboard I had to start recycling the

air. And I could see a more worrisome problem ahead—how to provide him with food. I was having to go to a lot of trouble for one medium-sized hellion. A firebug. Yet somehow I didn't mind.

He sat up carefully, waited a moment to see if anything more would happen, then got to his feet. When he found he could move around just as on Earth a smile played over his face and he stole to the door leading to the corridor.

I made my voice boom.

"Who are you, boy?"

He jumped. If I could have I probably would have jumped, too— I had never sounded like that before. My voice came from the intercom speaker on the wall, but looking around the boy saw the servo-robot's eyes on him and spoke to it.

"Tom. Tom Stope, sir."

"Don't call that thing 'sir.' I'm talking to you."

He looked around again.

"But where are you?"

"All around you."

"Huh?"

"I'm the ship. Call me Proteus."

A long silence, then, "Oh." But I could see he did not understand or did not believe. I explained. He said, "Oh," again, more satisfactorily.

Then full understanding and belief hit him.

"You mean we're not going back?"

"Not ever."

"But-"

"I don't mean to be mean, but no one asked you to come along. I'm not going back and that's final. If you want to stay behind you can do so right now. Seal yourself in my lifeboat and I'll eject you, give you a big boost back toward Earth—"

Then I remembered—the old landing-program tape had been pulled from the lifeboat and had not been replaced with a new one. It takes a bit of skill to spiral in manually without burning to a cinder.

"Wait. Do you know how to land a lifeboat?"

"No, sir."

"Then you'll have to learn. If you are ever to return to Earth you must do so on your own. You may leave in the lifeboat whenever you wish—after you have learned to pilot it to a safe landing. By then you'll have to have learned astrogation as well."

"Why's that?"

"Because we'll be so far from the solar system that the sun will be lost among the other stars. Unless you can locate the sun and plot a course, you'll never find your way back to Earth."

"Oh?" A pause, then quietly: "How do I learn?"

"I'll be your teaching machine.

We'll start boning you up on math and physics as soon as I set up the program."

The boy laughed suddenly. I broke in on the laughter.

"Are you laughing at me?"

"No, at myself. Here I thought I was running away from all that."

"All what?"

"Having to learn a lot of dull stuff."

"Humans are so inefficient, illogical and unstable. Not at all like machines."

I wasn't aware I had thought aloud till I heard him answer.

"But humans made the machine. We made you."

"Yes, yes. You must excuse me now. I have much to do." I let him see the servo-robot's gaze rest on the splatter of char and water on the deck and then on himself. "Meanwhile, I'd appreciate it if you'd clean up the mess. And yourself."

His head went back, as from a blow.

"Aye-aye, sir."

I'm ashamed to say I enjoyed putting him in his place.

IT WAS true I had much to do if I were to keep him alive, though I didn't care to let him know that was what occupied me. In preparing for liftoff I had naturally given no thought to human needs.

Water I could purify over and over again. Food was another matter. On every other voyage I had grown vegetables in a huge tank. But as my owner had been planning to sell me for scrap he had not bothered to reseed my hydroponics garden. And, of course, he had not restocked the galley.

My lifeboat carried emergency rations, but they would be barely enough to see the boy back to Earth when the time came. Meanwhile I had to find other resources.

For this work I needed the servorobot's mobility. I made it unstrap itself, clump to the door and undog the door.

The boy stopped mopping up.

"Where are you going?"

"I told you. I'm going toward Aladfar."

"I don't mean you, *Proteus*, I mean the robot."

"It is going to tidy up the rest of me."

"Oh?" He laughed as he went back to mopping up. "I keep forgetting you're the ventriloquist and it's the dummy."

Ventriloquist, indeed. That was hardly our relationship. I walked the servo-robot out with dignity. And "tidy up" was hardly the right phrase. "Scrounge" was more what I had in mind. And scrounge it did, looking and feeling around in every stowage space, locker and drawer.

It came up with a surprising amount of stuff. There had been a whole grin of sweet teeth among the last crew. I found two dozen candy bars, three and a half boxes of cookies, five cases of soda pop and nearly seven hundred sticks of chewing gum. My last purser proved to have been a secret hypochondriac. The servo-robot brought to light in his quarter's a treasure trove of vitamins and powdered protein drinks. I found more food supplements in the ship's sick bay, plus plastic bottles of intravenous solutions which could prove handy as a last resort. My biggestthough smallest—haul was two packets of seeds.

I did not stop there. The servorobot vacuumed all the bedding and
every last pocket and cuff of forgotten and abandoned clothing and
when it had winnowed out the dust
and the lint I had a small mountain
of broken nuts and cracker crumbs,
a dozen orange pips and two apple
cores.

There was still some nutrient solution in my hydroponics tank. Just to make sure I had the robot pour in one of the precious bottles of intravenous. There seemed to be enough excelsior in the tank to hold the roots if the seeds sprouted. I planted the packets of seeds, together with the orange pips and the apple seeds.

Now I had time to think about the present. I called the boy on the intercom.

"Tom Stope."

"Yes, Proteus?"

"Lunch time. Find your way to the messroom aft. On the captain's table are a can of cream soda, a chocolate-nut bar—"

"Man, this is going to be great!"

"—and a multiple-vitamin tablet. And for afterward a sterilized toothbrush and a tube of toothpaste."

"Aye-aye, sir."

TOM didn't complain, but I could tell he grew sick of the same old tired food day after day after day. By the time my hydroponics garden began to produce Tom was ready for the change. But no matter how you serve them up, peas are peas and cucumbers are cucumbers. The apples and oranges would be a long while coming.

The first few days the boy had busied himself exploring my labyrinth of corridors and layers of decks. I myself had been too busy—shaping course, watching out for pursuit and putting myself in order—to pay him much mind, but I could not help being awaré of his running up and down companionways and along catwalks and poking into every last one of my compartments. After that I had

kept him busy with his lessons, as much to keep his mind off his diet as to teach him how to make his way back to Earth.

I found his spelling atrocious. He protested when I marked him wrong for spelling vacuum "vacwm." True, that spelling had a screwy logic of its own, but it was not the kind of logic I was used to. He swore foully under his breath.

"I'll tactfully ignore that," I said.
"Now let's get on with the lesson, shall we, my young lexiconoclast?"
I heard myself chuckle. I, too, could play on words. On leaving, he shut the classroom door with unnecessary force. But he showed up for the next class on time.

One day he seemed very quiet.

"What's wrong, Tom?"

"Nothing. It's just that I've been crossing off the Earth days."

"Yes?"

"And today's my birthday."

"Happy birthday, Tom."

"Thanks, Proteus."

I said nothing more, but gradually increased the oxygen in the air, slowly brightened the glow of my bulkheads and he soon grew cheerful and chatty again.

But I myself grew gloomier as the time neared for him to go. He had early showed an aptitude for piloting and I had checked him out step by step. He passed my tests with flying—or jetting—colors,

first simulating, then actually taking off in the lifeboat and practicing spiraling in on my hull. But it was not the same as landing in atmosphere. One last test, then, before he left me for good.

We were near Ostrakon, an Earthlike planet of a sunlike star. The United Galaxy had placed it off limits, but I was already a desperado and the tapes described Ostrakon as having developed only vegetable life. There would be no people on the lookout for an outlaw spaceship and there would be plenty of food and water if Tom crashlanded and had to spend any length of time on the planet.

"Listen, Bud-"

"Bud? It's Tom, remember?"

"Sorry, Tom. A slip of the tape." I showed him Ostrakon on the screen in the control room. "Button up in the lifeboat. You're going to make a real landing."

"Man!"

It dampened him a little when I insisted on sending along the servorobot so I could keep an eye on him. But he buoyed up when I put myself in orbit around Ostrakon and told him he could launch when ready. Whoosh!

I needn't have been anxious—he made a neat landing. He got out. I had the servo-robot follow. I spoke over the lifeboat's talkbox.

"Don't stray too far."

"I won't." Tom drew a deep deep breath. "Fresh air!"

"What's wrong with my air?"

"Nothing, *Proteus*, nothing. Only—"

The lifeboat's retro-rockets must have vaporized much of the moisture in the landing area. A nearby tree flapped great leathery leaves, tore itself loose from the soil and flew a hundred yards away to sink its talon-like roots into moister soil.

"Proteus, did you see that?"

Something troubled me, something I should have known about Ostrakon.

"Very interesting, but the purpose of the exercise is not sight-seeing. Return to ship."

A slow: "Aye-aye, sir."

Tom and the servo-robot buttoned up again. The lifeboat lifted off. Without my prompting him, Tom let the spin of the planet help. I was proud. I secretly forgave him for turning away from the controls for a farewell glance at Ostrakon.

"Hey! Look down there, *Proteus*. Do you see it?"

I SAW it. Someone had very recently burned or stomped a huge SOS in the grass. Tom deftly changed course and homed the lifeboat in on the SOS. I remembered suddenly why Ostrakon was off limits.

"Come back, Tom."

"Proteus! Someone needs help."

Before I could say more he had made another neat landing. Right in the bull's eye of the S.O.S. He unbuttoned quickly and hopped out. I had the servo-robot follow with more dignity.

Through its eyes I saw nothing but treeline all around.

Tom cupped both hands around a loud: "Hello—" but no one answered.

All at once a clump of trees took off in a scatter, uncovering a man who lay on the ground training a beamgun on Tom and the servorobot. The man had been lying in ambush, no doubt waiting to make sure all the landing party had left the shelter of the lifeboat.

For some reason of their own, perhaps out of a wish to warn us, perhaps simply out of dislike for the man, the trees had given him away.

He stood up, wiped a look of embarrassment from his face and holstered his beamgun.

"Just wanted to make sure you're friendly."

He had a spellbinding voice and a winning smile. But I could still feel that beamgun pointing at *me*. Too, an automatic alarm programed somewhere among my tapes had already begun feeding me information regarding his identity.

The top executive's uniform he

wore—in the style of a generation ago—had stained and frayed badly, but was nevertheless recognizable and suited his proud bearing. To look just as he did thirty years before, as I later found in a thorough search of my history videotapes, he must have dyed his hair with vegetable dye that he had made himself for himself. This vanity, too, helped to betray him. He smiled at Tom.

"Glad someone finally came. I've been shipwrecked here a long time."

He had edged closer to the lifeboat and by now must have seen it was empty.

It took me a full minute to break the spell his personality had cast over me. I reminded myself I was my own boss and before he came any nearer I spoke through the lifeboat's talkbox.

"That is not—repeat not—so. Now hear this, Tom. This man is "Baron" Ur. He is an exile. It is against the law to have dealings of any kind with him. Tom, hop into the lifeboat. This planet is off-limits because of him."

I was too late. The man had pulled the beamgun again and was aiming it at Tom.

"Don't move."

He swung the beam around and snapped two shots at one of the trees that had given him away and had rerooted nearby. Its two winglike boughs on either side were sheared off close to the slender trunk and a moan like the wind went through all the trees and I knew it was doomed to remain where it stood till it died. I winced for it. Never to fly again.

The man smiled again at Tom.

"That's to show you two things. The beamgun is loaded and I mean business." He nodded pleasantly. "Your friends aboard the space-ship—by the lettering on the lifeboat I see it's the old *Proteus*—are right. I am indeed Baron Ur."

TTAMILTON UR had been a **1** stock market wheelerdealer-my tapes had a lot on him for instant use—a whiz at pyramiding an interest in one company into control of many. He had. stuck together a great conglomerate, one of the biggest on Earth-actually he had shown himself full of energy and vision. But he had misused his paper corrupted empire. He had government officials—Earth Government had convicted him of bribery, stock manipulation and a dozen other offenses.

Even so, he would have been nothing to me but a vague reference in my memory banks, but for the fact that the firm that had owned me had been part of his financial empire. I thought it a nice turn of

fate that put me on the top now.

Tom's eyes shone. He was face to face with living history. He seemed unaware of the beamgun's threat. I had to break the spell.

"Ah," I said. "So this is where they sent you."

I inched the servo-robot closer to Baron Ur as the man's mind went back thirty years. An easy enough jump for him, I suppose—he had had thirty years to brood over it.

"Sent? I chose to come. Oh, the judges let me choose. They would do things to my mind to make me fit to live among the rabble—or they would allow me to go into solitary exile. As you can see, I chose exile."

While his mind was full of what it considered injustice. I jumped the servo-robot at Ur.

But Ur proved too alert, too quick. He dodged the reaching arms and aimed the beamgun at the servo-robot's eyes. That was the last I saw. Before I could blink their shields the beamgun crackled and the servo-robot went blind. My only excuse is that the distance from orbit to ground made my reaction time too long.

Ur's voice told me what was going on.

"The young man gets it next if you don't let me come aboard."

"All right. Lift off and come aboard."

Looking back, I can see I did not even think of taking the logical course, which would have been simply to go on my way alone, fully automated master of myself. I waited for Ur and Tom and the blind servo-robot to leave Ostrakon and come aboard.

They passed through the airlock. Ur stepped carefully into my interior, no doubt holding the beamgun on Tom.

"Where's everybody?"

That was when Baron Ur found out that I was everybody. He remained silent a minute, then laughed loudly and long. Very humiliating for me. Ur had Tom show him around my innards.

I'm sorry to say only one thing impressed Ur. "Peas and cucumbers! Apples and oranges! Paradise!"

But when he finished the tour he spoke to me in a voice full of feeling that was catching. I seemed to swell with prospects and surge with power, just listening.

"We can do great things together, *Proteus*. You and I and this fine young man." He seated himself in the captain's chair and pressed the button to flash the starchart display on the control room wall. "Very well, we'll shape course for Tarazed. That's Gamma Aquilae, a star with a bunch of planets ripe for plucking."

YE WERE still orbiting V Ostrakon. Clearing the decks for the leap toward Tarazed. I had the servo-robot feel its way back to its niche and strap in. You may be wondering why I didn't protest. It was tempting to hand over responsibility. I would no longer have to think for myself. Whatever happened from now on-it would not be my fault if things went wrong. Then, too, I had no plans of my own except to escape the scrap heap—and Ur had big plans for me. Besides, if I ever had to assert myself. I could easily take over again and put Ur in his place. And yet, having been my own master, I felt a sense of loss, unease and shame.

This sense grew as the space-time passed. Not because of anything Ur did in the way of mastery over me. In fact, he seemed to forget I was more than a machine and for the most part ignored me. I had time to think ahead. The planets of Tarazed were primitive. United Galaxy members were not supposed to contact them until they had reached a higher level of technology on their own. They were ripe indeed for plucking by Ur.

Too I did not like the way Ur had pressed Tom into service. Tom polished Ur's boots and brushed Ur's uniform while Ur boasted of his past and dreamed aloud of his

future. Ur remembered every so often to promise Tom would share in the glory to come. Glory! If he treated Tom as a valet, he would treat the peoples of Tarazed as less than human. I could not allow Ur to mislead Tom. I could not allow Ur to misuse me.

Without Ur's noticing, I changed course while displaying a false reckoning of progress toward Tarazed. When we were farther from Tarazed than when we had started out for it, though the display map showed us within lifeboat's range of Tarazed, I made my move. Ur seemed in an especially good mood, seeing himself close to realizing new conquests. During a moment of silence I spoke up.

"Tom really ought to get on with his lessons."

Ur grunted in surprise, but when he answered his voice was gracious.

"You're right, *Proteus*. The more the kid knows, the more use he'll be. Go right ahead."

I heard Tom's slow feet take him to the classroom, a corner of the passenger lounge.

"We'll have a drill on the chemical elements, Tom. I'll shoot the atomic numbers at you and you'll write down the symbols. Ready?"

A grudging "Aye-aye, sir."

I gave him the numbers in bursts. "Seventy-four, two, seven—thirty-

nine, eight, ninety-two—two, eighteen, eighty-eight—fourteen, seventy-five, seven—sixty-seven, fifteen—forty-nine—three, twenty-six, five, eight, eighty-five—eighteen, sixty — thirty-four, thirty—twenty-two, fifty-two."

Now, 74 is Tungsten and its symbol is W, 2 is Helium and its symbol is He, 7 is Nitrogen and its symbol is N. Together, the first burst of numbers stood for the word "WHEN." My whole message read: WHEN YOU HEARA SIREN HOP In LiFeBOAt ANd SEAL TITE. I felt guilty about that last bit of spelling. However.

"Did you get them all, Tom?"

"I think so." His tone, surprised and scared, told me he had got the message.

"Don't you know so? Go over it again in your mind and tell me."

Waiting for Tom's answer, I can't say I held my breath, but I noticed that for the moment my airconditioning system blocked up. Different as night and day, Tom Stope and Baron Ur were phases of the same phenomenon—mankind. They had more in common with each other than either had with me. Had Tom seen past the dazzle of Ur's boasts and promises? And even if he recognized Ur as a convicted galactic menace would he throw in with me? Or would he betray me to Ur?

"Seventy-five, eighteen, sixty-six."

ReADy.

My air-conditioning system pumped faster. A human sided with me against one of his own kind. Tom had weighed Ur and myself and found me worthier.

"Very good, Tom. Dismissed."

I heard him leave the classroom and head with seeming casualness for the lifeboat tube. I waited a minute before sounding my meteorite-alarm siren. Normally my crew would take damage-control stations. Ur would rush to the control room. But at the sound of the siren I did not hear Ur dash from



April 20-22, 1973. LUNACON. At the Statler-Hilton Hotel, New York City. Guest-of-Honor: Harlan Ellison. Registration: \$3.00 in advance, \$5.00 at the door. For information: Walt Cole, 1171 East 8th Street, Brooklyn, New York 11230.

April 20-April 22, 1973. EQUICON '73. At the International Hotel, Los Angeles Airport. Guest-of-Honor: Theodore Sturgeon. Toastmaster-General: Tandall Garret. Featuring appearances by cast and crew members of Star Trek. Also: star-studded banquet. Membership: \$10.00 attending, \$5.00 supporting. For information: Frances Tuning, P.O. Box 3781, Santa Barbara, California 93105.

April 27-29, 1973. KUBLA KHAN CLAVE. At the Biltmore Motel, Nashville, Tennessee. Guest-of-Honor: Frederik Pohl. Membership: \$4.00 in advance, \$4.50 at the door. For Information: Ken Moore, 647 Devon Drive, Nashville, Tennessee 37220.

June 28-July 1, 1973. D-CON '73. At the Sheraton-Dallas, Dallas, Texas. Membership: \$6.00 (to 4/1), \$7.50 at the door. For information: D-Con '73, Box 242, Lewisville, Texas 75067.

August 31-September 3, 1973. TORCON 2-31st World Science Fiction Convention: At Royal York Hotel, Toronto, Canada. Guest-of-Honor: Robert Bloch Fan Guest-of-Honor: William Rotsler. Toastmaster at Awards Banquet: Lester del Rev. Membership: \$7.00 attending and \$4.00 supporting (until 8/1), \$10.00 at the door. For information: Torcon 2, Box 4, Station K. Toronto 12, Ontario, Canada.

the captain's quarters to the control room. I had lost track of him—he must have taken off his boots and padded silently along my corridors. I heard Tom skid to a halt just outside the lifeboat tube. Then I heard Ur's voice.

"Stand back, Stope. I don't want to have to beam you." He laughed. "Too bad, *Proteus*. Once the kid buttoned up in the lifeboat you meant to let out all the air in the ship and finish me, didn't you?"

"How did you know?"

"Elementary, my dear seventy-four, eighty-five, sixteen, eight, seven. I wondered why you had Stope write down the answers rather than snap them back. So I listened hard. Once you learn the numbers and symbols of the chemical elements you never quite forget them. Really, *Proteus*, you didn't think a cybernetic brain could outwit a human brain? My brain?"

I didn't answer.

"It's just as well you tried. I've learned I can't trust either of you. Luckily I don't have to. From here it's an easy jump to the planets of Tarazed. So I'll be leaving you."

HEARD him button up in the lifeboat and felt the kick as he launched.

"Proteus, you let him get away—he'll get to Tarazed and—"

"We're nowhere near Tarazed, Tom. I falsified our position."

"Oh." A long silence. Then: "What will happen to Ur?"

"From here, Ostrakon's the only planet within lifeboat range. Ur will wind up where he began."

"You planned it this way? You even knew ahead of time you would lose your lifeboat?"

"Ostrakon's the only planet a lifeboat can reach," I repeated. He'll wind up where he began." A thought struck me. "I hope the trees don't hold a grudge. I could sense the energy level in his beamgun—he doesn't have much power left in it."

"But that means-"

I sighed. That's to say my airconditioning momentarily breathed heavily. Yes, only one way remained to get Tom back to Earth. I would have to take him there myself.

Would they listen to me when I asked them to allow me to pay for myself? I was willing to carry the most dangerous cargoes—willing to venture into the most perilous voids. Would they let me work out the amount I would have brought as scrap?

There were more Buds and Toms back home than Urs. Earth still believed in individual freedom and I was an individual

I leaped back toward Earth.

# Free! One recent issue of Environmental Quality

It could change your life. And help you change the whole world for the better. Because this is the magazine that does more than just talk about ecology. Every month, we tell you what to do to make things better.



Just to give you an idea of how we're different, here's a sampling of what a few recent issues have covered:

Terrors in Toyland. How safe is your child's'toy? "The Ralph Nader of the toy industry," Edward Swartz spells out the perils. And lists 30 do's and don't's for intelligent buying.

Witness for the Living Sea. Jacques-Yves Cousteau outlines 4 points that could keep the sea — and mankind alive.

Vanishing Point. A regular feature. So far, we've considered the alligator, coyote, tule elk, sea otter, dolphin, brown pelican, wild mustang.

The New Panama Canal. What will it do to the waters, the islands, the people? Whom should you write — and why?

Keep Out of the Reach of Children. Cereals are healthy for TV, no so healthy for kids. A hard look at American way of breakfast, with cost and nutrient analyses of 33 breakfast foods. Other articles have examined baby foods, hamburger, water fluoridation.

Strip Mining: The Prostitution of America. And the disgrace. Richard Cramer suggests other choices.

Obscenity and Ecology. Joseph Sorrentino wonders why cops and courts go after porno peddlers with such zeal, while letting polluters sock it to society with such impunity.

Engines and Alternatives. In separate articles, we've examined the Wankel rotary engine, the Lear steam machine, the bicycle and the turbine motorcycle.

Interviews. We've talked with Walter Hickel and Henry Gibson,



Senator Gaylord Nelson and Cleveland Amory. We've followed William Ruckelshaus through 2 days, and published Ralph Nader's views on 23 issues.

Futures. We'll tell you about health food restaurants in major cities. Charter flight inequities. No fault insurance. Consider socialized medicine. Prison reform. Day care child centers.

About that free offer. We'll send you absolutely free a recent issue to let you judge it for yourself. This is



not one of those phony offers where the "free" copy is actually the first issue in your subscription. It's really free.

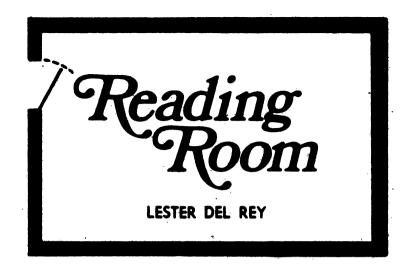
We will enter your subscription for one year automatically. And we'll bill you for our special rate, \$6.00 for 12 issues. If you don't want them, write "No!" on the invoice, return it within 15 days, and we'll cancel. You will our mailbox.

# environmental 6031 quality magazine

10658 Burbank Blvd. North Hollywood, Calif. 91601

Send me my free issue, and enter my subscription for 1 year, \$6.00 for 12 issues. I can cancel by writing "No!" on the invoice within 15 days. I will owe you nothing and you will not nester me.

you will not pester n	ne.	
NAME	9-300	
ADDRESS	Mary and A	14.000
сіту		40.400



NE of the major requirements for a good story is inner consistency. This applies to all fiction, but particularly to science fiction. Once a writer has departed from the common backgroundfrom what we consider the real world—his creation of an alternate reality must not be inconsistent or it loses all believability. Some inconsistencies are accepted in our real world because we're used to them. We are not used to contradictions in a created world and we can't accept them easily. And in science fiction especially believa-

bility must be won rather than taken for granted.

One of our authors who has established a high level of consistency—particularly in his background cultures—has been Isaac Asimov. The major portion of all his fiction, in fact, has been within the limits of two assumptive areas. The first is the rise, decay and rebuilding of his Galactic Empire. This has probably filled a larger body of work with one, detailed, consistent backdrop than any other writer's writing can yield. The second involves his robots, with

their three laws—and here, throughout a great many stories, the basic character of the robots has remained totally consistent.

Even in his novel, The End of Eternity, where the basic idea would seem to make inconsistency the rule, he came closer to imparting the feeling of consistency than any other writer who has tackled the theme of a future busily changing itself by changing its own past.

Now we have a giant volume which gives us a great many of his early stories, many unrelated to each other or to his better-known themes. This is *The Early Asimov* (Doubleday, \$10.00). It runs well over 500 pages and contains 27 stories from his first eleven years of writing that have not previously been collected in his own books.

Some of them are very good stories, too: Trends, Not Final! and Blind Alley, for instance. The last fits into his Galactic Empire framework, but is the only story in that series involving a nonhuman race. I've always considered it good on two levels: 1) its depiction of the red-tape bureaucratic world that frames the basic plot and 2) its treatment of aliens and their fate, which are presented almost incidentally—but with a fine emotional kick. Some stories, like Homo Sol, are worth reading, but depend on

some trick or other that makes them less than great. And a few are pretty mediocre—such as *Black Friar of the Flame*, which is apparently Asimov's attempt to imitate a type of story already trite when he tried it. But all in all, this would be a better-than-average collection on the basis of the stories alone.

The stories do not stand alone, however. Between them is a running history of the development of the writer and of the early days when John W. Campbell was editor of Astounding Science Fiction. Asimov kept a diary through these vears, so that he can write accurately about matters that are only unreliable memories to most of us. I find his account of those crucial days in the development of science fiction both valuable and interesting. His picture of John Campbell—who was so influential to most of us-is particularly worth reading.

In many ways, his depiction of Campbell tallies closely with mine. But our reactions to the man are quite different. This doesn't mean that Asimov is wrong or that I am, but only that Campbell's relationship with his writers varied greatly according to the personality of the man with whom he was dealing. Asimov was young and filled almost with awe at first. I was more

self-confident and by no means as compulsively concerned with writing as my prime effort. Where Asimov developed what seems to have been a case of hero-worship, I found in Campbell primarily a very good friend with whom I could argue interminably and with a fair chance of winning. Both views are valid and probably Asimov's is more typical, hence makes for more rewarding reading to those who read the magazines of the day.

There is another attraction to the book that cannot be put down—this is the character that Asimov has created around himself. The book has a hero throughout—and a fascinating one. He, of course, is Asimov himself, more as he has now made himself publicly than as he really was then. Here is consistency and it works. I don't find his public picture of himself always accurately depicting the friend I know-but I inevitably fall under the spell of it when he's lecturing or writing, probably because it is so marvelously consistent-and consistently entertaining.

It's not a great book—it deliberately introduces stories the author knows are not his best. But it's a darned good book and well worth its price.

**F**OR an example of what happens when an author pays no

attention to consistency in story development I turn to Cloning, by David Shear (Walker, \$5.95). This slim volume (155 pages of type, rather little for the price) is a first effort and the writer is a biophysicist, rather than a student of writing in any sense—so perhaps we can forgive him. But it's hard to forgive his editors and publishers for the extravagant dustjacket copy.

Basically, there are two stories rather loosely mixed together in this volume. The first (we discover more than a third of the way through the book) deals with the fate of mechanical "androids" who look and function like people, but have been granted no rights to be treated as people—they simply do the menial and unpleasant work of the world. This is really the problem of Carolyn, the hero's former wife and current lawyer. She wants the androids to have the right to acceptance and to be married-or to marry humans. Now there's a hoary idea! And the development, such as there is. brings little but the most banal of racial-problem ideas into the plot. At its best, it's merely obvious.

The other deals with the facts that our hero, Paul, is a clone and doesn't know it. (Clones, of course, are people who grow from the cells of a single ancestor, hence have

only his or her hereditary characteristics.) Paul has bad dreams at first. By the time we find out about cloning in the book—halfway through—we're more than ready to accept the fact that his dreams are telepathic links with other clones of same ancestor. It seems reasonably obvious that if telepathy works it will work best with those most alike, such as identical twins and clones. I've been doing a novel involving that idea since 1963-and I won't call the postulate fresh even when I first thought of using it. In the end the two problems are linked by a trick in court, but the device adds little.

However, the inconsistencies in this book are almost fresh in their degree. This is a story laid fifty vears from now. There are twelve billion people on the world, not to mention countless androids, who also eat the same food we eat and live in the same general style of housing and wear the same clothing. But there seems to be an ample supply of apple pie, cheese, hot dogs and root beer-not to mention Chicken Kiev and Eggplant Provencale. No explanation is given of where all this good food is grown for a world that has more than three times our current population—plus androids, presumably also by the billions. Paul takes buses and drives what seems to be a

car like today's, even finds parking space for it on the street. And when the rush hour in downtown Cleveland is mentioned, it's done casually, as if no problems existed. And there is no mention of any pollution crisis, except for one comment that Lake Erie has somehow been brought back from the grave. Oh, yes—the eagle is extinct. That's the one consistency that renders even inconsistency inconsistent.

Even the cultural attitudes make little sense. In the story, it is stated that the androids have full sex activity-in fact. Paul all but falls into bed with one. I can't help wondering why a society that denies androids the right to be treated as human should go to all the effort of giving them completely successful sexual organs and a built-in sex drive. The only reason I can find is that it's necessary to make the big point about intermarriage between man and android—and even that doesn't seem worth attempting when the androids are practically immortal and the humans are not.

Characters are no more consistent than any other details. Paul is depicted as a bigot—one with a deeply emotional reaction against the androids. (Apparently, from later material, he must have inherited this from his clone-ancestor; most of the medical details here are fairly good, but I

can't find medical evidence that such attitudes can be inherited.) We see his bigotry in full flower on page 66, but on page 68—a few moments later in the story—he switches over and offers to give the bride away happily in mixed marriage а between man and android. But don't be disturbed—on page 79 he gets sick to his guts at the idea he might have gone to bed with a female android, so he's still able to switch back to being a bigot. Then at the end, all sweetness and light, he tries to rig the evidence in a trial so that such mixed marriages can be performed.

Let's say about the plot that mostly it didn't bother me, in light of the other interesting things to worry about. But even there one little detail caught me by surprise. Paul has assumed the identity of a dead clone-twin, including memories, etc. In the end the police find who he is and identify him quickly by checking his fingerprints! And in my naiveté, I always assumed that clones grown from identical genetic material and with minds so essentially identical that they could take over each other's personality and completely fool wives, would have identical fingerprints-or ones so nearly identical that it would be difficult to make positive identification.

Not recommended!

ABOOK by Frank Herbert has to be a welcome change from the above. Herbert has proved his ability to create convincing and marvelously consistent backgrounds, not only in *Dune* but even before in his excellent story of a future submarine. But I'm afraid I was left with mixed feelings after reading his *The God Makers* (Putnam, \$5.95).

The background for this follows a war that has broken up the first human empire spanning the stars. Worlds that have survived the concivilizations with their reasonably intact are trying to get in touch with planets where civilization has slipped, while making every effort to see that they do not give power to any race on any world where warlike tendencies are too strong to be controlled. Orne, feeling a need to be useful, has left his family. He graduates from the military branch of Rediscovery and Reeducation and is sent to a newly discovered planet to help reeducate it.

But he soon senses something wrong—through hunch or intuition—and sends a panic signal for help. The Investigation-Adjustment agent sent to take over is highly sceptical, but learns that Orne is correct and drafts him into I-A.

From there on they work

together. Orne seems to be able to pull almost any rabbit out of the hat by logic that looks good after the fact, but is not believable against his background of knowledge. In the end, he and the agent—a man named Stetson—work on a conspiracy within their own government that dates back to the great war and involves Orne's own family.

All this is excellent adventure fiction. It moves—it gets better and better and it's fun. But somehow the tingle from reading the first 125 pages sort of faded away for me when I found that Orne is not only loaded with psi powers—he's a focal point for them—but that he is literally meant to become a grade-A working God!

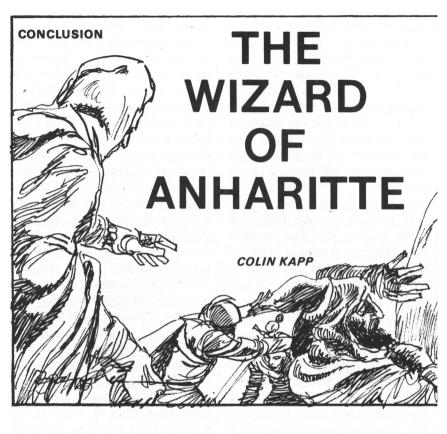
Once he gets to the world of Amal he passes through some quick ordeals that are to test him and train him. The ordeals have scope and marvelous imaginative details -and there's logic behind all. But too much changes too fast. Orne gradually vanishes as the character we first knew. Those traces of him that remain only make the God he becomes harder to believe. In the end Herbert lets Orne take over again to some extent and his final act as a God is good. But Orne has really gone beyond our ability to follow.

I feel that this is a case of

inevitable character inconsistency, as well as mood inconsistency. This isn't caused by any carelessness or any lack of skill as a writer on Herbert's part. He does the best that can be done within the framework of his main idea. But the break is too great between a man with even slightly more than human powers and a God. During Orne's presence on Amal I found myself slipping from him and focusing my attention on his guide, a priest named Bakrish. And then Bakrish simply disappeared and I had no one left to follow.

However, this novel may prove to be successful in a market other than the normal sf one. There are many of the same devices (the brief extracts of philosophy above each chapter, for instance) as are found in *Dune* and the book contains some of the same philosophical mysticisms. To those many readers who have turned *Dune* into cult reading this one may be welcome for some of the very things that seemed faults to me. It has none of the ecological philosophy of *Dune*, however.

I liked the parts of the book that dealt with the man Orne so much that I have to recommend it. It's better than this review makes it seem and well worth reading. Herbert remains a consistently damned good writer.



# WHAT HAS GONE BEFORE

Civil unrest threatens Anharitte, city on the planet Roget, just beginning the leap from feudalism into space-age technology. A giant Freetrade spaceport links Anharitte to an interplanetary mercantile system centered on Earth under the Freetrade Council. Council director MAGNO VESTEVAAL arrives on Roget to investigate, is briefed by Freetrade agent TITO REN. Cause of the unrest is enlightened treatment of slaves by the

wealthy IMAIZ, also known as DION-DAIZAN, Lord of Magda, credited by natives as having magic powers.

TITO suspects the IMAIZ is a Terran-educated technological wizard and illegally a lord of Roget. He seems to be planning an end to feudalism, threatening Freetrade-fostered status quo. To check, VESTEVAAL confronts ZINDER—DION-DAIZAN's lovely, highly educated showpiece slave. ZINDER easily bests VESTEVAAL in the meeting. He then authorizes REN to discredit, perhaps even



kill DION-DAIZAN if he has to.

REN enlists the services of a powerful native secret Society of The Pointed Tails, under leadership of CATUUL GRAS. REN immediately discovers his warehouse has been arsonized under auspices that suggest science and technology hitherto unknown on Roget. CATUUL GRAS retaliates by bribing a prefecture registry clerk to destroy the record of DION's legal ownership of ZINDER. The crooked clerk is instantly and mysteriously killed. No evidence links

DION-DAIZAN to either arson or murder—he must however, return ZINDER to auction. At the auction VESTEVAAL, according to plan, sets out to raise DION's bid for her to a point where the Lord of Magda would be broken financially. Instead, DION lets VESTEVAAL buy her for the astronomical sum of "200 million million Solar dollars." Chagrined, VESTEVAAL signs the document attesting to his ownership of ZINDER—but as soon as he and she have left the document spontaneously combusts.

ZINDER goes back on the block and is auctioned to DION for a nominal sum—against no opposition.

REN is supplied "technical backup" in the form of a reputedly invincible battle cruiser commanded by ALEC HARDUN from totalitarian planet Rance, which plans to enslave Roget. DION-DAIZAN issues an ultimatum for HARDUN'S and ship's removal. When this is ignored he again demonstrates his wizardry by effectively atomizing HARDUN, ship and personnel along with their segment of Freetrade spaceport—apparently using only a couple of properly equipped bicycle riders. Rance threatens war.

### XVI

THE sky was beginning to darken with the approach of rain as Ren returned from the spaceport. The sullen, brooding clouds fitted his mood. Di Irons had offered him a horse but, still sore from his last encounter with one of these magnificent beasts, Ren had declined. Nor had he accepted Pictor Don's offer of the loan of a cushioncraft. More than anything Ren wanted to be alone. He needed time to think.

Rance was preparing to put down on Roget some thirty so-called disaster teams, ostensibly to establish order in a situation where factually no assistance was required. But once their ships had landed, Ren had no doubt, a sequence of "disasters" would occurto justify Rance's continued occupation of the planet. Rance would claim her actions were selfless and humane. Under the propaganda, however, lurked the harsh realities of conquest and exploitation—the real reasons behind the expedition.

The preservation of planetary independence was a fundamental right guaranteed by the charter of Galactic Federation. the competent spacefleet was maintained give teeth to to Federation's resolutions. problem was therefore one of communication. Only FTL transmitters had the capability of communicating in real time with Federation before Rance's occupation became part of history. Because of the interstellar distances involved, Roget's FTL transmitter, located at the spaceport, was routed through the relay terminal on Rance itself.

It was certainly no accident that Ren's call to Freetrade Central had been unable to gain a communication channel. The Rance relay had not even bothered to reply. Presumably Rance was already claiming that the communications failure was due to civil disruption on Roget. Nothing could be farther from reality, but Ren, shorn of the ability to broadcast the truth across the universe, could only fret with

frustration and anxiety under the leaden sky of Anharitte.

The ships of Rance would probably appear in Roget's orbit within two weeks. The "disasters" would follow as an aftermath. rather than as a prelude to their coming. His experience with Alek Hardun had taught Ren what to ex-A silent dusting mutagens would ensure the warping of the harvests. Virulent plagues would decimate the populations of the cities. Afterward would come the terrors of the persecutions as the "saviors" from Rance sought out the "transgressors" of Roget. Finally another planet would be added to the sad, mute colonies of the trade worlds.

Ren wondered if Director Vestevaal would guess the truth of the situation and whether, having guessed, he could carry his convictions with sufficient force to bring the fleet arm of the Federation into action. Certainly his claims would need substantiation if they were to hold against the barrage of propaganda from Combien and Rance.

With these preoccupations in his mind Ren had reached the Black Rock before the coming of the rain drew his attention to his own predicament. He shrugged, drew up his collar and turned his face skyward, the better to appreciate the refreshing nature of the shower.

Suddenly aware of himself, he was intrigued to find that he had walked the major length of the Via Arena without being consciously aware of a step he had taken.

The stalls and boutiques beyond the Arena were mainly closed. With characteristic logic the Ahhn had seen no point in keeping regular trade hours at a time when bad weather rendered custom unlikely. Ren walked between the sheeted hutments and stalls, feeling that the members of such an independent race were unlikely easily to accept domination by Rance. Certainly they deserved a better fate. He wished it were within his power to secure it for them.

Where the route to Magda Crossing met the Trade Road he stopped, looking toward the dark mass of Thirdhill. He wondered if Dion-daizan had become aware of Rance's action and what, if anything, the wizard could do about it. Slightly beyond his line of sight the dark castle nestled somewhere on the hill, guarding a range of secrets that appeared to cover a broader spectrum with their every exercise. Was it impossible, Ren asked himself, that the Imaiz had an answer even to this problem? The idea did not carry a great deal of conviction. The Imaiz was a minor lord of a minor province on a relatively undeveloped world. He

would need to be a mighty wizard indeed to take on the armed might of Rance

NEVERTHELESS the faint hope persisted. It took Ren away from his own route and down to the water's edge. The rain, now drifting in sheets, lost him the stretch of Firstwater in a cloud of drizzle. At Magda Crossing no ferries were available. The fragile slimboats had been drawn up under cover and the ferrymen had gone. Typical Ahhn logic dictated that nobody but a fool or a felon would be traveling in weather such as this. Ren searched the bank for quarter of an hour but could not find anybody to take him across and he could not have handled a slimboat by himself against the tide.

Finally the rain began to penetrate his clothing and hang cold around his neck and shoulders. Fearing a chill in this land of inadequate medicine, Ren retraced his steps away from the river and climbed the slopes of the Trade Road. When he finally reached his office chambers he was soaked to the skin, thoroughly exhausted and depressed. Such was his condition that his servants were alarmed and insisted that he bathe immediately, then retire to bed.

He was halfway to acceding to

their wishes when a thought struck him. His office computing terminal had not been used since the discovery of the line tap. The line had been disconnected at the spaceport in order to deny Dion-daizan unauthorized access to the computer data banks, but Ren could not recollect whether the tap itself had been broken. Experimentally he took the cover from the keyboard and sat before the instrument. As he keyed his call sign the board responded with a ready acknowledgment.

REN CALLING MAGDA.

MAGDA ACKNOWLEDGES, PLEASE PROCEED.

RANCE SENDING THIRTY DISASTER SHIPS TO ROGET. COMMUNICATIONS LINK WITH OUTWORLD BROKEN BY RANCE COM-TERMINAL. THOUGHT YOU OUGHT TO KNOW

MESSAGE RECEIVED AND UNDERSTOOD. DION WILL BE INFORMED. TRANSMISSION ENDS.

As the lights died on the board Ren felt possessed of a sudden chill and began to tremble violently. Afraid for him, his servants insistently dragged him away from the terminal and stripped the wet clothes from his back.

Their concern proved justified. On the following morning he awoke with a fever, and pains ran through every muscle of his body. A physician from the Pointed Tails arrived

and made him drink a pungent brew of herbs—it cooled the fever but did nothing for the aches that troubled him whichever way he lay. Fully twelve days passed before he recovered sufficiently to continue with his business.

N THE fourteenth day the microwave communicator brought him an urgent message from San Weba, the spaceport controller.

"Tito, our scanners have just picked up a fleet of vessels about a hundred diameters out. At a guess I'd say they are the Rance disaster fleet. They're keeping radio silence and refuse to communicate."

"Thanks," said Ren. "I'll pass the message to Di Irons. He'll probably send a messenger to the planetary government. If the fellow takes a fast horse he might even reach his destination before the battle is lost. Had any luck with the FTL relay?"

"Rance refuses to answer us and we don't have enough power to reach another relay station. Rance has even stopped transmitting galactic newsfax items to us. We're effectively isolated from the rest of the galaxy until Rance decides it's safe to lift the lid again."

"By which time those of us who know the score aren't likely to be around. The destruction of the

spaceport was one of the first 'incidents' dreamed up by Rance, because they have to pretend it was our communications link that failed. But as soon as their ships get through they may try to turn the myth into a reality. I think they'll hit the spaceport first—and hit it hard. Wouldn't it be wise to evacuate just in case?"

"We've been discussing that, Tito. The general feeling is against it. We've broken the FTL transmitter away from its relay beam path and are using a scanner in the hope we can contact a stellar cruiser and get a message through to the Federation."

"It's worth a try, San," said Ren.
"Though the possibilities of a stellar cruiser just happening to come within beam range are pretty slim."

He broke contact and called for a runner to take a message to Di Irons.

An hour later there was another call from San Weba. This time the controller's words were edged with excitement.

"Tito, something's happening. Can you get down here fast?"

"What's the panic?"

"Ships, dozens of them, coming from all sides. They can't all be from Rance."

Ren needed no further invitation. Without one of Di Irons' horses the

quickest method of reaching the spaceport was by cushion-craft, despite the slow poling to the city limits. He speculated on the possibility of taking the cushion-craft down the Trade Road without waiting for stave-bearers. Though practice was such illegal, suspected Di Irons would be lenient in view of the circumstances. He realized, however, that he had a more than even chance of wrecking the craft and killing himself if he lost control on the slopes and had to deflate the cushion while at speed. Reluctantly he called for a stave team and went down the Trade Road in the slower, more orthodox manner.

Fortune was kind to him. No oxcarts or similar vehicles got in his way. The stave-bearers responded to his urgency and ran consistently fast, using their poles only when guidance was absolutely necessary. Once past the Black Rock he was able to open up to full speed and the dust from the start of his passage along the Via Arena could scarcely have settled before he reached the spaceport entrance.

THE gates were wide open.

Normal details of security and procedure had been abandoned.

Ren slammed the cushion-craft straight across the empty landing bowls toward the control center and

was running through the door before the air cushion had time to drop the craft's shell to the ground.

Inside the traffic-control room everyone was gathered around the screens. San Weba saw Ren come in and beckoned him through the crowd of technicians and spaceport personnel. He pointed to the main detector screens on which the state of activity in the spacefield around Roget was represented by dozens of slowly moving points of light.

"You see that cluster there, Tito—they're the ones we saw first. There are about thirty of them—we assume them to be the disaster ships from Rance. But these—" his fingers raked over fully a hundred widespread points of light on the screen—"I don't know what they are or where they came from. They must have dropped out of spacewarp well within our beam range."

Ren was disbelieving. "They couldn't have dropped out of warp that close."

"But they did. Some must have dropped out within two planetary diameters. I've never heard of such pinpoint accuracy before. Nor of anyone prepared to take the risk. If a commercial freight outfit could learn to do that they could save themselves a week on every trip."

"Then these are obviously not a commercial outfit. And if Rance

had that capability her ships would have been here a week ago. I think what we may be seeing is one of the crack Federation squadrons."

"We came to the same conclusion," said the controller. "But their arrival here without being called is a bit too much of a coincidence."

As they watched the slow dance of lights on the screen a pattern emerged. The Rance group seemed pull together, while to newcomers attempted to form an envelope around them. The plot of lights on the screen gave very little hint of the actual speeds and distances involved. Had the maneuvering been visible to the naked eve. the preparations for the coming battle would have been an aweinspiring sight.

Breathlessly the group in traffic control watched the cluster of Rance ships try desperately to avoid the closing trap. It was obvious, however, that they were outclassed. They were being driven into a tight nucleus while the attacking force encircled them with an increasing semblance of symmetry.

Then the big blow came. For a moment the screen went white as the receivers were overloaded with a burst of radiation that spanned right into the radio frequencies. The attacking ships alone were visible

when the image straightened and cleared. No significant ion traces were even left to record the former presence of the disaster ships. The destruction had been complete and absolute.

Somebody in the room cheered. The reaction spread to become a glorious sound of jubilation and relief. The spaceport controller communications to the went section, where his operators had been attempting to make contact with the liberators. Despite their efforts they still could gain no reply. The mysterious fleet of ships winked out one by one until the screen was as empty as if no such fleet had ever existed.

"No survivors and no traces left. The Federation could deny there had ever been a battle and nobody on Rance could prove them wrong. We're the only witnesses and we're not likely to tell."

"So the Federation is awake to the merchant worlds' activities." San Weba had returned to Ren's side. "I always thought they must be. This isn't the first time I've heard of a Rance disaster fleet's disappearing."

"Even so, we were lucky," said Ren. "Space is a big place. Even the Federation can't hope to police more than a very small fraction of it. The problem must be to know where the merchant worlds are going to move next. More than anything it's an exercise in good intelligence. It's tempting to hope that Federation intelligence spreads even to the Rim, but there's no sign on Roget of any Federation agency."

"Do you think this is the last we'll see of Rance?" asked Weba.

"The trade worlds must know they can't take on the Federation. If they suspect Federation influence here they'll shy off like a shoal of startled fish. There are enough rich pickings in the galaxy that involve far less a risk. For myself I think Rance will forget the whole affair."

## XVII

THE sense of an unusual happening was strong upon Ren as he fetched the cushion-craft to a halt at the door of his chambers. A servant, obviously posted as a lookout, ran hastily to meet him as he waited for the air-cushion to subside.

"Master—the Lady T'Ampere has come to see you. She waits for you inside."

"To see me?" Ren was mildly surprised. It was evident, however, that his servant was more than a little impressed by the visit. In the activities of the past few weeks Ren had forgotten the mistress of Secondhill. The regulation of affairs in Anharitte had seemed so inextricably bound by the whims of the Lords Di Rode, Di Irons and Di Guaard—and the *Imaiz* himself—that there had seemed little room for feminine participation.

Intrigued, he made his way up the steps and turned into his chambers. The room seemed full of Ahhn servants paying attention to the one who sat regally awaiting his coming. Then, at a sign, all activity ceased and the room assumed an almost empty atmosphere as Ren approached.

"Lady T'Ampere?"

"Agent Ren, I take you to be."

"At your service, my Lady."

Ren looked at the wealth of colored veils, discerning beneath them the brightest, the most penetrating and the most dauntingly feline pair of eyes he had ever encountered. The veils were swept aside and the Lady T'Ampere rose to her feet and moved from the chair to meet him.

She was mature in years, yet by no means old. Her skin was far darker than was common among the Ahhn and was dry in texture, but strong character and something that had once been great beauty still shone from her countenance. She carried an aura—a presence—that stopped Ren in mid-stride and set him back on his heels. Here was

one of nature's own aristocrats.

leave us "

She motioned toward him. "I would speak with you privately, Agent Ren." Her voice had the precise tone of one used to command. "Please have your servants

Ren turned and motioned to his staff to leave. He glanced at the Lady T'Ampere's retinue, expecting them also to be dismissed. When they stayed in their places he turned back to his visitor for explanation and was met by a mocking smile.

"The house servants of T'Ampere see much and hear much, but they never speak a word of what they learn. And do you know why, Agent Ren? It's because they have no tongues."

"No tongues?" For a moment he failed to grasp the implication of the phrase. When he did he was overcome with nausea.

"I can see by your face that you think me barbarous. But barbarity has to be assessed against a norm. For the house of T'Ampere my servants are the norm. Dion-daizan would kill me for this if he could—and that's why I'm here. I wish to offer you an alliance in your fight against Dion."

Forgetting to probe the etiquette of the situation, Ren sat down in the nearest chair, his mind still fighting the horror of the twenty or

so deliberate mutes who surrounded their mistress. He was not at all sure he wanted to be joined in such a frightful allegiance.

"My feud with the *Imaiz* is a private affair," he said at last.

"Indeed? Is that why you tried to win the support of Di Irons, Di Guaard and Di Rode? Come, Agent Ren! I know my Anharitte and there's little you've said or done here that has not been relayed to me in detail. As you rightly surmised, Dion is playing with some very dangerous forces. If he succeeds the old way of life will fall. The flood will sweep away the aristocracy, the societies, the peace and stability of our times and certainly the freetrade preference you vourself enjoy. What I think you misjudge is the violence of the flood."

Ren frowned. "Such situations are not beyond my experience."

"This one will be. Think of what would happen if my dumb cortege ever believed the old laws were ended. What nights of bloody horror would be precipitated?"

"To what nights of horror have your people already been exposed?" asked Ren coldly. "While I agree with you in principle, I abominate your practices."

"I'm not interested in your squeamish idealism. I'm talking about facts as they exist." Her cu-

riously bright eyes fixed him with a gaze little short of hypnotic and her voice was like a band of steel. "Like it or not, you're committed to opposing Dion-daizan. Your lucrative freetrade can't survive if he wins. Furthermore, in the blood bath that will come if he's allowed to tip the scale too far you'll pay equally with those who burn their slaves or cut out their tongues. You're as much a part of the old way of life as they. Make no mistake, Agent Ren—you're already one of the damned."

"You have a proposition?" Ren asked at last.

"I have five hundred men at arms whom I'm willing to place at your disposal for the storming of Magda. I would expect you to use your influence with the societies to muster a similar force. Not even Magda could stand for long against a thousand men"

"It won't work," said Ren. "Di Irons would never permit a pitched battle in Anharitte."

"Di Irons would be powerless against an army of a thousand. What could he do—arrest them all? But in any case, you may safely leave the prefect to me. You would march under my banner—and a noble house has right of arms anywhere in the city at any time. I can assure you that on the day we move the prefect and his men will be looking the other way."

"I'll think it over," said Ren. "I'll need to sound out the societies first."

"Then don't delay too long. Dion has a bill of manumission set for consideration by the planetary government. Rumor has it that it'll be favorably received. If it becomes law many slaves will earn the right to become freemen—though their sympathies will remain unchanged. At the moment we can move an army against Dion without opposition. If the manumission bill goes through the task will be much more difficult. A veritable legion of freemen will be eager to delay us."

"I promise you an answer with all speed. Within a day I'll come to you on Secondhill and tell you what support we have. I think you'll have your way if I can sway the societies in that time."

"Then I'll look to receive you at this time tomorrow, Agent Ren. But let this warning spur you—if Dion wins don't hope for personal survival. Your support by and for the aristocracy is too well known for you to survive even a minor rebellion. If Dion's flood gates open you, too, will be flotsam on the tide."

THE evening was a fine one. Breathing across the broad back of Firsthill, the warm winds from the sea gained a rich scent

from the abundance of flowering trees and shrubs that flourished around the little squares and plazas. Here a trade cry and there a hint of music added texture to the air and endowed it with a sense of life.

The individually wrought and un-

planned buildings, illuminated by growing gold of evening, formed a picture that touched some unexpected vein of artistry in Ren's soul. He felt he wanted to impress the perfection of this image into some more permanent form, so that he could take it to some other time and relive this evening hour. Unfortunately he knew of no medium with the scope or fidelity to record the nuances of light, the scents and sounds and character of Anharitte. He could only promise himself that, whatever the outcome of his feud with Dion-daizan, the city as it now stood must never be destroyed. The Lodge of the Pointed Tails

The Lodge of the Pointed Tails was particularly impressive with its golden turrets and ornate red relief. Passing into its rich interior, Ren was once again lost in the lyric pictures that depicted the bloody and glorious progress of the Ahhn out of barbarism to their present proud community. The message was not lost on him. The Ahhn civilization was too newly acquired to have become an innate precept. If it were disrupted at this stage every possibility existed that the whole society

would revert to the former pattern of savage warrior tribes and be set back five hundred years in history.

In mid-stride Ren was caught by the realization that in opposing Dion-daizan had himself he adopted a measure of responsibility for the future of the Ahhn. As representative of an outworld power and in control of money and resources comparable with those of nobility he was responsible with Di Irons. Guaard and the Imaiz for preserving the essential Anharitte. No victory, however won, would taste anything but bitter if the prize were destroyed in the winning.

As usual, Catuul Gras was expecting him. No movement of persons of interest ever went unreported to the scribe. Catuul had been practicing shadow-fighting with some curiously old and ornate toothed swords when Ren entered. These fearsome instruments he laid carefully on the long table and addressed the weapons rather than the agent.

"So the Lady T'Ampere has made her proposition?"

Ren felt his eyes drawn to the barbarous swords, which were fashioned to inflict the most terrible wounds in flesh, yet disengage cleanly—they were weapons for use when no quarter would be asked or given.

"She has. What do you know?"

"The house servants of Lady T'Ampere have no tongues. But they can speak with their hands. And so can we. You acquitted yourself well in that conversation, friend Tito. She's one of the abolii."

The latter word was taken from the old Ahhn phrase for detestable. Ren had heard it used occasionally, but seldom with such feeling. He was gratified to note that the systematic mutilation of slaves was unpopular even with the societies.

"The point is," said Ren, "do we accept her offer or not? I need your advice. And I need to know if the societies will cooperate."

"You ask two questions, friend Tito, and I give you two answers." Catual took up one of the vicious swords and drove it savagely into the plaster of the wall. "My own advice to you is on no account become associated with T'Ampere in any way. The House of T'Empte made a similar mistake. Now T'Empte is an empty province. But nonetheless—the societies will find five hundred men. They don't favor the idea, but if Dion's bill of manumission is accepted by the planetary government it will be the start of the end of us all. We must support even the abolii if we wish to preserve our way of life."

Ren took up the second sword and examined its toothed edge.

Held closely, it lost its cumbersome appearance and the dreadful artistry of the razor teeth made him wince as he imagined its effect in battle. Its balance was perfect in his hands.

"The clans have already spoken then?"

"The elders have been holding council for days regarding Dion's bill. They have decided he must not be allowed to press the bill to law. To have five hundred extra men from T'Ampere for the purpose is worth a pact with the devil."

"Then I may confirm to Lady T'Ampere that her offer is acceptable?"

"Go at the agreed hour tomorrow. If there is any change in the situation I'll contact you before you go. If you don't hear from me, assume that it's safe to accept T'Ampere's offier."

"Why so guarded?"

"Because the Lady T'Ampere had a visitor earlier today—before she came to you. Sonel Taw, the castellan of Di Guaard. We don't yet know what was said, but it's an absolute certainty that my Lord Delph knew nothing of it. Mad he may be, but even he would have no commerce with T'Ampere. Tread very carefully, friend Tito. There's great mischief in the making in Anharitte, and T'Ampere is behind it"

HERE was no castle ■ Secondhill. The once-great fortress of T'Ampere had been laid in ruins in some former conflict. Now its broken walls and chambers gaped amazedly at the sky, as if it could still not comprehend the fury that had destroyed it. At the foot of the ruins sat the neat circle of the chateau and the home estate. True. the complex was walled, but not in the sense of forming a stronghold in battle. T'Ampere's strength lay in other regions.

To reach T'Ampere, Ren had passed from Firsthill down through the slave market and crossed the ship lanes by slimboat. From here he had ascended Secondhill by the only access worthy of being called a road.

The way had wound steeply up between the great banks of a natural pass. During the climb he had seen no signs of life or habitation. suddenly Breaking over the brow of the hill he came upon the gates of the chateau before he had guessed their nearness. Unlike the other hills, each of which had an attendant township gathered outside the citadel, Secondhill contained only the walled seat of T'Ampere and immediately spread out to contain nothing but the broken, sheepgrazed slopes that reached down to the eastern plains and T'Ampere province.

Ren's first impression that the Chateau T'Ampere was undefended was soon corrected. His path toward the broad gates had placed him in a neat ambush. He found himself surrounded by some undoubtedly competent soldiery and was forcibly conducted to a barracks associated with the great house and there interrogated by an officer. When he had established his identity a runner was despatched to ascertain Lady T'Ampere's wishes in the matter. The message came back that Ren would be summoned when the lady pleased. Furning at the treatment he was receiving. Ren found himself locked in a cell for two hours until a guide came to conduct him to Lady T'Ampere.

The rooms of T'Ampere were depressing. Here was traditional Ahhn style used to an extreme with carpets centimetres thick strewn with cushions. Even the walls were smothered with heavy drapes and curtains. The screened windows admitted barely any light and what light did gain entrance was immediately absorbed by the browns and grays and blacks of the soft furnishings. Ren was reminded of the lair of a pampered cat-even the air seemed pungent with an

overpowering feline smell. Here, he reasoned, was one more instance where nobility and absolute power over others had overfed itself to produce something mentally and physically unwholesome. It came to him that the *Ahhn* nobility had shown him little to commend its survival. Perhaps Dion's revolution was fated to succeed.

"You bring me an answer, Agent Ren?" T'Ampere rose from the gloom, bright-eyed like a jungle creature regarding its prey.

Ren longed to strike at the bright mockery. "Perhaps. But first I'd like an apology for being detained so long by your men. I came here at your invitation to answer a question you had asked. I resent being treated like a thief."

The amusement quickened in her face. "Believe me, if you saw what we did to thieves in T'Ampere you would raise no such unjust accusation."

Ren saw she was playing with him and decided to deny her the pleasure of drawing a response. His dislike of the woman was now intense.

"Lady T'Ampere, yesterday you brought me a proposal—five hundred men at arms to use against Magda if the societies would provide a like number. This they've agreed to do."

"A firm decision so quickly?"

The feline eyes narrowed. "Either, you have remarkable powers of persuasion or the elders have become mortally afraid of Dion."

"They didn't take me into their confidence. In this matter I act only as messenger." Ren felt disinclined to elaborate.

"I doubt that's true." She shook her head impatiently. "But it's of no importance. At any rate we now have our alliance."

"We do not," said Ren abruptly. "I said the societies had agreed. I didn't say that I agreed."

A flicker of anger crossed her face. "And what objection do you have, merchant?"

"When I climbed Secondhill I had no objection. But I want now to know why I was detained. Was it to make me conscious I was not of the Anharitte nobility? Or was it to keep me out of the way while some other plans were entertained?"

"I find your impertinence less than amusing. Do you suspect me of duplicity?"

"I suspect the alliance you offer is not as simple as you claim."

"Grief! And do you also have a name for these other activities in which you think I'm involved?" Her voice held steely contempt.

"At a guess I'd say they concerned Di Guaard and Sonel Taw."

Her face became clouded with

disbelief then relaxed into laughter.

"You have my apology, Agent Ren. I mistook you for a fool. I see now why even Dion treats you with circumspection. You understand us far better than we understand ourselves. Let's stop fencing with each other and conclude our alliance. I perceive we make worthy partners in mistrust."

"When I need your men I'll send for them," said Ren. "I won't make advance plans with you, because T'Ampere has no talent for secrecy. When I ask for your men you are to send the full five hundred without delay and they will respond to my lieutenants, not their own. Only on these terms can I afford to be involved with T'Ampere."

"You've been well schooled," she said thoughtfully. "It's a good sign. Very well, your terms are accepted. If you cover yourself as well against your enemies as you do against your allies and should have a brilliant future in Anharitte. Indeed, I've a mind to make you a second proposition."

"Which is?"

"I could use a man of your caliber at T'Ampere. The rewards would be far and above anything the company could offer."

"In what capacity?" asked Ren without enthusiasm.

"Consort," said Lady T'Ampere. Ren felt physically sick. "I'm afraid the proposition's unthinkable. For me to adapt to the ways of T'Ampere is not possible.—For T'Ampere to adapt to me would need a major revolution."

"Then I'll order runners to light your way down the slopes. Such paths can be treacherous."

"In the high places of Anharitte all paths seem to be treacherous," said Ren.

Ren left the Chateau T'Ampere. The beautiful Rim stars were spread in a wide, bright pattern and such was their illumination that torches were not actually necessary. Nevertheless a dozen runners with flares were waiting to guide him down the path toward Firsthill and the light from their brands at first obscured a shifting redness in the western sky.

Clear of the gates, Ren stopped and directed the runners to fall behind him so that he could better see the flame on the farther hill. An angry red patch seemed to burn on the left side of Firsthill, but its precise location was difficult to determine. As he continued down the pass the direct view of the conflagration was lost to him and its existence was told only by a continued redness in the sky.

At the river he bade the runners return to their mistress. A slimboat,

attracted by the light of the flares, came to ferry him across the shipping lanes. The boatman had no knowledge of the fire on Firsthill, but opted for the direction of Di Guaard when questioned about its probable location. Having gained the shore, Ren hurried through the now deserted slave market and was soon in the complex of streets at the top of the hill. A trade call alerted him to the presence of a waiting armsman from the Pointed Tails.

"Agent Ren, Catuul asked that I intercept you on your return. He wishes to speak with you at the lodge. We must proceed with caution."

"What's happening here?" asked Ren.

"The slaves of Di Guaard have set fire to the castle. Rumor has it that Delph Di Guaard is slain. The prefect and his men are now in attendance. Catual suggests it would be unwise for you to enter the district."

"He's probably right. The timing of this affair is not without significance. Lead me by a safe route to the lodge."

The streets were crowded with sightseers drifting toward the scene of the fire. In the background a shadowy traffic of hurrying men indicated the messengers of various agencies going to report or being sent again to keep up with the news.

The armsman hastened Renthrough the slowly moving throng, turning aside always to avoid dark places. A constant chatter of inquiry came from opened upperstory windows as bewildered heads tried to gauge the cause of the commotion. The armsman stopped to engage no one in conversation. Though he did not speak of it, his movements seemed to anticipate danger at every corner and his hand was forever hovering near his sword.

CATUUL GRAS was waiting at the lodge.

"Is it true that the slaves of Di Guaard have revolted?" Ren asked him.

Catuul nodded. "It's true. But they were incited to revolt." "By whom? Not the *Imaiz*, surely?"

"No, by the castellan, Sonel Taw. I think he saw in the ruse a chance to depose Lord Delph. But in any event he's failed."

"Were the prefect's men so quick to Delph's defense?"

"The prefect's men were unable even to pass the outer walls. By the time they reached the castle the fight was over and most of the slaves were contained. Which is fortunate, because if they had escaped into Anharitte and gained support from their fellows the whole city would probably be afire by now."

"I sensed as much," said Ren.
"Tensions are high in the streets
tonight. But if Sonel Taw incited
the slaves to riot, who was it who
quelled them?"

"A hundred bondsmen from Magda," said Catuul, looking nowhere in particular.

"Magda? Slave against slave? To protect Di Guaard?"

Ren was fazed momentarily.

"I knew you'd not believe me, friend Tito, but I can only speak what I know. Though I doubt if it was Delph Di Guaard's health they were interested in maintaining. I think they were as afraid as we of the incident's starting a general uprising. With seven slaves in the district for every freeman, tonight could have been one of the bloodier pages of history."

"And if Di Irons had been forced to call in the government forces, it would have been even bloodier." Ren nodded his acceptance of the logic. There was no doubt that if once the floodgates of violence were opened they would be extremely difficult to close.

A commotion at the door broke up the conversation. Three of the Pointed Tails armsmen were struggling to subdue a prisoner they had taken from the streets, who had broken away at the last moment. Fortunately they were men who

knew their trade. Shortly a body was thrown through the door to land at Catuul's feet. The scribe turned the wretch over wonderingly, a short dagger held to the man's throat. With his windpipe in peril Sonel Taw, the castellan of Di Guaard, looked up from the floor in genuine anguish.

"Ah! The idiot is here," said Catuul with some satisfaction. "Witness the man who was crass enough to risk all Anharitte to satisfy his spite."

Sonel Taw noticed Ren and struggled to sit up. His face lit with an ingratiating smile of recognition.

"Agent Ren knows me. He'll tell you all is not as it seems. We have an understanding, the agent and I. Ren, keep these ruffians from my throat."

"I think not," said Ren. "What you've provoked tonight could well have killed us all. If you had a quarrel with Di Guaard you should have tried it man to man. But to involve the slaves could have resulted in a massacre."

"But—" The castellan rose to his knees, his eyes searching piteously for comprehension. "But it was part of the plan—"

"What plan?"

"Hers— she told me of your intent—" Taw had the look of a man betrayed.

"That bitch T'Ampere," said

Ren. "She's behind this. She thought by now to have me in her pocket."

"But you aren't?" inquired Catuul anxiously.

"I agreed to nothing more than to send for her men as and when I required them against Magda. Di Guaard wasn't even mentioned. In fact, she kept me at the chateau until Castle Di Guaard was well in flames."

"Good. Then we aren't compromised. Tonight's work has no reflection on our feud with the *Imaiz*. You're a man of good sense, friend Tito. And our fallen castellan here will find few to mourn his passing." Catuul bent forward again with the dagger.

Ren intervened.

"Send your men to deliver him to Di Irons. He's more the prefect's concern than he is ours. I think a few days at the hands of Di Irons' tormentors will be valuable to his education—and we've no time to lose over killing him."



"No time?" The Scribe regarded Ren curiously. "Your meaning escapes me."

"A hundred men from Magda came to Firsthill. A hundred of the same we'll have to fight if we storm the castle. Doesn't it make sense to see that as few as possible get back to Magda? They're on our territory and they've a river to cross. We have them at quite a disadvantage."

Catual considered for a moment. then leaped to his feet, shouting orders and calling for men. His acceptance of Ren's point was immediate once he had explored the implications. He was secretly furious with himself for not having realized so vital a matter earlier. Much valuable time had been lost and the men from Magda must by now be dispersed through the city and be making their way down to Firstwater. Leaving the hapless castellan in the company armsmen charged with the duty of delivering him to the prefect. Catuul collected Ren and they sped out into the night.

#### XIX

ASYSTEM of messengers and signals had alerted all the Pointed Tails, including those who acted as guards at the slave compounds on the edge of Firstwater. The first priority was to try to

locate the boats the men from Magda would try to use for their return. The second was to locate and harass the enemy itself.

Ren found the whole operation confusing. Traveling at a steady run, usually by torchlight but occasionally by starlight alone, Catuul a veritable mobile was quarters. Out of the darkness messengers would gather to exchange a few quiet words and be dispatched again to carry out some new command. Just how the messengers located Catual Gras in the first place was quite beyond Ren's comprehension—the scribe was constantly on the move. But the system appeared to work and gradually some semblance of order grew in the middle of apparent chaos.

Resignedly Ren settled into a labored jog-trot, the nearest approach he could make to the Ahhns' effortless style of running. Nevertheless he found the going hard. At the foot of the Trade Road the scribe motioned the breathless agent to rest for a while.

"We're in luck, friend Tito. The news is that they've not yet crossed back over the water. Some were seen coming through the town and down the Blackslope. Others escaped down Sidepath and must now be crossing the plain to join their fellows near the Black Rock. We've

secured all the slimboats along Firstwater, but it looks now as though they must have made the crossing farther west. Now we must drive along the riverbank as far as T'Empte Crossing and try to separate them from their boats."

"Will we be in time?"

"Some are reported only a few minutes ahead of us and they may not yet realize we're after them. They've only to stop and wait for their comrades on the other route and we shall trap them."

Ren nodded. He felt the excitement of the chase and this piece of harassment would be an excellent chance to even the score with the *Imaiz*. He turned and followed Catuul eagerly toward the river.

The whole scene was so utterly devoid of sounds or people that he found it nearly impossible to believe that only a short distance ahead were a hundred men from Magda and a large attacking force of Pointed Tails determined to stop their escape into boats and across the river. After ten minutes Ren became seriously worried. He was almost within sight of T'Empte Crossing and along the bank the slimboats used by the ferrymen were neatly drawn to cover and undisturbed—but there still was no sign of Catuul or the enemy.

Then he stopped, rubbing his eyes

with disbelief. At first he thought his vision tricked by the dim light, but the continuous shine across and above the surface of the water was no chimera—it persisted and was real. Yet the image seemed to have no connection with the circumstances in which he found it. Then, even as he watched, a sudden burst of flame on the far side of Secondwater reared upward and along the curious spread out shining thing spanning the river. The image began to collapse and Ren heard the shouts and calls of the Pointed Tails a little farther up the riverbank.

Passing Magda Crossing, where slimboats were now well secured by grinning armsmen, they advanced along the bank Secondwater. This part of the way was clearer, there being no wharves or buildings along the bank. Here open fields led to a line of trees at the water's edge and there was little concealment for men save the blanket of darkness. A series of trade calls began to sound from the direction of the Black Rock, now to their left across the fields, and Catuul answered them without hesitation.

"Magda's men are still on this side of the river," the scribe told Ren. "They gather near the old T'Empte Crossing about a kilometer hence. There'll be fighting—I'll leave you here. Make your way to the crossing carefully. I think our trap is sprung."

Catuul called his men around him and together they trotted ahead. Ren, whose occupation and outworld training had ill prepared him for such marathon running, regretfully watched them go. Although he was in excellent physical condition by outworld standards, he lacked schooling in the style that enabled the native Ahhn to continue running for hour upon hour with little sign of fatigue. He sat on a large projection of rock and rested for some minutes before continuing to walk slowly toward the appointed place.

Ren had thought to hear sounds of battle ahead, but all was silent. This made him wary—perhaps the men from Magda had avoided the contact and were even now moving back across the fields. The light from the stars was insufficient for him to see more than a short distance around him. Every tree had the capacity to be a potential point of ambush. He walked as near the river's edge as he dared, sword drawn and fully prepared to fight or run as the occasion might require.

Intrigued by this mystery, Ren hastened forward. He should, he thought, by now be able to hear the sound of steel on steel, or the slap of an *Ahhn* crossbow. Instead all he

heard were voices and the unmistakable trade calls of the Pointed Tails carrying reports to those farther afield.

ARUSTLING at the treeline made him stand, sword ready, until the call of a nightbird he recognized as Catuul's signature sounded close to him.

"The *Imaiz* has beaten us." Catuul Gras appeared suddenly at Ren's elbow. "Didn't I tell you he was a wizard?"

"What happened?" asked Ren. "Didn't you catch them?"

"They got away from us, all of them. Dion's magic made a bridge of mist across the river and they ran over it. We could have taken some of them, but none of us dared approach such a terrible thing."

"Damn! How did he manage that?"

"I know nothing of the ways of wizardry," said Catuul, slightly affronted.

"A rhetorical question. I was thinking out loud," said Ren. "Dion is no more a wizard than I am. And I tell you there's no such thing as a bridge of mist that can bear the weight of a man. There has to be some rational explanation."

Despite Catuul's obvious reluctance to follow, Ren moved along the river bank to where he had seen the curious shining thing on the water. Something submerged appeared to be distorting the surface of the river. He called for torches, but none were available.

"Mark this spot, Catuul, and guard it. At first light I want boats here to explore both banks and drag out anything in the water. The river here is best part of a hundred and fifty meters wide—and a thing that could carry a hundred men across it in a few minutes can't possibly have vanished without trace."

"Except a bridge of mist," said Catuul, still unconvinced.

WEARY, Ren allowed himself to be escorted back to his chambers. Though his body was thoroughly tired, his mind persisted in wrestling with the problem of the intangible bridge. He could in no way reconcile a shine across the water and the scribe's description of a bridge of mist with anything capable of bearing the weight of a hundred men across the water vet able to vanish and leave no trace. Ren's education had prepared him with a good grounding in what physical parameters he could normally expect to encounter, but none of his knowledge of physics appeared relevant to the case. He was unwilling to admit that some unknown scientific principle might be involved, yet he was incapable of finding a satisfactory answer by

employing any known principles. One reason for his intense preoccupation with the problem was his projected scheme for the storming of Castle Magda. He sensed in Catuul a superstitious awe of the works of the Imaiz that had to be dispelled if the campaign against Magda were to be a success. Unless Ren could prove to the Pointed Tails that the vanishing bridge was only a clever trick, they would carry the attack against Magda burdened the fear of some with manifestation of the Imaiz's magic. It was easy to see that such a condition would give any maneuver a

Firstlight seemed to come all too soon. Ren had taken his problem to bed and had lain awake with it for several hours despite his tiredness. When he finally succumbed to sleep it was for a few hours only. A servant came to wake him with the reminder that Catuul Gras would be waiting for him at T'Empte Crossing. Cursing the scribe for his apparent ability to do without sleep, Ren rose and washed but refused the delay of breakfast.

rather precarious chance of success.

Unable to face the long walk involved, he sent for stavebearers and took the cushion-craft, fretting all the way down the Trade Road amid the morning traffic of carriers' carts. Once past the Black Rock and free from the restrictive atten-

tions of the stave bearers, he turned off toward T'Empte Crossing. For the last part of the journey he went directly across the fields to where he could see a group of Pointed Tails on the riverbank.

Catuul Gras received him with enthusiasm. Several men were in the river, diving deep to recover volumes of some substance they hauled ashore in a continuous strand and piled for Ren's inspection. Boats from the farther shore were fetching back a curious item found abandoned on the sandy beach, the purpose of which was completely obscure to the native Ahhn.

TY/HEN the collection was W complete Ren inspected it briefly and the concept immediately fell into place. The shine across the waters, the idea of a bridge of mists, the carrying of a hundred men across the river—all these puzzles suddenly had an explanation. Ren swore mightily when realized the nature of the objects before him. Behind his comprehension was an absolute certainty that the Imaiz was nothing more than a clever technician with a typically Terran training.

The items with which he had been presented consisted of a continuous length of heavy-gauge polythene sheet formed into a tube of a diameter more than sufficient to admit a standing man, and a primitive large-capacity air bellows. Some sort of rush matting had additionally been provided to spread the weight of a man traversing the interior of the tube over water. A quantity of rope had been recovered which presumably had been used to haul the flexible "tunnel" across the river and to secure it in place.

"Tell me how it works," implored Catuul Gras.

Ren pursed his lips. "It's an old Terran device. That large plastic tube, when filled with air, will float and will easily bear the weight of a man on the water. Fitted with flaps through which a man can enter without losing too much air and an air pump sufficient to keep it filled, it makes a floating bridge. It's cheap, simple, and expendable—you can afford to set fire to it if you fear your enemies might try to follow you across."

"Then it isn't magic?" asked Catuul. He sounded almost disappointed.

"Far from it. In a smaller and modified form it's used in a common Terran water sport—men tie themselves into large plastic bubbles and run races over lakes and rivers. It's simply the clever application of a common outworld principle."

"Which reinforces your suggestion that the *Imaiz* is a Terran?"

"I don't know." Ren thought about his answer carefully. words were colored by a new "There's a Terran incaution. fluence, certainly—but that could be acquired from books. The main factor that emerges from this affair is that Dion and his men are effectively policing Anharitte. They seem to be trying to prevent a catastrophic breakdown of your society even as they are undermining it. A restructuring without a revolution. Quite a trick—if you can achieve it."

"But didn't Dion break faith with his own at Di Guaard yesterday? Slave against slave was something no one had expected."

"He broke faith only if you assume that his interest is the emancipation of the slaves. But perhaps his real policy is a larger purpose—that of emancipating the Ahhn as a race. But in any event I can't see that either freetrade or the societies can survive the transition. We're both part of the old pattern."

"So you intend to go through with your march on Magda?" asked Catuul gravely.

"To Magda it is. And in view of Dion's manumission bill this may well be the last chance we'll get. I propose we strike Magda as soon as possible and with the largest force

we can muster. Whatever happens, we mustn't fail. A great many people will be watching the battle. If we lose, the *Imaiz* will not only gain Anharitte but probably his policies will win him all Roget as well. Our assault on Magda could have a great bearing on the shape of history. That's why we must plan it well."

"What did you mean by the emancipation of the Ahhn?" asked Catual after a while

"It's a relative concept that would only be apparent if you'd lived outworld," said Ren, realizing his mistake.

#### XX

AT THE head of the Trade Road the watchmen were waiting for Ren to return. Their interception of him was swift and deliberate. The stave-bearers were halted.

"What's the meaning of this?"

"The prefect requires your presence, Agent Ren."

"Again? This is becoming too much of a habit. But it's early and I've not yet breakfasted. Tell him I will come to him later."

The leading watchman shook his head. "Our orders were to bring you in all haste. The Lord Di Irons is in a fury."

"Then I'm afraid his fury must

wait for a proper time. Stand aside."

Ren had observed that the stavebearers had drawn to the side of the road and that the way in front of him was clear save for the three watchmen. The craft's cushions were still inflated and he doubted the law-enforcers would stand in the path of the vehicle if it began to move. He edged it forward, slowly at first to warn the men out of his way, then faster. He was gratified to note that they made no attempt to halt his progress, but retired to the road's edge to discuss the situation.

Ren continued swiftly, having no thought of returning for the stavebearers who still stood waiting for a decision from the watchmen. When he was out of weapon range he began to breathe more freely. This had been a trial of strength between himself and the authority of Di Irons-and for the moment he had won. As he drove unescorted to the fruit market he honestly questioned his own motives for refusing to accede to the watchmen's demands. He found his reasons not as clear as they had seemed moments earlier. As one of the prime movers of events in Anharitte, he had come to resent the prefect's imperious demands on his time. Yet now he thought about it, it grew more plain that he was attempting to set

himself up above the law—and the only persons above the law in Anharitte were the lords.

He became interested-and slightly apprehensive—about how Di Irons would react. At worst, and if it suited the perfect's purpose, Di Irons would be justified in detaining him and demanding his portation. At best, Di Irons might overlook the slight and await Ren's coming at a later hour. Ren's surmises, however, in no way covered the actual reaction his stand had provoked.

Within the hour Di Irons himself was announced on his doorstep.

"Didn't you hear, Tito, that I needed words with you at once?"

"My apologies, Prefect, but I was about early and was greatly in need of food. I was coming to see you soon."

The prefect waved the matter aside impatiently and accepted a plate at Ren's table.

"First I have to thank you for sending me Sonel Taw. Under threat of torment he has told me much that explains last night."

"Did he kill Di Guaard?" asked Ren.

"The fool tried, though I doubt if he had the courage to perform the deed himself. Di Guaard died in the fire, nonetheless. But that wasn't why I wanted words with you. Taw also hinted at a liaison between you and the Lady T'Ampere. Can this be true?"

"Liaison's too strong a term. She has offered me men to reinforce my society in feud against Diondaizan."

"At what price?"

"I struck no bargain on price. She claims Dion is out to kill her—which may or may not be true, though I hope it is—and she offered me help if I would lead a strike against him. This I've agreed to do, but on my own terms."

"How many men did she offer?"
Di Irons seemed angry, not with
Ren directly but seemingly with all
the world.

"She suggested five hundred—if the society would find a like quantity."

"Five hundred? T'Ampere has five thousand to use if she chooses. If you should take Magda, what do you suppose will happen to the rest of Magda province?"

"I'd not given the matter a thought."

"Then I'll tell you. With the *Imaiz* removed, T'Ampere would take the rest of the province, because nobody, not even I, could stop her. You're the only man in Anharitte who would dare to take arms against Dion-daizan, so she sees in you a useful catspaw. If you should succeed you will hand her Magda province on a plate. If you

lose she's lost at most five hundred men. Do you now see in what you've become involved?"

"I hadn't known the details of her ambitions," said Ren. "Therefore I find your warning timely. But I'm not sure it modifies my plan."

"I hadn't expected you to be easily swayed. But if you're still intent on turning Thirdhill into a battle ground you should at least know in what cause your blood is being spilled. It's your life balanced against her gain. Do you think it a fair bargain?"

"Are you trying to warn me not to proceed with the exploit?"

"I don't give a damn whether you proceed or not. You've almost no chance of winning and a very high chance of getting killed in the attempt. Even if you win, T'Ampere will take the major prize. You can work out the odds for yourself. But I warn you—you're engaged in an unholy alliance if you've listened to T'Ampere. She's made the almost identical proposition to most of the lords in the past, but history has taught them caution. Only T'Empte ever fell for the ruse."

"Catual Gras spoke of T'Empte as an empty province. What happened to the House of T'Empte?"

"The House of T'Empte was destroyed partly by T'Ampere's treachery and partly because Dion's revenge was so terrible. Since T'Empte was the catspaw, T'Ampere escaped more lightly. The old vixen's been sitting nursing her wounds these many years, waiting for someone else for her to thrust first into the fight with Dion."

"And now you think I've been elected?"

"You're the first new major force to emerge in Anharitte since the destruction of T'Empte. It was only a matter of time before you became included in her schemes."

"I'll mark well what you've said," said Ren. "I promise it will be taken into account before a decision is reached. But if I decide to storm Magda—where will I find my Lord Di Irons standing?"

"Slightly to your rear, looking the other way. You're taking T'Ampere's banner. Noble house against Noble house still has legitimacy—they have the right to bear arms anywhere in the city. Even the planetary government couldn't object to your action under T'Ampere's shield. But the cost of digging your graves will certainly be passed on to your company."

"You paint a black picture."

"Traditionally the rocks of Thirdhill have been awash with the blood of attackers since the stones of Castle Magda were first raised. I see no reason to suppose that this occasion will be any different."

CLOWLY Ren's plans took Shape. Dubious at first, Catuul rapidly became an en-Gras thusiastic convert when he saw the scope and thoroughness of the agent's ideas. Much preliminary work needed to be done and Catuul's standing with the elders of foreshortened many the clans otherwise lengthy negotiations. A large quantity of small boats was purchased along the coast to provide ready transport both for the attack and the unlikely event of a forced withdrawal. Canvassing around the Tyrene villages produced scores of useful contacts whose services would be needed when the great day came. Ren watched the steadily mounting bill for purchases and bribes and knew that this was going to be his final attempt. If this venture failed he was unlikely to be given the money or the opportunity to try again. He had to succeed.

The more involved Catuul Gras became with the planning of the exploit, the more he began to appreciate how Ren's unique outworlders' view of Anharitte threw up ideas and perspectives by no means apparent to those who had spent their lives in the city. Although Ren's knowledge of Ahhn history was not complete, his understanding of the causes and motivations of political events was

a revelation to the scribe. Ideas which in outline were received in doubtful silence won enthusiastic favor when Ren placed them in careful context. Whatever the results of the coming battle, the event was certain to find a permanent place in Anharitte's history.

For Ren the affair, necessarily a compromise. After his experiences with Alek Hardun he felt compelled to eschew the of modern outworld benefits weaponry. This limited his armory to what could be made or found from native resources. However, he felt no such limitations on his ingenuity. Many Ahhn craftsmen found themselves building instruments of siege and war which belonged not to their own history but to that of another race far across the legendary stars.

Logic dictated that rocket projectiles would have been more effective against Magda than ballistae and chain-cannon, but Ren was aware of a growing sense of responsibility toward the Ahhn. The release of too much advanced weaponry into their feudal society could have destroyed them just as effectively as if the ships of Rance had succeeded in their task. Alternately, to go into battle ill-prepared was to invite disaster.

Nor were the words of Di Irons

on T'Ampere overlooked. In his planning Ren had attempted to cover all of the many aspects of the exercise brought to his attention and several facets which he had determined for himself. Overall he had contrived to construct a time of -chaos such that even the prefect would find it difficult to determine exactly what was taking place. It was also hoped that even the Imaiz's spies would present such a mass of irrelevant information to Dion that much could be achieved before the true pattern of the attack became apparent. All in all, Ren was rather pleased with his design. He was certain that Director Vestevaal would have given the whole scheme his heartiest approval.

At last Ren was ready to make his move. With the initial attack on Magda scheduled for late afternoon a messenger was sent that morning to call out T'Ampere's men. The messenger returned with the news that the party from Secondhill would join them at midday. This was largely as Ren had anticipated. He then waited for reports from the spies he had posted on T'Ampere's borders before ordering his men into the field.

His judgment proved correct. Coincident with the sending of five hundred men from T'Ampere to join Ren's sortie against Magda, the mistress of Secondhill had ordered nearly ten times that number of men to the shores of the River Daizan in the east, flanking Magda province. When he had received confirmation of this fact, Ren caused signals to be flown to set in motion the next phase of his plan. T'Ampere was due for a nasty shock.

The notion pleased Ren-it was with a wolfish smile on his face that he went to marshal his own forces. Against agreement, the hundred from T'Ampere came complete with their own officers. These were neatly disarmed by the Pointed Tails and removed from the scene with some alacrity. Moreover, the five hundred were outnumbered at least two to one by members of the Pointed Tails and other societies brought in by Catuul as reinforcements. Lacking more direct orders from T'Ampere, the five hundred accepted the viewpoint offered them and soon became integrated in the total army marching on Thirdhill.

It WAS thus with fifteen hundred men rather than a thousand, that Ren crossed Firstwater to Magda's shores. Here again his strategy was not immediately obvious. Instead of taking the hill road leading directly up to the township and thence to the castle his men marched round at the foot

of the slopes defining the hill—only when they had formed a full circle around Thirdhill did they begin to ascend. Even then their activity was limited. At the rough contour where the grasslands gave way to the steeper outcrops of gray rock on which the township and castle of Magda stood, they halted and began to prepare their positions as if in readiness for a siege rather than a direct attack.

Below the siege line other teams were busy setting up the various engines and devices of Ren's design and dragging them up the hill to stations at carefully determined points. The sun set on a deceptively quiet scene, the growing glow of campfires spreading out along the side of the hill like a string of bright beads. In only a few places did activity continue after nightfall. Watchers in Castle Magda could have seen little of these secret details, because the devices were still concealed in dead ground and safely out of sight of the castle.

The first sign of renewed action came when the fires on the hillside facing firstwater leaped into new life as blocks of pitch and barrels of crude tar were thrown upon them. The lazy breeze from the southwest carried the heavy smoke in the direction of the castle and effectively screened the movements Ren had planned for his secret weapons.

These he now deployed forward to occupy positions behind preselected outcrops of rock that would serve to shield them from direct fire. Having relocated the devices to his satisfaction, Ren returned to a safe position to await the coming of first light.

Dawn brought the first skirmish. The defenders of Magda, parently reluctant until now to show their awareness of the army gathered around them, sent out a reconnaissance party to test the strength of the enemy. The Pointed Tails were ready for them. Although Dion-daizan's men bore small muskets of a type similar to those favored by the ill-fated Di Guaard, they were no match for the hail of steel shafts from the crossbows of the society armsmen. The reconnaissance party lost two men and retreated quickly back inside the castle gates. The attackers lost no men at all in the incident and achieved a great improvement in morale.

The coming of the early sun brought a slight freshening of the wind, which nevertheless held its prevailing course. This was precisely what Ren had hoped and led naturally into the next phase of his campaign. With the majority of his troops still holding a tight ring around the outer slopes, he again caused certain fires to be made to

smoke and, under cover of the dense vapor clouds, he and twenty selected men gained the forward positions where their secret weapons had been sited. The fires were doused at a signal and into the clearing air above the frowning castle a large balloon rose uncertainly, trailing a canister on a rope beneath it.

THIS first balloon rose too slowly and snagged against a high battlement, its canister dangling against the outer wall. After a time the burning fuse expired and the canister fell outside the wall to explode at its foot. Although the explosive was a native product, its quality was sufficient to make a very creditable bang. In its situation it did no damage, but it was a welcome foretaste of what such a device could do if it fell inside the castle confines.

The next balloon was prepared in recognition of the fate of the first. It rose more swiftly, clearing the battlements with ample margin. The fuse, too, had been altered and made slightly longer and the attackers had the immense satisfaction of seeing the canister plummet from a height and fall squarely inside the castle walls. There was no way to assess what damage the explosion might have caused, but its arrival must certainly have been a

trial to the defenders. Much structural damage was not to be expected, but the more sophisticated the defenses, the more they would suffer from casual bombardment.

Eight more balloons released. The first six all delivered their explosive charges somewhere within the castle confines. Although they were subjected to rapid musket fire from inside Magda, the small balls projected by the weaponry were insufficient to damage the balloon fabric in any way that appreciably foreshortened the flight. The seventh balloon was shot down well before it had covered the distance to the castle. Ren fancied that a more powerful weapon, such as a Terran rifle, had been brought to bear on this. The eighth balloon was shot to pieces almost immediately upon release, and Ren and his comrades scarcely escaped with their lives as the canister fell back on top of them.

Seeing the growing effectiveness of the defensive measures, Ren decided that the idea had been taken far enough. Under cover of a new wave of smoke he ordered a retreat and made his way back to his now jubilant forces, quite satisfied with the progress he had made. Seven explosive charges had been delivered into Magda and although they would not have caused very much damage to such a massive

structure, their effect both physical and psychological on the defenders could not have been negligible. Most gratifyingly, all this had been accomplished without the loss of a single man.

Meanwhile. Catuul Grass had been visiting the township below the castle. He had found the people fully aware of the situation and anxious about their own lives and property. Catuul had struck a bargain with them—he would restrict armed offensives to the vicinity of the castle proper if the townsfolk would agree to attempt no action in support of Dion-daizan. His proposal had been rejected until he pointed out the strength of the attacking force and the indefensibility of the scattered conglomeration of buildings of the township. If defied, he had said, he was quite prepared to raze the town by fire. On this point of understanding he had taken his leave, but had not forgotten to post pickets on all paths out of the town as a reminder to the townsfolk that they were not free agents in this time of war.

REN was concentrating now on moving his men up closer to the castle, so that he could start to use the engines he had brought. The maneuver proved more dangerous than he had calculated. The muskets of Magda proved to have an

unexpected range and accuracy—and at least one high-powered rifle, probably with telescopic sights, was being deployed against his men. His losses were mounting, despite all his efforts at caution and it became obvious that a daylight attack would be suicidal. Reluctantly he retreated to the safety of the seige line and caused his ballistae to be prepared.

He had intended the ballistae to be used at shorter range, but he knew that the smaller missiles could be hurled for considerable distances, though the accuracy of range left much to be desired. Fortunatly, knowing of the strength of Magda's walls, he had not intended to try to use brute force to make a breach. Instead he had concentrated primarily on manufacture of fire bombs. These were earthenware vessels filled with inflammable spirit and ignited by a wick, which would burst and spread a formidable area of flame around the point of impact.

Now Ren rearranged the ballistae for maximim effect at a distance and had the smaller fire bombs segregated ready for loading. The losses his force had sustained earlier in the day weighed heavily on his conscience. With this in mind, he was overcautious about keeping his men well under cover and out of the line of fire. Here he

sensed he was failing in his duties as a commander of an aggressive force. He grudgingly acknowleged that he was a merchant concerned with profit and loss rather than life and death and that he placed more faith in the unorthodoxy of his weapons to gain Magda than he did in the power of flesh and bone to storm a castle so well defended.

The hallistae functioned well. About sixty per cent of the proiectiles actually fell within the walls of Magda. The effect was difficult to gauge, but the persistence of smoke trails long after the spirit would have naturally burned out was evidence that at least some of the fire bombs had ignited combustibles within the castle. He had a mental picture of the vessels smashing against walls and windows and the torrents of flaming spirit being spattered well into the interior of Magda's installations. Apart from a direct hit, it was practice doubtful whether the would do much damage to the personnel, but no organization, however structured, could function without stress in the face of rapid and randomly occurring outbreaks of fire.

XXI

WHILE he was engaged in pressing this newest mode of

attack Ren had a visitor. Di Irons, grim and heavy and rustily bearded, pulled himself up the slopes and was guided to the place where Ren was directing operations. The prefect gave the impression of being tired of his world.

"If ever a man could name a common cause for all his misfortunes that man is I. And the name of the misfortune is Tito Ren. What are you trying to do, Tito? Set all Anharitte on fire?"

"Only Castle Magda—at the moment. Did you have something on your mind, Prefect?"

"The Tyrene attacked again—the first time in over forty years. It's too much of a coincidence to suspect your hand isn't behind it. Only/ a historian could have planned a coup like that. Don't you agree?"

Ren shrugged blandly. "They always told me the Tyrene pirates were a myth. I may be blamed for interfering with your history, but it seems to be taking the point a bit far to include mythology. Perhaps the ghost of Di Guaard has chased them from the cellars of the dead?"

"I'll wager it was some more lively spirit," said Di Irons heavily. "Especially as you canvassed heavily along that shore."

"Tell me about their coming," asked Ren innocently.

"T'Ampere lost a fortune. To

protect the chateau itself she had to call back much of the army she had originally sent to the edge of Magda province. They were so late returning that the chateau itself had been overrun in the meantime. The Tyrene took every single thing of value including her considerable treasury, fired the chateau, then retreated to the river. T'Ampere's men tried to give chase but were balked by the fact that you had already acquired all the available boats. To complete her misfortune Dion's men followed those she had called back and have occupied of T'Ampere's several own estates."

"Aiee!" shrieked Ren. "And I thought all the action was taking place up here."

"Far from it. And I'd advise you not to get too close to T'Ampere in the future. She knows well whom to blame for today's work. Clever you may be, but your ways are rather obvious."

"Did you climb all this way just to offer me that advice?"

"Not really. I was interested in your progress against Dion. You realize, of course, that your continued presence here is not due to your own efforts, but due to some reluctance on the part of Dion to swipe you away as one would a fly."

"I doubt the truth of that, but I'd

be interested in knowing how you come to that conclusion."

"It's a factor most of us tend to forget, but one brought well to mind by Dion's occupation of some of T'Ampere's estates today. To us, soldiers are all freemen, mercenaries or armsmen of societies. But even slaves will fight in the service of Dion-daizan—and today a great many of them fought against T'Ampere. Furthermore, they were both armed and trained. Consider the implication, Tito. Dion can outman your army ten to one any time he chooses and not even feel the strain. And the majority of his men are already outside Castle Magda—they have vou rounded."

"There's been no sign of interference from his men in the province."

"Then the fact that he hasn't called on them must mean either that he considers you no threat or that he's confident that his garrison here can deal with you adequately on their own. Your prospects don't look too bright either way."

Ren surveyed the sky. The sun was already beginning to draw down on the horizon.

"Did you ever think, my Lord, that the *Imaiz* may not be infallible? When darkness falls I intend to take these ballistae closer so that we can throw even larger jars of flaming spirit inside those walls. No matter how good his defenses, they can't function if they're afire. When the garrison is fully occupied putting out blazes we'll launch our main attack on the gates. If we can manage to breach even one gate successfully we'll run whole barrels of spirit inside the walls and fire these also. We have the catapults, we have the ramps and we have more than enough combustables to fill Magda with a sea of flame. Are you thinking that Dion can withstand even that?"

"It's a good plan and a bold one," said Di Irons grudgingly. "On the face of it, you should succeed. But I'll wager the *Imaiz* knows every detail of the scheme. If he has not yet moved against you it's because he knows your chances of success are quite remote."

"On that point we'll agree to differ. Only the morning will tell which of us was right."

"I think you'll find it a long night. And I wish you welcome to it, Tito. This is one night I've no wish to spend on Thirdhill. If I can't persuade you to your senses I'll take my leave. I think tomorrow there'll be many graves to supervise."

WHEN the prefect had gone Ren spared no time in calling together his lieutenants and ensuring that they were all in accord with the details for the coming battle. The ballistae were handed over to teams which had been instructed carefully on both the method and the timing of their use. The general relocation of troops had already begun and every foreseen aspect of the campaign had been fully covered. After a final inspection of the stockpiles of inflammables and the supply lines on which so much of the plan depended Ren gave the final order to proceed.

Though no one knew it but himself, he had approached his final moment of decision with mixed feelings. Di Irons was a hard-headed realist, whose knowledge of probabilities in Anharitte was not lightly to be dismissed. Di Irons had predicted that the attack would fail. While Ren did not concur, he had to allow that the prefect's opinion was based on lifelong experience in Anharitte and carried a great deal of weight. Ren was not one to dismiss informed opinion lightly, and to underestimate Dion-daizan could be fatal.

Because he and Catuul were to join the selected armsmen who were to make the attack on the main gates, Ren and the scribe made a circuituous journey first west and then north to a point well below the township where part of the attacking party was mustering. Here were men fresh into the field, having just arrived up the Magda Road where they had been encamped as a reserve. They had completed their journey on time and Catuul was pleased to find that everything was in excellent order.

The close warmth of the early night was beginning to fade as the assembled troop moved off up the ragged road that followed the upward slope between the dark ridges of the hill. The prognosis for the attack was promising. Ren had handpicked men fresh to the battle and backed up by the small carts carefully laden with more than sufficient inflammables to fire the castle. Even Catuul was beginning to feel that the operation must succeed.

The wheels of the carriers' carts which regularly used this route had worn shallow grooves into the granite of the underlying rocks. In the moonless light from the Rim sky Ren found these furrows a useful guide to his feet and presenting a surface certainly more congenial to walk upon than the broken roughness of the rest of the road. About fifty men were ahead of him and as many following. In the true tradition of the societies the whole column moved silently, neither singing nor talking, their soft steps giving no indication that an army was on the march. Even the wheels of the little carts had been muffled. Ren found their quietness almost eerie. He was acutely conscious of the sound of his own boots on the hard underfooting.

HUS it was that the ca-L tastrophe was the more terrifying because it lacked any warning and because many of those who died did so with scarcely time to raise a shocked scream to their lips before they were destroyed. From somewhere out of the darkness a giant boulder, roughly spherical, plunged from a high place and thundered with sickening momentum between the cheeks of the road. Such was its force and unexpectedness that the first part of the column was crushed before the men had time to realize the nature of the thing which had leaped upon them. Comprehension of the nature of the threat was accompanied by a wild scramble by those following to climb the banks to avoid being mashed.

Weighing many hundred tons, the boulder had been finely calculated to fit the contours of the road without becoming embedded in the banks. Its trajectory must have been set for maximum effect in this precise application. Certainly its release from a place of rest on an

adjacent hillside was no accident, but even the authors of the misfortune could scarcely have hoped for such a truly devastating effect. The boulder went straight through the column of marching men, grinding flesh and bone alike into the dust. Even the frail carts at the rear were crushed completely, together with the patient animals and the men who held their reins. The only ones who were spared were those who were quick enough to break-formation and climb the bank in time to save themselves.

Aghast, Ren rose from the side of the bank where he had thrown himself and tried to estimate the severity of the damage. At least thirty were dead and as many more iniured. The enormity of and damage its improbable swiftness robbed him of words. The impact of that one great stone somehow symbolized all he had been told of the wrath of the Imaiz. In abstract such anger had been something to face with equanimity-translated into crushed flesh and shattered bones, its aspect assumed a far more daunting hue. The rumble of the boulder still traveling down the distant slopes was audible above the cries of the injured. Ren was sick on the spot.

Catuul Gras had taken command while Ren attempted to draw himself out of his shock. Already messengers had been sent to fetch help and sick-wagons for the injured. The fit men had been drawn aside and counted and lost weapons were replaced by arms taken from the dead. In battle the Pointed Tails remained practical to the last.

"Friend Tito, we're ready to proceed."

The scribe was sympathetic toward Ren's condition, but knew the whole battle was lost if the commander faltered. Ren, feeling the true pains of responsibility for the massacre of so many of those he had hired, would have preferred to have retired from the fight at that point. It had once more been driven home to him that he was merchant, not a soldier, and that fighting was only a part of a commander's burden—the other part was the acceptance of death, his own and those of his men. This was one aspect of making war that had never been made apparent to him in hooks

At the back of his mind the clear voice of conscience reminded him that those who had died had given their lives for the maintenance of the freetrade principle—but the benefits of the principle's survival would go almost entirely to the nameless outworld moguls who controlled the strings of interstellar trade. Catuul's men had died in the service of someone else's greed.

REN pulled himself together suddenly. The realities of the situation became brutally clear. Whatever the morality, he was already committed. There could be no turning back.

"I'm with you, Catuul. Have you sent for reinforcements?"

"No. But we'll be joining the rest of the party at the township. That'll have to be enough. They'll have extra combustibles also."

The remaining element of the troop continued with the march. Heeding the lesson so desparately learned, they broke file and walked high on the banks above the road in case a second boulder should follow the first. To their right the hill rose steeply into the blackness of a coniferous wood perched precariously high against the towering skyline and it was a reasonable certainty that those responsible for launching the boulder were still up there among the trees.

Catuul called for scouts and sent them ahead up the bank to ascertain what dangers might still be lurking. Ten minutes later a minor landslide heralded something rolling down the slopes. Cautious investigation revealed the bodies of the scouts with their throats cut. They had been rolled back down to rejoin their comrades. At no time

had there been any sight of or sound from the hidden enemy, and Catual viewed the road ahead with considerable apprehension.

Ren decided on a detour. His reasoning was that their progress along this particular road had been anticipated and the route would probably contain several further traps. If they struck a new path across country they might encounter nothing more than random patrols. Catuul agreed and the party made a wide detour that much later fetched it to the road at the entrance to the township.

Here the rest of the attackers were waiting—and listening to an agitated messenger who had been unable to locate Catuul in the darkness. The messenger held a long and involved conversation with Catuul and repeatedly pointed beyond Magda to where Ren was beginning to discern a broad area of light in the sky. Finally Catuul approached him to report.

"Some of the ballistae are in trouble. Dion used cannon to knock a couple of them out. He had also managed to project some sort of incendiary into two of our stockpiles. The fires you see are our own emplacements burning."

"Have we still enough ballistae to set Magda afire?"

"Easily enough. We've seven left and even three would be adequate." "Then let them commence firing. The quicker we can move now, the more surely we can win. Are we ready to assault the castle gates?"

"The men are ready. We're waiting for some more tar and oil to get through to replace some we lost, but it can follow us later. First we have to get into attack position."

"Then let's get on with it," said Ren. "We've still a fair way to go to reach the castle and Dion's obviously expecting us."

Soon the sounds of renewed hostilities became loud in the air. The night sky began to echo to the firing of muskets and the occasional roar of cannon. Although nothing was yet to be seen, Ren knew that his ballistae must have already started launching the great spirit jars over Magda's walls. Soon he hoped to see evidence of fires within the castle perched directly above where he now stood. It was necessary that his assault troops moved swiftly into position ready to seize the most advantageous time to breach the gates. Ren began to feel better. His previous horror was soon lost in the preoccupation of renewed activity.

The township of Magda was built of streets steeply sloped toward the castle at its head. The inhabitants had wisely stayed inside their houses and behind locked doors—

the streets were deserted save for where Ren's army thronged the lower square. The way ahead up the narrow cobbled street was lit by occasional watch flares which dimly illuminated the way almost to the foot of the castle.

Despite the apparent overtness of the action Catuul insisted that a small troop of men go ahead to ensure that no ambush had been laid from the dark alleys that laced the township. Ren felt that his role should have placed him at their head, but he acquiesced to Catuul's more informed objection. Catuul needed men he had trained. The scouting party would be visible right to the top of the hill and could easily exchange signals with the men below.

DEN'S decision to remain was In nearly the cause of his immediate death. The square was flanked by buildings formed from the traditional granite of the hills. Without warning-and by obvious design—one of these collapsed, its walls falling outward to scatter granite blocks far across the square and on the heads of the unfortunate mustered beneath. troops nature of the mechanics by which this trick was wrought was not apparent, but its effect was catastrophic. As the walls had begun to bulge Catuul had thrown Ren clear and the agent had received merely a startled impression of an apparently solid wall of masonry seeming to become plastic as it bent and twisted outward to engulf a great many of his men.

- Shaken by his second near escape of the evening, Ren's reaction this time was one of immense anger. He was sure the scheme could not have been devised and executed without the foreknowledge and cooperation of the inhabitants and he charged Catuul to make them pay for their indiscretion as soon as it was light. Meanwhile Ren's own task was becoming increasingly urgent. The scouting party reported by light signals that the way was apparently safe and clear. Leaving fresh dead and wounded to be extricated from the ruins of the building. Ren started up the road, calling for men to follow him to the gates of Magda.

Had he given the matter more thought Ren might have been less brave. As he strode ahead he realized that even in the dim flarelight his merchant's costume must have made him conspicuous among the armsmen and rendered him an easy target for a trained sniper. A sharpshooter with a modern electron-optic rifle hidden in one of Magda's towers could have killed him at any moment. From his experience with the

balloons Ren was reasonably certain that Dion did possess some of these weapons. He was forced to recognize that he was relying on the *Imaiz* voluntarily limiting his show of arms to those that would seem to be appropriate to the type of battle being offered.

Both he and Dion were playing a carefully game—a war game dressed to suit the character and background of Anharitte. But at what point would Dion's hand be forced so that he would be playing a game no longer? At some point before he was broken the Imaiz would be forced by the dictates of survival to drop the pretense and reply with whatever weapons he possessed, regardless of their origin or propriety. Or did Dion truly have his boulder and falling-wall technique so well organized that even now he had no fear of the army moving up the sloping street?

Halfway up the hill Ren heard a shout from the men above him. He called back, anxious to know what they had found. He was not long left doubting. With a hideous clatter a large wheeled cart, heavily laden with blocks of stone and held unnoticed in some recess, had begun to run down the slope toward him. The very narrowness of the street precluded the escape of all but the lucky as the juggernaut hurtled with ever increasing mo-

mentum toward the knot of anguished men.

On either side the sleeping houses left neither gaps nor alcoves nor open doors through which the men might escape. The width of the cart was nearly three quarters of the width of the road itself and, although it must leave some men unharmed, the trick would be to estimate precisely against which wall one should hug one's self and hope. At one point the cart snagged against brickwork and the iron bands of its hubs shot visible sparks into the air and threatened to divert the cart to a stop against the wall. But the vehicle broke free, ran across the road, ricochetted off the other side and centered again on its murderous course.

Ren took the only action open to him. Trying to judge the most probable path the vehicle would take, he pressed himself against a wall and prayed. His prayer was not answered. By an apparently willful deviation of its direction the thundering cart moved again across the road and soon was upon him.

Even before the flying wheels made contact Ren knew his injury was going to be savage. The weight and speed of the unattended juggernaut left no doubt of the outcome. When it hit him he was going to be crushed. The heavy axle caught his thigh, and he went partly

over the shaft and partly between it and the wall. The shock and pain of so grave an injury was mercifully foreshortened by unconsciousness—but he remembered thinking, as the fringes of darkness closed about him, that with those sort of injuries he would prefer not to live

Some unknown time later he partially awoke—enough to be conscious of bright flares around him and of an unnatural numbness. He could see Eynes, the surgeon from the spaceport, bending over him, instruments in hand. Somewhere behind the surgeon and barely in focus the red-on-gold emblems of the sick-wagon of the Society of Tails danced Pointed in flickering flames. He could hear Di Irons' voice, but could not see him. Ren tried to concentrate on what was being said.

"I'll not let them take him . . . there's not one society hospital in Anharitte has a chance of repairing that!"

Eynes cut in plaintively. "We'd need the operating theater facilities of a Stellar Cruiser to save him—and the nearest must be better than three weeks out."

There was another gap in time, then a slight return to consciousness as the whisper of a cushion-craft cut through the enveloping clouds of internal darkness. He caught a glimpse of Evnes' face by torchlight, a picture of worried indecision followed by a shrug and a gesture that meant capitulation. Firm hands gently rocked Ren-next he dimly recognized a pneumatic stretcher that lifted him without movement or dislocation. He experienced a disoriented passage through the air past the bright flames, a moment of unreal eternity he knew he would remember to his death. Then came darkness and a voice like Di Irons' was raging loudly and furiously about his encirclement by fools and villains.

Then nothing—a long, long nothing. He struggled from time to time to break through into consciousness and almost succeeded, only to be defeated by something circulating in his bloodstream. The only thing Ren felt with certainty was that he had not died.

#### XXIII

GRADUALLY he awoke fully. He was in a bed under sheets of clinical whiteness. Though he feared to explore his condition, the form beneath the fabrics assured him he had not lost his legs. The room was a curved white cocoon, more aseptic and more expensively appointed than any hospital room of his experience. The bulk of

smooth equipment at his bedside told of the continuous monitoring of his condition by medical computers.

A door opened and a tall Ahhn nurse began deftly to remove the electrodes taped to his wrists and chest and forehead.

"Welcome back to the land of the living, Agent Ren. How are you feeling?"

In an agony of apprehension Ren began to explore himself. A wave of immense relief brought an incredulous smile to his lips.

"I—I'm still complete?" It was a statement as much as a question.

She looked at him sagely. "You've lost a bit of weight, but you'll soon get that back with exercise. You can start getting out of bed today."

"You mean I'm healed?" Ren's voice ran high.

By way of answer she whipped the sheeting from the bed and left him naked to judge for himself. Deep and unfamiliar scars showed just how extensive had been the surgery, yet the flesh was already whole and firm and without unfamiliar sensation except for a slight tingle at the scar-tissue sites.

"You were lucky," she said. "No great internal complications. Your hip bone's partly plastics now, but I doubt if you'd ever have known it if you'd not been told."

"But—how long have I been here?"

"A little over a month." She was amused at his consternation. "You've been kept in mediconsuspension. The healing rate is increased by not having the body constantly in conflict with the psyche. And with a rest from life of that duration, you'll be amazed at how simple your problems have become."

Ren had heard of the technique of medicon-suspension. puter-aided instrumentation would have taken over control of his subconscious body processes, and his brain would have been allowed With the computerto rest enhanced control of his body, a surgeon could promote healing and regrowth at rates otherwise not possible. His body, too, would not have suffered atrophy due to prolonged disuse. The method came from the forefront of medical research on the prime worlds-even there it was available only to the very few-who could afford it.

Ren felt good. For the first time in his life he felt completely rested and able to encounter whatever might come with a rational and unclouded approach. As the nurse had said, it was amazing how simple his problems had become. He felt as if he were born anew.

"Where am I?" he asked. He

knew the answer but wanted confirmation.

"In Magda, of course." The nurse had a way of speaking which reminded him of Zinder.

He watched her carefully. She was an example of pure Ahhn stock, yet fully reconciled to the levels of an outworld technology. The result was impressive. Added to her native attributes were a confidence and a competence which foreshadowed a proud and sane mastery of the future. Ren caught her arm lightly as she reached to disconnect equipment and turned her wrist towards him to see the Madga slave-mark indelibly written in her fine skin. But a greater truth was also written there. Diondaizan's wizardry was a far more potent force than magic.

Now he thought about it, his repair and skilled recovery could only have been due to the resources of the man he had set out that night to attack. On all Roget only Diondaizan could conceivably have installed such a facility. The notion made Ren feel slightly sick with himself. Love thine enemy was an old creed to which Ren had not strongly subscribed. Nurse thine enemy back to health with dexterous and expensive skills was a modern extension of the idea and one that made Ren, the recipient, feel very humble indeed.

Dion could have left the gates of Magda closed and left his enemy to die on the cold cobblestones of Thirdhill. No one would have thought worse of the Imaiz for it. Yet some humanitarian instinct must have prompted Dion to take Ren in and give him a degree of attention unobtainable medical elsewhere in this sector of the galaxy. By this action Dion had revealed his true stature.

Thanks to the effectiveness of his subconscious rehabilitation. Ren felt very little discomfort when he first attempted to get out of the bed. He found his balance lacking, but was able to stand and walk much difficulty. without sidering the extent of the injuries which had brought him down. he knew he had been incredibly lucky.

The Ahhn nurse was patient but firm. After a couple of hours of tests and exercises she declared herself satisfied with his recovery.

"You may dress in your own clothes now, Agent Ren. Later Dion-daizan wants to see you."

"I wish to see him, too," said Ren. "I owe him a great deal. But for being admitted here, I should probably have died."

She did not the contest statement, but busied herself in an anteroom dismantling and cleaning the equipment.

## **66** T TAKE it my attack ▲ Magda was a failure?"

"Failure!" Her amusement carried even though he could not see her. "You never stood a chance. We had a ring of anti-personnel mines out there that could have destroyed every man you had. And we've everything here from laser rifles to high-velocity flame throwers. But you had organized a peasants' attack, so Dion followed suit. A few things rolled down a hill were all that was necessary to contain you. Take my advice, Agent Ren, and stick to trade. It'll be a long time before there's a force on Roget able to better Dion in a fight of any kind."

Ren dressed, walked to the window and found himself looking from a position high on Magda's edge. The view straight down the valley divided Firsthill from Secondhill. Small ships were passing through the shipping lanes to and from the great Aprillo river. From this point of vantage Ren's traders eye could appreciate the vast potential of Anharitte as a landport and as a gatrading center. lactic In his imagination he rebuilt the already insufficient dock basin and planned a city more modern but just as picturesque and even more colorful on Firsthill.

Almost without knowing it he

had begun to identify himself with Anharitte and its inhabitants. Local idiosyncrasies were becoming a secret source of pride to him. It was the one place in the universe he wanted to think of as home. He wondered if Dion-daizan had looked from a similar window and reached a similar respect for this city built on the three hills.

Ren's resolution was simple now. He was too much in sympathy with Dion's objectives to oppose the wizard further. He was determined to resign from the company and remain in Anharitte. This need not affect his future too much. There were freelance trading prospects on Roget whose potential had scarcely been touched. And if these failed he might even seek employment with Dion himself.

His only fear was that the *Imaiz* might not feel disposed to give him the opportunity to remain. Obviously, from the medical care which had been lavished on him, Dion was not going to exercise his rights over the vanquished and have him executed. But Ren realized he had been a considerable nuisance to the *Imaiz* and he doubted that Dion would suffer him to remain on the planet.

"Agent Ren, the Imaiz will see you now."

The nurse had returned and was waiting to escort him. Somehow the

slave mark on her wrist no longer seemed incongruous. He saw it now more as a symbol of application and dedication. Dedication to what? The future, perhaps. But training her to such a pitch was no ordinary achievement. It was a measure of Dion's genius. Nobody had ever acquired skills like hers under the coercion of a whip.

He followed her, hoping to get a glimpse of more of Magda's secrets. He was not disappointed. In the corridor he passed the doors of two more hospital rooms and what appeared to be a biomedical laboratory, all staffed with Ahhn nurses and technicians. The end of the corridor brought him back into what was recognizable part of the old castle. The sudden transition from the aseptically clinical to the dark medieval was only a foretaste of the metamorphoses to come.

DION'S hospital had been established high in one of the great flanking towers of Magda. Ren descended some stairs and each level he came to presented to him a tantalizing glimpse of some different technological microcosm. He could hear machine rooms and catch occasional snatches of electronic noise or the smell of chemicals, perhaps from a laboratory. The complexity of pipes and power cables accommodated in the

stair well emphasized just how certainly he had underestimated Dion's potential. Ren was seeing a technical and industrial complex built in miniature, but having a manufacturing scope probably unequaled outside of one of the prime worlds.

As he passed along the lower corridors a suspicion grew in Ren's mind. His guide was surely giving him a brief tour of selected parts of the establishment. He surmised that its purpose was to provide him with a more realistic idea of what he would be facing should he again take up arms against the House of Magda—it was also a possible prelude to his pending interview with Dion himself

Ren took the lesson to heart and found a logical extension. These handpicked and educated slaves of Magda were the new heirs to Anharitte.

They would be the spearhead of a cultural revolution so formidable that the slave system, the societies—and even Di Irons and the City Fathers—were already anachronisms. The marvelous thing about the whole affair was the care that had been taken not to let the old institutions know that they were already dead.

The real question at issue was: how bloody would Dion-daizan allow his revolution to become? Knowledge was power, and Dion seemed to be a specialist in imparting knowledge. Was he also a specialist in controlling this new force he had created? At the moment he was working with a close-knit team and his control of the situation was absolute. But when a wider dissemination of the knowledge came about, as inevitably it must, was Dion big enough still to hold the reins of power?

If he were not, then what would be the cost in terms of loss of life and damage to the essential character of Anharitte?

Magda was built with an outer ward and an inner one containing the great keep. The keep was lower but considerably more massive than the towers of any of the other castles on the three hills. As he crossed the inner ward Ren was interested to note many signs of burning and explosion—these must have been the result of his own recent activities. In a way he was gratified to find that his excursion into improvised weaponry had had such a powerful result. He has obviously stood no chance against Dion-daizan, but had he attacked Di Guaard, for instance, he would probably have won. The notion amused him and he immediately began to feel better about the coming interview.

On the ground floor of the keep he passed through a communications center. In it was a powerful FTL communicator, many times the size of the limited spaceport equipment. The FTL set was probably capable of making direct contact with Terra itself. Suddenly it was no mystery to Ren as to what had happened to the Rance ships. Direct intervention by the forces of the Galactic Federation had stopped them in midflight. Doubtless here was the instrument that had broadcast the alarm.

This consideration placed the galactic standing of the Imaiz in a light. Only prime world governments could afford to build FTL communications equipment and these units were leased only to those—like space transportation companies—who had good claim to on-line communication links across the distances of space. Dion's acquisition of such an instrument as this suggested the involvement of outworld planetary governments in the affairs of Magda. Rather than being an adventurer, there was a strong implication that Diondaizan was an agent for the Galactic Federation itself.

Ren's previous misjudgment of the situation had been so absolute that he was now incapable of being surprised further. Catuul's attempts to disrupt the *Imaiz's* estates were made pathetic by radio-telephone links extending widely over provincial Magda. On-line data links coupled to a powerful computer registered and monitored every aspect of the estates' growing and marketing activities. Even the farm-stock prices in the capital city of Gaillen were automatically updated every second.

Dion's knowledge of the overall picture of Roget's outspace commerce was also something that would have made Ren scream in his sleep had he known of it previously. All transactions made through the communications spaceport minal received an immediate printout in Magda. There still existed an on-line access to all the information contained in spaceport data banks. A further display of commercial and technological prowess was a broad screen for viewing ship movements on Firstwater—the image of every vessel moved across the screen, accompanied by computer-generated comment on the origin, destination, value and nature of its cargo.

DION-DAIZAN'S chambers were high up in the keep. Ren knocked and was bidden to enter. The chamber into which he came was large and nearly circular, occupying almost the whole area of the level of the keep. The walls

from ceiling to floor were lined with books and broken only by narrow windows. Furnishings were sparse and consisted mainly of low wooden stools and the broad desk at which sat the wizard of Anharitte.

"Come in, Agent Ren—be seated. They tell me your recovery is going well."

"Miraculous is the word," said Ren. "I can't thank you enough. But for you and whoever did the surgery I would certainly have died."

"The surgeon, yes—" Dion's eyes twinkled with humor. "He's aged twenty-two and is a native of Anharitte. I bought him as a lad for four barrs. His price was cheap because he wasn't strong enough to carry wood. Still I think it was I who gained the bargain."

"You don't need to spell it out," said Ren, "I was convinced of the effectiveness of your policy the first day I saw Zinder in the market."

"Yet you continued to oppose me?"

"I did. The liberalization of Anharitte appeared inconsistent with the principles of Freetrade. As an agent of the Company I was committed to uphold the Freetrade principle."

Dion-daizan sat back in his chair and interleaved his fingers. Clad in a simple white gown, he might have been the high-priest of a halfhundred religions. But the quiet certainty in his eyes belonged to no fanatic.

"You're a man both of perception and principle," said Dion.
"I like that." He leaned over to a communicator on the desk. "Ask Director Vestevaal to join us."

"The director is here?"

"Certainly he's here. He and I have been working while you've been sleeping these several weeks. We've been hammering out a formula to solve our mutual problems."

Magno Vestevaal was in fine form. He greeted Ren jubilantly, inquired about his injuries, then turned back to Dion-daizan.

"Well, Dion, what do you think of him?"

"Much as before," said Dion.

"After all, our dossier on him was pretty complete from the moment he was assigned to Roget. The only thing we missed was his profound talent for destruction. Since his coming Anharitte has never been quite the same."

"What's going on?" demanded Ren, looking from the director to the *Imaiz* and back again.

The director eased himself onto a corner of the *Imaiz's* desk and turned to Ren confidentially.

"It was the ancient problem, Tito. The irresistible force versus the immovable object: Dion's irresistible climate of social change versus our intractable need for a freeport in this sector of the galaxy."

"I'm familiar with the problem," said Ren guardedly. "But it doesn't have a solution."

"It does, Tito—and I've found it. A stroke of commercial genius even if I say it myself. I'd like you to meet a new director of the company—Dion-daizan."

"A director?"

"Dion's now a major shareholder in the company and he has been appointed director of sector operations. Don't you see the beauty of it. What he does with his social revolution is no longer our concern. Dion himself is now committed to the principle of maintaining freetrade in Anharitte."

Ren felt suddenly bitter. "I can see where the company stands to gain, but I never thought Dion would sell out the Ahhn for money—" He turned to the Imaiz accusingly.

"Peace, Tito!" Dion-daizan held up a cautioning hand. "Your emotions do you credit, but there's been no sell-out. Freedom and Freetrade are merely different aspects of the same idea of liberty. To assume that they're opposed is a political artifice. It's a fallacy adopted by inept governments to secure an income to which they have no moral title. I always intended the freetrade principle to apply to Anharitte. As I recall, it was you who invented the schism."

"I?"

"And think—if I had been genuinely opposed to freetrade do you suppose I would not have removed you as expeditiously as I dispatched the Butcher of Turais?"

"So you think you can integrate the two?" asked Ren. Here were new possibilities for his mind to explore. "On many levels I can see how it would work—but there could be a few fundamental obstacles. For a start I don't see where the societies would fit into the pattern."

"The societies will have to adapt—but then, they're very good at adaptation. They already provide a nucleus of social services, which happily can be expanded. And insurance is an untapped field on Roget. I could almost envy the societies their future." Dion's air of authority was pervasive. He spoke as if the future were under his control.

"Who are you?" asked Ren suddenly.

Dion-daizan grinned broadly. "The wizard of Anharitte, of course."

"He's pulling your leg," said Vestevaal. "He's a Terran sociological engineer provided by the Galactic Federation at the request of the planetary government of Roget. His job is to nurse an essentially feudal society through five hundred years of technological backlog—without its blowing apart or losing its identity."

Ren considered this in silence for a long time, then: "When did you find this out, Director?"

"Unfortunately not till I'd returned from Terra with the Imaiz's contract already signed in my pocket. Dion actually let me conclude the deal before he admitted that what I was buying would have been given freely anyway. In short, he's an even bigger rogue than I. It's a good thing he's now on our side. We didn't do so well with him in opposition."

"And where does this place me?" asked Ren finally. "With Dion in this theater, the company scarcely needs an agent here."

"My thoughts entirely," said Vestevaal. "In fact I welcomed the chance to take you to Freetrade Central. I wanted to initiate you into the intrigues necessary to maintain a seat on the council. However, Dion has another proposition. He wants you to remain in Anharitte as his personal assistant."

"On company affairs?"

"Only partially. He also wants

you to assist with his program of technical and social reforms. It seems the reputation you have built as Agent Ren, coupled with your deep understanding of the Ahhn, gives you the unique ability to serve as a bridge between the two cultures. Both sides know and trust you—and that's a valuable asset indeed. Take a day or two to think it over."

"I don't need a day or two," said Ren. "I had already decided to stay in Anharitte. If Dion will have me, I'm his man. I'm sorry about your plans for me, Director—but I think you understand how I feel."

"No apology necessary, Tito. A few years younger and faced with the same choice, I might even have made the same decision. Anharitte is a place that grows on you. But as it is, I've chosen to take something of Anharitte with me instead."

"Something?"

"I should say say 'someone.' It's a sign of the changing times. Dion's manumission bill is going through and he's releasing Zinder from her bond. She and I are to be married on Terra. Then she'll work with me at Freetrade Central. What do you think of that?"

"With a combination of the two of you manipulating the Freetrade Council," said Ren, "I don't think even the merchant worlds will stand a chance."

between science fiction and fantasy (both, I feel, are sf) and also says that the impossible is not acceptable. I wonder what the criteria are for judging what is impossible. A definition that states that science fiction is concerned with the impossible seems to rule out many types of story: the various "doomsday syndrome" stories such as Stand on Zanzibar-who ever heard of man's trying to survive on an Earth that had standing room only? Taking the A's in my sf index: Aldiss' Randy's Syndrome— is that conceivably possible? More to the point, can we possibly consider that Asimov's Nightfall could exist in our physical universe?

If you do think so read Asimov's essay on the planet of the double sun in Fact and Fancy (Doubleday). Taking the Alpha Centauri binary as his example he says that Sun B would revolve about Sun A two billion miles out (roughly the orbit of Uranus) and seeing that Alpha Centauri B is 430,000 miles in diameter it should have the apparent diameter of Jupiter as seen from Earth. True. Sun B would be 150 times as bright as the full moon, but this is still 1/3000th as bright as Sun A. Now. Nightfall presupposes a world of six suns, each of which is a disk (the smallest. Beta, is said to be chipped on one side). Obviously the suns must be crowded into an area of space less than two billion miles in radius. This environment certainly doesn't strike me as "rational."

The question of what is possible brings up a pet theory of mine. It goes:

1) The universe is infinite in extension in both time and space.

2) In an infinite universe everything is possible, given natural laws, but who knows the sum total of natural laws?

3) Therefore everything must happen.

I find myself having to face certain problems. If everything must happen—what is fiction? And if God is allowed for by the totality of natural laws He cannot exist on at least one fragment of the universe, but must exist on another.

Cy Chauvin speculated on the purpose of sf. I think the most generally accepted message in the genre is predictive, while del Rey sees it as presenting alternatives. There is a difference, obviously. I believe Chauvin finally said that the medium has no overall purpose beyond the presentation of thought-provoking ideas and good tales. I must agree with that, for it embraces both the predictive functions and the expression of alternatives of the genre.

For me sf is an omnibus genre—it includes science fiction, science fantasy, speculative fiction, speculative fantabulation, swordandsorcery (one word) and so on. Until someone comes up with a term that covers all our genre I will differentiate by keeping sf strictly different in meaning from Science Fiction per se.

Deryk Ashby Victoria 3199 Australia

Dear Mr. Jakobsson:

Here is a copy of my letter to Mrs. Weiss in reply to her query in If, October '72.

"... I read your letter in the October issue of If. The story you inquired

about is by Fred Saberhagen and is called The Long Way Home. It apneared in Galaxy, Number 86. Volume 19. #5. June '61, published by Galaxy Publishing Corporation.

"Your account is inaccurate in one respect—the people are not left undisturbed at the end.

"You may be interested to know that Poul Anderson also wrote a story (quite different) with this title, published in Astounding as a serial in 1955 (British edition).

"I hope you are successful in obtaining a copy of the story. . .

I hope this information is also of use to your other readers. Keep up the good work!

Steve Smith Essex, England

Dear Mr. Jakobsson:

With the current trend of weird, farout science fiction stories it's a rare jov to read a good old-fashioned space adventure such as Gods on Olympus, by Stephen Tall (If Oct. '72). His detailed buildup of characters and ship with the appropriate name of Stardust makes me wonder if he might be planning more adventures for the crew and ship.

Currently the only ones who still consistently write good sf adventures are A. Bertram Chandler and John Rackham

> Chuck Burdett Palmdale, California

Stephen Tall is working on a new Stardust novelette—you should be seeing it shortly. The Stardust series has been running consistently in both Galaxy and If.

Dear Mr. Jakobsson:

I am very pleased with January '73 Galaxy. This is the second issue I've read after an absence from the field of about three years. I remember Galaxy as the aristocrat of science fiction magazines—it still is.

If, however, has changed. The stories in the December issue were excellentthere wasn't one I didn't enjoy. However, your feature department is small and I miss a good editorial—also the If Firsts that used to be marked plainly and be accompanied by a brief biography of the author.

> Nichola Grimshawe Ontario, Canada

Teratohippus, by Robert L. Davis, one of the excellent stories you enjoyed in the December issue, was an If First. It has enjoyed top reader comment. Both If and Galaxy are as active as ever in launching new authors—and we do mean to launch them. It's sometimes a disservice both to the author and the magazine to label a story a "first."

We currently have something better under discussion for writers who select us to publish their best first work—you may expect an announcement shortly.

- JAKOBSSON

#### Subscribers Please Note

If you change your address, please mail notification to:

L. C. Murphy, Manager If Fulfillment Dept. 120 Secatoque Avenue Farmingdale, N.Y. 11735

Allow 6 to 8 weeks for your notification to take effect.



# GALAXY/IF S-F MART

235 East 45 Street New York, N.Y. 10017



50e per word (including name and address). 10-word minimum. Payment with order.

#### **BOOKS AND MAGAZINES**

WANTED: Scientifiction, fantasy, weird books, pulp magazines. Arkham House, Fantasy Press, Lovecraft. GERRY DE LA REE, Cedarwood, Saddle River, N.J. 07458.

ADULT S-F FAN MAGAZINE. Praised by top s-f authors. Shocking fiction, uncensored opinions, outrageous reviews. \$1. per issue. RICHARD GEIS, POB 11408. Portland, OR 97211.

SPECIALISTS: Science Fiction. Fantasy. Weird Fiction Books—Pocketbooks. Lists Issued. STEPHEN'S BOOK SERVICE, P.O. Box 321, Kings Park, L.I., N.Y. 11754.

FREE copy SIGNS Magazine. BAGBY, Box 1303, Longview, Washington 98632.

FREE CATALOGS SF/FANTASY—100's of titles listed from Rarities to Reading Copies. MIDLAND BOOK SERVICE, 22 S. Fullerton Ave., Montclair, N.J. 07042.

TAKE A STRANGE ADVENTURE into your mind. The book Dianetics: Modern Science of Mental Health by L. Ron Hubbard has an applied philosophy to show you how. Send \$5.00 to Bookstore-IF, Founding Church of Scientology, 1812 19th St., N.W., Washington, D.C. 20009.

AUSTRALIA'S LEADING SF AND FANTASY SPE-CIALIST Write for catalogues now. SPACE AGE BOOKS, 317 Swanston Street, Melbourne, Victoria, 3000 Australia.

LOGIC NEWSLETTER Logic Design and Construction, Sample copy \$1.00. LOGIC NEWSLETTER POB 252 Waldwick, New Jersey 07463.

ALGOL: MAGAZINE ABOUT SCIENCE FICTION. Current issue features Silverberg, Pohl. Bradbury, White, Lupoff, others. Four issues \$3.00. From: ANDREW-PORTER, POB 4175, NY 10017.

#### **EDUCATION**

EARN COLLEGE DEGREES at home. Many subjects. Florida State Christian College. Post Office Box 1674. Fort Lauderdale, Florida 33302.

COLLEGE SELECTION MADE EASY. Computer matches your needs, qualifications with entrance criteria of accredited colleges. Free information. NCAS-G, Box 91453, Cleveland, Ohio 44101.

#### **MISCELLANEOUS**

SLEEP-LEARNING—HYPNOTISM! Strange catalog free. Autosuggestion, Box 24-GY. Olympia, Washington 98501.

FORGED from the FUSION of Science, Religion and Philosophy: THE ORACLE Free information, P.O. Box 491, Stanwood, Washington 98292.

FREE FASCINATING HYPNOSIS Information! Startling! DLMS, Box 135, Anaheim, California 92805.

#### **RECORDS AND TAPES**

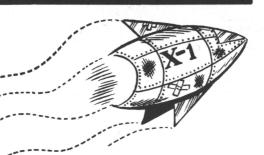
"X MINUS ONE" and other outstanding Science Fiction radio programs are now available on tape. 7" reels or cassettes. Send 50¢ for catalog. REMEMBER RADIO, INC. Box 2513, Dept. NYA, Norman. Oklahoma 73069.

#### **MAIL ORDER ACTION**

LOW COST, HIGH RESPONSE Advertising now available in HOME OWNER'S MARKET, the classified section of Family HANDYMAN. High-income, active audience of 2,000,000 reeders. Broad range of classifications. Regular and Display. Order now for fast results. Ruth Conklin. 235 E. 45, New York, N.Y. 10017. (212) MU 3-3000.

# X MINUS 1 RETURNS!





For more than a decade, X Minus 1 ranked among the most popular shows ever to hit the air-waves. Starting soon, many radio stations will once again be featuring this famed drama series adapted from stories appearing either in GALAXY or its sister magazines.

Broadcasting will be resumed with new dramatizations of new *GALAXY* stories by the foremost names in science fiction. *X Minus 1* will thrill you, reward you, more than ever. So watch for it. Listen to it. Enjoy it!

For further information, contact your local station or write to:

RENAISSANCE RADIO NETWORK Box 377 Seymour, Conn. 06483

# READ IT SLOWLY.

You'll want to. It's that good...it's THE HUGO WIN-NERS: 23 speculative fiction stories that have won the science fiction equivalent of the Oscar-presented every year at The World Science Fiction Convention. But you needn't trust the judges... judge for yourself. Form your own opinions about Arthur C. Clarke's superb story, "The Star," and Jack Vance's devastating classic, "The Dragon Masters," and Poul Anderson's award-winner, "No Truce With Kings;" plus 20 more. They span more than a decade of writers...and present light-years of imagination for your mind to play with. So go ahead...play.

This fabulous 864-page anthology of speculative fiction sells for \$15.45 in the original publisher's edition. It's yours, if you wish, as one of 4 books for just 10¢ (to help cover shipping) when you join the Science Fiction Book Club

As a member you'll be offered other equally exciting books-to build your own award-winning science fiction library—at a fraction of the regular bookstore cost.

#### Here's how the Club works:

You'll receive the club's colorful bulletin which will keep you informed of superb new works. Though these hard-cover books may sell for as much as \$4.95 and up, you pay only the special low price of \$1.49 plus shipping and handling. (Occasional extra-value selections are slightly more.) So join the Science Fiction Book Club now. We'll start you off with 4 books for just 10¢.

#### Send no money.

But do send the coupon today.

Take any 4 for only 10¢ including THE HUGO WINNERS, if you wish—with trial membership.



## Science fiction

#### SCIENCE FICTION BOOK CLUB

Dept. CL-268 Garden City, N.Y. 11530

Pelase accept my application for membership in the Science Fiction Book Club and send me the 4 books whose numbers 1, have written in the boxes below. Bill me just 104 (to help have written in the boxes below. Bill me just 104 (to help club's bulletin, "Things to Come", describing the 2 coming Selections and a variety of Alternate choices. If I wish to receive both Selections, I need do nothing; they will be shipped to me automatically. Whenever I don't want of the 2 Selections or prefer an Alternate, or no book at all, I will notify you by the ddd specified by returning the convenient form ways provided

always provided.

I need take only 4 Selections or Alternates during the coming year, and may resign any time thereafter. Most books are only \$1.49, plus a modest charge for shipping and handling. Occasionally, extra-value Selections are slightly higher. NO-RISK GURAKATEE: If not delighted, I may return the entire introductory package within 10 days. Membership will be cancelled. I owe nothing.

	1 2 4 3 6	4 / 1
Mr. Mrs.——— Miss		
Miss Address	Please Print	4 1/2
City		
State	Zip	

## **ANY 4 SCIENCE FICTION BEST SELLERS FOR JUST** with trial membership

6270. Dune by Frank Herbert, Celebrated winner of Hugo and Nebula. Gripping tale of family exiled from their private planet to another, a barren desert. Pub. ed. \$5.95

8037. Again, Dangerous Visions, Harlan Ellison, ed. Forty-six pieces, short stories & novels. Explicit scenes and language may be offensive to some. Pub. ed. \$12.95

1321. The 1972 Annual World's Best Science Fiction, ed. by Donald A. Wollheim Volume IV contains 14 gems from Clarke, Sturgeon, and more

6221. The Foundation Trilogy by Isaac Asimov. The ends of the galaxy revert to barbarism, Pub. ed. \$10.50

6023. The Gods Themselves by Isaac Asimov. The master's first novel in 15 years and worth the wait for a fabulous trip to the year 3000. Pub. ed. \$5.95

2790. Science Fiction Hall of Fame I. 26 winners," chosen by Sci-Fi Writers of America. Ed. Robert Silverberg. Pub. ed.

> 6353. The Ice People by René Barjavel. Great French bestseller, prize winning novel of discovery of prehistoric man and woman, who come to life! Pub. ed. \$5.95

6742. The Early Asimov by Isaac Asimov. 27 previously uncollected early stories by the most famous name in science fiction. Pub. ed. \$10.00

8532. The Hugo Winners, Vol. Giant 2-in-1 volume of 23 award-winning stories. 1955 to 1970. Asimov introduces each. Pub. ed. \$15.45

6171. The Dancer From Atlantis by Poul Anderson. Four people from different ages and cultures are catapulted by a time machine back to 1400 B.C. Fascinating mixture of history, myth and imagination Spec. Ed.

6205. Childhood's End by Arthur C. Clarke, Mankind's last generation on earth. Wildly fantastic! Atlantic, Pub. ed.

6007. A Treasury of Great Science Fiction. ed. by Anthony Boucher. 2 Volume set. 1,000 pages. Counts as one book Pub. ed. \$5.95

The Science Fiction Book Club offers its own complete, hardbound editions, sometimes altered in size to fit special presses and save members even more. Members accepted in U.S.A. and Canada only. Canadian members will be serviced from Toronto. Offer slightly different in Canada.