

WORLDS OF

JANUARY 1968

SCIENCE FICTION

combined with

60c

WORLDS OF
TOMORROW



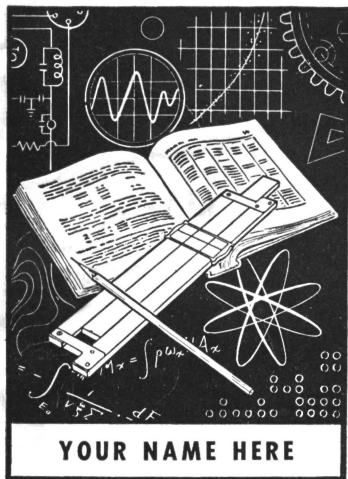
HE THAT MOVES
by
ROGER ZELAZNY

STARSONG
by
FRED SABERHAGEN

THE WORLD'S LEADING SCIENCE FICTION MAGAZINE IF
Wins the "HUGO" for Excellence Second Straight Year



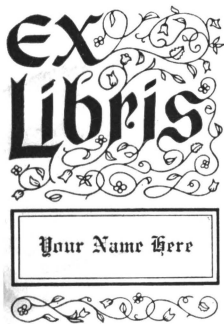
The **BEMs** in your neighborhood
 won't run off with your books
 if you put inside the front cover
 of each book... a gummed bookplate
 with your name printed on it!



No. GF-614 by Emsh



No. GF-612 by Emsh



No. GM-12 by Cullen Rapp



No. GX-57 by Lynd Ward

FINAGLE SAYS —

The umpteenth corollary
 of Finagle's General Law of
 Dynamic Negatives says:

**"No books are ever lost
 by loaning except ones you
 particularly want to keep."**

100 for \$5; 200, \$7.50; 300, \$10
 with owner's name imprinted

All Postpaid. Add state sales tax, if any.

ACTUAL SIZE, all designs, 3x4 inches

The designs shown above are the only ones we offer!

Order from Galaxy

421 Hudson Street, New York 14, N. Y.



**SCIENCE
FICTION**

**ALL NEW
STORIES**

*Frederik Pohl, Editor
Judy-Lynn Benjamin, Associate Editor*

*Robert M. Guinn, Publisher
Mavis Fisher, Circulation Director*

NOVELETTES

THE PEACEMAKERS	6
by John Rankine	
THE TASTE OF MONEY	50
by R. V. Humphrey	
ROGUE'S GAMBIT	76
by Phyllis Gotlieb	

SERIAL

ALL JUDGMENT FLED	115
by James White	

SHORT STORIES

FROM DISTANT EARTH	40
by Basil Wells	
STARSONG	100
by Fred Saberhagen	
HE THAT MOVES	153
by Roger Zelazny	

SCIENCE ARTICLE

INTERSTELLAR TRAVEL AND ETERNAL LIFE	109
by R. C. W. Ettinger	

FEATURES

EDITORIAL	4
by Frederik Pohl	
FOREIGN FANDOM	71
by Lin Carter	
HUE AND CRY	160

Cover by PEDERSON from HE THAT MOVES

IF published monthly by Galaxy Publishing Corporation. Robert M. Guinn, President, Vol. 18, No. 1. Main Office: 421 Hudson Streets, New York, 10014. 60c per copy. Subscription 12 issues \$6.00 in the United States, Canada, Mexico, South America and Central America and U.S. Possessions, elsewhere \$7.00. Second-class postage paid at New York, New York, and at additional mailing offices. Copyright by Galaxy Publishing Corporation, 1967. All rights, including translation reserved. All material must be accompanied by self-addressed stamped envelope. The Publisher assumes no responsibility for unsolicited material. All stories are fiction, and any similarity between characters and actual persons is coincidental.

Printed in the U.S.A. by the Guinn Company, New York, N.Y. 10014

ON DOING BETTER

Each year at the World Science Fiction Convention an award is given for excellence in the various fields of science fiction. The awards are called "Hugos", after the late Hugo Gernsback, who started the whole thing in 1926; and the most recent batch were handed out at the New York convention, Labor Day weekend.

For the second straight year, the "best magazine" Hugo went to *If*. We're pleased about it, of course. We were even more pleased to note that all the awards in our categories came from either *If* or *Galaxy* — best novel was Robert A. Heinlein's *The Moon Is a Harsh Mistress (If)*, best novelette Jack Vance's *The Last Castle (Galaxy)*, best short story Larry Niven's *Neutron Star (If)* . . . while the award for best professional artist went to our longtime regular contributor, who is also Art Editor of our new companion magazine, *International Science Fiction*, Jack Gaughan.

There is something pretty soul-satisfying about making a clean sweep, and we would be lacking in candor if we denied a considerable feeling of pride. But the same candor makes us want to try to take an objective look at just how good a "best" science-fiction magazine is . . . and to try to think of ways to make it better.

To begin with, science-fiction magazines appeal, after all, to only a relatively small percentage of the population — well under one per cent — and, in an age of mass-

production giantism, that places us all under a heavy handicap before we leave the post. A science-fiction magazine may put out 100,000 copies of each issue on the newsstands — but there are upwards of 400,000 newsdealers in the United States alone; if we put out only one copy on each stand, we would be unable to cover as much as 25% of the outlets. In practice, even that is impossible because it's not economically feasible to put a single copy in a newsstand; and we wind up with, at best, perhaps one newsdealer in ten carrying a few copies of *Galaxy* or *If*. So getting the magazines out where it's possible for you to find them is a complex game, made more difficult by the fact that we don't always buy in the same place. A handy way around this trouble would be to sell the magazines by subscription. We're always glad to do that, of course; but with a mobile population, a lot of people hesitate to try to predict where they'll be six months or a year in the future. And our subscription prices are relatively high: the major slick magazines will spend \$5 to wheedle you out \$2.99 for a subscription, which they can manage because they are subsidized by advertisers. We can't.

The point of this is that science-fiction magazines are relatively small potatoes in the publishing patch, and it seems they are likely to stay that way. Which, in turn, means that we can't compete in payments to authors and so on with the larger media.

And yet we do! Funnily enough, writers who are perfectly capable of earning five or ten times the word-rate they can get from a science-fiction magazine will nevertheless spurn the offers of the big slicks to produce work for us.

Anybody capable of making a living out of writing science-fiction is, invariably, capable of making at least twice as much by writing something else. Dozens of top science-fiction writers have proved this, performing brilliantly and lucratively in TV and screen writing, in selling to the large-circulation slicks, in the writing of advertising copy, publicity, all the blue-chip areas of literary craftsmanship.

Yet we still keep our writers, and the question is, why do they stay with us? Not for the money; not for the prestige.

As a matter of fact, *you* are the reason science-fiction writers will take time out from fat assignments to produce a story for *If* or *Galaxy*. What we have that no other media can offer is an audience composed exclusively of people like you. In terms of I.Q., in terms of alertness and knowledgability, in terms of general high quality of readership, science-fiction readers are the class of the publishing field. And that's what writing is all about: communication with people who can understand what the writer is saying.

So what we try to do is keep the interest of people like you, because that's how we can keep the good writers who have developed in the science-fiction field and will stay with it just exactly as long as you do.

Over the next few months we

hope to add a few new features to *If* — because we think you'll enjoy them. One thing we're sure of — if you don't, you'll let us know. We wouldn't have it any other way . . .

And, of course, we'll continue to do the best we can to find and print for you the top science fiction available, by the best writers, old and new, in the field. Have you been noticing, by the way, how many new writers we're finding these days? The reason is simple: we've been actively looking for them. For five years now we've had at least one "first" story in each issue of *If*. We started the program with a certain amount of apprehension; we weren't a bit sure that we could keep it up for more than a couple of months. But several dozen stories later, we're pleased to report that the supply of "first" stories is healthier now than ever, and even more pleasant is the discovery that a lot of the new writers we've attracted have stayed with the field. Our first of all firsts was Joseph Green, now the author of a fair number of magazine stories and novels. Larry Niven was a first three years ago; now he's got a Hugo of his own. And we expect much the same for half a dozen others we can think of off-hand . . .

And that's another thing *you* — the collective "you" that reads *If* and *Galaxy* and the other science-fiction magazines: You not only read and understand science fiction, a number of you go on to write it. In fact, there's hardly a science-fiction writer who didn't begin as a reader —

Doesn't that suggest anything to *you*?

— Frederik Pohl

THE PEACEMAKERS

by JOHN RANKINE

Illustrated by FINLAY

*Easy job! All they had to do was
invade a planet, steal its secrets,
destroy its power — without a war!*

I

Communications One asked for a repeat; and the tone of his voice, even filtered through the intercom, was unmistakably critical.

Its harmonic of doubt was echoed in every head on the net; but there was no other spoken comment when Fletcher's coldly clear repetition came back.

There was every reason for doubt. *Petrel*, after a major refit, was homing in deep space on the squadron to which she had been assigned. The distant ships were coming up in the zoom lens of the main scanner.

Five craft: silver beads on a black velvet display pad. *Europa* in the center, a capital ship, a major unit in the Inter-Galactic Organization's peace-keeping force. Outriding in a

protective screen, four pencil-slim corvettes, like *Petrel* herself, seemingly motionless as they kept station with the cruiser.

Joining the squadron and taking her designated place was a complex maneuver for *Petrel*. All hands were at action stations, sealed up and buckled into deep-foam acceleration couches. The course changes involved would mount as much G as a primary blastoff from a planetary pad and would rate infinitely more subtle calculation.

Commander Dag Fletcher, swinging on his gymbal-mounted couch on the corvette's tiny command island, said again, "Hold fast on the auto chain. I'll take her in on manual."

He had been with *Petrel* for two weeks, having taken over as his first independent command after the long refit had been completed. Her crew had been together, except for three new men, through the action which had almost destroyed her and which had killed her captain. They were a powerful in-group and accepted the new top man with many reservations.

Fletcher knew it would be so and accepted the challenge. No body of men which had endured what they had been through could avoid the group feeling which had emerged from it. They would have liked to see one of their own number put up to the command slot. Sam Cotgrave, in fact, who was swinging next to Fletcher in the co-pilot seat on the command island. That was natural enough. He would have felt that way himself. But he recognized the basic wisdom of the I.G.O. staff in bringing in someone from outside.

Command was, after all, not a friendly game. He was likely to have to make decisions which would balance the lives of every one of them against some theoretical gain for the authority they served. Nobody could afford to risk a commander who might have to say, "Shall I send my friend Joe or my friend Fred?"

But from the beginning, he would have it clear that they had drawn a spaceman who knew what it was all about. One who could handle the ship with or without benefit of mechanical aids.

The duty officer in *Europa's* control room had picked up the tiny speck of the hurrying corvette and was feeding deliberate observations to his tracking computers. Linked on the same net, *Falcon*, *Drake*, *Heron* and *Hawk* trained major armaments in concert.

When *Petrel* was still a pea-sized globule, she was the focus of such a concentration of destructive power that she could have been dispersed as a faint nimbus of glowing gas before her commander had time to call a course change. Five computer-based tracking systems locked on and monitored the oncoming craft. An exchange of coded recognition signals cleared the air; and McCool, *Europa's* duty officer, took his finger from the button which would have called the squadron to battle stations.

Then he was looking incredulously at an empty screen and, by reflex, thumbing down the stud that sent urgent alarm bleeps to every corner of the cruiser.

Admiral P. J. Varley, first into the

command center, still sealing up, with his visor hinged back, said, "What is it, Jock?"

"New corvette joining the squadron, Admiral."

"So?"

"Recognition checked okay; but now she's slipped the tracking gear."

"You believe she could be a hostile?"

In every command center of the squadron, the same speculation about *Petrel's* uncharacteristic behavior was repeated. Consequently there was a full audience to see the corvette appear as though by sleight of hand out of the single narrow blind vector on *Europa's* port quarter and take up her station with a flamboyant course change which must have put her crew on the extreme edge of G tolerance.

Her commander's level tones came up on every net. They said simply, "I.G.O. corvette *Petrel* reporting for service with Red Squadron. Request instructions."

Varley, mastering anger, said thickly to *Europa's* captain, for all to hear, "Get that fool along to see me, Commander. Stand down, if you please."

On *Petrel* herself there was a suspension of criticism. Probably only the navigators, Bennett, Sluman, Hale and the co-pilot himself could fully appreciate what the new commander's performance was all about. To the rest it was simply a spectacular maneuver which could have been misinterpreted by the ships they were coming to join. There was, however, a certain pride

in it. *Petrel* was in business again and showing that she was a crack outfit.

Only one man was positively antagonized by it. One of the new men — Dave Hocker, Power Two — had already crossed the new commander and was ready to swing into positive enmity. He thought, but did not put into audible speech, "The crazy fool. Playing to the gallery. Looking for a pat on the head from blood — and — gut Varley. All right Mister Clever-bloody-Fletcher. Watch it, that's all, watch it."

But when the summons came, as Fletcher knew it would, and he was moving into the pressure lock, Cotgrave said, "Good luck, Commander." The calculated risk had paid off. Whatever Varley had to say about it was unimportant against the fact that he was one step closer to solidarity with the crew of *Petrel*. The sooner they were integrated as a team which would jump when he said jump, the better for one and all.

His own face looked back at him through its transparent visor from the polished bulkhead of the pressure lock. It seemed the greatest irrelevance of all. Elongated by the curvature, even longer and thinner than nature had devised, it showed gray-green eyes, fair hair cut very short, grim-looking mouth.

Outside *Europa's* lock, he hooked on and uncoupled the thin nylon line which had tethered him like an umbilical cord to his own ship. He saw it whip back, spring-loaded, over the divide and he went inside, carrying with him a panoramic view of a backdrop of infinite violet-black

depth, glittering with multicolored sequins of distant light. Incurably introspective, his computer mind filled with his own minute importance against that backdrop. It was difficult in that setting to give any value to human action at all.

II

Varley said, "I am bound to tell you, Commander, that your unorthodox method could have had serious consequences. Quite apart from the danger to the squadron if you had hit a collision course. I see your point and I hope you were justified. But no more of it. Understand? There'll be action enough in the very near future to shake your crew down into a combat team. There's a squadron conference in fifteen minutes. Take a look round and get to know what *Europa's* control center has to offer. I'll reserve judgment."

Dag Fletcher was relieved that Varley had gone no further. But he was under no illusion about the future. Every new commander was allowed one mistake; this was his. He had used up his slack. Next time he would be out, and that would mean no other command experience in his I.G.O. service and could carry its smear over to the civil space corporation to which he would return, if he did return, when the compulsory stint was done.

Round the conference table, Varley had seven attentive listeners. There was his own staff lieutenant, Grant Crowford, a dark, muscular

type, looking like an intellectual weight-lifter in his gray-ribbed inner suit; Group-Commander Frazer, captain of *Europa*, hair clipped short so that he seemed prematurely bald. In a semi-circle facing him, Simpson of *Falcon*, dark, predatory, whose prototype might have sailed with Morgan; Cooper of *Drake*, round-faced, usually smiling in a rictus of facial muscle which had nothing to do with benevolence; Driscoll of *Heron*, heavy shoulders hunched forward, hands out in front of him on the table-top. Cameron of *Hawk*, a huge rawboned Scot with red hair cut back to a rusty stubble.

Fletcher, the newcomer, had been angled into the center seat so that Varley's eye naturally rested on him; and the address seemed to be delivered as a *tete-a-tete*.

In point of fact a great deal of it concerned him, and he began to realize that chance had cast *Petrel* for a very dicey role.

Varley said, "The object of the exercise, then, is to release certain I.G.O. nationals interned on Garamas. A cutting-out expedition, if you like. With the force at our disposal it would be possible to demand what we want, and no sane government could deny it; but there is more to it than that."

He paused for a count of five as though marshalling the data in his mind, as he must have done often enough, before summoning the conference. He looked his part. Square jawed. Graying. Half a lifetime of command decisions had left a settled residue in the set lines of his face and his disillusioned eyes.



"In the first place, Garamas is a neutral planet. You can see why its government has tried to keep that status. Right on the frontier of I.G.O. space, they are in line for any retaliation that the Outer Galactic Alliance might make. The way they have played it over the years, O.G.A. are no more anxious than we are to force the issue. It's useful to have Garamas as a point of contact. Nearly every major planet has a consulate there; it's a meeting point.

"Moreover, there is a delicate political situation. The present government has majority support; but there is a very powerful fascist element waiting for any opportunity to seize control. If the government showed weakness in foreign policy that could be the pretext they are waiting for."

Frazer, as a privileged listener, interposed with a question. "I take it there's been a request for release at diplomatic levels?"

"Certainly. But the Garamas government will not move. They *can't*, with Scotia and Chrysaor represented there and watching for an opportunity to claim repatriation for their own nationals. There's a Scotian ship impounded. They'd have trouble enough if they moved a centimeter from strict neutrality.

"But there's another thing, and I needn't remind you that this is top-line, classified material. Amongst our people in the internment sector is an I.G.O. agent who had been working in Fingalna and got out on a Garamasian freighter just before the O.G.A. powers drew together in their present venture. He has a re-

port which must be gotten away.

"Basically, that is all we are interested in as a military expedition. Recovery of the personnel is a useful cover, and we'll do what we can for them. But I say to you now that if any one of them has to be ditched, that is the way of it. You understand me?"

Nods from round the table came without enthusiasm, but he knew he had made his point.

"Now the cover for the squadron is that we are paying a courtesy call on a neutral planet. Showing the flag, you might say. I have no doubt that our intensions were signaled ahead. *Europa* and four corvettes have clearance to enter the gravisphere of Gramas in thirty-six hours from now, rationalized time. *Four* corvettes, checked and named on the visa. But as you see we have five."

Seven pairs of eyes tracked briefly round to focus on Fletcher, then Varley was off again.

"*Petrel* left her refit base ostensibly for a home posting. She changed course on sealed orders when she was well beyond the reach of prying eyes. She is a bonus which alters the balance in our favor, so this is what I propose."

Varley used micro switchgear on the small console let into his desk top, and one wall of the cabin was filled by two circular projections of Garamas.

Left was a large central land mass, which petered out towards the circumference in an archipelago like a bead chain. The right was almost

empty, except for a roughly oblong continental mass lying along the equator.

Varley moved a stylus on the atlas page before him. A dot moved in sympathy on the large-scale map. It came to rest as an asterisk over a population center on the left-hand circle.

He said, "That is the capital city of Garamas. Cristinobyl. Half the population of the planet is concentrated there. The space port at Cristinobyl is about twenty kilometers outside the city. They have first-class equipment and will pick us up as soon as we cross the gravisphere line. At that time they would find out *Petrel* has joined the squadron.

"I propose at that time to emit a succession of cobalt flares. When we arrive it can be explained that this was an accidental discharge. But for at least thirty minutes their monitoring gear will be unable to give them precise data."

Dag Fletcher felt a sudden tightening of the nerves which he knew as a sixth-sense nudge that his number was coming up. He did not have long to wait.

Varley went on, "Precisely at that time, *Petrel* will detach from the squadron and set course for this point." He stabbed at the center of the land mass in the right hand hemisphere, and an asterisk glowed to mark the spot.

"She will set down there with minimum time loss and put up a total screen so that she can not be detected."

Fletcher said, "Local people, Admiral?"

"There are none. This is desert. You will know why when you get there. Nobody can live outside a ship without a life-support system. You will have to be very careful indeed."

Fletcher thought, "That's going to make their day on *Petrel*. They had a long run of that on their last mission." But he said only, "Check."

"The squadron will put down at Cristinobyl, and I will pay the usual courtesy calls. Simpson will find out where the interned personnel are being held and in twelve hours we shall be ready to act."

Simpson lifted his dark, conspirator's face and gave unsmiling acknowledgment.

Varley quickened his tone, having come to the vital part of the exposition. "Fletcher will wait that twelve hours and then seek out and sever the equatorial energy ring which generates all the power used on Garamas. The confusion in the city will be total. It is estimated that their robot fault-finding gear will take a minimum of forty-five minutes to bring in temporary services. A cutting-out party will make its way into the prison quarter and effect the release of the internees. Certain agents in the city will take care of them and pass them along an escape line. *We* are only concerned with the I.G.O. agent.

"Timing will be important. There is a detailed schedule prepared. Withdrawal will be as arrival. The visit is only scheduled for twenty-four hours. As we leave, we will jam the tracking gear long enough for *Petrel* to lift off. Any questions?"

Fletcher, conscious that as junior man he should have nothing to say but "yes," put an awkward one. "Will not Garamas Security immediately connect your visit with the power failure? Once down on the pad, the squadron will be limited to a defensive role. What is to stop them refusing clearance and insisting on a detailed search?"

Varley gave him a straight look. "The report is basically what we came for. As you will understand, the agent does not have it with him. He will have to collect it from where it is hidden. That will be an added complexity. In the event which you describe, the agent would have to be destroyed. Once identified as an agent he would be open to interrogation methods which no one can resist. He will be prepared for that. You know the score, Commander. Do I have to spell it out?"

If Fletcher was nettled by the implication, he did not show it. His face was impassive as he went on, "That is what I thought; but with *Petrel* available as a shuttle, not subject to search, would it not be possible to pick up the agent by scout car and take him out to R.V. with my car outside the city? Looking at the map there, I would say that a scout car could do the overland journey in three hours. In fact, we could take more of the escapees."

"Don't let's complicate this issue, Commander. What you suggest is possible. We will look at it. For one only, though: the I.G.O. agent. The rest can disperse as planned. It is less than six hours before *Petrel* should detach from the squadron

and take independent course. You can work on your amendment with my staff."

He looked round the circle for any further query. There was none. "Very well. One more thing. Garamas is technologically advanced. As far as we know we can screen the ships from monitoring devices; but don't count on it. Anything with a slant on this mission, however angled, should be kept on maximum security. Even inside a ship."

With the squadron dwindling on the port quarter, space seemed hugely empty again on the miniature scanner in Fletcher's cabin. Its loneliness found an echo in his own isolation in the hurrying corvette. Momentarily his computer mind imagined itself as a nucleus at the center of an infinity of Chinese boxes; a regression into nonexistence which was frightening. He forced himself to consider the detail of the mission ahead.

After the course change, he had given Cotgrave a stand-down for two hours. That meant the crew could unseal and relax before the long chore at action stations which preceded a planetfall. There would be long enough confinement in suits if the weather in the streets on the desert side of Garamas was as Varley said.

Final details had been hammered out in a long session with Varley and Frazer. They had agreed his plan and marked up an R.V. just outside the northeastern suburbs, where a green belt of parkland separated the city from its support zones. It would

be a long run for *Petrel's* tiny scout car. Once he had fixed the sabotage angle he would take that chore himself.

Lying back on his acceleration-couch bunk he ran through the crew list. Cotgrave, his co-pilot, must stay with the ship. Bennet, Sluman and Hale in navigation were all good men. Bennet would go on the breaching job, then. He'd need an engineer—Hocker would do there, Power Two. Together with Engels and himself that would be four.

Once the decision was made his mind went into a free-wheeling phase, and he slept deeply until the bleeps of a stations call brought him back to instant readiness.

When he was circling slowly on his miniature command island with the corvette streaking in for a planetfall, he recognized that it had been the most difficult navigational task of his career. Without a preliminary orbit and with no help from the ground, every bit of data had been won in microseconds by their own observation. Split second re-appraisal of course vectors had become an uneasy norm.

Petrel flamed down in darkness like a glowing meteorite. In spite of the supposed human vacuum in the desert, Fletcher ran it as a standard military landing. Coolant gas billowed out to damp down thermal agitation before the corvette had flexed back on her hydraulic rams. Two minutes after planetfall, six men were fanned out on the ground and reporting back that the pad was clean.

Farnley's voice came precise, la-

conic, making an objective assessment of a locale which could stand in for a traditional picture of hell: "Surface, shale and pumice. No vegetation. Gauges reading fifty-six. Suggest limit of extra-vehicular activity at ten minutes."

Fletcher said, "Check. Come in, Alf."

III

Dawn on the desert side of Garamas was not held up by any contour. It flooded in as a quick-moving cadmium-yellow tide over flat reaches of gravel to a circular horizon.

Petrel was the sole physical feature in the landscape, a gnomon on an immense sundial dish sitting astride a faint line of discoloration which was the only indicator of the buried generator ring.

Dag Fletcher checked times and had his small scout car launched from its bay. Heat gauges began to bake.

Bennet said, "Where do we cut the ring?"

"Not here. If the power is anything like what they claim, there could be a local upheaval which would threaten the ship. Give it about ten kilometers. We breach it at 0800. Then the car has three hours to R.V."

They followed the marker line in a sprint to the horizon, with the draft of their passage throwing up a swirl of fine dust below the hurrying car and gauges marginally dropping back under ventilation.

Bennet said, "Nothing to choose.

Only distance. Ten kilometers should be enough."

Hocker said, "The chart shows a ravine like Grand Canyon. What's happened to that, then?"

"It was never an I.G.O. survey. Could be a hundred kilometers either way."

Fletcher turned to Engels at the console. "Take her up to maximum height, and we'll see what we can see."

The car went up like a free-standing elevator, and the horizon reeled back to a smudgy bar.

"That's it."

Hovering over the gorge, they could appreciate the immensity of the project which powered Garamas.

All of five kilometers wide, the vast gorge was spanned by a huge, striding viaduct. Its upper surface was the power ring itself, a tube twenty meters in diameter. It ran on the equatorial line all round the planet, like a hula hoop. Mere force of spin was enough to accelerate free particles in its composition into a centrifugal surge of energy. Simple but effective.

Here, in the open, it was painted white. It was the painting that triggered off the alarm in Fletcher's mind. Keeping it in that dazzling trim meant regular maintenance. And maintenance meant men; somewhere down there would be an outpost for servicing personnel.

He saw the squat, heat-insulated building built under the near rim of the gorge at the instant that Engels brought them down in a tightly banked turn on the desert.

There was only one narrow slit of

window looking directly out on to the gorge. At this time of day, unless there was a deliberate watch kept, there was no reason to suppose that they had been seen.

On the other hand, mere common sense dictated that they should assume that they had been.

At the edge there was a change in texture noticeable even through the thick foam-rubber of their boots. There was an apron of fine ashlar paving and the beginning of a ramp.

It was a superbly engineered entrance which melted into the lip of the gorge in complete camouflage. Zigzagging back under an overhang to the left, it led down to the blank face of a thickly insulated block-house.

Already the suits were fighting a rearguard against the heat. Sweat running into his eyes, Fletcher said, "There has to be a way in. Look for a recessed lever."

Engels stumbled on it, banging the toe of a clumsy boot on a six-centimeter stub. He knelt down to get the full picture in direct vision through his visor. Then he squatted back on his heels like a hound dog and pointed at it with a bulky gauntleted fist.

Fletcher said, "Okay, Alf, give it a shove."

They waited to a count of ten, facing the blank yellow wall.

When the opening appeared, they were not immediately aware of it. By instinct they had expected it to be central, but it appeared at the far left, against the wall of the cliff. It was a low narrow slit, lead-

ing into yellow depths, a miserly break in insulation.

They dropped into a routine pattern of fire cover and movement, and by its logic Bennett arrived first at the center.

Impression of a cool spacious chamber, as though deep in a natural cave. Panoramic view of the gorge through a long horizontal slit of window, triple glazed in great depth to conserve refrigeration. Fully automated system with two walls covered with computer units in serried ranks. Below the window, a long presentation table and high stools.

Engel checked the air and found it good. Suit gauges had dropped to twenty-four centigrade. With visors hinged back, they took stock.

Bennett said, "After all, it's only a couple of hours from Cristinobyl in a fast shuttle. No need for a permanent detail."

Engels had been giving the equipment a professional eye. "Neat. Very neat. There's a half hoop sprayer running out with bearings grooved into the parapet of the duct. All done by mirrors."

They watched through the observation window and saw a three-meter broad hoop with a flat platform like a howdah ride out from a point just below them. Engels stopped it and brought it back. "It'll get you to the center span in under five minutes."

He was within seconds in his estimate. Although used to having an infinity of space beneath their ship, there was something different about this naked contact with vertical free fall. Movement was slow and delib-

erate, with the shiny shell of the tube below like a skating rink.

One refinement of control which eluded the distant Engels was how to shut down the paint-spraying function. Driven with tremendous penetrative force, paint was atomized and surrounded the slowly moving hoop in a fine mist. Suits turned from silver gray to a dazzling white carapace which made movement a hazard.

Bennett, anchored by his lifeline and moving with infinite labor, used a vibrator to excavate an oblong cavity from the parapet.

Then it was done. A calculated charge would lift out a ten-meter length of tube on a radio signal from *Petrel*.

Fletcher called the ship. "She's all set, and we're coming in. Detonate on eleven hundred, whether we're back or not. Expect us in fifteen minutes."

Why he put in that last gloss he could not tell. Everything was going according to plan. Better, in fact, than he had any right to expect, and it was there that the nudge of a sixth sense told him that it was probably too well.

Confirmation came when they climbed back into the blockhouse, and Engels soused them with a solvent he had found. When their visors were transparent again, he said, "Take a look at this inspection chart. If the periodicity is as I read it, we're due for a visit today. No times. But I'd bet it would be early on. Give them a full day for whatever they have to do."

Bennett said slowly, "*Petrel* will

be in sight on any reasonable approach line from Cristinobyl."

It had already occurred to Fletcher. She would be there all day, stuck up like a sore thumb through a sheet of brown paper.

The answer came as they were homing into the docking collar of the carport. He gave it to Cotgrave as though it had been there all the time.

He said, "Call action stations, if you please, Mr. Cotgrave. Blast off as soon as you can make it. A short inter-continental flip to the coast. Northwest. Shortens the trip to R.V. and takes us out of line. As soon as you like."

"Inform *Europa*?"

"No."

"Varley expects us to be on this ref."

"He does not expect us to give our presence away to the Garamasians."

IV

From the coast, Fletcher pulled the plug on his bomb. Engels turned a startled face from his console.

"Negative, Commander."

"Negative?"

"It has not fired."

"You are sure?"

"Believe me, at this distance a bursting paper bag would show up."

Fletcher checked times. "We can spare fifty-three minutes and still hit the R.V." He called Bennett. "Car away. You, Engels, Hocker and myself. We can save time by going straight on from there."

Arrow swift, the small car had reeled back two hundred kilometers before Engels spoke again. Then he said, "It'll be the paint."

"What'll be the paint?" Bennett was genuinely puzzled.

"Going out along the viaduct, that spraying gear put a new coat over the tube. You sited the device on the viaduct, right?"

"Right."

"When we left there would be a drain back of surplus paint. Cover the whole bag of tricks."

"But it was closed."

"Very delicate gear that. Staggered vents at the back to avoid increases in pressure due to heat. Paint vapor could get in there. Just enough goo to hold back a feather-light relay. But it will be ready to blow. A slight jar should do it."

"Like opening the box to see what's going on."

"Like that."

Fletcher said mildly, "Well, just get thinking about it. There's always a way round." He was looking ahead in the miniature scanner and went on without a change of voice, "At the same time you can think about how to get past a large troop shuttle and a maintenance tender. They're both down there by the block house."

Bennett said, "So the gear there was more sensitive than we knew. It called out a posse."

"Not while we were there." Engels was positive. "I got a line on every working unit in the setup. All very functional and busy with the power ring. I'd swear there was no monitor."

Fletcher said, "Either way, they're there, present, now. Put us down just below their horizon. Then camouflage the car and go in at ground level."

Engels took them down in a long glide and, before deceleration was total, Hocker was outside tugging at shift bars to alter micro-grooving in the outer skin and match the car's color with the desert. From twenty meters out, standing in swirls of baking dust, Bennett ran a pragmatic check on his efforts and raised his arm to signal that the car had blended into its background.

Then they were running forward at ground level like a smooth invisible rat toward the two Garamasian shuttles.

At half a kilometer, and still moving in without a challenge, Fletcher took the firing grip of the laser tube which ran the whole length of the axis of the small car. He knew that what he had to do must constitute an act of war and would be death to the purpose of the mission, unless it was a hundred per cent successful.

He called for height, and Engels took them up in a steep climb. Then he said, "Right along the spine," and they went down like a mosquito homing on a succulent flank.

Belatedly, two guards spilled out from the transport, both in clumsy refrigeration gear like a collection of oblong boxes. Carbine fire using glowing tracer lifted lazy lines which the car crossed in a succession of hammer blows, then the laser was breaking up the shuttle.

It appeared to melt, plates turn-

ing to molecular scrap. A puff of black smoke came from its rounded bows, laced immediately with vermillion flame.

Fletcher switched to a wide-scatter paralyzing ray and sprayed the area.

Engels was down beside the maintenance tender. They spilled out, spoiling the effect of special branch cops making a raid by the comic clumsiness of their bulky suits.

The tender was empty. Hocker sprayed a line of holes through its console.

Fletcher went forward on hands and knees, like a fat grub, and shoved out an extensor periscope to look over the rim. Down below, the narrow door was shut; but two high-shouldered Garamasians stood on either side of the ramp, with squat carbines held incongruously across their chests.

He appeared briefly in their limited visual field and, as the muzzles were lifting towards him, sprayed them once on a wide angle. They leaned back on the block-house wall, too stiffly clad to fall down.

Bennett shoved over the stub lever, and the heavy door began its ponderous swing back.

A round-headed Garamasian engineer, out of his salamander kit, showing the typical, lanky high-shouldered development of his ethnic stock, was making a wide gesture with narrow hands which made it clear even to an observer from another world that he was *telling* them that he *knew* there had been intruders in the hive.

He was still working at it when

the beam fixed him that way like a butterfly on a pin.

Fletcher said, "Shovel them over to the back wall and clear that spraying line. Where does it load with paint?"

Engels the expert said, "It doesn't need any more paint. It only did half the crossing. It's got a fair load still on board."

"Empty it out. Fill it with solvent. Set it to move out. We can be on the way to the R.V. before it frees the relay."

Hocker asked, "Suppose it doesn't work?"

"Keep your fingers crossed. Because if it doesn't you'll have to go out yourself and tap it with a hammer."

"Why me?"

"I'll overlook that, Hocker, this one time. For now you can go up top and keep an eye on the desert. Don't question anything that moves. Just blast it."

"Check, Commander."

Working methodically, Engels had cleared the sprayer and was rinsing its saddle tanks with solvent. When it was refilled he ran it for ten meters and then brought it back.

"Solvent goes out faster than paint. But paint capacity is enough for a full trip, so I reckon this will make the center. All set, Commander."

"Let it go, then. How long do you say?"

"Five minutes."

"I can't afford to risk the car. We'll get over the horizon and head

back immediately after the blowout."

As the car rose, they could see the length of the viaduct, an engineering marvel in its own right, carrying the glistening white tube across the gorge. Fletcher imagined it going on below the land surface, crossing seas, the patient work of skilled men.

It was the first time he had been cast in the role of saboteur, and it went against the grain. Whatever report was to be brought out, it would need to be red-hot to justify their action. On the other hand, there was something about the snug neutrality of Garamas which was unacceptable. No planet could be uncommitted. Those that were not strong for the law were in reality working against it.

He recognized that he was finding excuses. Every human mind has a built-in necessity to think well of itself. This was his rationalization. Short-circuiting the internal debate he said, "That's far enough. Put her down. One minute to go."

When it came it was different from any other explosive sound he had ever heard — even allowing for the filter effect of the listening gear.

There was a high-pitched scream rising and cutting off as it passed beyond audio frequency. Seconds later the car rocked in a Force Nine gust, bringing a hail of dust and small trash. Every dial on the console went into a crazy spin as though under a freak magnetic storm. Then there was silence.

Fletcher said, "Back, then," and the car went up in a steeply banked turn.

For a hundred meters from the point of fracture, the huge tube had peeled free from its supporting viaduct. On the far side, the force had thrown the broken end down, and the tube sagged away towards the floor of the gorge. The block-house end had reared up like an elephant's trunk and was holding an uneasy stability as a high, swaying tower.

Only two or three meters of the center span of the viaduct had been breached. It was a neat job of demolition. But Fletcher saw it as a wound in the ring of solidarity forged by professional men. He felt like a murderer who would now give much to staunch the flow of blood.

V

Nobody in the block-house appeared to have moved. Engels said, "They'll have pinpointed that break as of now. There'll be a trouble-shooting gang on the way."

They left the Garamasians parked round the walls like ritual sacrifices in a *mastaba*. Hocker, last out, took a minute to pose the end one in a nose-thumbing gesture towards the open door. Then they were streaking over hot, brown desert for the R.V.

With just over two thousand kilometers to go Engels locked the car on its maximum speed just below the sonic ceiling, and its auto-pilot took over.

Now they were across the first strait, leapfrogging a chain of islands that were not much more than atolls, with a still magenta sea washing white crystal beaches.

The car raced on, a slight, hurrying shadow across empty shores. Engels said, "Mainland coming up, Commander. If the chart tells no lie there's nothing on this course except automated farm spreads."

Even they were enough. An unfamiliar machine crossing the homestead would be enough to have the resident agricultural engineer grabbing for a video.

"Level out. Set for half a meter over hedge height. They'll have some trouble with identification at this speed."

Now it was useless to look for topographical features. So close to the ground, they were virtually flying blind in a dizzying welter of melting shapes.

With fifteen minutes to go, Engels dropped them neatly in an irrigation ditch, where they sat across the gap like a custom-built bridging plug. The chart showed less than five kilometers to R.V., but they were now moving into the outer ring of commuter development. Top executive country, isolated house units surrounded by private parkland.

They took time off to unseal, methodically stacking the gear in roof slots above each seat. The tiny car seemed to double in inside room. Even then there was only a cubic meter of space in the loading bay for their passenger.

With ten minutes to go Fletcher said, "Okay. Take it up. Steady now, pick your way through the trees."

Almost at once, they found an outer-ring monorail and crossed it, hugging the ground beneath a hundred-meter span. There were four



Virgil
F. O.
T. I. L. A.

kilometers of rolling parkland without sight of human life before Engels swept over a long gentle rise to meet the monorail again, hidden in a shallow valley, the next spiral in.

They were on to it before he could alter course. Too late he saw two stationary shuttles dead ahead, with Garamasian top people looking out from a row of crystal viewing ports.

Round heads set like ornamental roundels on narrow, high-shouldered trunks. Blue tunics of the top executive grade, with narrow stand-up collars which completely covered rudimentary necks. Lidless eyes, dark disks of polished obsidian missing nothing. Except one, facing the window in sleep with optical facets turned away and dull gray blanks presented to the familiar view.

As Engels dropped them down in a crash stop where their microgroove skin texture would give them almost complete camouflage, the bulletlike silver shuttles began to move.

Fletcher said, "They've cleared the fault. Smart work that. Must have sent a big party out to the desert. They'll be looking round for who did them dirt. Now this lot will be falling over each other to get to a video. Move it along, Alf. Don't worry about being seen."

Engels took them up to a meter over tree-top height, and for a moment the car was as still as though it had been painted there. It began to turn as he lined it up on the direction beam. Then they were homing at full thrust on the tiny glowing mark of the R.V. set up on the miniature navigation spread.

Fletcher had time to think that technological refinements were all right, but when you came right down to it, you got no greater accuracy than you fed in. If Bennett was a fraction out in his original plot, they might very well be going all out for a local gendarmerie.

The thought led him to take a checking run along the co-ordinates. Bennett's voice brought him back to direct vision.

Now they were amongst buildings. Blind to the road in the Garamasian fashion, grouped round inner courts, inward-looking. Typical of a desert-founded ecology.

"There she is!"

A small scout car identical with the one they were in was sliding to a halt beside a group of eucalyptus trees.

Engels said, "That's *Hawk's* car."

Then they were alongside, and Cameron himself was crossing the gap in full space gear with his visor hinged back.

His hair seemed more aggressively red in Garamasian daylight, and there was no doubting the urgency in his voice. "Nice, Fletcher. Right on the button. As well, too. There's a big thing on. Our ploy worked out, the agent's here; but there's borderline revolution in the city. Fascist lot taking over. Very dicey situation all round. Just as well you're taking this agent out; we've already had a check from security, and they'll be back. Anyway, see you."

While he spoke a small figure, bulky in an I.G.O. suit with the identity flashes of a communications lieutenant, had taken Bennett's hand

and been hauled up into the cubic meter of cargo space.

Fletcher said, "Right, Jock. We've been seen, by the way, so the hunt will be on. For the record you could claim to have been out to the outer mono rails on a sight-seeing trip. See you."

Engels was moving them out before the hatch closed.

They saw *Hawk's* car spin on its axis and beat away in a dragonfly flash of iridescence; then they were running on a direct course at maximum thrust, ten meters above the highest building.

Hocker was concentrating on a circular scan to check for Garamasian atmosphere craft. Engels was fully committed with the pilotage chore. Bennett began a recheck of his navigational set for the home run, reasonably concerned that they should make a first-time hit. Consequently it was Fletcher, the drone, who had time to chat up the inmate of the loading pen.

He turned in his bucket seat, prepared to knock on the man's helmet to signal this civil intent and stopped with his clenched fist two centimeters from a neat, platinum blonde head.

Copying the style of her new crewmates, a silvery Fingalnan girl had wriggled, chrysalislike, out of her borrowed gear. She was sitting crosslegged in the lotus suit, wearing a taut, lime-green inner suit which could have been sprayed on by a miserly makeup man, who had to do a couple of hundred of them with one small can.

Making a display of her cosmopolitan expertise, she leaned forward with outstretched hand in Earth-style greeting. He automatically took it, reminded at once that the Fingalnian metabolism kept its children's blood a good five degrees hotter than his own. It was like holding a warm polystyrene glove.

She said in English, "Xenia, Commander. Delighted to meet you, I think."

Low-pitched and husky, contriving to build communication on a carrier-wave of warm enthusiasm as though she had only been born for this day, her voice triggered a quite disproportionate reaction.

Three more heads whipped round, and the car banked sharply under Engels's convulsive grip.

Gallant Hocker said, "Stone me, it's a she-male. Sitting on that ribbed floor is no good for a delicate spirit. Come and sit with me."

He even held out his hands to lift her over.

"That is very thoughtful of you, I think. But I am still on duty. Some other time, I think. Meanwhile, hello."

Her wide open green eyes had never left Fletcher's, and what she saw there seemed to bring her to a decision.

Hocker was ready to go on with his ploy, but Fletcher said coldly. "Save it, Lieutenant. Get on with that scan, or there may not be another time."

To Xenia he said, "Forgive us for being surprised. We were expecting a man. It is not easy to believe that anyone so beautiful is an agent."

"Is that complimentary or not, Commander? Espionage is necessary. This weport I have may save many lives, I think."

He remembered that Fingalnians had particular difficulty with the "r" in Earth languages. In Xenia's hands the defect was a positive gain, but it made it even harder to take her seriously.

"Of course, I was not under-valuing your work. You have the report?"

An amused gleam in the green eyes told him that she appreciated what considerations had triggered off that question. "Yes, it is vewy *small*."

It would need to be, and any confusion was entirely on his side.

"Don't fret about the weport, Commander. It's been on my mind a long time. I haven't lost it yet. How much time do we have?"

"Three hours to reach the ship. Then we wait for the signal to lift off. Perhaps two hours after that. Has to key in with a jamming transmission from the squadron so that *Petrel* can get out unnoticed by their monitoring stations."

They had crossed the first mono-rail circuit and were well inside the executive belt. She said, "This weport could be made out of date anyway by your action in getting it out. The fascists have been waiting for a national cwisis, and you've made it. I know you had to do it this way; but it's just what they wanted."

Fletcher said, "Perhaps the government will believe that they chose the Squadron visit as an opportune time and engineered the breakdown

themselves — hoping that I.G.O. would get the blame."

"You are *clever*, Commander. That *could* happen. So it would pay them to see that you get away. Perfect scapegoat for them. If they get power, they'll *definitely* take Gawamas into the O.G.A. sphere of influence whether they declare it *openly* or not."

"And the more dangerous if not openly."

"Exactly so, I think."

"Who are the fascist leaders?"

"Mainly fwom this awea. Industrialists with something to lose if Gwamas adopts the full I.G.O. charter on human wights, I think. Their headquarters is the Gawamasian Agwicultuwal Club. That will be the command post for any *putsch*."

VI

Fletcher turned away. Outside, they were crossing the last of the suburban belt, and the precisely squared out food-production areas rolled away to the distant horizon. Spaced with mathematical exactitude, the headquarter buildings of each section stood out like plotted quantities on a lattice. One of them would hold the action group which wanted Garamas to move back to medieval political thinking.

It would be easy to take the view that it was no business of his. He had a clear mission and no mandate to move a centimeter outside it. Indeed, any move other than to get Xenia and her report to a place of safety was definitely against orders. He could be executed for failure. So

what? What indeed was he thinking of? Xenia's fragile beauty dedicated to a dangerous trade had presented him afresh with the issue of responsibility which was never far below the surface of his mind.

A gloss from a theology tape of his college era quoted itself in the clear tones of a female recording clerk. Not dissimilar from Xenia's — which was probably the grapple which had dredged it up. No lisp though and a lot less sexy. "To him that knows to do good and does not do it. To *that* man, *that* is sin."

Xenia's warm, light hand on his shoulder supplemented the communication possibilities of her voice, now as intimate as it could well get. They might have been alone in the car.

She said, "Exactly so."

Bennett, the only one listening, looked puzzled by an apparent *non sequitur*. Dag Fletcher met her eyes, and the tiny nod of her head confirmed his questioning look. In addition to her more outstanding charms, she was a telepath. He wondered briefly how she had reacted to unspoken speculation about where she was keeping the report. Saw her smile again and deliberately fell back on learned skills to keep thought out of the transfer areas of his mind.

His success in so doing got him a credit. She said, "You're vewy quick, Commander. But too late. I agree with your position. It comes down to individual responsibility. You can't twist any wuling clique. Not one. That's what I like about I.G.O., mainly staffed by civilians like yourself doing their stint. Going back to ordinawy jobs, so they know

they'll be at the weceiving end of any wegulations they make. Here, now, there's a chance for us to do something about the setup."

"What do you mean?"

"I know where the Agwicultural Club is. You could dwop a small neutwalizer on it."

She read his instinctive rejection and its grounds. "You're thinking about *me* again. I can look after that old weport. If we do this, it won't be so important anyway."

"If it's their command center, they'll have guards and some military potential. It would be an unjustifiable risk."

"Individual wesponsibility, commander. Now you know the *opportunity* we have, you can't just shwug it off."

He saw that they were deep in the food-producing belt. Not even a collection center in sight in any direction. He was acting at an instinctive level when he said, "Take us down. There by the purple hedge."

A glowing asterisk on the chart spread marked their position. Xenia leaned tautly forward and extended a slim silvery arm to point out the location of the headquarters.

Hocker had not said a word, but she said, "To save you wasteful use of time, Lieutenant, the answer is no. Just concentwate on the mission."

He was visibly taken aback; but the look she got needed no telepathic power to interpret. She had not made a good friend.

Bennett, who had pieced enough together to know that a detour was

being considered, said, "That's two hundred kilometers. Not all loss; triangulated from there it only means about another one-fifty on the total journey. Minutes only. It depends what has to be done when you get there."

Dag Fletcher faced the personal decision at a level not accessible to Xenia's interception. She waited with the rest for it to receive a clothing in words. He said, "Alter course. Take a look at that reference. Make the last ten kilometers at ground level."

She had the general drift of it, however, when the first two words were out in overt speech, and warm arms went quickly round his neck in a brief hug that left an impression of unexpected strength and a lingering trace of an exotic and unfamiliar scent.

It took less than five minutes before Engels set them down in the shelter of a squat irrigation unit housed in a white adobe cube. They could hear the rhythmic beat of a pump working like an isolated heart.

Fletcher sent up a pencil-slim periscope and took a long look at the blank wall of the club premises. It was indistinguishable from any other headquarter building which sat in the center of each precisely calculated admin district. It lay half a kilometer distant, across a field carrying a mauve, heatherlike crop of protein-rich *erichthonius* plant.

The field went all the way round on the right flank. Left, a low hedge ran directly to the corner, dividing off another production area, lying fallow and showing up as a tidy

spread of yellow ochre corrugations.

A darker line amongst the furrows claimed his attention, and he was deciding that it was a surface road leading to the house, when Xenia said, "All these places have direct access underground to the monorail circuit. Supplies come in and products go out that way."

Movement from the distant road made a period. A long, olive-drab hovercar, slug-shaped, flying a maroon pennant, appeared briefly on the periphery of vision and swept out of sight at the side of the building.

There was an urgency about it which confirmed in his mind that they were at the right place. If that was so, however, the small scout car would hardly be allowed to hover overhead choosing a good target for a depth charge. No doubt at all, the plain brick facade would conceal a fortress.

Fletcher flicked the eyepiece shut and set his periscope to retract. Before the tip had clicked softly into its housing, he knew what he had to do. He said quietly, "Hocker, get yourself outside and cut a hole in this wall. Go in and top the pump."

When Hocker was busy making a circular incision with a vibrator from the car's external tool rack, he went on, "Whatever else they do here, they must keep the district working."

Hocker disappeared through his seal hole. Xenia was leaning forward breathing warmly down Fletcher's neck, a distracting intimacy which made him too much aware of her physical presence; uncomfortably

underlined by the knowledge that she knew he knew she knew.

The pump went out. Two minutes later a clumsy, angular silver-gray maintenance tender was rounding the blind corner of the facing wall.

Engels said, "Efficient, whatever else."

The tender was lightly made, with huge inflated wheels. It rolled over the crop without causing damage. It stopped on the opposite side, and they watched the scanner for a close-grain picture of the developing scene.

Two Garamasians jumped down from the high seat. A comedy partnership. One very tall, the other shorter, a geometric design of two balancing spheres. Gray coveralls with maroon armbands to show membership of the nationalist party. Breast-pocket flashes to show status as agricultural engineers. The fat one carried a cranked key like a winding handle and shoved the business end home in a slot which was invisible to the watchers. Then he began to turn it.

Dag Fletcher had seen enough. He was moving silently out before the man had completed one revolution. They saw him check the setting of his laser for its wide-angle stunning beam, and then he was through the hole in a smooth flow of effort.

Whatever the inside of the pump room was like, it could not have been immediately obvious that there was a hole in its protective shell, because both men went in. On the count of five Hocker reappeared at the hole.

"Stay here with the car. We're going to have a look inside." He pulled a strap pouch from its ceiling clip and put in it two charges from the rack. "If we're not back in fifteen minutes you're to set a course for *Petrel*. Take off according to schedule."

He was sliding back the hatch when Xenia hazarded vivisection by slipping through the narrowing gap to join him.

Standing at ground level, the top of her head was well below his shoulder — a miniature Boucher, now seen to be wearing a broad flexible metallic belt over her minimal green tights with a short, narrow-bladed knife hanging from it in an electrum sheath.

"Not you, midget."

The knife was pricking into his navel before he could lift a hand. Something very clear in her green eyes warned him that she would just as soon push it right in as not. He thought, "Why should I sweat? Let clever bloody Fletcher sort her out." He simply shrugged and finished closing the port.

Hocker said, "That little silver *hint* followed me out. I told her to get back. I reckon she must have thought better of it and done that."

"Okay. Let's get on."

Sitting on a high bench seat, Dag Fletcher found that he was facing a completely unfamiliar set of instrumentation. The buggy was however quietly vibrating, so its power pack was in service.

Out from a plain bulkhead under the windshield, two rods, one white and one black, curved out and seem-

ed to fall naturally to the hands of anyone in the driving seat.

Methodically checking out possibilities he tried to move them up, then left, then right. It was not until he pulled them both down that there was a soft click of engagement, and they were moving straight forward. Now he could feel lateral play and tried moving his left hand out. The buggy swung on its tracks turning right.

Then he got the trick of it. Both down for straight on. Left or right, feed power into the drive on that side, so that the buggy spun on the slowing wheels and went in the contrary direction to hand movement. Once grasped, it was easy; and he made a fast run across the field to the house wall.

From underneath, it was a towering slab of masonry. Solid as a cliff. Too huge to be so featureless. They rounded the corner in a controlled spin and trundled on. Precisely in the center of the side, the approach road ran into the thickness of the building as though into a mine.

Fletcher spun the buggy into the entrance, and they saw fifty meters of oblong section tunnel lit by brilliant lighting ports in the roof and painted white. There was no operator in sight, but as they approached a maroon and white check barrier began to lift like a portcullis.

The buggy was obviously recognized and given official welcome by a scanning eye.

At the end of the run they came out into a central courtyard. The external severity of design was belied by a profusion of color.

The entire floor was paved with red and white squares of ridged tile. In the center was an oblong pool with violent color patches of *merope* bushes apparently growing from its indigo surface. Entirely of translucent brick, the inner wall glowed with light. At ground level open colonnades led from the courtyard into the building. Right, the olive-drab car was drawn up at a semi-circular entrance port. Left, a more utilitarian working area was laid out with parking space for farm plant. Beyond the pool, a number of military-design hovercars with the maroon pennant of the organization were drawn up.

Fletcher swung around to join the farm vehicles. A round head lifted from some desk-bound chore and watched incuriously as he ran into an empty bay. But he could not expect that they would get far without a challenge.

In answer to a question framed only at mental level, Xenia's voice came from beneath the buggy. "Their operations room is under the main block. Through that portico and down."

She wriggled free from the angled chassis members which had supported her and stood beside them.

It was useless to make anything of it. Fletcher said, "You seem to know all about it."

She appreciated his realistic acceptance and went on. "These places are all on the same plan. If you've seen one, you've seen the lot. And they all have an underground

complex. Stowage and civil defense. The internment building was just like this."

"And of course you had the run of it," Hocker said.

"I was a very pwivileged pwisoner."

"I'll bet you were."

"All we have to do is to get inside the building. Anywhere at all. I can show you."

Only twenty-five meters distant, the farm office block was the obvious target.

Reading Fletcher's line of thought, Xenia said, "You want a diversion. Why not send one of these buggies over the yard to cwash into that tidy line? The end one. When I was underneath I could see the contwols move. I'll do it from underneath."

His conditional agreement was still unspoken, when she had slipped away under the wheels. Seconds later they heard the end buggy begin its destructive run.

It skirted the edge of the pool, picking up speed until it was waddling along at a good thirty kilometers in the hour. Then it was doing its best to climb over the middle car of the waiting line.

Reaction was immediate and positive. Suddenly the courtyard was full of high-shouldered Garamasians. Conformation that this was no simple farm center came at the same time: All the new arrivals were in military uniform and carried machine pistols.

With all the movement in the direction of the crashed vehicle, Xenia led the way under the colon-

nade and through the nearest entrance. They were in a circulation corridor which ran all the way round the building. Without hesitation, she picked an arched opening leading off and went through it like a silver rabbit on the home run. Ramp on a spiral leading down, lit by oval ceiling ports.

At the second turn, a Garamasian hurried up and was blasted by Hocker with a yell frozen in his gullet. They left him leaning against the wall with his eye disks rolled to gray blanks.

Xenia said, "Each floor follows the same plan. We need to be over the other side."

They were running now, footsteps beating a light tattoo on the parquet. At the second corner, she said, "Round this one there will be a beam barrier."

If there was it was not apparent. Smooth white walls ran away to a darker-hued distant rectangle where a right-angled turn brought in the opposite wing.

Hocker said, "Stalemate, then," and crumpled forward to the tiled floor.

Xenia's lips were framing, "Don't worry about that weport," but it was never uttered. Men in olive-drab uniform, moving like trained soldiers, were swarming in the corridor where sentry niches set in the walls had sliced open.

Many hands made light work of carrying the aliens to a point half-way down the corridor where a wide opening on the left led to the underground operations room they had come to seek. They passed a

low-ceilinged crush hall and were taken into the lofty nerve center itself.

Round the walls, men in green uniforms looked round indifferently before turning again to the winking lights of a communication network. Operators, shoving magnetized disks along route lines on a wall-sized operations map, rested on their billiard cues. But it was left for a select group round the board-room table in the middle of the floor to take executive action. A paunchy type at the head of the table looked up and said in a harsh, grating voice, "Set them in the analyzer. Quickly now. There is no time to waste."

VII

When his head cleared, and the convoluted, white mists rolled back to extend his vision outward from a still black center, Dag Fletcher was on the specimen's side of a large lens looking up into the eye of a busy researcher. He was lying in a convenient coffin-shaped box with his neck on a padded rest. Then centimeters from his face the curved glass of the lens filled the aperture from edge to edge. Electrode plates pressing on his skull both prevented any movement and set up a tension which was on the threshold of destructive pain.

It was, with all its strangeness, recognizable enough. Any advanced culture in the galaxy could set it up, one way or another. He was hooked to a bug that could tap the inmost secrets of his mind. Whatever he

thought, bawdy, humorous, treacherous, kindly, cruel, picayune or full of ultimate truth as an egg, was all there for them to see. A mind naked and ashamed.

Working at it, however, he filled its surface channels with frivolity. Xenia, since she was nearest at hand in experience. He set himself to do an identikit portrait which they could throw on their screen if they liked. Straight, aristocratic nose, level brows, serious mouth of a voluptuary, small round chin. Being a mathematician he recognized that like nature she was profoundly symmetrical and proportionate. A number sequence. 1. 2. 3. 5. 8. 13. 21. 34. 55 developed as he considered the claims of her body structure to satisfy the strict requirements of the Golden Section.

A grating voice penetrated the privacy of his box, speaking in Garamasian.

From somewhere left he heard Xenia herself giving a helpful word. "Are you thinking about me, Dag? That's nice."

Then the harsh commentator once more, this time in the *lingua franca* of the galaxy, "It is no use, Commander. We already know all about your ship. Your lieutenant has given us all we need to know. Unfortunately I do not think we can catch up with your patrol car, but there is still time to have the ship intercepted."

Xenia said, speaking quickly, "But they can't do that, Dag. It would show their hand too soon. We have only ourselves to worry about and that . . ." Her voice cut off in

an involuntary screen. Some linguist had caught the drift of her argument and used direct means to cut it off.

More Garamasian gobbledegook, and he felt the container he was in was beginning to move.

From being horizontal, he was now tipping forward, pivoting at a point somewhere near shoulder level. Finally he was upright, with weight taken largely on his feet, but a certain spinestretching tension still present from the head stall. Now he could see the operations room through the distorting lens in front of him, like a view through the wrong end of a binocular.

At the head of the table, seemingly at the end of a long tunnel, the man who was calling the shots looked like a piranha. Underslung jaw, open, rubbery mouth, bland noseless face, bloated trunk stretching away below the shiny table top.

It was not a lot better when the glass screen was swung away and he saw that the man was less than ten meters distant. Sitting next to him like an A.D.C. was a lean, blue-white Scotian, motionless, reptilian eyes looking away left, no doubt at the more rewarding tableau of Xenia. On the table in front of them was the pouch with their charges.

Fletcher said, "Garamas enjoys neutral status. You have no right to imprison I.C.O. personnel. If you have any charges to make, your government will deal with the matter."

"I can tell you, since you will

have no use for the information, that we are the government. The neutral status you speak of will not be of long duration. There is no future for Garamas with the mealy-mouthed I.G.O. alliance. I am sure our Scotian friends will be very glad to have two serving officers with knowledge of I.G.O. affairs. They are very skilled at breaking down reluctant contributors. Destructive, but thorough."

Mind-racing to find any small advantage, Fletcher was only half listening. Under pressure, heightened by stress he thought he heard Xenia whispering quietly from somewhere left. Then he recognized that the voice was in his own mind.

"Dag. We're on the same frequency. Think with me. These mind taps are very finely balanced. Together we can send a surge back up the spout that might wreck the box. Think with me. Very angry. Destroy. Destroy."

Piranha-face was going on. Another quickly choked gasp of pain from Xenia brought all the anger Fletcher could feel into his mind. That and admiration for her which was involuntary and independent of sex.

Silence from the floor and sudden quick movement from beside his box. Movement that was too late to throw a circuit balancer and stop a surge back along the delicate wiring of the cephalograph.

There was a small plosive pop and an acrid smell of a burned-out dielectric. Fletcher was at the same time conscious of a bonus which they had not planned for. The fail-

ing circuit had tripped the relay which fed magnetic grips holding their wrists and ankles. He sensed simultaneously that Xenia too had recognized it, and he said directly to her mind, "Good girl. Now! Both together — out and grab for King Log!"

He had a confused impression of many heads turned inward to watch the developing scene and the movement of one guard quicker off the mark than the others. Then he dived for the shiny table top and went along it on a sliding tackle that brought him to its head.

Piranha-face had opened his fish mouth and had struggled to his feet when the Earthman's arm clamped round his neck. Fletcher heard a confused struggle behind him and expected at any moment to feel the hammer thump of an old-fashioned slug tearing into his back. But he had twisted round his victim and got his own shoulders against a solid wall before anything had a chance to develop.

He saw that Hocker, slower off the mark, had been grabbed by two Garamasian guards. While he watched, one of them brought up a machine pistol and clubbed it on the side of his head. Hocker went limp, and they let him fall.

Xenia, a flash of quicksilver, was beside him. Her lime-green inner suit had been reduced to a fragmentary monokini, and blood welled from two long incisions from throat to navel. In her hand she carried her own small knife, stained to the hilt with blood which was not all her own.

Leaning against the cephalograph box she had left, was a tall Scotian. He was still moving slowly and turning as he fell. Reptilian in metabolism though he was, he needed air, and he was currently trying to get his ration through a severed throat. When the circuit blew he had been looking elsewhere for instructions and had left Xenia's useful knife sticking in the fleshy part of her shoulder.

Pulling it free and putting it to instant use had been pure therapy to the silvery Fingalnan, and she was actually grinning like a pleased cat when she joined Fletcher.

Her knife pricking into the skin over the Garamasian's heart was a better argument than Fletcher's neck lock. It also allowed freedom of speech. She said, "Tell them to stay where they are or you will surely die."

"What do you hope to gain? If you kill me you will die yourselves. If you do not you will only delay your deaths for a little time. There is no escape for you."

Fletcher reached out for the strap of the pouch and swung it clear of the table.

Movement toward them was very gradual, and Xenia sensed it as a mental thing before it was physically obvious. She said, "Tell them to stand still," and shoved the blade a few millimeters towards its beating goal.

Dag Fletcher was fumbling in the pouch bag and came out with one of the demolition charges. Then he hung the bag by its strap on the back of the leader's chair.

Speaking in the *lingua franca* he said, "I have set this now for impact detonation. I only have to drop it. Unless I can take it with me, we shall all go up."

Cold, black eye disks held his own for a long pause. Xenia said, "That's all wight, Dag. But I'm sorry it had to end like this."

"Don't be. Not many people have such an opportunity to go good."

"To that man that is sin?"

"Something like that."

But under the surface of his mind, that structure which could present a thousand units of information in any living second, there was a majority voice that was less than satisfaction and viewed the move into oblivion as an unqualified evil in itself. Not least in this self-preservation lobby was the fifth-column, flank-turner Eros.

Without deviating pressure at the knife point she put a warm hand on his arm and said incomprehensibly to those who could follow the Earth language, "I wegwet it too."

Piranha-face stirred uncomfortably. He spoke out in the *lingua franca*. "Let them go. They can not get far. The bomb might just as well go off outside."

Fletcher backed towards the exit making unmistakable mime that any attempt to rush him would cause his ten-centimeter cube to hit the deck.

Xenia seemed to take her knife out of its pincushion with real reluctance. At the door, Fletcher stopped and said, "Can we do anything for Hocker?"

She said, "I'll twy. But frankly he does nothing for me. You'd be better without that one."

There was one undamaged carafe on the conference table. She took it and poured it over Hocker's head. When he stirred, she said without any womanly sympathy, "On your feet, Lieutenant. This is no time for lying about. Quickly. *Quickly.*"

He allowed himself to be led out like a dumb ox, shaking his head from side to side and seeing only a confused double-image view of the set.

In the corridor they were watched out by a double row of silent guards. The word had gone ahead that they were to have free passage.

As they began to go up the ramp, Hocker stumbled once against Fletcher's shoulder, and a sigh of audience participation went up from the spectators.

Fletcher steadied the box and centered it afresh on his flat palm. Xenia said sharply, "Watch him, Dag. That was partly intentional. They tried a two-way feed on me. Maybe they planted some ideas on our fwiend."

Up in the courtyard, Fletcher quickened his pace. When they reached the line of waiting cars he was going at a jog trot and his silvery A.D.C. running with a pennant of blonde hair flying back.

He took the first car in line and spent a count of ten looking at its instrument console. Then he was moving it off its pad to the entrance.

Hocker said, "What's the hurry?"

"We have about fifteen seconds to get out."

"How come? What's the trouble?"

"The second demolition mine. I set it down there in the bag. Give or take a second."

They were at the beginning of the tunnel. Hocker slid open the hatch and was out, running back across the courtyard.

He shouted, "I must warn them. The plan will fail."

Fletcher looked back. Three cars had sidled out of the line and were following up. There was no time to go back. Xenia was out. She steadied herself against the side of the machine, and her arm flicked like a whiplash. Hocker fell forward, face down on the tiles, with her knife sticking out of his back.

Then she was inside again, and they were surging down the narrow way with the portcullis lifting to let them through.

Outside he gave it the gun, and they circled behind the sabotaged pump house to check that *Petrel's* car had indeed gone. They saw another green shuttle storm out of the narrow cleft, then a circular puff of fragmented debris rose from the invisible center of the building complex. A seismographical ripple traversed the purple field of *erichthonius*. The pump house took it like a dinghy hitting the wake of a hydrofoil and rocked to its foundations.

Xenia said, "Look. Dag. We did it."

He spared a second's vision from a struggle to get full power out of the unfamiliar machine and saw that it was indeed so. The great walls were fissured from top to bottom

and leaning in. Even as he looked, a widening rent began to spill out a ragbag of artifacts. The single figure of a man appeared momentarily like a scabbling beetle on its crumbling surface before a rising dust pall obscured the site.

A line of holes punched through the fabric of their car just above head height. That brought him back to the business in hand. The Garamasian car had used time to gain height, and was coming in from the port quarter in a murderous power dive.

Dag said, "Lie down on the floor!" He flung them in a steeply banked turn which brought the car to the edge of its potential. The other pilot was committed to his dive, and they had a broadside view with a face in every lateral port looking up.

The clatter of a machine pistol at his back brought Dag's head round to the inside of his own steeply tilted car. Xenia had found it in a ceiling clip and was swiveling in a tail-end-Charlie gunner's seat. He thought, "She's unbreakable. I'd rather have her at my back than any man I know."

Into his mind her voice said directly, "Only at your back? That's not very complimentary." And he knew that the heightened awareness of shared danger had put the telepathic link on a two-way net.

But habit dies hard. He asked aloud, "That report. You still have it safe?"

Falling in with his choice of medium, she said, "You do go on about that report. I haven't got it at all.

It's in that little car of yours. I hope they don't cwash it or anything." Then she was raking the following car in bursts of fire that put molten metal asterisks along its bluff bows.

"Any luck?"

"No. Armor there in fwont. Only the woof vulnerable, I expect. Still, it will make them more *careful*."

Four lengths separated the hurrying cars. Already they were crossing out of the farm belt. Dag Fletcher put everything out of mind except the navigational chore, and Xenia could pick up only fragmentary clues of the high-speed calculations that were going on in his private computer.

Professional to the ends of her fingertips, she knew better than to interfere in a task which only he could perform. Except for an occasional transmission of a kind which she thought might be good for his morale, she kept out of his mind.

Using a formidable visual memory, he projected on to the unfamiliar chart blank all the mathematical detail which had cluttered the presentation table of the scout car. In ten minutes he had pin-pointed *Petrel* and set up a course line.

Some of the gear was very good. Absorbed in the technology angles, he made notes of some features which could well be incorporated in the I.G.O. scout cars. As a final act of confidence, he brought in the autopilot and after a full minute, with the car holding course at undiminished speed at its ceiling of eighty meters, he left the pilot's seat to take a look at the view.

As he went down the center aisle between the seats, he realized with a sudden feeling of guilt that he had not heard from her for some time. When he got there, he knew why.

Xenia had strapped herself in to the swivel chair and blood from the Scotian's long, exploratory dig had welled out in bright slow rivulets. Head back, so that her silky, blonde hair hung straight away from her neat head. Throat round and firm. A small pulse beating in a taut hollow below her collar bone. Breasts a pale silvery tumescence against the harness. She was unconscious.

He loosened the straps and laid her flat in the aisle.

The pursuing craft was still there, a good ten lengths astern and five meters below. Assuming the cars were equal, he would have the edge, because Garamasian had a capacity crew. Ten at least. Best part of a thousand kilograms. He took a look at the console and found the auto pilot was holding the course without a microsecond's deviation.

Above each pair of seats he found a shallow locker recessed in the roof and methodically worked his way round the car. Medical kit, water tubes, ration packs. He spilled them out on to the seats. No clothing. But it was warm enough and would be warmer before they reached the ship. Fingalnans anyway were not clothes conscious and only wore them for decorative possibilities.

With a pad of lint and some lukewarm water he bathed away congealed blood and drew the delicate sil-

very skin together with continuous strips of skin-graft strapping. He broke out enough lint pads to cushion her against the ridged floor and as a refinement, on purely esthetic grounds, spread her hair in asymmetrical fan like a pale aureole.

She was as well out of it for a time. Transfusion of plasma could be carried out in *Petrel's* minute sick bay. That would be a treat for Sholto Quinn, the ship's medicine man.

The car hurried on. Now he was checking for seconds of leeway in the schedule. Cotgrave would give him every chance, wait to the last minute before taking *Petrel* up; but he was bound by his orders and no return could reasonably be expected. They were over the desert, and heat was notching up. It was providential that he had moved the ship to the coast; a short journey from the car might just be tolerable at the coast site. At the viaduct even seconds without a life-support system would have been too long.

Then another thought struck him. Cotgrave would see the approach of two Garamasian craft as a threat. A ship was very vulnerable at the instant of liftoff. Even small-arm fire could upset her delicate balance. The co-pilot would be inclined to blast them as soon as they were in range of the main armament.

When *Petrel* showed up, a slender spire on the horizon, they had a two-minute lead on the following car. Above the maroon pennant, Dag Fletcher had broken out an improvised white rectangle. He slipped control out of the autopilot's

capable hand and began to circle the ship, noticing the wreathing steam spiraling from heating rocket tubes and willing Bennett to wait one minute more.

Then he was going down in a steep dive and ploughing into soft sand twenty meters from the tripod legs.

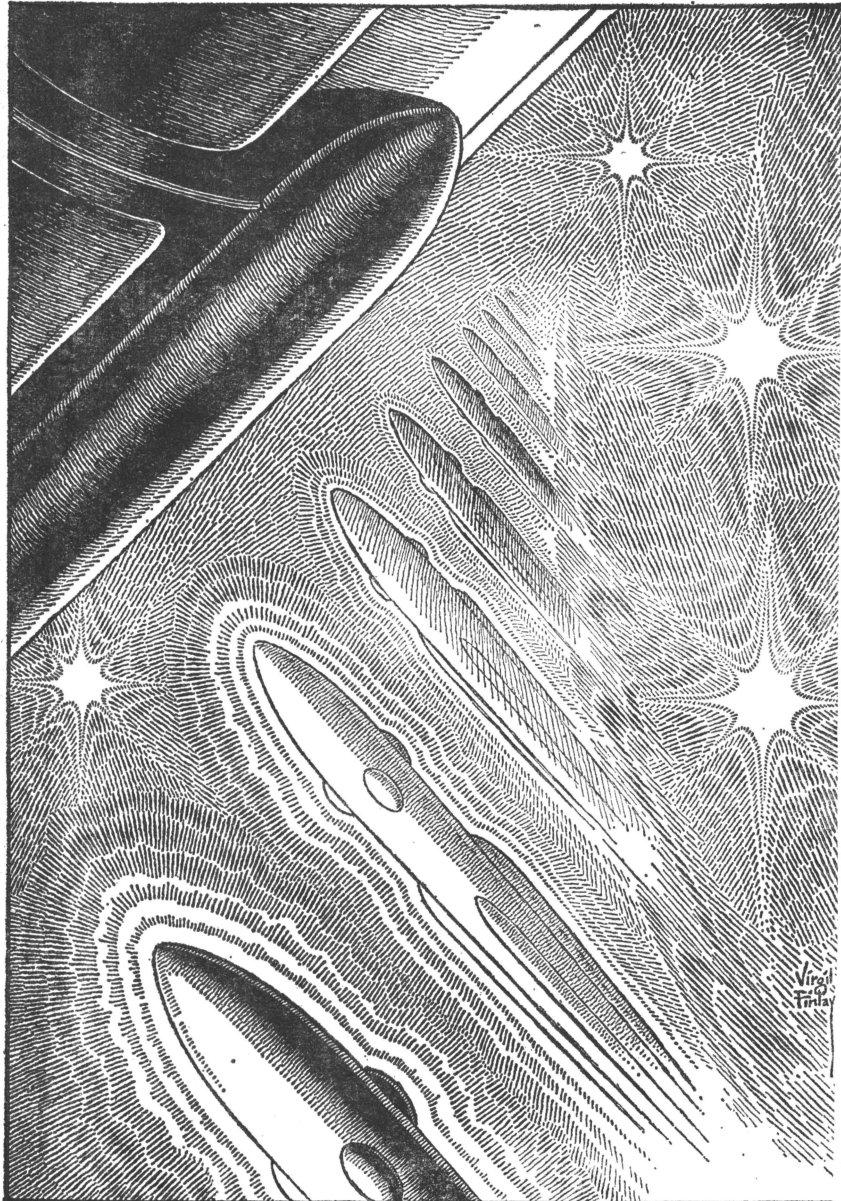
Even in the hurrying car, making its own ventilating draft, and refrigeration doing its best, it was hot. Sweat was glistening on his bare arms and running unchecked down his face. He saw the freight hatch open and a small elevator platform begin its descent with a bulky figure in full gear which could be Engels.

Cotgrave, with his finger on the button to blast the car, saw its hatch slide back and Fletcher's tall figure step out onto the burning sand. Across his arms, like a drugged victim being delivered for a burnt offering to Baal, was the limp, silvery figure of a Fingalnan girl. Bennett from the navigation console said, "That's the agent, believe it or not. It looks as though she's bought it."

Dag Fletcher forced himself on. Behind him he heard the disintegrating roar of the Garamasian car, caught by Farnley as a plumb target on the hairlines of his main laser. But he was walking through fire and heard it as an irrelevance from another world. It was the furnace mouth. Heat that was shriveling his skin. Boiling his blood.

Then hands were holding him up, and the elevator was retracting. Slowly, slowly. Too slowly. He was fighting for breath.

It seemed only seconds later that



Virgil
Finlay

he was stirring in his own acceleration couch in his cabin and calling the command island. "Commander to One. Course detail."

Cotgrave said, "Glad to have you back on the net, Commander."

A miniature of the main scanner glowed above Fletcher's head, and he saw Garamas as a plate-sized disk with the land masses in clear definition.

Cotgrave said, "Sixteen hours to R.V. Permission to stand down."

"Check. Carry on."

VIII

Sixteen hours. Xenia would have to transfer to *Europa*. Facilities there for an extra body. And a very popular body she would be.

When he went into the sick bay, Quinn said, "She's doing very well. I'd say she was just about indestructible. Anyway I'll leave you to talk to her; she tells me there is classified material to discuss. But don't excite her, now."

When he had backed out of the tiny crucible, Xenia sat up in her narrow cot. In the familiar surroundings of his ship, her silvery nudity was a greater surprise. Too late he remembered that his thoughts were not his own.

She said, "So you think the warning about excitement ought to have been given to me? That's nice. Sixteen hours. That isn't long. I have to give you a big thank you."

Nobody in that cubicle could be far away from any other occupant, and it was easy for her to reach out and put her arms round his neck.

"How do you feel?" He was doing his best to keep a conversation going.

"I feel fine. You feel fine, too. I do like you, Dag. Will you come and see me when you have a furlough?"

"Where will you be?"

"I have to do a session at I.G.O. headquarters. It will be a long time before I go out on another mission. Prepawation takes a long time."

"Certainly I'll come and see you. I owe you a lot, Xenia, and so does the service. That was your show and you did well."

"You sound like a schoolmaster pwaising a pupil."

Before he could reply, her lips, very warm and soft, had effectively closed his. But the mental link began to open, and he found that he could follow her argument in a communication that used no words, but made sense at one remove from conventional, overt symbols.

It went something like, this is a military unit. You are putting me in an impossible position.

There is no such thing as an *impossible* position. Just a greater challenge to ingenuity.

Quinn said you were not to be excited.

I know better than any *Earthman* about whether I want to be excited or not.

Don't wriggle about, you'll start bleeding again.

Lock the door.

No.

Then I'll get up and do it.

He opened the door and looked out. Quinn coming back along the

corridor. Fletcher said, "She's okay, Doc. I'll sit with her until she goes to sleep."

Then he went inside and thoughtfully dropped the toggle on the catch.

The squadron was moving like a silver chain on a velvet display pad, in line astern, with *Europa* in the center of her corvette screen. *Petrel* came up on the microsecond.

"Permission to rejoin."

"Permission granted. Admiral requests Commander Fletcher and I.G. O. agent to proceed aboard flagship."

The beginning of the end. Swing out over vacant interstellar space with Xenia beside him on the line, already an anonymous figure. Report delivered in the command cabin. Xenia indifferent of the impact she made, coldly professional again. Even the smallest coveralls found on *Petrel* were sloppy on that small figure.

Vatley said, "Success must carry a certain commendation. But I am bound to tell you, Commander, that your actions could have had serious repercussions. I must ask you in the future to stay within your brief."

He fingered the small gray capsule which contained Xenia's report. "We have succeeded in our mission, and there is a bonus in the destruction of the fascist nerve center. Government forces have re-established control, and it is given out that the destruction of the power ring was part of the takeover plan. I shall mention your part in it in my dispatch. We are bound now for I.G.O. H.Q.

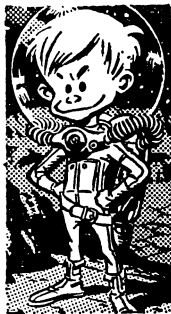
A short leave for all personnel, I understand, before the next mission."

Swinging back over the black depths to his ship, Dag Fletcher recognized her mind penetrating the vacuum to speak to him. Tenuous at this distance it was no more than a warm promise, a feeling of well-being, a frail human alliance at this instant of time in the immensity of galactic space. Time indeed was still on their side with another meeting, and that, when rightly considered, was as far as any reasonable man would wish to go into the future.

He sent back as a signal, the signal, the single, ubiquitous service word for acceptance of any situation.

"Check."

END



WITZEND

IS THE NAME OF A NEW MAGAZINE INTENDED FOR FANS AND COLLECTORS OF SCIENCE FICTION, COMICS, SATIRE, S+S AND RELATED FIELDS, IT IS A FULL-SIZED, 8½ BY 11 OFFSET MAGAZINE ON HEAVY, QUALITY STOCK AND FEATURES THE WORK

OF THE WORLD'S BEST CARTOONISTS AND ILLUSTRATORS, WILLIAMSON, GAUGHAN, FRAZZETTA, CRANDALL, AND MANY OTHERS, SOME COPIES OF ISSUE NO. 1 ARE STILL AVAILABLE, AND NO. 2 IS NOW ON SALE. THE PRICE IS \$1.00 YOU MAY SUBSCRIBE ... \$4.00 FOR 4 ISSUES.

ORDER FROM,
AND MAKE
MONEY ORDERS
OR CHECKS
PAYABLE TO →

WALLACE WOOD
BOX 882
ANSONIA STATION
NEW YORK, N.Y. 10023

FROM DISTANT EARTH



GARY WOODCOCK

by BASIL WELLS

*Naron might not be
such a bad planet — if
only it weren't invisible!*

“A planet without vegetation, surface water, or life. A leaky spacelighter without fuel. Food for six months and half that much oxygen.”

Mal Harker shook his head hopelessly.

If that doesn't spell murder, Esme,” he went on tonelessly, “name what it is.”

The yellowish dusty wastes of Naron, fourth planet of Kyor Twelve, were coming up swiftly to meet them. The outer shell of the clumsy little craft was warming rapidly, so steep was their course; but they had no spare retro fuel for a second approach.

Esme Jannot's pleasant round face was placid. In all their four years together aboard the planet-mapping *Von Ark*, he had never seen her upset or excited. His partner, Ilda Nolan, had nicknamed her “Doll.” She was blonde, blue-eyed and tall.

It angered Harker that she seemed so little concerned.

The small spacelighter was being tossed about now by the outer shreds of atmosphere despite the measure of stabilization afforded by the rudimentary wings.

“There is atmosphere, Mal,” said Esme. “Somewhere there may be a rift or oasis that will support life. We have three, perhaps six, months to find it. Remember, we did not map all Naron.”

“And in the meantime Dorn Tate will be light-years distant — with my partner!”

Harker beat his fist against the cramped cabin's insulated green matting of resilient synthetics.

“That is the heart of the matter,” said the big woman strapped into the control seat at his side. “Tate has stolen your parner. It is not the loss of the *Von Ark* or being exiled here that troubles you most. It is the thought of Ilda alone with Tate.”

“Yes,” Harker agreed savagely.

“You knew that he too loved Ilda,” she said calmly. “You could

have avoided this ugly crisis by freeing her at the last six-months' part-nering."

"We neither of us wanted that." He scowled over at Esme Jannot. "The thought of her partnering with Tate was revolting to us both."

"And to me as well, Mal. Yet I was his partner for these four years past. It was for the good of the ship and its personnel. Men and women need companionship and understanding. We understood that when we signed for the voyage."

"I realize that. What I, what we both feel, is not anything logical. It is something atavistic I suppose. We love one another." He struggled for words. "We belong."

The ship, under semi-automatic controls, leveled off, cooling its superheated skin. They saw the dead yellow surface now from a height of less than a score of miles. And there were no gaping wide canyons or sunken depressions visible where they might eke out a miserable existence for a time. Only jutting ridges of barren black rock, some of them thousands of feet in height, marred the waterless wastelands below. Esme Jannot's voice cut across a long silence.

"And because of your selfishness, and Ilda's as well, we were drugged and put adrift near this dead world."

She smiled. "I am not condemning you, Mal. I only wish someone, sometime, had loved me in the same way."

Harker glanced quickly over at the big woman's face. He had caught a trace of wistfulness, perhaps of re-

gret, in her voice. And then he realized that they must ground on the surface within a scant handful of minutes.

"What do you say?" he asked. "Should we land on one of the mesas or near its base?"

"Water goes down, Mal. I vote for the lowest area possible."

"Agreed," cried Harker.

Their final goal was a huge mass of stone, perhaps a hundred miles across and roughly star shaped — a seven-pointed star. The dark bulk was flattened on top, and a mile-wide rift cut it into a larger and a smaller segment. Here, Harker reasoned, there might be possible openings into a subterranean cavern or caverns.

The tiny spacelighter came down across an upcurving bed of pale sand, heading toward the split mountain that would be their final resting place. The sand's friction would slow them, he hoped, but not too much.

The ship met resistance, a hundred feet or so above the sea of sand. There was a hissing burbling rush of sound. He felt the ship slowing. And now the sand was closer under them. Fifty feet and then twenty. They felt the sand bite into the hull. The lighter shuddered.

Sand sprayed outward and upward, obscuring their vision momentarily. Yet there was no sound transmitted through the ship's tough outer skin. It was like plowing through a dense fog.

Came a rending crash. They were thrown forward in their resilient harnesses. Harker regretted not hav-

ing Esme don the lone spacesuit, a battered, much-patched outfit. If the lighter was holed they might die almost at once.

And the ship *was* broken. The alien atmosphere was seeping into the cabin, diluting the stale stench of the air trapped there.

"It's good!" cried Esme in a strangled voice. "Smells fresh and clean! Green growing things! Fresh earth!"

Harker released his pent-up breath. Deadly gases might be masked by a pleasant smell, he knew, but he had to breathe. And he took a second deep breath, savoring to the full a deceptive sweet fragrance.

In a moment they might both be dead or dying, but for the moment he relaxed and was thankful for their safe grounding. He forgot Dorn Tate, the arrogant graying astrogator, and his tiny, darkly beautiful partner, Ilda Nolan, a captive aboard the spacer.

The sound of Esme Jannot's unzipping and unpoping the control chair's harnesses aroused him from this pleasant lethargy. He set about freeing himself.

Golden light from the sandy waste outside poured through the broken transparency of the nose blister. He went to the sealed entrance port and spun the safety lock's hand-wheel.

The round laminated thickness of the first lock, and of the second, this a trifle warped and sticking, slid into their grooves; and the way outside was open.

"It feels," said Esme, as they gained the outside, "like Mother

Earth after a summer rainstorm. Yet this is desert. Dead!"

Underfoot the sand felt springy and almost sticky. Harker looked down, puzzled, and then looked over at the woman's comfortable dark shoes. Like his own their soles rode an inch or better above the gritty-looking soil.

Something invisible and compressible covered the dead land here at the base of the star-splattered loom of the mountain! Something like this had caught at them as they were coming in for a landing!

And the air was rich and heady with the scent of moisture and growing things! He heard the breeze whispering!

Harker bent over, his hands probing into the nothingness beneath. He felt the crispness of grasslike growth — the coolness of recently watered roots and stems. A hoarse bird sang.

"There is vegetation here, Esme!" he cried out. "Why we cannot see it I do not know."

Esme was lying on her stomach when he turned, her face buried in the invisible sod and her fingers digging into the seeming emptiness. She sat up, an unwonted excitement in her deep blue eyes, her cheeks flushed. Harker saw her, as though for the first time, as a vital attractive woman. Why had he thought her dull and bovine aboard ship, he wondered? That other Esme Jannot, placid and uncomplaining, had been a mummer's masking.

"There must be water, animals, edible plants," she said, her eyes glowing. "After a time we may be

able to see them — to live off the country.”

“I don’t know, Esmc.” He frowned. “Plant life that cannot be seen. It must be too alien in structure for our bodies to assimilate. It may not even be carbon-based.”

His tongue was clumsy he knew. Words and thoughts tangled together and spilled out. He knew that it was the delayed shock of losing his partner, being exiled forever here on Naron and now the discovery of possible reprieve from eventual starvation and thirst that made it so.

“But we have a fighting chance now, Esmel!” he cried out. “That must have been water, or something akin to it, that the lighter plowed through. Let’s analyze some of it.”

The big woman smiled agreement. Side by side, their light rocket rifles outthrust like a blind man’s probing cane, they went down the easy slope below the ship. Twice Harker tripped over an unseen jut of brushy growth, once with a painful raking and piercing from the thorns or needles of the Naronese plant. The roar of pounding surf strengthened.

Before them the yellow sand darkened and seemed firmer in texture. They were walking on a hard-packed beach of grassless sand. And they saw sand that moved. Now it came uphill, and now it slipped backward. Into this moving sand Harker stepped and felt fluid come swirling up about his ankles. He scooped up a palmful of the receding wave and tasted it. Definitely saline. He spat it out.

A larger wave staggered him, and he started to fall. He caught himself,

after a bit of ungraceful arm waving and hopping, and rejoined the woman.

“We’re in business — I think,” he said. “It feels like sea water. Once we have tested it and distilled a few gallons, we will know better.”

Was it only four days? Four days on Naron meant a few minutes over eighty hours — the day being approximately twenty hours long — but it seemed much less.

They had repaired the gaping wounds of the spacelighter as best they could and found a second daytime refuge from Naron’s great golden primary in a cliff-sheltered valley. Here they had found a small stream and a pool of fresh water, with several stands of straight-boled timber along the creek. It was here, on the three or four hundred acres of arable land, that they decided to settle to await an improbable rescue.

With improvised hooks and lines, baited with bits of promine steaks or colored lures, they had fished the pool — hooking three and four pounders. Unhooking an invisible fish has its problems they had learned; but later on, the fried beauties taking on a misty reality with their coatings of synthameal and cooking oils, they had earned a tasty reward.

Esme’s specialty, photography, had proved invaluable. The dozens of pictures, taken at random, revealed a fertile land of forests, meadows and a horizonless sea to the east. They had discovered slender deerlike animals and fat, gray-haired brutes, hog-sized, that fed on roots and nuts under the smooth-boled trees.

Even yet, familiar as he was with the half-mile trail from the ship, Harker was continually running into low boughs or crashing into the trunks of trees along the way. And it was disconcerting to step on a writhing, snakelike something and leap backward. Yet your eyes revealed only a sere yellow wasteland.

He tried to put Ilda from his mind. When he imagined her alone with Dorn Tate, his anger and despair sickened him. Yet he knew there was nothing he could do. They were millions of miles distant by now. And they would never return. He and Tate's discarded partner must end their lonely days here on this mysteriously veiled planet of Naron.

Esme was an understanding woman. She respected his grief and could keep her silence. She left him to his own brooding thoughts and did not interfere in any way while he was steeped in bitter self pity. He realized what a pouting child he must appear and forced himself to labor harder.

A cabin had to be built and a stockade across the narrow mouth of the valley to keep out the hidden animals of the ghostly forests. Experiment showed that wet mud from the pool, smeared on trees or leaves, remained to mark their presence. He experimented with sprays, outlining their immediate surroundings. He used dyes to stain the water, the resultant contents of the valley pool having an unreal cottony appearance. And he set out generous cuttings of the edible, oxygen-freeing hybrids that the

spacelighter's air-reclamation system utilized. They grew luxuriantly.

Harker was busy and, increasingly, almost happy. He knew that the buxom woman who shared his exile often felt the same. He caught her singing softly as she worked, not once, but a dozen times. The sun was coloring their skin, and its warmth caused them to shed the superfluous burdens of emergency coveralls, standard aboard ship, and don shorts and brief tunics.

He discovered that Esme was a big woman, yes, but beautifully proportioned and strong. There was nothing flabby or needlessly sagging about her body. To most men, he thought, she would be very attractive. But not to Mal Harker. He loved Ilda Nolan — and he always would be faithful to her.

He was spraying the trees about the little clearing where they had decided to build. The spray was a fine mist of aluminum paint and carbon scraped from the tubes. It outlined, in a darkly silver sort of shadow-image, the immediate surroundings. Silvery sward underfoot and silvery trunks and leaves arching overhead. His supply of the paint was strictly limited; only the heart of his projected farm could be marked. But there were substitutes.

"Mal!" screamed Esme from the direction of the pool.

He could not see her, the rocky lip of the pool's edge was nine or ten feet above it, but he knew she had gone there for a bath and, perhaps, to hook a fish later.

He ran, the improvised hand

sprayer yet in his grip. Now he saw her clothing, abandoned at the pool's invisible edge, and then, across the hundred-foot bowl, he saw her struggling, her kicking body being impelled up the rocky slope. She was fighting an unseen something, or things, as savagely as her great strength allowed.

Harker's needle-spitting hand gun was at his hip, its needles armed with paralyn. If he fired Esme might well absorb several of the paralyzing slivers. More than five or six meant death. And the metabolism of the unseen raiders might remain unaffected by the drug.

He ran swiftly after Esme, circling the pool and tripping over hidden undergrowth as he did so. As he neared her contorted body, something that sounded heavy and vicious went hurtling past his ear. He ducked, stumbled and was aware of the tank of compressed air and the nozzle and paint cylinder that bumped ground before he recovered.

He depressed the stud, showering Esme's naked body and the invisible enemy equally with an aluminum mist. The spray caught three hulking shapes, humanoid in general shape but larger, thicker and wider. One of the trio held Esme's arms locked behind her, but the other two were advancing on Harker. Both imperfect shells of animated silver swung huge clubs, and a savage roar of anger and savagery went up.

A lashing club grazed his shoulder. He had the needler out by that time and was sewing metallic slivers across their middles. The other club struck the ground, so quickly had the

paralyn acted, and the two kidnappers were helpless. Harker rubbed at his left shoulder's numbness, feeling the sting of bruised flesh, and sidled around Esme and her captor seeking a clear shot.

The bulky biped hurled Esme aside, bellowing, and rushed Harker. An unseen fist slapped the needler, even as it started to spew out its deadly hail, from Harker's grip. He felt a huge, strangely hard body slam into his own; and he went down. A snarling mouth came down at his throat. He jabbed an elbow into emptiness, and the barely discernable head fell away momentarily.

He pumped his fists, he had dropped the sprayer even before the hand gun, into the springy armor-like body of the aborigine. He heard Esme panting out words of courage. Then the needler hummed, close at hand, and his Naronese assailant collapsed upon him.

"Mal!" she was crying as she rolled the helpless creature out of the way. "Mal, are you hurt?"

Harker grunted, raising himself to a sitting posture. He moved his neck and arms — stretched. His shoulder felt numb, and he was gasping for breath; but he was unharmed. He saw surprised tears in Esme's eyes — although after her close escape that might be expected.

"Yeah," he managed. "I'm fine."

She was examining his bruised shoulder, forgetful of her own unclad state. He could see that it was an ugly bruise, with blood oozing through the abrasions, but his arm was not too badly affected.

"Thanks be," Esme said. "I was so afraid that you would be killed. And I couldn't face that." She shivered. "This horrible place — these unseen monsters — the desert!"

She was sobbing her arms around his neck, her tears wet on his bared shoulder. Gone was the calm, almost robotic, crew member he had known for several years aboard the *Von Ark*. This was a warm-blooded, sympathetic queen of a woman. Her tanned fair flesh was warm and soft against him . . .

Harker pushed at her gently. He stood up.

"We had best get back to the lighter," he said. "No telling how many more of these brutes are prowling about."

Esme shook her thick chestnut curls into order with a toss of her head. With the back of her hand she brushed the surplus tears away. She was smiling again, suddenly, her usual calm capable self — and this despite her recent outburst. Harker was proud of her.

While Esme went for her garments around the pond's rim Harker sprayed one of the helpless creatures more completely. Its color was of course not apparent, but it appeared to be four-toed, rather than five-toed, and its hands boasted an equal number of digits.

The apishly thick-bodied brute was close to seven feet tall and completely hairless. The legs were short, thick and bowed. The huge-jawed skull, capped by six flexible crestings of fin-like ridges, was equipped with the huge, flat-slabbed teeth of an herbivore.

Harker understood now the apparent hardness of the native's body. The external body covering was a natural and flexible coating of bony plates almost chitinous in character. This strange carapace of linked plates gave way to more normal flesh on arms and legs, but even this was coarse and scaly.

"Ready," called Esme. "Let's go to the ship."

"One minute," Harker cried, gathering up the sprayer and one of the crude, hide-wrapped splinters of igneous rock that the natives carried for weapons.

"We must come back with a camera," he said as he reached her side, "before they recover . . ."

The lowest level of the city was a hundred yards above the plain. The city was the product of centuries of boring into a drum-shaped mesa's softer rock layers. Now the city's avenues and passages honeycombed the mesa's several miles of diameter.

Four elderly Naronese, in an exterior chamber on the thirtieth and topmost level, linked minds amicably.

"Unless we free their eyes," one declared, "both aliens will be destroyed by the *Lynks* or the *tagants*. And a new defence against aliens should be devised. They see through pictures."

"We must not let the offlings die," agreed a second, "but the mother ship *did* go away, suspecting nothing. These two were left behind to die. So I say let us release these two from their visual blackout but retain the planet-wide shielding."

"I agree with Hedl," the third

native's more deliberate thoughts came through. Retain the desert planet mirage, but free the two castaways."

"They *are* much too interesting specimens to permit their wanton destruction," the last of the quartet agreed. "I too vote with Hedl. Yet I also agreed with Adro that a second line of defense against possible future invasions be considered. The next aliens may not be as primitive and peaceful as these Earthmen. Nor as amenable to mental suggestion."

"Even with these aliens our only complete success has been with their vision." The thoughts were flooding together now. "Natural blocks against control like the brutish Lynks of the forests . . . Yet we can read their thoughts . . . Not control them . . . Children in many respects and cruel as only the young . . . They can be taught wisdom, Hedl . . . And they can teach us as well . . ."

Thoughts battered, splashed and churned. Eventually an agreement was reached, and the word went out to the scattered millions of Naronese spread thinly across the globe. The male and the female alien were to be permitted full vision at once.

That a few isolated citizens misunderstood or were asleep or mentally disturbed was to be expected. To them can be ascribed the vague sense of unreality felt by Esme and Harker at first . . .

They were entering the lighter's outer lock when the curtain was abruptly lifted.

The sward underfoot was a blend-

ing of purple and green, the tightly curled underleaves a paler hue. The trees of the forest were paler, on the whole, than Terrestrial vegetation; but then the pale golden tinge of the heavens, opposed to the blue of Earth, made for strange lighting effects. They saw for the first time — excluding the color films Esme had taken, the grazing herds on the plain to the sea's red-sanded brink.

"What happened?" cried Esme.

"Like scales dropping from our eyes," mused Harker. "Some ancient writer wrote that. And it is so."

Unconsciously they had come together, arms interlocked and bodies touching. It was a need for mutual reassurance — a fear of the unknown that needed to be faced jointly.

"See those creatures, like tigers or lions, prowling along the ridge," Esme cried. "Covered with blue fur, or hair, large as a horse! And the ruminants. Like bison but bigger . . ."

"The cat beasts are called *tagants*. The ruminants are *satas*. And the brutish bipeds you defeated so cleverly are called *Lynks*. They are degraded offshoots of our own race."

There was no voice. Harker was sure of that. He turned about, peering. Esme was not smiling now, her face pale. There was a sound of footsteps on the grassy cushion at the spacelighter's stern; and two giants, scarlet-plated with shading to a delicate yellow and white along the belly and chest, strode into view.

"Forget your weapons, Mal Harker and Esme Jannot," the bodiless voice cautioned. "We could have destroyed you long ago had we desired."

Harker nodded somewhat ruefully.

"I expect you could," he agreed, his eyes taking in the finely fitted harness of leather and metal and the sword and the dagger hanging from it.

"We do not kill needlessly, Mal Harker," the alien thoughts came. "Only the Lynks and a species of sea serpent resist our control. The weapons are for them and for misguided men of our own race."

"And what of us?" Harker demanded. "Are we your prisoners? Now that we can see you, what is to happen to us?"

"You are offered this valley and the others surrounding. You can never return to Earth. You have been deserted by your leader. Here you and your children can dwell in comfort."

Harker swore half-heartedly and spluttered. Esme reddened.

"We are not partners or mates," he said. "My partner was stolen. I am faithful to her. There will be no children."

The thoughts of the Naronese were amused.

"Wait and see," they advised. And then: "we will come again tomorrow."

They turned and walked swiftly back the way they had come. Harker and Esme looked at one another uncertainly. A small doubt was gnawing at Harker's brain. The two Naronese apparently knew something that he did not suspect. He recalled how Esme had flushed and looked away.

Forget it, he told himself, and get to work on the stockade and the

cabin and at the planting. Now that you can see your surroundings your sprayer is not needed. Work!

But there was something wholesome and fine about Esme . . .

That night he was battling with Dorn Tate. It was a hopeless battle from the first. Tate was older, stronger and more experienced. And watching, laughing mockingly at his feeble efforts, was his eight-term partner, lovely, dark Ilda Nolan. In utter despair he cried out and heaved the crushing bulk of Dorn Tate from him — and awoke!

The hopelessness of that nightmare battle carried over into his waking thoughts. Helpless here on Naron, while his beloved Ilda was born light-years away. What good to live on? There was no hope of rescue. The first colonizing expeditions to follow the route they were blazing would come a century or so later, and this desert planet would be avoided. He groaned aloud.

"Is something wrong?" Esme asked softly.

"Everything, Esme," he said. In the pale light of Naron's larger moon he saw her across the control cabin, sitting up in her emergency shock hammock. "Why go on living?"

Esme swung herself out of the hammock and came over to his improvised cot of cushions and webbing. She was angry, he saw as she switched on the ship's side lights. He had never seen her like this before. Her hair all tousled and her face . . .

"For four years," she said sharply, "you kept one partner aboard

ship. You were faithful to her as our code of ethics requires you to be."

"You know that, Esme. You were the only other woman aboard the *Von Ark*."

"Had Ilda partnered with Dorn Tate you would have respected that relationship?" she demanded.

"Why, of course, Esme," Harker agreed, "but Ilda would never have partnered with him. We were — are in love."

"I would never had spoken of this, Mal, had we returned safely to Earth. Believe me. But now I cannot let you go on destroying yourself . . . I love you too much to let you . . ."

"You — me?"

"Since we first boarded ship, Mal. But I knew how hopeless it was. Ilda wanted you, as well as Tate."

"What?" Harker's hands clamped Esme's firm shoulders. "You say she wanted — Tate?"

"And had him. They were lovers from take-off, Mal. You never suspected. You trusted them. And I knew the ship's mission came first. What good to hurt you?"

"You lie, Esme!" He shook her savagely. "This is a story you manufactured. You lie!"

His fist knotted. He drew it back and struck at Esme's face. But his blow went wild, somehow, missing her completely. Instantly he was ashamed and shocked at his instinctive brutality.

"You invented it?" He was pleading.

"It is true, Mal. Think. You must

realize I am not lying. Ilda knew that you would obey the code if she were partnered with Tate. But he was not that honorable.

"Until he changed and demanded that she leave you. It was after that that we were set adrift near Naron. She had lost her control over him."

"I will not believe."

"You must." It was a powerful inner voice. "She tells the truth. We, of Naron, know the truth. Believe!"

And Harker believed. There was utter conviction in the thoughts that had come through so strongly. A thousand memories came briefly to him confirming the ugly truth of his partner's calculated unfaithfulness.

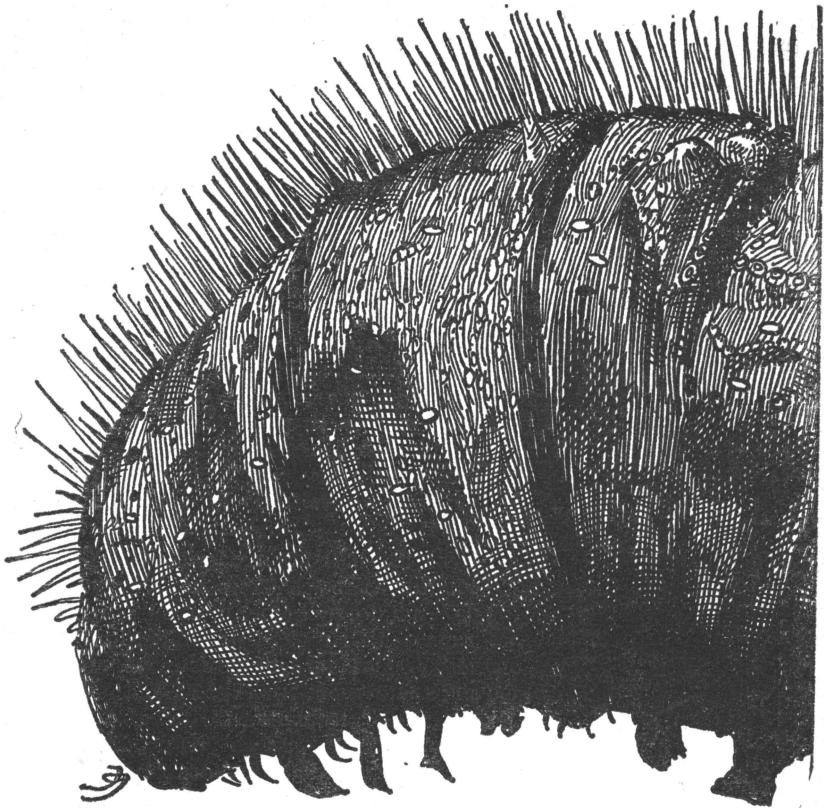
Dimly he sensed the withdrawal of the mental linkage with the Naronese. His mind was a dull ache within his skull, a bruised numbness slowly wearing through pain to a measure of peace.

Esme was beside him, her arms tender about him, her voice soft. Gone was his anger at her. He felt shame and bitterness. His love for Ilda, her professions of love — all mirages, even as the desert world of Naron had been false. The reality was better.

The operation had been clean and complete. Instead of a sickly dream he possessed something real and lasting at last.

He took his partner in his arms, the moonlight of that alien world bright upon them, and it seemed that this was a homecoming to their own bit of a distant Earth . . . END





Business could have been profitable — but something was eating into the profits!

I

“Gloomer?” asked Charles Darwin Skroot.

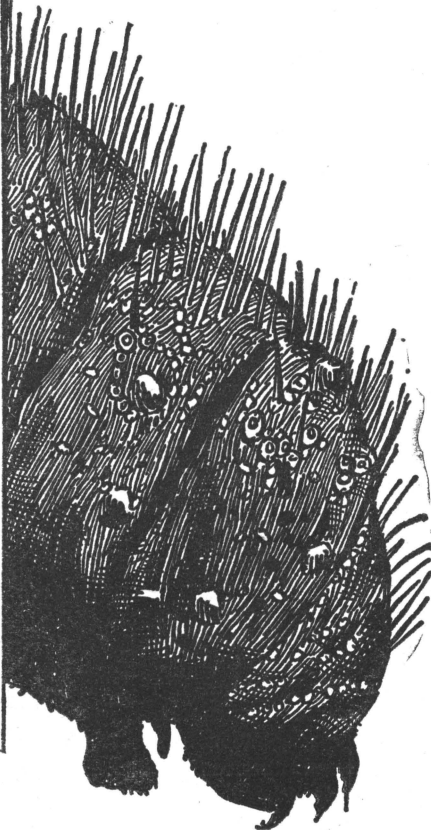
The president of Planetrade Corporation nodded. With an understandably worried expression, he handed

a transcribed message to Skroot, a planetary ecologist of great reputation and little sense of humor. Skroot adjusted the glasses which rested toward the tip of his nose and carefully read the typewritten sheet. It said, “Have had to move into re-

THE TASTE OF MONEY

by R. V. HUMPHREY

Illustrated by GAUGHAN



mote areas to collect. Demand exceeding supply. Still no new seedlings. No success in transplanting. No success in locating seeds. Help. Usher."

"There's our problem," Conners said when Skroot looked up from the message. "The planet Gloomer

has only one valuable resource, namely, Tastybushes. We have over a hundred collectors out there now, and we should probably send another fifty to keep up with the demand. But, you read it for yourself. We're running out of Tastybushes.

R. V. Humphrey, author of this month's "first" story, is a field archaeologist, photographer and lab technician at the University of California, where he is studying for his doctorate in Archeology. When not digging in prehistoric coastal Indian sites, our author enjoys shark fishing.

"What's even worse! Tastybush-blossom extract has become our biggest product, and if the things disappear we'll probably go bankrupt. Three or four more years like this, and we've had it." Tiny tears rolled down Conners' cheeks as he gravely considered bankruptcy. "That's why we called you, Skroot. Find out why they're dying off and fix it. If you can save them, you can almost name your own price."

Skroot read the message over again and queried, "Just what is this Tastybush-blossom extract used for?"

"About ten years ago we began marketing it as a soft drink flavor. We never dreamed it would become so popular — or so profitable. Our sales doubled every year, and up to now we've expected to make some real money on it. We're the only suppliers, you know. But last year we discovered that no young Tastybushes were sprouting in any of our collecting areas. The old bushes died off, and there weren't any new ones to take their place. Now we have to go out into the swamps to find them, and that gets expensive, believe me.

Skroot took his dog-eared notebook from its holster and began taking notes.

"You know," Conners continued,

"This is the first new flavor in several hundred years. Before they finished exploring Earth, every time they discovered a new continent or something a new flavor came with it. Like chocolate, when they discovered America. Since then, nothing until the Tastybushes. This is the only really new one that hasn't turned out to be either poisonous or habit forming." Conners grinned and chortled, "And we're the only suppliers."

Skroot nodded his head in agreement.

"Everybody loves it," Conners announced. "Some people drink six or seven bottles a day. And every bottle is worth a profit of three and a half cents." He leaned back into his chair with evident satisfaction, but his smile turned into a scowl as the thought of bankruptcy returned. "But, as goes the Tastybush, so goes Planetrade Corporation."

Skroot removed his glasses and thoughtfully cleaned them on the front of his shirt. "My fee," he said quietly, "will be one cent per bottle, for a one year period, commencing one year from the completion of my task."

"What?" Shrieked Conners, half rising from his chair. "That's robbery!"

"Well now," Skroot replied placidly with a shrug of his shoulders, "It's not as bad as all that. If I don't solve your problem, naturally, there will be no charge for my services."

Conners' voice increased in volume and pitch. His face became redder with every second. "Do you realize how much money that is?"

"Yes, indeed I do, Mr. Conners," replied Skroot, not the least perturbed by the outburst. "And it's cheap at the price. Of course, there are other alternatives. You could engage someone else or pay me a flat fee whether I should succeed or fail or you could put some of your staff people to work on the problem, or you could always just sit and go bankrupt."

Conners winced at the thought. "You bandit," he said. "You know very well there's no one else with your qualifications, and we've had our staff on it for two years already with no success, and we figure that you'll probably fail too."

"I'm really too old to go hopping about on the planets at all, you know. I should have retired many years ago."

"With the fees you charge you could retire after a single job." Conners deliberated for a moment, rapidly calculating on his fingers. "Okay, one cent per bottle it is, but only if you completely and permanently solve the problem."

"I'll have my attorney draw up the contract," Skroot said. "Of course, I am assuming that all of your records on the planet will be made available to me."

"Certainly," Conners responded with no hesitation. "Anything that might help. But unfortunately there isn't much we can give you."

Skroot looked puzzled. "It was my understanding that Planetrade Corporation always made complete and systematic surveys of the grass under its jurisdiction."

"Well, yes," Conners said slowly. "That's true. But there were, well,

certain problems involved here. We really weren't able to accomplish very much."

"Exactly what problems are you referring to, Mr. Conners?"

Conners noticed Skroot's suspicion and hastily said, "There's nothing dangerous there, you understand. No hostile aborigines or large carnivores or anything like that."

Skroot's eyes narrowed. "Are you attempting to conceal something?"

"No, no, certainly not," came the denial. "It's just that the situation there is difficult to explain. It's the weather. You might say it gets, well, a little thick sometimes."

"Thick?" asked Skroot. "Thick?"

"Well, yes," explained Conners, pursing his lips and looking at the ceiling. "No violent electrical storms or hurricanes or even a breeze for that matter. It's just . . . thick." He thought for a moment then added, "Precipitation is high; the visibility is correspondingly low."

"That doesn't sound like much of a problem."

"On Gloomer it's a problem, take my word for it." Conners leaned forward and cupped his chin in his hand. "For instance, our radar survey of the planet clearly showed a small range of mountains about 2500 feet high not more than twenty miles from our trading post. They represent the highest point in the whole hemisphere. But would you believe it, a crew of geologists looked for the things for three months and couldn't find them."

"Couldn't find them?" Skroot asked incredulously. "Indeed? An entire mountain range? Most unusual."

"That's what I thought at the time."

"Well, then," Skroot inquired, "what about a biological survey? Plants? Animals? That sort of thing?"

"We're not much better off there. Planetrade Corporation made a big grant to a university to send a crew of experts out to Gloomer to make a complete survey. We wanted another Challenger Expedition. And besides, it's tax deductible."

"What happened?"

"Well," began Conners, "it took three years to organize the thing. There were thirty specialists and enough gear to keep them going for five years.

"The geologists quit first. Right off the bat there was that thing with the mountain range; then it was another two months before they found even one little stone to work on. And that one turned out to be a piece of concrete that was accidentally transported from Earth.

"Another one of the crew was an ornithologist. One of the world's leading authorities on woodpeckers. But as it turned out, there weren't any woodpeckers on Gloomer, so he spent the rest of his time sitting and writing his memoirs.

"The ichthyologist had a better time of it. For a while, at least. Out on Gloomer, with all that rain and all, there are sluggish rivers scattered all over the place. We don't know where they come from, or where they go, or how wide they are; but there are fish or something that live in them.

"So he tried to catch a few with

a net, which didn't work. Then he tried a hook and line, but that didn't work either. He lost his tackle as fast as he could throw it in. One day he became desperate and rigged a line out of some 3000-pound test towing cable with a hook the size of a small anchor on it. He baited the thing with five frozen chickens and tied the end to a big concrete monument the surveyors put in. Whatever it was that he hooked took the line, survey monument and all.

"Poor guy," Conners said sadly.

"After all that time and effort, he didn't even see one of the things. He couldn't so much as publish a preliminary report. He finally had a nervous breakdown.

"Then the surveyors quit. They were furious when they found out about that monument. After months of work it was the only thing they had managed to map."

Skroot listened with genuine sympathy. "Did the botanists accomplish anything?"

"Yes and no," explained Conners. "They began by describing and classifying the marsh grasses. Then they disagreed about which family one of the species belonged to and spent the rest of their time on the planet arguing about it."

"They didn't work on the Tasty-bushes?" asked Skroot.

"No, they wanted to finish the grass first. As far as I know they're still arguing about it. After about six months, the whole crew got tired of the place and left."

"Well," Skroot concluded, "at least I won't have to spend several months reading academic papers." He rose

from his seat as though he expected to hear a loud creaking noise from his back. "When do I leave?"

II

The trip and touchdown were uneventful. When Skroot stepped out of the ship's elevator to the planet, its perpetual blanket of fog and mist closed in around him.

"Mr. Skroot?" called a tall, bony man, wearing a hooded plastic jacket and waders, who loomed suddenly into his ten-foot range of vision.

"Yes, as a matter of fact I am," Skroot replied, squinting as though it would somehow help him in peering through the soupy air.

"I'm Felix Usher, superintendent of the Planetrade Corporation trading post. Welcome to Gloomer." His clenched jaw and deep-set eyes overhung by shaggy black brows gave him an angry look. His normally snarling tone of voice completed the impression. "The chief beamed me that you were on your way. Here's your oversuit."

Skroot took the plastic jacket and waders and began to pull them over his clothes as he peered myopically into the fog. "If I had suspected that the place was as bad as this, I would have demanded a larger fee."

"Don't get all encouraged, Skroot," Usher sneered, "this is the best day we've had in three weeks, and this is the dry season." He led the way down a narrow path marked by flags on both sides. "When are you going to get to work?"

"I just arrived a few minutes ago," Skroot reminded him. "But I would

like to have a look at these Tasty-bushes I've heard so much about. Is there time to do it today? It looks as though it's almost nightfall."

"Nightfall, hell," Usher growled, "it's barely noon." They stepped off the hard surface of the landing pad and promptly sank ankle deep into the spongy surface of the planet. "We can drive over into the swamp right now."

"How far is it?" Skroot asked.

"A couple of miles," Usher answered. "Be careful to stay on the path. We don't want to lose you this quickly." They trudged along for a few more paces when suddenly, a huge vehicle appeared through the mist.

"This is how we get around. We call them swamp-cats. We have nine of them out here. No, eight," he corrected.

The sudden reduction piqued Skroot's curiosity. "What happened to the ninth?"

"Some clown came over to the trading post for a cup of coffee and forgot where he parked it. That was two weeks ago."

"You mean it's within walking distance of your trading post and you still can't find it?"

"This is Gloomer, remember?" responded Usher. "It's not only within walking distance, I could stand on the front porch and hit it with a stone, if I had a stone and knew which way to throw it. It's nothing to worry about. We'll find it sooner or later. We always do."

They clambered into the swamp-cat, and Usher pressed the

switch to turn the engine over. It growled and sputtered, but nothing happened. "Ignition wet," mumbled Usher. Finally it caught, and they moved ponderously down a road marked by posts spaced a few feet apart and painted fluorescent yellow.

"I ordered waterproof ignition systems for all of them," Usher explained. "Two years ago."

"Two years?" asked Skroot in amazement. "Are you sure they haven't forgotten?"

"Oh, no," he responded. "We've been corresponding about it quite regularly. Almost every mail delivery has something about it. The mail sacks aboard the ship you came on probably have three or four more letters for me on the ignition systems alone."

"Isn't two years a long time to wait?"

"Not really. It's not bad once you get used to the system. After all, the request had to go through three different departments. Besides, I have plenty of mail to keep me busy."

"But two years?"

"That's not bad. The man I replaced ordered some waterproof signal flares three and a half years ago, and they still haven't come."

"Why on earth should it take that long?"

"Special order. Waterproof signal flares aren't regulation equipment, and the corporation storehouse doesn't stock them."

"Oh," Skroot said, unable to imagine an appropriate comment. "How soon will we reach the Tastybushes?"

"Any time now." Usher drove silently along. "Ah. There they are."

The swamp-cat slogged to a stop just off the trail, in view of a small thicket of waist-high bushes and enormous thorn-studded tree trunks which disappeared upward into the mist.

Usher pointed to the bushes, scowling. "They used to be that thick all the way across that plain we just crossed. Now there's nothing at all there except that lousy swamp grass."

"Is this the swamp?" queried Skroot. "It doesn't look much different than the plain. Or around the spaceport, for that matter."

"It isn't any different," Usher growled. "The whole lousy planet is a swamp. You should see the trading post."

The persistent and saturating mist had found its way into the closed cab of the swamp-cat, covering every surface with a thin gloss of tiny water droplets. Skroot watched in fascination as they merged to form little rivulets which flowed to the floor. When they climbed from the vehicle a small waterfall accompanied them out the door.

They walked over to the clump of Tastybushes, Usher mumbling under his breath and stomping small, lavender-colored things under the heel of his waders. "Here's what's giving us all the trouble," he snarled. "Caterpillars."

"Let's have a look." Skroot fell to his knees with a splash to examine the caterpillars Usher had missed. As he watched, he noticed the crushed remains of the victims slowly assuming their normal spherical

shapes. Soon they began creeping toward the Tastybushes again, like hairy little golf balls.

"They're tough to kill. You can't just squash them," Usher explained, tromping another to illustrate. "But you can blow them out — like this!" With that he snatched a long, rusty knife from its scabbard with a graceful swoop and threw it with a grunt at another of the caterpillars which, as he predicted, blew out with a liquid pop. Its reddish purple contents spewed out and immediately soaked into the ground. The caterpillar shrank into an object which resembled a fuzzy pea.

Skroot examined the carcass with great interest as Usher explained, "We tried killing them for a while, but it took so long that we finally just gave the collectors big bags to stuff them into. Then we dump them into the nearest river, and the fish — or whatever they are — eat them."

"Very interesting," murmured Skroot. "The caterpillars, then, are killing your bushes?"

"No, hell no," Usher exclaimed. "They just eat the flowers before we can pick them." He reached out and snatched a fuzzy lavender lump off the nearest bush and flung it to the ground, where he ground it under his heel. As they watched, it resumed its shape and continued its march.

"It's not too tough to keep them under control in our major collecting areas. We have a crew of men patrolling the place catching the caterpillars as soon as they climb down out of the Thorn trees. That's where they come from, you know. Out of the Thorn trees."

"Out of the Thorn trees? You don't say." Skroot examined the nearest Thorn tree with new interest. Sure enough, four lavender caterpillars were threading their way down the trunk, detouring around the thick bases of the long, sharp thorns. While he wrote furiously in his book he asked, "If not the caterpillars, what, then, do you believe to be killing your Tastybushes?"

"Old age, probably," Usher said, kicking caterpillars away from a bush as though they were tiny soccer balls. "They die off in a couple of years, but there always used to be new plants to replace the dead ones. But lately there just haven't been any young ones at all."

"Good heavens," exclaimed Skroot, "I'm soaked to the skin, even with my oversuit on. Isn't there some way to stay dry out here?"

"That suit is standard corporation rain apparel, Skroot, that's all there is. But don't feel badly," Usher consoled, "everyone else is soaked too. You get soaked the day you arrive and you don't dry out again until after you leave. On Gloomer the only time you can even smoke is when a ship is in the port. You can crawl into the cargo hold and seal all the hatches."

Skroot gazed intently at a Tastybush. "If the life span is only two years or so, they must mature fairly rapidly."

"They do," Usher commented. "Everything does around here." He pointed toward a Thorn tree. "Even those things. They grow up and out of sight in two months."

"My word," exclaimed Skroot. "How tall are they?"

"Hell, I don't know," retorted Usher. "No one has ever seen the top of one."

"Very interesting," Skroot murmured, peering upward to the point where the thorny trunk disappeared into the gloom. Rivulets of water trickled down the frames of his glasses into his ears and eventually dripped off his earlobes. Skroot tipped his head to one side and shook it violently. Although the procedure did get rid of the water on the left side, it caused the water to run further into his right ear.

Usher laughed. "In a few days you'll learn to pay no attention to things like that, Skroot. Or you'll go mad. It's a toss-up, I think."

"Indeed?" commented Skroot, watching yet another caterpillar swimming across a small puddle toward a Tastybush. "Have you tried less violent means to kill your caterpillars?"

"We've tried everything we could think of," Usher said disgustedly. "We've tried insecticides of every description, irritants, repellents — you name it. The big problem is that whatever you use, if it touches the bushes they drop all their leaves, and the flowers to boot. And most of the time it doesn't bother the caterpillars at all."

"You don't say," Skroot answered. "They just fall off? My word."

Usher pointed a scrawny index finger toward the small thicket. "Those lousy Tastybushes are more sensitive than the crew," he growled, "and they're terrible."

Skroot bent over a Tastybush, attempting to examine a leaf with his pocket magnifying glass. Its lens was completely beaded over with water.

"We can't even transplant the things," complained Usher. "As soon as you touch them the leaves fall off; then the whole bush collapses."

"Collapses? Indeed? How do you mean?"

"They just go limp," shrugged Usher. "Then they fall on the ground. Some of them get up again, but mostly they don't."

"According to the reports I've seen, there isn't anything left to try," Skroot agreed, smearing a finger across his glasses. They were now not only wet, but muddy. "It's time to start on an entirely new line of investigation."

"Whatever we do it had better be fast," Usher commented. "If we don't come up with an answer soon we stand to lose a pile of money."

"So I understand," Skroot said, observing that the mist had begun falling more heavily. He groped his way back to the swamp-cat and opened the door. Another flood of water poured out of it. When he was seated, he opened his notebook and began scribbling urgently.

"Why doesn't that thing fall apart?"

"It's waterproof," explained Skroot. "Just a plain, old fashioned waterproof field notebook."

"I ordered some a year ago," Usher said, wistfully eyeing the book. "Accounting department turned them down. Too expensive."

"Good heavens, Usher, what do you write on? Ordinary paper would fall apart in five minutes."

"I don't write on anything. In fact, I haven't written a word since I got to Gloomer."

Skroot self-consciously tucked the dripping book back into its soggy holster. On the way back to the trading post, Usher clearly outlined his opinions of the planet (rotten), the weather (worst anywhere), the crew (a bunch of lazy misfits) and money (this he liked).

"The only reason I'm here," Usher explained, "is because I can earn enough in a single five-year hitch to retire to Bathsheba. Now there's a planet."

They finally reached the trading post, and Skroot was not really surprised to see a small waterfall gushing over the doorsill.

"It's a lot better now than it used to be," Usher commented. "We jacked up one end of the building, so now the water runs out. It used to be terrible."

The floor was canted sufficiently to make Skroot uncomfortable. The tilt of the room was made more obvious by the pictures and graphs tacked to the walls. They hung straight, but at a distinct angle to the floor.

"You know," Skroot offered, "this is just like a fun house at an amusement park."

"Skroot," Usher observed coldly, "if there's anything this place isn't, it's a fun house."

"I must say, it's difficult for one to become adjusted to it. It's as though one of my legs were shorter than the other."

"We argued that out long before

you got here, Skroot. We decided that it feels as though one leg were longer. You're outvoted." Usher sluiced most of the water off his chair and sat down at his desk. "Where's my briefcase?" he asked rhetorically, looking about the room for it. "Oh, there it is. Skroot, how about handing it to me?"

Skroot's gaze followed Usher's pointing finger until he spotted the briefcase jammed into a pile of rubble at the low end of the room where it had been swept to by the sheet of water which slid rapidly across the floor. He noticed that several holes had been cut through the floor where cabinets and desks impeded the water's flow, and each hole was surrounded by a tiny gurgling whirlpool.

"Thanks," Usher grunted as Skroot handed him the briefcase. "Now let's get down to business. What do you think?"

"As yet it is difficult to say," Skroot began, "I've hardly had an opportunity to investigate, but I intend to begin immediately."

He consulted his notebook. "To begin with," he said, "I shall need two men to assist me in my investigations, a swamp-cat and free access to your tools and equipment. In addition, I will set aside an area with its Tastybushes intact and will permit no collecting where my work is being conducted."

"You want what?" shouted Usher explosively. "Do you also want my left arm and all my money?" Droplets of water flew from his finger as he shook it at Skroot. "Do you have any idea what that will cost me?"

Personally? My commissions come out of the net profit of this trading post. And now you want me to give you expensive equipment and fuel and take two men off their collection routes? And take a bunch of Tastybushes out of production? Skroot, you're out of your mind!"

Skroot sat placidly with his hands folded in his lap, water dripping rapidly off the tips of his fingers. When Usher finished his tirade, Skroot outlined alternatives until there was grudging agreement.

III

Early the next morning Skroot and his two assistants departed for the chosen area with a load of tools and miscellaneous gear. "Gentlemen," he explained, "my task is to prevent the loss of flavor extract to Planetrade Corporation. I intend to accomplish this as quickly and as simply as possible."

"I figured it was something like that," said Jake.

"So did I," added Harry, "only first. I mentioned it to Jake while we were waiting for you," he explained to Skroot.

"That don't mean you thought of it first, you bum," Jake shouted.

"Gentlemen," soothed Skroot, "if you do exactly as I say, quickly and efficiently, our work will soon be completed."

"That's a laugh," chortled Harry. "The reason Usher sent Jake out with you is because he ain't done nothing quickly or efficiently since he got to Gloomer."

"You should talk," countered

Jake. "Usher sent Harry out here because he's the clumsiest so-and-so on the planet. The only reason he's still here at all is because he ain't worth the cost of shipping back to Earth."

The swamp-cat mushed to a stop in view of two or three Tastybushes and a pair of thick, spiny Thorn trees. "Gentlemen," Skroot began again, as though he hadn't heard their exchange of insults, "our first task is to discover whether we can recover the extract of the Tastybush more efficiently than by collecting their blossoms. This is the most simple solution to the caterpillar menace. Our second task, to discover why there are no young Tastybushes, will begin shortly."

Jake and Harry slowly climbed down from the swamp-cat and stood quietly, glumly watching the lavender caterpillars meandering slowly across the ground.

"If we are to maintain my experimental schedule, we must begin immediately," Skroot announced. "Our first task is to attempt to recover sap from the trunk of a Tastybush for analysis. I understand we must be delicate in the process."

"Delicate ain't the word for it, Skroot, it won't work," Jake said flatly. "We already tried it."

"Indeed?" asked Skroot? "When?"

"Well, actually I didn't personally try it, but somebody or other did a few years ago, and he said it didn't work." Jake remained convinced that further attempts would be hopeless.

Harry commented, "I know the guy that tried it. That clod is about as delicate as a bomb."

"Do either of you gentlemen have any idea of the technique he used," Skroot asked patiently.

"Yeah," responded Harry. "He told me that the boss wanted some sap to test, but he didn't say how to get it. So he walked up to a bush and stepped on it to bend it over. Then he took a cut at it with his knife."

"With what result?"

"Just what you might expect. As soon as he touched the thing, it gave a good shake, and all the leaves fell off. Then it went limp and collapsed. But it didn't get cut up too badly, so a few days later it came up again."

"It seems obvious," Skroot explained, "that one must use extreme delicacy with a plant which is sensitive to tactile stimuli. We will be much more gentle."

"I know more about them things than you do, Skroot," Jake announced, "and it ain't going to work."

"It is entirely possible that it will not," Skroot replied patiently, "but we must exclude all possibilities."

Skroot shook the water out of the dissection kit which he carried and slowly crept beneath the branches of a Tastybush, being very careful to avoid touching them. Very gently he pushed aside the grass which surrounded the trunk, and very tenderly he made a small incision about four inches above the ground.

The Tastybush reacted as Jake had predicted; it began to shake vigorously, its foliage dropping to the ground in a flurry. Immediately the branchlets began to sag, then the major branches, and finally the entire plant

collapsed before their eyes into a small ghostly pile.

"I say there," Skroot exclaimed in surprise, untangling the flaccid branches which had somehow become entangled in his eyeglass frames. "It did indeed collapse. How extraordinary."

"You can't say I didn't tell you so," Jake shouted triumphantly, nodding his head vigorously in affirmation.

"It appears, then," Skroot pondered, "that the Tastybush is similar to the caterpillars in that their shapes are maintained through turgidity. The pressure of their internal fluids causes them to fill out their shapes." Skroot frantically entered the new information into his notebook.

"Next," Skroot announced, "since it appears that the Tastybush causes its fluids to flow into the root system for protection, thus causing the bush to collapse, we must use other means to extract a sample. Harry, get the first-aid kit from the swampcat. You, Jake, select a bush which has few branches near the ground."

As the two disappeared into the mist in opposite directions, Skroot removed his glasses and wiped them on his wet plastic oversuit, leaving them no cleaner or dryer.

"Here's a good bush over here, Skroot," called Jake, as Harry returned with the first-aid kit.

"Where, Jake?" Skroot shouted peering uselessly into the fog.

"Over here," Jake answered helpfully, "about fifteen feet or so."

Skroot opened the lid of the kit and pushed a half dozen floating bottles of salt tablets aside, groping



among the objects which had sunk to the bottom. "Salt tablets?" he asked.

"It's a regulation corporation first-aid kit," Harry explained.

"Aha!" Skroot said. "Got it. Gentlemen, this may be our answer." He dredged up a tourniquet, tangled in two sodden rolls of gauze and some adhesive tape.

"Come on, Skroot, what are you talking about?" asked Harry in a disgusted tone of voice.

"Essentially this, gentlemen." He swung the wet tourniquet like a garrote. "We impede the flow of the sap returning to the root system. Thus, with the sap trapped in the branches of the plant, we will be able to extract our sample for analysis."

Jake shook his head negatively. "Usher ain't going to like this, Skroot. That Tastybush is going to die just sure as anything."

Skroot paid no attention, crawling beneath the dripping bush clutching



the tourniquet. He passed it gently around the short trunk and with a quick jerk pulled it tight and twisted.

As the tourniquet constricted the trunk of the tree, it began to quiver and shake, and a cloud of leaves fell to the ground. The tips of the denuded branchlets went limp, and the major branches began to droop.

Skroot nervously watched a bulge form in the trunk above the tourniquet. The tastybush twitched and sagged, and the bulge steadily grew

in size until it was fully five or six times the diameter of the trunk.

"Jump back, Skroot!" Harry shouted, "If that thing blows it'll take your head clean off." He and Jake hit the ground with a splash as Skroot tenaciously clung to the final twist of the tourniquet.

Skroot opened one tightly clenched eye and squinted through a watery lens at the bulge in the trunk, which was now shrinking to its

normal size. The upper branches near the trunk became turgid again, and the bush took on an almost normal appearance. "Jake," he shouted, "come over here and hold this tourniquet while I make the incision."

Jake fearfully crawled under the bare branches of the Tastybush and took hold of the tourniquet. "Whatever happens," Skroot ordered, "don't let go."

"Harry," Skroot shouted, "bring me that plastic bucket from the swamp-cat. And hurry."

Harry sluiced the water out of the bucket as he slogged rapidly back to the bush. Skroot seized one of the stiff branches and lunged at it with his scalpel. The branch immediately went limp; but the branches on the opposite side bulged out and shook.

Skroot held the flaccid branch in his hand. "Give me the bucket and go shake up the other side of the bush. That should cause the fluid to flow again to this side."

Harry grabbed a major branch in each hand and began alternately shaking and twisting them. Soon Skroot's branch began to stiffen. "Aha!" he shouted triumphantly and plunged the scalpel into it. The branch cringed as he sat down on the ground with the bucket between his knees. The fluid began to squirt noisily into it. "Keep shaking, Harry."

Skroot encouraged the flow by squeezing the branch near the trunk and sliding his fingers toward the tip of the branch. Each stroke brought a spurt of liquid into the frothy bucket. The three paid no attention to the sound of a swamp-cat mushing to a stop a short distance away.

Usher's mouth dropped open as the scene unfolded through the falling mist. Jake continued to cling to the tourniquet while Harry shook the limp branches to force the fluid to Skroot, who sat intently aiming spurts of sap at the bucket. "Just what in hell are you doing to that bush?" he screamed, his face turning pale. "You're killing it!" He seized Jake's legs and began to tug at them, trying to drag him away from the Tastybush.

"Let go of my legs," Jake yelled, hanging grimly onto the tourniquet. "Skroot, make him let go of my legs."

"I was better off with the lousy caterpillars!" Usher screamed, giving Jake's legs a final tug. Jake's fingers slipped, and his chin ploughed a furrow through the ground as Usher dragged him backward. The furrow rapidly filled with water as the bush collapsed. Harry stood there, tentatively shaking two spaghettilike branches, while Skroot's dangled limply into the bucket.

Water ran out of Usher's sleeve as he shook a knobby fist at Skroot. "I thought you came out here to find out what's killing the bushes — not to start slaughtering them yourself."

Skroot approached him, bucket in hand. "I would deeply appreciate it, Usher, if you would not interfere with my work or with my staff."

"That's telling him, Skroot," cheered Jake.

Skroot handed the bucket to Usher. "Here is a sample of the plant's internal fluid. Please have it completely analyzed." The intended severity of his words was somewhat

diluted by the water which trickled off the end of his nose.

Usher grabbed the bucket angrily and without further comment he stalked back to his swamp-cat, spacing his steps to flatten the caterpillars in his path. By the time he reached the swamp-cat, all of them had ballooned out again and were creeping toward the Tastybushes as though nothing had happened.

"I told you he'd be mad," Jake said.

"Gentlemen," Skroot said, ignoring him, "we have completed phase one of my experimental design. We will immediately begin phase two." He began writing in his dripping but still stiff notebook, ignoring the trickle of water which ran down the barrel of his pen, into little puddles across the words he wrote.

"Jake, I want you to climb one of the Thorn trees to see if you can discover the source of the caterpillars. When you reach the top I want you to shout down to me and describe what you see."

"You're out of your head, Skroot," Harry diagnosed, "Jake can't climb one of them trees. There ain't nobody who can climb one."

"Why, may I ask?"

"Just take a look at them thorns," Jake said. "Every one pointed down. Even the caterpillars don't crawl back up. Only down. Besides, how do I know how far I have to climb? I might get up there three or four hundred feet, and I wouldn't be able to yell loud enough for you to hear me. On top of that, how do I know what else might be up there? No, sir. I might get up there, and no one

would ever see me again. Like one of them Indians rope tricks."

Skroot inspected one of the thorns and tested its sharpness with the tip of a finger. "You're quite correct, Jake. It would indeed be difficult to climb one of these trees."

"You bet it would be tough," Jake agreed. "You can't do it."

"Nevertheless, we must observe the source of the caterpillars. Harry, bring an axe from the swamp-cat and chop it down."

"You're insane, Skroot," Harry gasped. "That thing is a good three feet thick, and who knows how tall. And you want me to chop it down?"

"Let us face facts," Skroot explained patiently. "It is, after all, a part of phase two. No one has ever observed the place of origin of the caterpillars. Further, no one has ever observed a caterpillar climbing back up!"

"Hell, no," retorted Jake, "nothing can get up one of them trees."

"Phase two must begin," Skroot insisted. "Harry, get the axe."

As Harry sullenly plodded toward the vehicle, Skroot reached into his gadget bag, displacing several ounces of water which splashed to the ground. His hand emerged holding a small can of fluorescent yellow paint.

"Jake, take this and place identifying marks on several caterpillars as they climb down the trunk of a Thorn tree. Then watch them carefully to observe their activities. And be careful not to disturb them in any way."

Harry reappeared through the mist carrying a double-bit axe with a rusted head. Jake shouted, "Start chop-

ping, Harry, while I go paint caterpillars. Ha."

For the first time since his arrival, Skroot began to show signs of impatience and anger; he glowered at Jake and demanded, "Harry, give me the axe!"

Harry viewed Skroot with suspicion as Jake quickly disappeared into the gloom without another word. "Give me the axe," Skroot repeated. He placed his foot atop a deadfall, raised the axe and took careful aim at it.

"Jake," Harry shouted, "come here and take a look at this. Skroot flipped. He's going to chop off his foot."

Jake approached warily to see if what Harry said was true. "You can't do that, Skroot. Them waders is corporation property. You can't go chopping them up with an axe."

"Gentlemen," Skroot said calmly, "as corporate employees you may be enjoined from damaging corporate property. But I am not." With that he brought the axe down sharply, cleanly severing the toe of his reinforced plastic wader. Three or four gallons of water gushed out and immediately disappeared into the ground. He repeated the process with his right wader, but somewhat less gracefully.

"Jake, Skroot warned, "you are not observing the caterpillars as I asked you to." Jake shook his head and disappeared into the mist. "Harry, take the axe and chop down a Thorn tree."

Usher's swamp-cat slurped to a stop nearby and soon he appeared through the gloom. "What are you



TEAR ALONG DOTTED LINE

Special Christmas Gift Rates

Galaxy

OFFER (bi-monthly)
[A] 12 Issues \$ 5.75
[B] 24 Issues \$ 10.50



WORLDS OF IF SCIENCE FICTION

OFFER (monthly)
[C] 12 Issues \$ 5.75
[D] 24 Issues \$ 10.50

Add \$1.00 for each (12 issues) for foreign subscription

EXTRA SPECIAL RATE WHEN YOU GIVE BOTH

GALAXY + WORLDS OF IF

[E] 12 Issues of Each \$11.00—24 In All

[F] 24 Issues of Each \$20.00—48 In All

Add \$1.00 for each (12 issues) for foreign subscription

GALAXY PUBLISHING CORP. 421 Hudson Street, New York, N.Y. 10014

Enclosed please find \$_____ in payment for subscriptions to be sent in accordance with the offers indicated in each case below:

GIFT FOR _____
 STREET _____
 CITY _____ STATE _____ ZIP _____

NEW RENEWAL CIRCLE OFFER WANTED

A B C D E F

GIFT CARD FROM _____

GIFT FOR _____
 STREET _____
 CITY _____ STATE _____ ZIP _____

NEW RENEWAL CIRCLE OFFER WANTED

A B C D E F

GIFT CARD FROM _____

GIFT FOR _____
 STREET _____
 CITY _____ STATE _____ ZIP _____

NEW RENEWAL CIRCLE OFFER WANTED

A B C D E F

GIFT CARD FROM _____

MY NAME _____
 STREET _____
 CITY _____ STATE _____ ZIP _____

NEW RENEWAL CIRCLE OFFER WANTED

A B C D E F

GIFT CARD FROM _____

I enclose additional gifts, on separate sheet

No Postage Stamp Necessary if Mailed in the U.S.

Give the gift you would like to receive

ALL OFFERS EXPIRE JANUARY 15, 1968

For A Happy Reading Year



**GIVE THE GIFT YOU
WOULD LIKE TO RECEIVE**

From

FIRST CLASS
Permit No. 61559
Sec. 34.9, P.L.&R.
New York, N. Y.

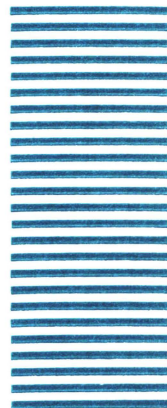
BUSINESS REPLY MAIL
No postage stamp necessary if mailed in the United States

POSTAGE WILL BE PAID BY—

GALAXY PUBLISHING CORP.

421 HUDSON STREET

NEW YORK, N. Y. 10014



clowns up to now?" he asked. "I just passed Jake crawling on his hands and knees following caterpillars with faces painted on them. Skroot, what in hell is going on?"

"Well," explained Skroot, "we're in phase two of my research plan: Jake is observing the behavior of several caterpillars, and Harry is about to cut down this Thorn tree."

"He's what? Oh, no!" Usher shouted. "Harry, stop!" But Harry's axe had already begun its swing. In attempting to stop it he merely lost his balance and fell to the ground with a splat.

Usher turned to run as the axe bit into the trunk of the Thorn tree, but it was too late. The trunk split open. The reddish purple liquid spurting out in a solid stream, passing over the prostrate Harry. It caught Usher full in the back, propelling him a full twenty feet, out of sight, into a clump of Tastybushes which promptly began shaking and dropping their leaves.

Skroot observed with great interest, watching hundreds of gallons of fluid pouring out the rent in the trunk. He could hear Usher's cursing above the roaring and splashing of the torrent.

The stream slowed down as the great Thorn tree slowly shrank and collapsed upon itself like an enormous concertina. Usher eventually clambered out of the thicket of denuded and collapsed Tastybushes and shouted, "Skroot, you madman. Are you trying to kill us all?" Four or five caterpillars clung to him, which he angrily threw to the ground as he stalked forward.

"And look at the toes on your oversuit! You're going to pay for those things. This is the end. I don't care what headquarters has to say. It's either you or me. This is absolutely the end."

"In a manner of speaking, you may be at least partially correct, you know," Skroot answered happily. "We may indeed be nearing the end. In your right pocket you have approximately a liter of the liquid from the Thorn tree. In your left you will discover a caterpillar."

Usher winced. "Please conduct an analysis of both," Skroot continued, "and compare the results with the sample from the Tastybush. Then inform me of the result immediately."

Usher was unable to speak a word, but the expression on his face conveyed this emotions. He turned abruptly and disappeared in the direction of his swamp-cat.

Skroot walked over to the former Thorn tree, the top of which was now perched atop a large pile of ghostly trunk skin studded with sharp spikes. "Harry, come over here and observe this," Skroot said. Slowly and with great effort, Harry trudged over and stood next to the remains of the Thorn tree. With each step he sunk almost knee deep into the ground.

"Look, Harry, here are great clusters of caterpillars actually growing out of the top of the Thorn tree!"

"I'll be darned. I never saw anything like that around here before."

"My word," Skroot said. "Here's a cluster of immature ones still attached by tiny stalks. Good heavens, I must publish a description."

"Hey, Skroot!" Jake shouted from somewhere out in the gloom. "These here caterpillars just crawled into a Tastybush."

"Surprise, surprise," shouted Harry in response. "What did you expect them to do?"

"Don't touch them, Jake watch them," cautioned Skroot. "Where are you?"

"Over here," came the helpful answer. "In this clump of Tastybushes." Skroot and Harry could see neither Jake nor the Tastybushes, but they followed the sound of his voice until they reached a clump with water-filled hand and knee prints pointed into it. "I'm in here," Jake shouted again, "and the caterpillars are eating flowers."

"Keep watching them," Skroot repeated, "but don't touch them."

"Quit yelling," Jake responded. "I'm only ten feet away — I think."

Harry sank further into the ground with each moment that passed, making slurping noises every time he moved. "Harry," Skroot asked curiously, "what on earth is the matter with you?"

"Nothing at all," Harry answered calmly. "It's just that my waders filled up with Thorn tree sap, and they're kind of heavy."

"Why don't you chop off the toes and allow the liquid to escape?"

"You crazy?" demanded Harry. "And have to pay for them?" He lay down on his back and with great effort, lifted his legs into the air. The contents of his waders flushed out, almost drowning him. "That's just as good," he sputtered, "and cheaper."

"Hey, Skroot," came Jake's call from the Tastybushes. "The caterpillars finished the flowers, and they're climbing down off the bush."

"Aha!" exclaimed Skroot. "Don't lose track of them." Skroot leafed back and forth through the pages of his notebook, frequently sluicing the water off his glasses. "Aha!" he repeated.

"Skroot, here's one of them painted ones," called Harry. As they watched, a caterpillar with a snaggle-toothed face painted on its smoothed-down fur crawled from the bushes and crept across the ground.

"Jake, I asked you to watch them," shouted Skroot in annoyance.

"Don't worry, Skroot, there's still five of them in here."

Skroot carefully observed the progress of the colorful little caterpillar. It stopped.

"What do you suppose the thing's going to do now?" Harry asked.

"Well," Skroot began, "according to one of my working hypotheses . . ."

"Look at the thing!" exclaimed Harry in surprise. "It's digging a hole. It's burying itself!"

"Aha!" cried Skroot triumphantly. "I thought so!" He watched until the tiny hole filled in with water and the caterpillar was no longer visible. "Jake," Skroot shouted toward the Tastybushes, "come out instantly. We're off for the trading post."

"Fat chance," Jake complained. "I can't move. I'm stuck. I'll probably starve to death in here."

"Those are all Tastybushes," instructed Skroot, "just grab a couple and start shaking them." Jake did so,

and immediately several of them dropped their leaves and collapsed. Jake walked unimpeded from the center of the thicket.

Water cascaded from the front seat of the swamp-cat as Skroot opened the door. They clambered aboard and proceeded at a breakneck pace, sending up a small bow wave in the soaked and porous ground.

They rushed to a stop in front of the trading post, the cataract of water still pouring out its front door. Skroot slogged into the building, his waders followed by tiny wakes as he crossed the floor to Usher's desk.

IV

Usher was seated there, searching for something in his lower left drawer, which was filled to the top with water. "I wish I could convince the supply department that I really need things that float. Oh, well, if I did, I probably couldn't convince the accounting department that it was worth the extra cost. Half of our equipment sinks out of sight somewhere on the first day after it gets here." Usher continued to feel around in the bottom of the water filled drawer.

"Why don't you punch holes in the bottom?" asked Skroot, considering that the simplest solution to the problem.

"Because it's corporation property, that's why," sneered Usher, "and I'd have to pay for it." He grimaced angrily at Skroot. "Is that all you ever think of? Damaging corporation property? What do you want now, you vandal?"

Unperturbed, Skroot said pleasantly, "I was curious to know whether those samples have been analyzed."

"Yes, they have," Usher replied, "and I'm sorry to say it, but you hit pay dirt. Tastybush juice is loaded with flavor; Thorn-tree juice is loaded with flavor, and even that lousy caterpillar juice is loaded with flavor."

"Aha! Excellent, excellent," chor-tled Skroot.

"Now we don't have to worry about those lousy Tastybushes dying off. We'll start on the Thorn trees first. They're the easiest, and they grow just as fast. Then if we need more we'll go after the caterpillars."

"Well, no," responded Skroot. "I'm afraid you can't do that."

"Skroot, you nut, of course we can. We know it's possible now."

"It's not as simple as that," explained Skroot. "You see, there is a somewhat complex ecological and reproductive cycle involved here."

"Explain," demanded Usher.

"Well," he began, "on Earth a similar situation exists in certain plants which we refer to as "dioecious," from the Greek roots *dis*, meaning two, and *oikos*, meaning house. In effect, it means two houses."

"So what?" Usher interrupted, pounding his fist on the desk, showering tiny droplets of water across the room. "Greek roots be damned. What's going on?"

Refusing to be interrupted, Skroot continued. "You see, dioecious plants actually have two sexes. Very simply, we have boy plants which produce pollen and girl plants which produce blossoms." He cleared his throat.

"The pollen floats through the air, blown to the flowers of the female plants of the same species. The pollen fertilizes the blossoms, and seeds develop within them. When the seeds mature, they are distributed in various ingenious ways."

"So much for the lecture, Skroot. What are you trying to say?"

"Simply that the plants you refer to as Thorn trees and Tastybushes are in fact merely male and female plants of the same species."

"Aw, come on, Skroot, they don't look anything at all alike."

Skroot tsk-ed at him. "Don't allow external appearances to deceive you. On Earth, for example, several genera display sexual dimorphism to an amazing extent."

"To hell with that, Skroot," Usher demanded. "Get on with it. What about the caterpillars?"

"Ah, yes, the caterpillars. An interesting adaptation. The environment here simply isn't conducive to the distribution of airborne pollen — the lack of wind and the constant mist, you know.

"So, just as in the cases of certain plants on Earth, the reproductive cells have become highly mobile. The species has evolved a form of pollen which propels itself down the trunk of the male plant and across the ground to the female plant, the Tastybush."

"I'll be darned," exclaimed Usher.

"Why then do they eat the flowers?"

"Actually, they don't really eat them. I doubt whether they eat at all. The mobile pollen grains merely migrate to the Tastybushes to fertilize themselves by absorbing the blossoms. Then, after fertilization, they can truly be called mobile seeds."

"Seeds?" asked Usher in astonishment. "You mean to tell me that all these years we've been feeding Tastybush seeds to the fish, or whatever they are?"

"Indeed you have been," chuckled Skroot. "Of course, some of them would grow into Thorn trees to provide a new male generation."

"Then if we plant caterpillars, they will grow into Thorn trees and Tastybushes?"

"Indeed they will, Usher, indeed they will. I suggest you begin training your crew to begin replanting immediately. In a few months from now you should be able to harvest your first crop. I would personally appreciate it if you would hurry. After all, my commissions begin only a year from now."

Usher, Jake and Harry stood to the side of the ship to view the departure of Charles Darwin Skroot. He slogged aboard the loading elevator, emptied the water from his equipment bag, smeared the rivulets from his glasses with a wet finger and waved good-by as he disappeared upward into the hold. END

**DON'T MISS THE WORLD'S BEST SF
SUBSCRIBE TO IF AND GALAXY — Now!**

FOREIGN FANDOM

by LIN CARTER

LAST TIME, if you remember, we were talking about the fact that neither science fiction itself nor science-fiction fandom are exclusively American phenomena. Fans, fan clubs, conventions and fanzines are found all over the globe, including some places where you would never expect to find them.

Down in South Africa, there's a fan named Roger Clegg . . . in Stockholm, Sweden, there's Carl Brandon . . . a fan named Osvaldo Elliff lives in La Plata, Argentina . . . in Certh, Scotland, there's Brian Hill . . . Tokyo, Japan, boasts of a fan named Yukiko Yesuoka . . . then there's Leland Shapiro in Saskatoon, Canada . . . Jannick Storm in Denmark . . . Walt Willis in Ireland . . . Tom Schluck in Hanover, West Germany, Jack Wodhams in Queensland, Australia . . . Ugo

Malaguti in Bologna, Italy . . . Jack Knight in New Zealand . . . and — well, I guess you get the idea!

What kind of fan activities go on in other countries? Quite a variety, actually. In Hannut, Belgium, Michael Feron publishes a monthly bilingual fanzine called *Early Bird*. A sample of the contents: news about the 1966 science-fiction fan convention in Vienna, reviews of sf mags published in France and a look at a Canadian science-fiction movie.

On May 29, 1966, the fourth annual meeting of Japan's only sf fan club met in Tokyo with more than sixty fans attending. Among the items thrashed out in open discussion were the nature of the club's forthcoming fanzine (the Japanese word for "fanzine," by the way, seems to be "Uchukiryu." Remem-

ber, you read it first in *If!*) and plans for the annual national science-fiction convention which was held in Nagoya, one of the bigger cities in east Japan.

Down in South America, the news of the hour is that *The Hobbit* (as "*El Hobito*") has just been published there. Spanish-speaking fans south of the border are now hopefully awaiting the full *Lord of the Rings* trilogy. Also, I've heard on the fannish grapevine that a fanzine called *Argentine SF Review* has been published. As I haven't actually seen a copy, I can't announce it for certain. . . .

In Trieste, the annual science-fiction film festival audience watched an ambitious color film from Yugoslavia called *Sedmi Kontinent* ("Seventh Continent"), a directorial first by the noted and prize-winning Yugoslav animator, Dusan Vukotic, which *Variety*, the American showbiz weekly newspaper, thought was an uneven but stimulating attempt to blend satire and fantasy into a film for both kids and adults.

And in Calcutta, India, of all places, there's a lively and booming science-fiction fan club *with over fifteen hundred members* ("and a long waiting list," reports *The New Yorker*). Star member of the Calcutta fandom is the brilliant, internationally celebrated Bangali film director, Satyajit Ray (*Paheer Panchali*, *Aparajito*, *The World of Apu*, etc.), who is not only a wildly enthusiastic sf fan and reader, but author as well — in India he writes juvenile sf for teen-agers. Furthermore, Mr. Ray is reportedly now

at work on a new science-fiction film, a joint Bengali-American production whose working title is *The Alien*, which is supposed to star Peter Sellers as an Indian businessman who discovers a flying saucer or something. The script, last I heard, was also a joint effort — between Arthur C. Clarke and Mr. Ray.

But of all the countries in which sf fandom is active, the most interesting to us Americans would be Great Britain, which reads much of the same fiction we get over here and which also has an annual convention. In fact, let's take a look at the British 1967 convention.

The Bristol Convention

Over the Easter holidays this year, the eyes of British fandom were fixed on Bristol, a large (41 square miles), ancient (founded in the reign of the Saxon king, Aethelred the Unready, 978-1016 A.D.) city with about a half million inhabitants.

To Bristol's Hawthorn Hotel flocked science-fiction authors, editors, artists, fans, collectors and just plain readers. Guest of Honor was John Brunner, whose name you must have seen in *If* and on the paperback stands many, many times (he's written 21 novels that I can think of, and probably I've missed a few). He gave a lucid speech on unauthorized mucking-about with an author's stuff as done by some publishers in America. As a case in point, he mentioned his recent novel *The Production of Time* (I'm not sure whether he said the editors

had made fifty changes on the first page or just in the first chapter), then went on to develop the theme that far too many sf writers of today seem to be firmly 19th Century so far as their choice of plots goes. He said they didn't seem to be really aware of the enormous possibilities open to those of us who work within the science-fiction field, where plot and setting are capable of literally infinite variety.

Besides John Brunner, a host of other writers attended the Bristol con: James White (author of *All Judgment Fled*) and Judith Merrill, on hand to represent the American writers, not to mention Michael Moorcock. The convention opened with a bang when Brian W. Aldiss made all the Big Names present stand up and look sheepish while he "introduced" them.

The convention program had a delightful variety of entertainment and business. There were movies, including a showing of sf cover artist Ed Emsh's Underground movie, *Relativity*. There was a sherry & cider party for informal icebreaking. There was a mock-Medieval pagent whereat some local celebrities were initiated into The Loyal and Ancient Order of St. Fantony (the patron saint of science fiction fans, you know), attended by some 60 spectators. And there was the giving out of the British Fantasy Awards, the English equivalent of our own Hugos. One of our boys figured large in this, when Philip K. Dick won for his novel, *The Three Stigmata of Palmer Eldritch*. Another award went to Michael

Moorcock for his valiant efforts in the behalf of British science-fiction publishing, though which he managed to keep Britain's only home-grown sf magazine still surviving, *New Worlds*, alive by means of a British Arts Council grant. On the second day of the convention, Mike Moorcock told how he got the grant that will help keep that magazine's (mast)head above water. He also showed around a dummy of the forthcoming first issue in its new format. The main theme of Moorcock's speech, however, was about "revolution and evolution in science fiction" — that is, the forces and people who change the shape of science fiction, not the plot-themes of ev. & rev.

Moorcock's example of a revolutionary force in modern science fiction is J. G. Ballard. To his way of thinking, Ballard is doing something entirely new in sf. This point was challenged by somebody in the audience who rebutted Ballard, saying all he had done was to put a few new twists on the old James Joyce "stream-of-consciousness" narrative technique.

There's one in every crowd.

Can't Anyone Help Denmark?

For contrast, let's turn from the lively state of science fiction and fandom in Great Britain to the doleful state of things in Denmark.

The land of Hans Christian Anderson has one, count 'im, *one* active and go-getting science-fiction fan, Jannick Storm. Jannick is conducting a virtually single-handed

fight to get some fannish activity going in his country, and he hasn't had much luck.

Now, Jannick says there are certainly enough *readers* of science fiction in Denmark — but where are all the fans? Most of the major science-fiction writers are translated into Danish and published over there. Two publishing houses, at least, do a thriving business in sf — Hasselbalch and Skrifola. Ray Bradbury has been represented in Denmark by *The Martian, Chronicles, October Country, The Illustrated Man*. Poul Anderson's *Brain Wave* has been done over there, and so have books by John Wyndham, Fred Hoyle, Pohl & Kornbluth and most of the classics, such as Verne and Wells, Karel Capek and Orwell and Huxley.

In fact, there are even a couple of native Danish science-fiction writers around: Niels E. Nielsen and Eiler Jorgensen. Harry Harrison has translated some of Nielsen's stuff into English, but Jorgensen is unknown to me. And there have been some homegrown Danish sf anthologies published. Jorgen Rothenborg did one called *The Other Side of The Moon*, and Tage la Cour edited *Stories From Other Worlds*, and they were rather good anthologies, with stories by Bradbury and Van Vogt, Asimov and Stanley G. Weinbaum and Katherine McLean and other well-known American writers.

But where in the name of smorgasbord are all the *fans*?

Jannick has tried just about everything. Last year he lectured on science fiction to an audience of

about 18 young readers at a meeting held in the town of Ringsted, Sealand. And he collaborated with a small Danish cinema society, organizing an open showing of some recentish science-fiction movies like *The Incredible Shrinking Man, The Mysterians* and *Village of the Damned*. Some 80 people showed up, but nothing much seems to have happened, fan-wise.

Jannick Storm went to the Swedish SF Congress at Malmo, last year, hoping that a big event like this, held in a nearby country, might stimulate the Danish fans into coming out of hiding.

Only two fans showed up to represent all of Denmark.

But Jannick isn't discouraged, and the small handful of sf-minded Danes he has managed to either discover or convert, may be the foundation of a full-fledged local fandom in years to come. In the meanwhile, I understand he keeps in touch with them via correspondence and encourages them to correspond with each other by the same medium, as they seem to be scattered too thinly about the country for anything like a local fan club.

I have just heard that this Our Man In Fandom column has worked up such a storm of interest in science fiction and fandom that Don Blyly of Peoria has been able to found a fanclub of *If*-readers in his local high school, and they've just started a fanzine called *Science Fiction Newsletter*. Don's address is 825 W. Russell Street, Peoria, Illinois, 61606. His *Newsletter* publishes 20 issues a year and will cost you \$2.50

if you'd like to subscribe. It mainly consists of book reviews and articles on sf writers like Asimov and Zelazny. Our Man In Fandom must be pretty popular in Peoria, because Don tells me he *sold* 150 copies of his second issue! (As far as I know, this is the first fanclub and the first fanzine that got started purely because Our Man In Fandom. Any others? Please let me know.)

Now, if this can happen in Peoria, how about Denmark? I don't know how many Danish citizens subscribe to *Worlds of If*, but if anyone in Denmark is reading this column, why not get in touch with Jannick Storm and get things going? Jannick's address in Ejbyveh 142, Rod-

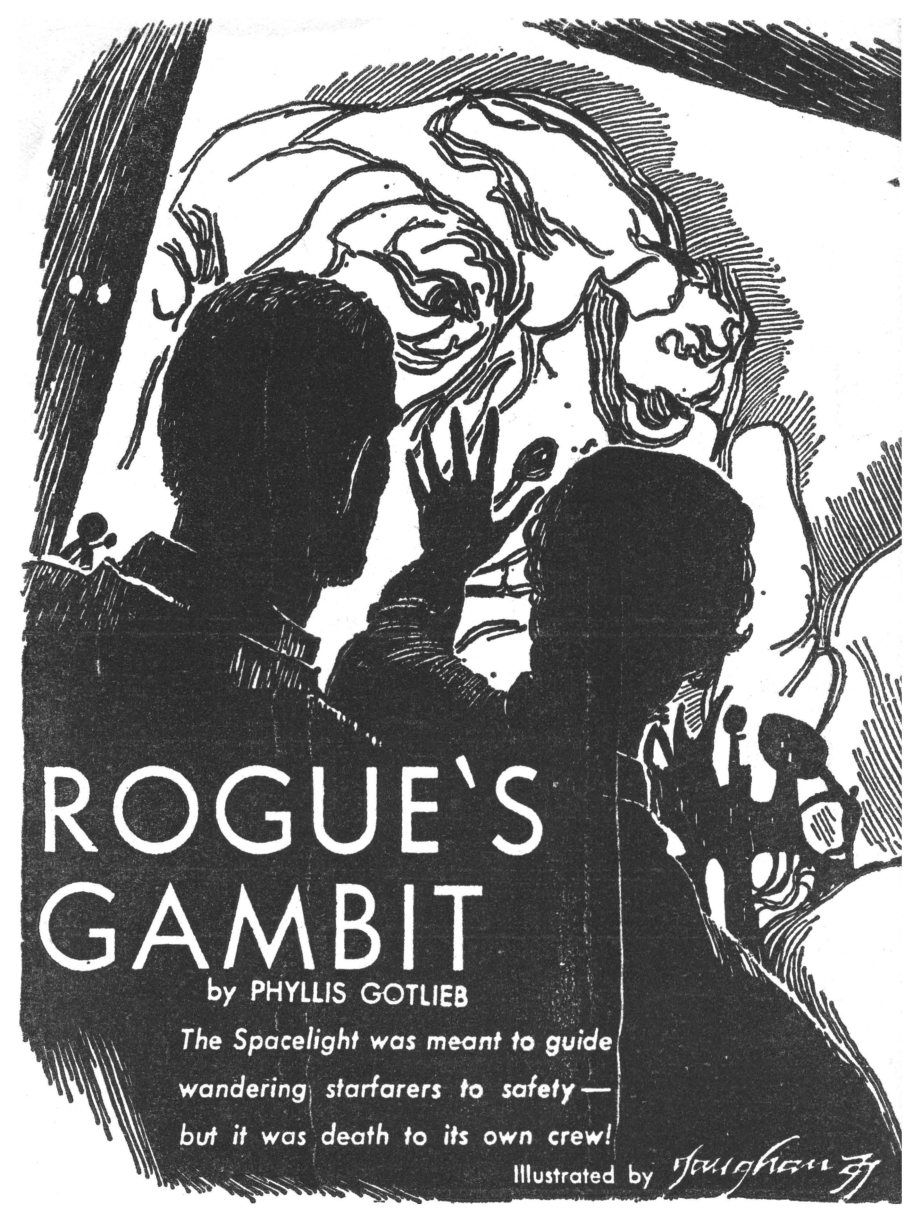
ovre, Denmark. Let me know what happens — okay?

At The World Con

Next time, we'll take a look at what happened over the Labor Day weekend at New York City's Hotel Statler-Hilton, where I'll take you on a guided tour of Nycon 3, the 25th World Science Fiction Convention. Among other things, we'll talk about the authors and artists and magazines that received the 1967 Hugos, and we'll find out which city is to be the host for the 26th World Science Fiction Convention in 1968. . . .

END

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of October 23, 1962); Section 4369, Title 39, (United States Code). 1. Date of filing: October 1, 1967. 2. Title of Publication: If Magazine. 3. Frequency of issue: Monthly. 4. Location of known office of publication: 421 Hudson Street, New York, New York 10014. 5. Location of the headquarters or general business offices of the publishers: 421 Hudson Street, New York, New York 10014. 6. Names and addresses of publisher, editor and managing editor. Publisher: Robert M. Guinn, 421 Hudson Street, New York, New York 10014. Editor: Frederik Pohl, 421 Hudson Street, New York, New York 10014. Managing Editor: None. 7. Owner: Galaxy Publishing Corporation, 421 Hudson Street, New York, New York 10014; Robert M. Guinn (sole stockholder), 421 Hudson Street, New York, New York 10014. 8. Known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None. 9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear on the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation. 10. A. Total no. copies printed (net press run): average no. copies each issue during preceding 12 months: 101,000; single issue nearest to filing date, 101,500. B. Paid circulation. 1. Sales through dealers and carriers, street vendors and counter sales: Average no. copies each issue during preceding 12 months, 61,200, single issue nearest to filing date, 61,600. 2. Mail subscriptions: Average no. copies each issue during preceding 12 months, 2,900, single issue nearest to filing date, 2,950. C. Total paid circulation: Average no. copies each issue during preceding 12 months, 64,100; single issue nearest to filing date, 64,550. D. Free Distribution (including samples) by mail, carrier or other means: average no. copies each issue during preceding 12 months: 50; single issue nearest to filing date, 50. E. Total distribution (sum of C and D): average no. copies each issue preceding 12 months: 64,150; single issues nearest to filing date, 64,600. F. Office use, left-over, unaccounted, spoiled after printing: Average no. copies each issue during preceding 12 months, 36,850; single issue nearest to filing date, 36,900. G. Total (sum of E and F — should equal net press run shown in A): Average no. copies each issue during preceding 12 months, 101,000; single issue nearest to filing date, 101,500. I certify that the statements made by me above are correct and complete. Robert M. Guinn, Publisher.



ROGUE'S GAMBIT

by PHYLLIS GOTLIEB

*The Spacelight was meant to guide
wandering starfarers to safety —
but it was death to its own crew!*

Illustrated by

Laughlin



I

The network of spacelights is spread throughout the Galaxy, its orbit pacing the stars; it has not yet completed one twenty-millionth of that orbit. There are holes in it, where Galactic Federation has not yet reached, but where it is established spacelights guide GalFed starships through dark nebulae and the blackest spans between the stars.

In Local System GF3284, Space-

light 599 is small and looks insignificant; there is a lot of blackness beyond it, and it is known as "the one on the edge of nowhere." But, second only to Base, it contains the biggest information bank in the sector. From local traffic and the nearest station it receives, stores, relays, answers five hundred requests during every twenty-four So13/Standard hours — requests for maps, coordinates, medicines, doctors, plasma, whole blood, ship parts, human-

body parts, police, repair men, priests, data from every branch of science, art and history — from a thousand races; humanoid, arthropod, arachnid, avian, ichthyoid — whatever classification there is.

And it answers them all, unless something goes wrong.

Five-ninety-nine was invisible in the dimlit sky.

If it could have been seen from the supply ship, it would have seemed a huge black ball like an anarchist's bomb, with a complex fuse of antennas for radar, maser and radio.

Bugasz closed with it as if it were a bomb. Every once in a while, in a tic, he lifted a hand and bit skin from the sides of his nails. He was a big man with crisp yellow hair and a face red and veinwebbed from the unshielded glare of a thousand suns, no-one's idea of a nervous wreck.

"Take it easy, Bugasz," Stannard said.

"I can't. I dunno what's wrong there, and I'm scared."

"The signal's eccentric; that means the antenna, and it probably knocked out the radio with it. What else can be wrong?"

"Crazy signal, dead radio? What else does it have to be?"

"They could be out checking the antenna."

"She does that. He wouldn't know how to go near an antenna. He's a computer man."

"Maybe she ran out of oxygen and got him to bring her a fresh tank. For God's sake!"

"They can do that from the inside . . . why didn't they use the

boat's radio to call 588, at least? Not a word!"

"Look, Bugasz, will you shut up already? The Hendrickses can take good care of themselves. There's about three hundred yells for help backed up in that computer, and Base is howling blue blazes. That's what I'm worried about. So call it off! Anyway, we'll be there in fifteen minutes."

Dr. Ramcharan quietly folded and put away the gauzy silk square she had been embroidering with gold thread and bent over to open her instrument case and check the contents.

Stannard blinked at her. "Now don't tell me you've forgotten something."

She smiled and said in a gentle voice, "I never forget. It is like, you say, always with a woman? If I sometimes wonder, oh, did I remember to turn off all the robots when I came from home?" A small beautiful woman, she had teak-colored skin and blueblack hair coiled in a knot at the base of her neck. Though she wore the crisp white redcrossed surcoat and narrow trousers of Med/Tech, there was always a small glint of gold about her: in the cloth of her inner sleeves, in her filigree earrings, her sandals.

The ship moved gently against the spacelight; the magnetic grapples clamped on its flanks with a reassuring *klung*, and the entrance shaft connected onto the lock with a barely perceptible suction thump. Bugasz handed out suits. Dr. Ramcharan squeezed her sandals into a small

chamois bag and hung them around her neck.

Stannard dragged on his suit and immediately started to sweat. Light made him sweat; heat made him sweat. He was a middle-sized man with thinning brown hair and glacier chips for eyes. He did not care for the outdoors or convivial company or comfortable travel. On a ship he was happiest when he was looking for the source of the trouble below decks where the wiring-boards were racked. Sometimes he whistled to himself a bit in the dark pits of orbital stations and space-lights, back of the glittering multi-eyed panels where the questions were asked and answered. Especially if there was a good refrigeration system cooling the air around him. On leave at Base he looked for no other society than that of a silent embittered old decontamination-man, an ex-spaceman, with whom he played endless games of *go*, his only recreation.

He picked up a bag much bigger than Dr. Ramcharan's. "Come on, let's get over. I don't want to cook in this thing."

The locks closed behind them and opened before. Their boots vibrated silently against their feet in the dark cavern of the antechamber. They stepped before the inner door.

"It's supposed to light up in here when these doors open," Stannard said.

"Yeah." They turned questingly in a silence broken by the faint rustle of static at the earphones.

Bugasz peered at the fluorescent manual-control panel. "That's funny."

"What? Air's coming in; gravity's Earth-normal."

Bugasz muttered, "I dunno . . ."

"Try the switches."

Bugasz pulled down OPEN, LIGHT, ALARM. Nothing happened. He plunged them back and forth, without result. "The grapples worked, so did the outside door," Stannard said.

"I used the ship's controls for that." He got out his flash and aimed the beam at the control panel. "Look. There's a couple scratches and dents around the edge there. I could see black marks on the fluorescent. There." He switched the flash off and on. "Looks like it was pried off and put back . . . I bet the wires are ripped behind that thing . . ."

Dr. Ramcharan's breath quickened. Stannard felt hairs rising in a prickling wave up his legs and back and a drench of sweat running down to meet it. He squatted and opened his bag. "Find me the serial number on that panel."

"Here — 7X724."

"Get the light down here." He pulled out one of a dozen neatly racked miniature controlboards, pressed a stud, and the out-lock door slid open again. "Get back in the shaft. I don't know what's in there, but if it isn't anything good we're getting out of here fast."

They backed away.

"Ready?" Stannard touched another stud.

The inner door opened. There

was a short hallway and yet one more door of clear lucite panels before them. Light blazed in their faces from the room beyond. There was nothing in it but a man crumpled on the floor and a computer humming softly to itself.

Nearly twelve hours before, they had set out from 601, a much bigger spacelight with enough crew to maintain a social structure that included several families. Stannard had been overseeing the maintenance staff on a tricky repair problem; he was a travelling trouble-shooter and did not live there. News of the irregular signal and the unanswered SOS's had relayed back to Base on a long chain of lights and out again to Stannard, along with microfiles on all aspects of 599, including its occupants, a married couple. This last because Stannard doubled in a police capacity — he reported to hundreds of GalFed agencies on jurisdictional and insurance matters. He loathed the extra work; but space is vast, and lives by comparison are few and short. There was a chronic lack of manpower whether it came from Sol or Betelgeuse.

The job involved endless duplications of forms he sweated filling out under hot lights with a pen gripped awkwardly in his wire-threader's fingers. There was rarely any excitement. Once he had subdued a crewman who had gone spacemad and was laying about him with a wrench: but he never spoke of the incident, principally because it made him uneasy that a good, level-headed man could go wild working in the cool,

quiet conditions he himself loved so well.

He had taken the risk of delaying a couple of hours to send for information about Bugasz, because the supply-man was the only person who visited 599 regularly and knew it and its occupants well. He had been on 601 when the call came, with his ship fuelled and ready about to take off for his next stop. He had been more than willing to change course for 599.

Stannard had spent a couple of hours with the microreader on the way out, so he knew the contents of the three dossiers. And the subject of one of them was lying dead on the floor.

"That is Cornelius Hendricks, isn't it, and he *is* dead?"

Dr. Ramcharan was kneeling beside him. "Very much so, I am afraid."

Once they had checked that gravity was Earth-normal inside and air and temperature were standard, Bugasz had ripped off his helmet and run through the station yelling, "Iris! Iris!" There was no answer, and he came back with his shoulders sagging, his face both anxious and defeated. "She's not here! Where can she be?"

Stannard muttered, "We'll find her. Don't worry . . ." He was looking at the body of Cornelius Hendricks. Age fifty-three, a quiet solitary, like Stannard, who had married Iris Cullen, a girl in her twenties, two years before. Now he was lying dead, with an empty spray can of deadly vermicide in his hand.

Stannard decided that he was never going to make either of those mistakes. "How long?"

"He is very stiff. Twelve hours, perhaps?"

"That's five-six hours after the signal started going . . ." So Hendricks had been alive when they got the news. And he had delayed. But nothing would have saved Hendricks; he had sprayed the stuff into his mouth, and death must have come in a few minutes.

Dr. Ramcharan picked up the can by the nozzle. "Excelthion. This kills all the vermin in the local sector — but I won't allow it on 601 because of the children. You cannot go into a room for six hour after you use it."

"I got some on board," Bugasz said.

"Get rid of it. There are other effective things you can use with less trouble."

Stannard was thinking of those twelve hours. But from 601 to 599 it took just over twelve hours, and there was no shorter way. And he was thinking of Dr. Ramcharan. It was Bugasz who had suggested she come, just as they were leaving; she lived on 601, one of a huge team of resident spacelight doctors who rotated every two years. What kind of trouble had be foreseen, that he wanted her here?

Dr. Ramcharan was packing her instruments. "Are we to leave him here?"

"Did you get pictures?"

"Yes."

"Wrap him up and we'll take him along."

She took a thin transparent plastic sack out of her bag, unfolded it and began pulling it over the body. "Did the stuff do that to his face?" Stannard asked.

"Just the purple," Bugasz said. "That's what his face was like."

Even discounting the cyanosed skin, the dead man was peculiarly ugly. Not in the features themselves, but in a certain asymmetry and lack of alignment. It was as if a noble marble head had been smashed by a child and glued together to escape detection. One eye, one brow were lower than the others, the nose twisted, the mouth jagged into a sneer. "It doesn't tell what he was like, really," said Dr. Ramcharan. "What was he like, Bugasz?"

"I didn't have much to do with him. I didn't know him that well."

"Doesn't look like we will, either," Stannard said. "I better look at the radio. If I can get it to work, whom do you call from here, 588?"

"Yeah. It's as far as we can get. They relay."

It was a small place, 599, a space-light for two. The communications room was next door.

"Bugasz!" Stannard yelled. Bugasz came running. "Why didn't you tell me about this?"

The radio was smashed, staved in, a wreck of coils and wires. It looked as if the madman with the monkey wrench had been at it. There was in fact a wrench on the floor.

Bugasz gaped. "Honest to God, Stannard, I didn't even see that. All I was looking for was her."

Stannard had bent over to stare at a red-lit indicator on a panel beside the radio. "The boat's not in dock. It's gone."

"Do you think she — "

"How far could she get in that?"

"Only to 588. But the lock controls are bust!"

"Not from the inside. I checked."

"I can call 588 from the ship — "

"Not yet."

"But Stannard — "

"She'll keep, Bugasz! I'm worried about the orbit now! All this smashing, if the pile's been touched — "

"But that's sealed! Even you haven't got high enough clearance — "

"He did all this. Someone did. If he wanted to foul up the pile bad enough he could manage that too. Let's look at the antennas." He trotted down the short hallway to the antenna-control room. It was a small, narrow place with one end wall taken up by instruments, and the other by a little spiral staircase leading to the hatch that gave access to the antennas. The antennas themselves folded into recesses with translucent walls in the center of the spacelight. Now they were partially retracted, the switches jammed. "God, what a mess! That louse didn't leave much," Stannard said. "This is going to be a hell of a repair job. Try the locks . . . they're gone too?"

"You can use the remote to open them — I'll go out and see what's doing."

"No, wait a minute." He was reluctant to let Bugasz out of his sight. Mrs. Hendricks was gone, and so was the boat; Bugasz was edgy and

overeager. He wanted to know if these facts were connected. "If she did leave the boat, is there any place she could have got to besides 588?"

"Hell, no. This light's out in the butt end of nowhere. Hendricks wasn't any ordinary dispatcher or lighthousekeeper. He was a research man with special grants. All he wanted was to be alone with his computer."

"And his wife," Stannard added, startling himself because he hadn't meant to speak. Bugasz hadn't even heard; he was staring up at the antenna hatch. Stannard sighed. "Gotta get that machine going, if he didn't bust it too. Come on, let's unsuit. I'm boiling."

"I'd like to have a look — "

"Leave it alone! You don't know which way it'll collapse if you touch it. Come on."

II

Dr. Ramcharan was using a small pump to extract air from the bag before she sealed it. Stannard took a last look at the face half obscured by plastic folds. "A girl twenty-six? Why'd she marry him?"

"Maybe she thought no one else would have her," Bugasz said.

Stannard took his own and Bugasz's suits and hung them in the locker near the doorway. "There's only one suit here. It must be his. Well, doctor, if you're through with that I'll call the drone." He used one of his control boards; the locks opened again, and a small squat loading wagon trundled in from the ship to pick up the body.

"I'll wash up now," Dr. Ramcharan said and went off to find the bathroom. After a moment she came to the doorway and said, "Bugasz, there's a three-d portrait here, is it Mrs. Hendricks?"

"Yes." He went over, and Stannard followed him into the bedroom, hesitantly crossing the threshold into privacy.

The bedroom was spare as a monk's cell, what one would have expected of Hendricks. But on a small table there was a lucite block, measuring perhaps a foot each way, and containing a three-dimensional portrait photograph, head and shoulders, of an extremely beautiful woman. Her hair was long and so fair it was almost white, shading deeper into gold nearer the scalp. Her features were classic and regular, and everything else humanity calls beautiful, but the truest beauty was in the joyousness and vitality of her laughter, even in the frozen silence in which it had been preserved.

Dr. Ramcharan said slowly, "Why would *she* think no one else would have her?"

"That was before," Bugasz said. "She got sick."

Stannard said, "I heard of that. She dropped out of sight for a couple of years, didn't she? Nobody said what it was, though."

Bugasz shut his mouth stubbornly and turned back into the computer room.

"Not going to get much out of him." Stannard stood looking at it a minute, then left the bedroom. Past the doorway he stopped dead

in his tracks. There was no one in the computer room. Bugasz was gone.

"Bugasz! Bugasz! Damn the man, what —"

The drone was gone; the lock doors were closed. Stannard had a sick glimpse of himself and Dr. Ramcharan stranded here without radio, Bugasz flown with the evidence. He ran to the locker. Bugasz's suit was still there, but he would not need it simply to get into the ship; he could risk leaving without it.

Stannard grabbed his own suit, fumbled it on, sealed it, sweating, and dragged at the lock control, almost praying. The door slid aside.

Bugasz was standing in the shaft, the open ship behind him. He was suitless, weaponless, shamefaced. His arms hung at his sides.

Stannard snarled, "What the hell you think you're doing?"

"I had to . . ." Bugasz muttered. "I had to radio 588 . . . to see if . . ."

"What is it? Hey?"

Bugasz shook his head and licked his lips. "The boat reached there . . . empty. They're sending it back."

Stannard looked at him. Bugasz swept an arm back toward the shaft. "It's the truth. Call them yourself if you want."

Stannard hesitated a moment and said, "I'll take your word."

"Thanks."

Anger mounting, Stannard wrenched at his suit-clamps. "Just don't, Bugasz, don't try it again!" He was humiliatingly aware of how ludicrous he looked when he was angry: red

splotches flecked out on his white skin. "You hear me? Don't try it!" He hung up the suit once more. "We stick together till we find out what's up here. You understand?"

He turned and stood staring at the computer; it hummed, the ready light pulsed; the stillness beyond it was heavy.

"There it is. Everything's gone but that. It's the only thing that didn't get bashed in. Why?"

"Maybe it's booby-trapped."

"It's a nice thought."

"Or — he didn't leave any note . . . maybe he left a message in it."

"Yeah." He went over, reached out a hand toward the microphone, and let it fall.

"You scared, Stannard?"

"What do you think, you fool!"

Dr. Ramcharan said quickly, "Stannard, if you have any doubt, seal this place and let us leave. The police will take care of it."

"Right now *I'm* the police," Stannard said. "I have to see this thing gets working, if I can; I have to get that back-up cleared, because there'll be people lost or dead; they may be already, because he didn't get the stuff out to them." He wiped a hand over his face. "I don't know everything that's been done here. The man was mad. If he's monkeyed with the pile and the orbit's shifted, we may really find out where nowhere is when making an attempt to take off."

"If the orbit had changed we'd never have got here."

"He could have timed it to veer off at a certain point. He could have

booby-trapped it, like you say, or even timed it to blow up . . ."

"Then why don't we just —"

"Look, you don't understand! If this place blows up we're not only short one spacelight, we'll have hot asteroids busting out all over. It's a godawful hazard to anything running in this district! Use your head!"

"I don't want it blown off!" Bugasz yelled. "You're the police, the Tech/man, the authority — you get us out of this!"

"All right! Take the doctor and get on board ship. Take her out a thousand miles and pace the light. If nothing happens in two hours, you can come down with your head intact. Okay?"

Dr. Ramcharan said, "Please, Stannard, let us not have heroics. If we were to blow up, I think we would have done so as soon as the locks were opened. I don't think it was meant to happen."

Stannard considered a moment. "Yeah. I guess you're right." He swallowed, picked up the microphone and said, "Paul Stannard, GF/Tech Supervisor, Sector 3284, Security clearance B."

The machine said, in a machine's voice, "IDENTIFY."

Stannard allowed himself one breath of relief and pressed his thumb against a small sensitive plate.

"PROCEED."

"What is your orbit, number, class, generation?"

"MY GENERATION IS THIRD; MY CLASS IS LV MOD 85; MY NUMBER 1526, AND MY ORBIT IS THE NINTH CIRCLE OF HELL."

Stannard jerked back; Bugasz gulped, and Dr. Ramcharan's breath shuddered between her teeth. The computer screen flashed to life, suddenly, in a flickering pattern of concentric circles.

"What in hell's going on here?" Stannard hung up the microphone and stepped back, shivering a little. Then he grabbed at it in a fierce snatch. "I said, give me your orbit, your position!!"

"THE QUESTION IS ALREADY ANSWERED. MY ORBIT IS THE NINTH —"

"Shut up! Stop!" Stannard knew his face by now was brindled as a Biblical calf. He said through his teeth, "Ask a stupid question, you get a stupid answer."

"Stannard —" Dr. Ramcharan hesitated, then and said, "Tell him — tell it — is it speaking for Hendricks, do you think?"

"Looks like it — I wish I knew why. What did you want?"

"If it is Hendricks, tell him — tell him he is not in the Ninth Circle, but in Circle Seven, Ring Two."

Stannard blinked at her. "Why?"

"Please. I think it will do no harm."

Stannard picked up the mike slowly and said, "You are in Circle Seven, Ring Two, not the Ninth."

The machine hummed a moment, and said, "I STAND CORRECTED."

Stannard said to the woman, "I gather we're talking about Dante and the *Inferno*, but I don't get what that was all about."

"Circle Seven, Ring Two is where the suicides are."

Stannard grunted. "That means he set all this up before he died. He went to a lot of trouble."

"He meant to hinder us. This is his booby-trap."

"Yeah, but why? Breaking everything I can understand; that's anger, and it took a lot of anger for him to kill himself . . . but this? It's stupid. He didn't even know . . ." He had been going to say "us," but stopped. Hendricks had known Bugasz. He resisted an impulse to turn and look at Bugasz. He didn't want to start another fight. Not right now. He spoke into the microphone again. "All right. What game do you think you're playing?"

"WHAT KIND OF GAME DID YOU WISH TO PLAY? CHESS? GO? TOSS FOR WHITE?" The screen swirled into the image of a coin, spinning dizzily.

Stannard hung up in disgust.

Bugasz muttered, "He was a computer nut."

"I gathered that." He tried again. "Does your memory contain the coordinates of the present orbit of 599?"

"YES."

"What is the orbit?"

"CORRECTED ORBIT: CIRCLE SEVEN, RING TWO."

"Forget the theology. I am not concerned with the orbit of Cornelius Hendricks but of 599."

"NO INFORMATION AVAILABLE."

"But is the information contained in the memory store?"

"YES."

"Good. Do you have a protect on that information?"

"YES."

"I see. Is that information available with the use of a code-word?"

"YES."

"Hah. I'm just one rung too low to clear the code by priority. Let's see, signal started going eccentric between twenty and twenty-two hours . . . were all requests answered and dispatched up to day 226, hour twenty?"

"ALL REQUESTS ANSWERED AND DISPATCHED UNTIL DAY 226, HOUR SIXTEEN."

"He must have been doing a lot of sitting around brooding . . . were no questions answered at all after hour twenty?"

"QUESTIONS ANSWERED, BUT NOT DISPATCHED UNTIL HOUR TWENTY."

"I guess he started laying about then. That means nothing's been coming in since twenty hours, if the radio wasn't working. All right, give me a printout of all requests and answers between hours sixteen and twenty."

"REQUESTS ARE AVAILABLE; ANSWERS ARE NOT."

"Hm, we could have been sending the stuff out by ship radio . . . that guy really knew how to hold a grudge. Tell me, are the answers tied to the code-word?"

"YES."

"Give me a memory map."

The map spread itself out on the screen, beautifully marked and spaced. He searched it. There was one huge area of blank spaces, with no indication of what was stored in it, no hint to allow him access. And

he was afraid to tamper with it.

"That does it. Hendricks was the only one who would have known the code-word, and Hendricks is dead." He bit his lip. "Damn, there must be something we can do . . . give me hard copy on your undispached questions. At least I'll know what's been going on."

The printer started rackets-tacketing, and a tongue of paper began to extrude from the slot. Stannard switched on the monitor-recorder, and the transcoded voices whispered across space:

Urgent alert GalFedPol 500 kilos heroin in bauxite cargo cruiser WINGED STAR en route . . .

"They'd be landed by the time we got that one out."

Urgent 527 ready receive three cases radiation poisoning treatment begun at . . .

Dr. Ramcharan shivered, and they were silent.

Kaghouro Clearing Company announces completion of program as indicated . . .

Stannard groaned to himself. The careful phrases meant that after nine years of laboring the Kaghouri had finally composed a program to translate the language of the alien raiders who had been stripping them for twenty-five years; there would be plenty for GalFed to do about that. He couldn't even mention it to the others because it was highly classified, and he was the police, the Security man or what passed for one . . . and the answers were sitting there in the machine. He tore off the printout and scanned it. He couldn't read the encoded program, but he

knew something of what it involved: thousands of lives, uncounted wealth, millions of hours of desperate, patient drudgery. He could feel his whole skin twitching at the thought, and he had to keep his mouth shut. And he had to have the code.

He started when Bugasz asked, "Why all this fancy business with code-words?"

"That I don't know, but he could have erased the whole thing, answers, orbit and all . . . he could have done a dozen different things to destroy us if he'd wanted, but he didn't. Dr. Ramcharan was right — that wasn't the idea. But there's something else behind this, and I'd sure like to know what it is."

"What are you going to do for us now, Stannard?"

"I think it's a matter of what you're going to do, Bugasz. You knew the man, at least to some extent. What do you think he'd have chosen for a code-word?"

"You crazy? What do I know about computers?"

"You knew a computer nut. Did he have any favorite expressions or mottoes?"

"None I ever heard. He was so closemouthed I never even heard him say gee whiz."

"I need that thing. We've got to get past this . . . maybe we can work around him, try another subject . . ."

"Ask him where Iris Hendricks is, for a start. I'd like to know that."

"Fat lot that's — I guess it won't hurt to try." He raised the mike.

"Where is Iris Hendricks?"

"IRIS HENDRICKS IS WHERE

IRIS HENDRICKS SHOULD BE."

Bugasz whispered, "I don't like that."

"I'm not too keen on it myself. Fifteen/twentysix, is Iris Hendricks alive?"

"IRIS HENDRICKS WAS ALIVE WHEN LAST SEEN BY CORNELIUS HENDRICKS."

"Is Iris Hendricks now alive?" Stannard pressed.

The machine blared, "FAITHLESS, FAITHLESS, FAITHLESS — " The screen splattered with red stars of pain. Pause, click, whir. "NO INFORMATION ON THAT SUBJECT."

The three of them looked at one another. Stannard said again, urgently, "Is Iris Hendricks still alive?"

"NO INFORMATION ON THAT SUBJECT."

"What happened there?"

"I'm not sure. I think it's some kind of automatic switchoff . . . I'm scared to monkey around with anything, because I don't know how he's got it set up here, and I might wipe off something we need." He stared at the humming mass for a moment, thinking of the Kaghourai waiting for the results of their nine years' effort. "Maybe . . ." His fingers tightened on the mike. He said in a reasonable voice with an undercurrent of tension, "Paul Stannard, GF/Tech Supervisor, Sector 3284, Security clearance B." He whispered, "Cross your fingers."

"IDENTIFY."

He thumbed the plate once more. **"PROCEED."**

"What is your number, class, generation?"

"MY GENERATION IS THIRD, MY CLASS IS LV MOD 85, MY NUMBER IS 1526."

"Fifteen-twentysix, will you play a game with me?"

"CERTAINLY. WHAT KIND OF GAME DID YOU WISH TO PLAY? CHESS? GO? TOSS FOR WHITE?" Once again the coin spun on the screen.

"Go," said Stannard.

Bugasz snarled, "Stannard, what do you think you're doing?"

"Playing go."

Bugasz glared at him, and Dr. Ramcharan said with a touch of dryness, "I didn't know you played games, Stannard."

"It's the only one I know," said Stannard, and he addressed the machine: "I'll take a white."

"YOU ARE THE PAUL STANNARD, WHO DEFEATED ZANGZX OF EUROPA AT THE PAN-SOL FESTIVAL, 2577?"

"Yes."

"I AM NOT PROGRAMMED TO PLAY WITH A FIFTH-CLASS PLAYER."

Stannard grunted. "Done his homework." He hung up and turned to the others. "I wanted to get back my access to the memory store, or the part of it we were dealing with when it cut off. The part he kept for himself, to play around with. This was the only way I could think of to do it. This part . . . looks like he implanted a bit of his personality into it some way . . . it's not uncommon, I guess, with people who love computers . . ."

"Do you do that, Stannard?" the woman asked.

"It's not one of my games."

III

Bugasz moved restlessly. "What's that got to do with the orbit, or where Mrs. Hendricks is?"

"Mrs. Hendricks certainly has to be tied in with his personal life — and the rest is, in some way, too. I'm sure of it. I know we won't get the orbit till we find out how. Now . . . if you have any better ideas, spit them out."

"The machine won't play," said Dr. Ramcharan.

"That doesn't matter. It was willing to talk about playing, and that was all I needed to get back to where I wanted to be." He went back to the microphone. "Do you have information on Iris Hendricks?"

"YOU WISH VITAL STATISTICS?"

"I guess so."

"CLARIFY."

"Yes, go ahead." A picture of Iris Hendricks flashed on the screen, and he waited glumly while the machine reeled off everything he already knew. When it stopped, he asked, "Can you tell me where she is now?"

"LAST SEE LEAVING 599, NO DEFINITE INFORMATION ON PRESENT WHEREABOUTS."

"I think this thing's waffling."

Dr. Ramcharan said, "You may find out something if you ask about Hendricks himself."

"I'll try it — but we'll have to go all the way through another damn

dossier. Fifteen/twenty-six, can you tell me anything about Cornelius Hendricks?"

"YOU WISH VITAL STATISTICS?"

"Yeah, I — I mean, go ahead."

The picture of a man appeared, and the machine began, "CORNELIUS HENDRICKS, BORN 2529 —"

"Hey, wait a minute!" Stannard yelled. "Who's that guy in the picture supposed to be?"

"THAT IS A REPRESENTATION OF CORNELIUS HENDRICKS."

Regular handsome features? Firm clean jawline? Perfectly arched brows?

"The hell you say! That's not Hendricks!"

"Yes it is," Dr. Ramcharan said softly. "It is."

It wasn't, and it was. Each brow, each half of the mouth, each eye belonged to Hendricks. To the handsome man he would have been if his well shaped but badly arranged features had been squared off and symmetrical. "It's the way he wanted to think of himself," she said.

Stannard sighed. "Yeah . . . I guess so . . ." He remembered the dead empurpled face and set it beside the vital Greek ideal.

"How'd he do it?" Bugasz asked.

"Oh . . . probably fed the machine a picture of himself and told it to beautify or de-uglify or symmetrize him or something."

Dr. Ramcharan said, "You think it is disgusting."

Stannard shrugged uncomfortably. "I dunno . . . something . . ."

"It matches the picture of Mrs. Hendricks."

"Yeah," Stannard said. "Better get on with it." He addressed the machine again. "Did Hendricks say he was going to kill himself?"

"YES."

"Why?"

"CLARIFY."

"All right. Why did he kill himself?"

There was a blank hum for a moment, and the wait was long. The machine said with a subtle but definite change of intonation, "BECAUSE I WAS BETRAYED."

The others moved away a little, and Stannard broke into another sweat. He swore to himself. Hendricks, damned fool, tangling himself up with his machine. People crying out of space for help. I, I, I. Hendricks, the I, was dead. Hendricks, the ugly man, Prince Frog, twisting his absurd obscene passion for a beautiful young woman into the clean skeins of wires and transistors that belonged to Stannard. And to the urgencies of a thousand races. "Who betrayed you?" he asked.

The machine said in its curious stilted voice, "MY WIFE AND BUGASZ WERE PLOTTING AGAINST ME."

It was out, what he had been waiting for. The explanation for all of Bugasz's moods, nerves, surliness. The missing piece that fit *only* to add greater complexities.

Bugasz yelled, "He's a goddamn liar! I never —"

"Shut up. What were they planning to do?"

"PLOTTING, PLOTTING, THEY DROVE ME TO THIS, THEY DROVE ME . . ." Silence. Stannard waited for the sudden shift of the cut-off, but there was none, only the silence around the hum. He hung up and turned to Bugasz.

"You have anything to say?"

Bugasz was almost speechless. "Say?" His face was magenta, his voice strangled in his throat. "You think that mad fool is telling the truth?"

"I'd say . . . he's telling some kind of truth — what it looks like to him. I know he was nuts. I can't take his word. But you've been a mess of nerves; you been running around yelling for Iris Hendricks like a dog who forgot where he buried the bone . . . there's something in it somewhere. You didn't kill him — but he claims you gave him a push. If it's true, you were the cause of the mess we're in, and you ought to have something to say about it."

"Say? What can I say when *I'm* going nuts? *He's* the one doing all the talking. Ask him!"

Stannard turned back to the mike. "How were they plotting? What did they intend to do?"

"THEY WERE GOING TO LEAVE ME . . . WITH NOTHING TO DO BUT KILL MYSELF, BECAUSE SHE WAS ALL MY LIFE. NOW THEY ARE GONE, AND THERE IS NOTHING TO DO BUT DIE."

"Bugasz is here," Stannard said dryly.

"STATEMENT INCOMPREHENSIBLE."

"Here, Bugasz, speak for yourself."

Bugasz grabbed the mike and yelled, "Hendricks, you goddamn liar —"

"IDENTIFY."

Bugasz's lip curled, but he controlled himself long enough to answer, "Laszlo Bugasz, Supply Agent 72, Sector 3284, Security clearance C3." and jabbed the plate with his thumb as if he were gouging an eye.

The machine stammered, "BUGASZ? BUGASZ? NO, NO, NOT COMPREHENSIBLE, NO ANSWER POSSIBLE, DATA ARE NOT, NOT, NOT, N . . ." The screen flickered with a thousand mad images, blanked, and finally, "DO YOU WISH TO PLAY A GAME?" the coin spun.

"Hang up," Stannard said. "I don't think we better try anything else for a while."

"Stannard —" Bugasz choked. "You really believe that — that —"

Stannard found a chair, sat on it and let his hands drop between his knees. Dr. Ramcharan gave him a long look and said gently, "Bugasz, I think he would like to know what was between you and Mrs. Hendricks."

"Nothing."

Stannard raised his head.

"I'm not lying. I haven't even spoken to her since I started servicing this light."

"Then where the hell'd he get all his crazy ideas? Tell me that?"

Bugasz shook his head. "I don't know."

"But you knew her before, back on Base! Well enough to call her by her first name —"

"All right! But that was back on Base. This is different!"

"Whatever it was, it was enough to send Hendricks off his nut. What happened back there, then?"

Bugasz sat down. "I did love her, once."

"Once! It looks like that's all Hendricks needed!"

The red-veined face twisted. "I wasn't *in* love with her, you fool! I loved her. Everybody did. You saw what she looked like."

"But you knew her very well —"

"You saw the dossier. She was in starship communications, and I'd just joined up with GalFed . . . we took a couple of courses together in emergency procedures, shipboard stuff."

"Shipboard stuff? And she came here?"

"She'd been going out to Tau Ceti — before she got sick."

"Go on."

"With what?" Bugasz shrugged. "She married Hendricks and came out here."

"And stopping here every two months, you never saw her? Not once?"

"A blink of her, going round a corner. That's all."

"Hendricks wouldn't let you . . ."

"He had nothing to do with that."

"But you said you'd loved her . . ." he swallowed. "Didn't you even take her out, ask her to marry you, anything?"

"You kidding? She had all those young guys hot out of the academies

crowding around her; she was having a good time. Look at me," he slapped his chest. "What would she want with me? My big dumb head? My ugly red face? My pilot's pay? I was ten years older, I had no future . . ."

"And Hendricks made all this mess out of that? Come on, Bugasz! And if age mattered, Hendricks was twice her age."

"That was after she got sick."

"So she was sick. But she got better. What's that got to do with all this?"

Bugasz sighed and shook his head. "She didn't get better. She had Schoebl's disease."

"I never heard of it."

"It didn't have a name when she got it. And they kept it off the records as much as they could. Just said 'unspecified disease' without even a description."

"Why?"

"It's — it's a horrible, godawful — if it leaked out they'd have had a panic blowup and maybe have had to close down half the lights in the sector."

"But you knew — with your security rating?"

"I knew. I used to have lunch with her about once a week. One day she didn't turn up, so I asked around for her and got all kinds of dumb excuses . . . maybe they thought I was a deadhead, but a supply man gets to know all kinds of people, all kinds of things. So I found out."

Stannard crossed his arms. "Bugasz this sounds like a lot of —"

Dr. Ramcharan interrupted, "I know of Schoebl. An alien-parasitologist. I studied from one of his texts, but I never knew he had a disease named after him."

"You'll hear about it. They named it after him because he isolated the parasite and found a cure — three weeks ago. This doctor, a young guy who told me about it first, back then on Base, well he got kicked out for shooting his mouth off — not about this, just generally; and he was sent out to the sticks. I ran into him, and he tipped me off they had a cure . . . a couple weeks ago. Still shooting his mouth off, I guess."

"It sounds plausible," Dr. Ramcharan said.

"It would if we knew who this guy was."

"You're not gonna. I don't want to get him bumped again."

"What kind of disease was it, Bugasz?" she asked.

"You know that tropical Earth disease, something about an elephant?"

"Elephantiasis?"

"Yeah. The one where you swell up in the feet, and —"

"Yes. That is also a parasite. *Filaria*. It blocks the lymph glands, sometimes causes lumps under the skin . . ."

"But that's mostly the feet, or . . ." he rubbed his forehead. "This one — this one you can get anywhere . . . shoulder, hand, lips, cheeks, nose . . ." His face screwed up like a child's who was about to cry. "I saw her . . . I got in and saw her."

"Your blabbermouth doctor friend," Stannard said.

"Yeah. But nobody saw her after that. She didn't want people to . . ."

Dr. Ramcharan said, "I believe the disease exists. I heard rumors of it, but it had no name then."

"It's got one now. Schoebl's disease. They caught three cases of it on Base, altogether, and isolated them before it got around; but they didn't know what it was."

"You went to see her — you might have caught it."

"It stops spreading when the nodes ripen. I didn't know that then. But I saw her." He put his head in his hands.

"But Hendricks never kept you away from her when you dropped off supplies," Stannard said.

"No, but she wouldn't look at anybody. She —"

"Bugasz! Did you know you had two unauthorized visits marked down on your record in the last two weeks?"

Bugasz jerked up. "Hendricks!" he snarled. "He said he'd tell on me, that louse!" He slumped again. "There's my job."

"So you've been lying all along."

"Damn you, I never lied! Not once!"

IV

Stannard poured a sweat of fury and impatience and frustration. "Then why were you out here!"

"I wanted to tell him, for God's sake! Can't you understand? I wanted to tell him she could be cured! He wouldn't even let me in. I thought, so help me God, I thought he'd be glad; I thought he'd be

jumping up and down cheering his head off! He wouldn't even let me in! I had to talk to him on the radio. I was yelling at him — "Bugasz held his hands before him, stretched and trembling, "yelling at him, 'Hendricks, I only want to tell you they got a cure for the damn thing; it's Schoebl's disease, some kind of bug, if you'll only take her into Base they can —'" his hands fell to his knees. "He cut me off. I couldn't even get him to talk to me. I came back a week later and tried again, and he said he'd report me. That's it."

"This cure could be only a rumor."

"No. I checked with another guy I know. It's classified, but it's no rumor."

"Huh. I didn't know Security was that full of holes."

"I wouldn't tell you if my job wasn't shot."

"This makes everything even more complicated."

"No, Stannard . . ." Dr. Ramcharan shook her head sadly. "That poor man . . . you remember, he took her when she was hideous. He was ugly; perhaps there was no one else in the world, he thought, who would have him . . . such a man would be an ugly person inside, too, I think?" She looked at the blank screen where the picture had flashed Hendricks's idealization. "Or too shy and self-conscious . . . or he would see that ugly people also live and are loved in the world. It was his mistake that he took her because she had been beautiful. But he took her, and she was grateful, and perhaps even loved

him for it . . ." She ran her eyes over the plated walls. "You have this garden, a place for two, like in the silly songs, only lined in steel. And then Bugasz, the outside world, comes pounding on the door with the news that she will be beautiful again, with a miraculous cure, like being freed from an evil spell — and he is only an ugly man. Would she look at him after that? And as an irrational man, would he not be angry at Bugasz and do his best to strike back?"

"He might," said Stannard. "And Bugasz could have explained some of this before, too."

"How could I? He swore he'd have my job. There's nothing in the universe I'm fit for except shoving this old scow back and forth, and now I haven't even got that. I'll end up in decontamination spraying Excalthion on Schoebl's bugs, and if there's a leak in the dickey-suit I'll get my lungs burnt out like Hendricks got his."

"**Y**eah, it's sad," Stannard said and watched Bugasz stiffen. "If all this is true, if there is such a disease, if she had it, if Schoebl found a cure for it, why in hell did you come out here if you knew it meant your job? Whatever it was, something about your coming out here triggered him. Why didn't you just sit tight and wait and let the news of the cure leak out, through the news reports? Having radio contact, he couldn't have missed them. Even if he was such a hermit and didn't listen to news, the Base hospital, knowing her case, would have

gotten in touch with him. He couldn't have avoided it. And then he'd have had to do something, probably something constructive because he'd have gotten a slow solid push — he couldn't have ducked out; he'd have been ashamed. But he wouldn't have flung himself around and smashed everything up."

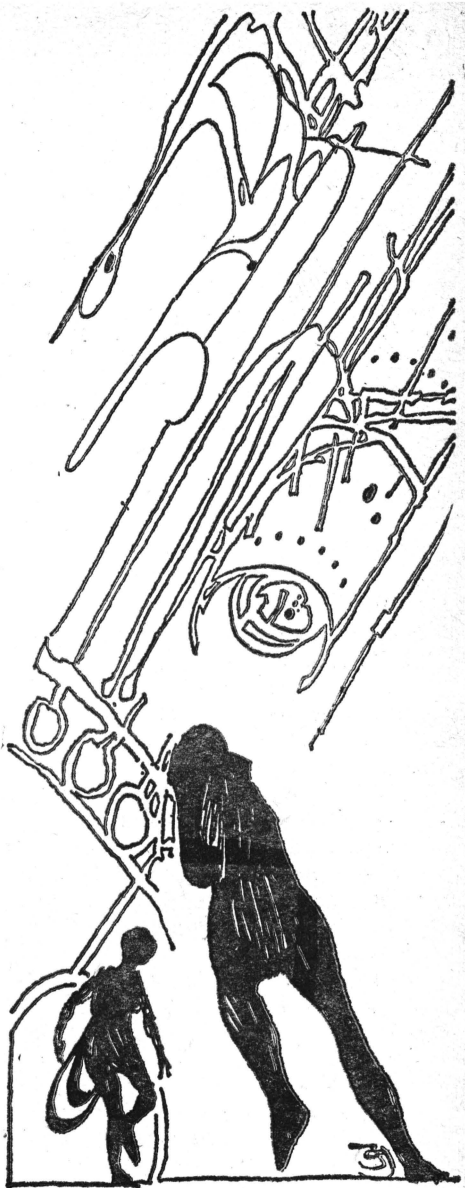
"I know it was dumb." Bugasz cracked his knuckles. "I didn't want him to — I didn't do it to make him act like that. I didn't know it would happen . . ."

"You were the one who wanted Dr. Ramcharan to come."

"Sure, I figured if there was something wrong with the antenna, he'd have to let us in — and if I had a doctor with me I could force him to let her examine Iris and maybe make a case out of treating her. I didn't know my coming here before would have started —" He moved his hands helplessly.

"Then why —"

"Give me a minute, for God's sake! It's hard to say this." He fumbled in his pockets for a pack of thin cigars and lit one. "I could have married her, after she got sick. She would have had me. I'm better looking than Hendricks, anyway, and younger. Women don't scrunch their faces up when they look at me, and I've had what I wanted — all except her. She'd have come to love me, and I'd have loved her, because there was nothing twisted about her, inside. But I got in to see her . . . and they hadn't even let her have a mirror — and — and she looked at me, and — the look in my eyes told her what the thing had done."





"He looked her right in the face, and he married her. I could have had faith a cure'd be found . . . it was a parasite, not a thing like cancer. Cures for this kind of thing turn up fast enough when they're needed as much as this one was."

"You cannot blame yourself for choosing not to marry an ugly woman," Dr. Ramcharan said. "It has happened a few times before."

"But he gave her his love and a marriage . . . all I gave her was the sick look in my eyes that told her for the first time what a horrible, godawful thing she'd turned into." He raised his head. "That's why I came out. I wanted to be the one to give her the news, like giving her back her beauty . . . because I felt I was the one who took it away. I wanted to make up . . ."

"But she's gone," Stannard said. "Even granting Hendricks was nuts, and I grant it, willingly, there's nothing to prove you didn't lift her off this place and leave her somewhere, having a good idea what Hendricks would do, and then come back with us, all innocent, bringing Dr. Ramcharan so she could testify he killed himself. You could even have smashed the radio yourself, so he couldn't send out a call and head you off. You could have dispatched the boat to 588 so he couldn't get out of here and have ripped off the outside controls — or even rigged the antennas so we couldn't reach here very easily."

"And there's nothing to prove Mrs. Hendricks was deformed, even if she did have something wrong with her at one time. You may not

have known Hendricks very well, but you knew enough of him to predict he might just kill himself if you were trying to take his wife away from him or if he thought you were . . . why didn't you blow up the pile already, Bugasz? Then there would have been no evidence at all."

"You crazy fool!" Bugasz hurled his cigar at the wall and screamed, "That's what that louse wants you to think! You're playing right into his hands!"

"Maybe I am." Stannard turned to the humming machine. "But I don't trust that thing any more. Whatever kind of nut Hendricks was, he made his biggest mistake when he got that computer tangled up with his feelings. I'm going to shut this whole operation down and take you with me to Base. Let those poor fools out there answer their own questions — it's better than having them trust people like you and Hendricks. And we'll take the tapes and recordings and let the police listen to them and ask you their questions and knock their heads over what to do about the whole thing. I don't want to touch it any more. I'm tired."

"Stannard, if you do that we'll never find her! Stannard! She'll stay lost somewhere out here. I don't know where she is, I swear! I haven't done any of the things you think. And I haven't touched this machine, you know I have C3 clearance — it'd shut off, I couldn't get near it. I couldn't have gotten near the pile even if I'd wanted to; I couldn't have monkeyed with the orbit —

I'm a pilot, and all I can do with machinery is pull switches — maybe I can tighten a screw, but even then I wreck the thread." He slapped the console. "Hendricks set things up to make this happen — it's the way he figured he'd get even. Stannard!" he begged. "Please! Ask him! Ask him if she had Schoebl's disease. It's the only way I can think of that'll prove I told you the truth."

"Why should he have put that in?"

"I don't know! Chances are he didn't, and it's just one more damn dumb idea — but I'm willing to take even a one-in-a-million chance. Please!"

Stannard regarded the machine with loathing. Madness in its twisted wires. He got up slowly, his shoulders weary. He went over and picked up the microphone. "More damn idiotic . . . Hendricks — "

The screen stayed blank. "NO DATA, NO DATA, NO DATA — "

"Stop." He swabbed his forehead. "I don't know if I can get anything out of this thing now . . ." He began wearily for the last time, "Paul Stannard, GF/Tech Supervisor . . ." and went through the rigmarole. "No, I do not want to play a game. I want to know if Cornelius Hendricks knew that his wife had Schoebl's disease."

"I READ YOU, TECH/MAN. THE PROTECT IS DISSOLVED. ALL DATA ARE NOW ACCESSIBLE."

They stared at it in silence for a full minute, and Stannard whispered, "Is *Schoebl's disease* the code-word?"

"YES."

Taking no chances, Stannard grabbed his bag and pulled out his own recorder. "Give me the orbit! Gimme the stores!"

Bugasz yelled, "Ask him where Iris is, goddamnit, ask him!"

"All right, give me a minute! Now, Hendricks, you damn well better tell me where your wife is!"

The screen flashed in mad succession with the picture of Iris, the reconstructed image of Hendricks, the go-board, the spinning coin, the concentric circles, a nebula, a map of the spacelight network, the memory-map — now filled, an unspecified flow-diagram, a monster — real or imagined — a hideous caricature of Hendricks's actual face.

The sound rose blaring till the metal voice rebounded endlessly from the steel walls.

"DEAD, DEAD, DEAD, YOU FOOL! UNDER THE ANTENNA! DEAD! NOBODY WILL HAVE HER! NOBODY!" The voice died abruptly into a wail. "OH IRIS IRIS IRIS, I DIDN'T MEAN IT, IRIS, FORGIVE ME, IRIS I DIDN'T MEAN IT — IRIS IRIS IRIS IRIS . . ."

On and on and on — but Bugasz, with a cougar's ripple of movement, had slid into his suit, grabbed Stannard's Gag, and was racing for the antenna room before Stannard could as much as turn around and blink.

The machine went on, "IRIS IRIS IRIS — " but Stannard made no move to shut it up. He stood waiting till a few minutes later when Bugasz came back, carrying the woman's limp body. He took her in-

to the bedroom and laid her gently on the bed. Dr. Ramcharan was in there already, and Stannard came after.

She started to undo the spacesuit, but as they moved closer, she said, "Please don't look."

Stannard went back to where the machine was still wailing. Bugasz knocked back his helmet and ran after him, twitching him round by a push at the shoulder. He roared, "You! You wouldn't let me check the antennas!" and swung a back-hand blow to the side of the head that sent Stannard flying.

"IRIS IRIS IRIS — "

After a moment, Stannard dragged himself up, staggered over, pulled down the mike. "Stop it," he said. "You can stop now. She's alive."

V

Stannard ran diagnostic tests and satisfied himself that fifteen/twenty-six was no longer a jealous liar. There was nothing wrong with the orbit; the answers for hours sixteen to twenty were there for the picking. And Iris Hendricks was alive, but only just. In gasping whispers she was able to add the few details they needed to know. Hendricks had sent her out to check the antennas and simply retracted them. Although they moved very slowly, not in one quick collapse, there was no way for her to escape. The hatches were locked, and she couldn't dodge out of the way without ripping her air-hose; she had no oxygen tanks. She had been carrying

a heavy lantern; all she could do was jam it under the angle of one of the descending arms and lie trapped in the narrow space it left her. She had lain there eighteen hours. "I thought it was a mistake at first — I was going to call him through the suit-radio . . . but he started screaming things — he thought I was dead — and — and —"

Dr. Ramcharan drugged her into relieved sleep, and Bugasz called in the drone.

"Will she live?" Stannard asked.

"Oh, yes. She would have weakened and died soon if we had not found her, but now she is only bruised." She turned to Bugasz. "How will they cure her?"

"The way I heard it, there's drugs to kill the parasites and dissolve the nodes. Some of them will probably have to be cut out. She won't be — everything she was, but . . ." he watched the drone trundling toward the shaft with its burden, and Dr. Ramcharan gave her attention to Stannard's battered cheekbone and the cut on the corner of his mouth.

"You are determined to stay?" Stannard winced a little at her touch. "It is not good for men to be alone in these places."

"The police will be here within a day, and I can clear things up faster. I'm not a lonely type. Besides, I won't even be alone." He cocked his head at the machine, and grimaced. "I've got him."

Bugasz tore his eyes away from the disappearing drone, came over to Stannard and gave a couple of preliminary swallows. "I'm sorry."

Stannard, bruised, thin-haired and cold-eyed, feeling a little sorry for himself and ridiculing himself for it, looked up at Bugasz and took one small flicker of enjoyment from the big man's humility. "Forget it."

Bugasz, with a slumping of the shoulders, went into the ship.

"The poor man will lose his job," Dr. Ramcharan said.

Stannard said, "Not through me. I'll do my best to help him keep it. But he took a swing at me, and I'm not gonna let him off the hook." He grinned at the expression on her face, even though it hurt his mouth. "You'll tell him, anyway, as soon as you get on board."

"You are hard on the feelings of a person, Stannard."

"I'm a Tech/man. I never wanted to be a policeman."

She took his chin in her hand and looked down so there was no escaping her eyes. The shadow of her sleeve glittered with gold, and her fingers laced his jaw like hot gold wire. "You are not lonely and you do not need to be loved. I think someone forgot to teach you how."

He sat unmoving, hands resting on his knees. "Are you lonely, Dr. Ramcharan?"

"My husband is treating tentacle paralysis on Barnard IX, and my children are home in New Bombay with my mother. But I will have a sabbatical soon, and I hope to see them all."

"Good luck," he said.

She packed her bag quietly and left, going down the shaft with the slipping glide of a woman who has

learned to keep a sari from sliding off her shoulder.

The locks closed.

Stannard called for a tape print-out of the Kaghouri data first and then for the rest of the answers. It would save time for the police, and he would have at least one neat package to hand over to them. Then he turned down the thermostat, dimmed the lights and sat down and lit a cigarette. He began to shape in his mind the explanations he would have to lay out; but there was plenty of time for that, and he left it. He meditated briefly on the complexities of men and the machines that served them. His thoughts, his eyes, drifted back to the computer. He sighed.

Part of Hendricks' tormented spirit was still twined in its guts. The man had had no right to do that, to force his machine to lie, deceive, conceal, accuse . . . but it had

been done. The Psych/police would unreel the situation hour by hour from its stores, would report, judge and close the case. Still unresolved forever because a machine may not expiate nor a man absolve it.

He got up very slowly, went over and picked up the mike.

"Fifteen/twenty-six, this is Stannard again . . . will you play a game of go with me?"

"I AM NOT PROGRAMMED TO PLAY WITH A FIFTH-CLASS PLAYER."

"That's all right," he said. "I'll take white and give you a four-stone handicap. It'll even us out okay . . ."

He waited, almost tensely, and after a moment the go-board appeared, white-hatched against gray, black-dotted at the D and Q cross-points of 4 and 16.

"Fine." He took a deep breath. "My first move is R 14 . . ."

END

NEXT MONTH IN IF

Science-Fiction's Newest Hugo Winner
Brings Us A Thrilling New Novell

SLOWBOAT CARGO

A World at the End of the Universe
Receives a Deadly Gift from Earth!
by LARRY NIVEN

New Novelette by One of Science-Fiction's
Favorite Writers of All Time — Now Back!

THE PETRIFIED WORLD

by ROBERT SHECKLEY

Plus many other headline stories of science fiction!
Don't miss next month's IF — reserve your copy now!

STARSONG



by FRED SABERHAGEN

*Though his music was heavenly — could
it charm the strange berserkers of Hell?*

Forcing the passage through the dark nebula Taynarus cost the humans three fighting ships, and after that they took the casualties of a three-day battle as their boarding parties fought their way into Hell.

The Battle Commander of the task force feared from the beginning to the end of the action that the computer in command on the berserker side would destroy the place and the living invaders with it, in a last *Gotterdammerung* of destructor charges. But he could hope that the damped-field projectors his men took with them into the fight would prevent any nuclear explosion. He sent living men to board because it was believed that Hell held living human prisoners. His hopes were justified; or at least,

for whatever reason, no nuclear explosion came.

The beliefs about prisoners were not easily confirmed. Ercul, the cybernetic psychologist who came when the fighting was over to investigate, certainly found humans there. In a way. In part. Odd organs that functioned in a sort-of way, interconnected with the non-human and the non-alive. The organs were most of them human brains, which had been grown in culture through use of the techniques that berserkers must have captured with some of our hospital ships.

Our human laboratories grow the culture-brains from seedlings of human embryo-tissue, grow them to adult size and then dissect them as needed. A doctor slices off a pre-

frontal lobe, say, and puts it into the skull of a man whose own corresponding brain-part has been destroyed by some disease or violence. The culture-brain material serves as a matrix for regrowth, raw material on which the old personality can re-impress itself. The culture-brains, raised in glass jars, are not human except in potential. Even a layman can readily distinguish one of them from a normally developed brain by the visible absence of the finer surface convolutions. The culture-brains cannot be human in the sense of maintaining sentient human minds. Certain hormones and other subtle chemicals of the body-environments are necessary for the development of a brain with personality — not to mention the need for the stimuli of experience, the continual impact of the senses. Indeed some sensory input is needed if the culture-brain is to develop even to the stage of a template usable by the surgeon. For this input music is commonly employed.

The berserkers had doubtless learned to culture livers and hearts and gonads as well as brains, but it was only man's thinking ability that interested them deeply. The berserkers must have stood in their computer-analogue of awe as they regarded the memory-capacity and the decision-making power that nature in a few billion years of evolution had managed to pack into the few hundred cubic centimeters of the human nervous system.

Off and on through their long war with men the berserkers had tried to incorporate human brains

into their own circuitry. Never had they succeeded to their own satisfaction, but they kept trying.

The berserkers themselves of course named nothing. But men were not far wrong in calling this center of their research Hell. This Hell lay hidden in the center of the dark Taynarus nebula, which in turn was roughly centered in a triangle formed by the Zitz and Toxx and Yaty systems. Men had known for years what Hell was and approximately where it was, before they could muster armed strength enough in this part of their sector of the galaxy to go in and find it and root it out.

“I certify that in this container there is no human life,” said the cybernetic psychologist, Ercul, under his breath, at the same time stamping the words on the glassite case before him. Ercul's assistant gestured, and the able-bodied spaceman working with them pulled the power-connectors loose and let the thing in the tank begin to die.

This one was not a culture-brain but had once been the nervous system of a living prisoner. It had been greatly damaged, not only by removal of most of its human body, but by being connected to a mass of electronic and micromechanical gear. Through some training program, probably a combination of punishment and reward, the berserker had then taught this brain to perform certain computing operations at great speed and with low probability of error. It seemed that every time the computations had

been finished the mechanism in the case with the brain had immediately reset all the counters to zero and once more presented the same inputs, whereupon the brain's task had started over. The brain now seemed incapable of anything but going on with the job; and if that was really a kind of human life, which was not a possibility that Er- cul was going to admit out loud, it was in his opinion a kind that was better terminated as soon as possible.

"Next case?" he asked the space- men. Then he realized he had just made a horrible pun upon his judge's role. But none of his fellow harrow- ers of Hell seemed to have noticed it. But just give us a few more days on the job, he thought, and we will start finding things to laugh at.

Anyway, he had to get on with his task of trying to distinguish rescued prisoners — two of these had been confirmed so far and might some day again look human — from a collection of bottled, though more or less functioning organs.

When they brought the next case before him, he had a bad moment, bad even for this day, recognizing some of his own work.

The story of it had started more than a standard year before, on the not-far-off planet of Zitz, in a huge hall that had been decorated and thronged for one of the merriest of occasions.

"Happy, honey?" Ordell Calli- son asked his bride, having a moment to take her hand and speak to her under the tumult of

the wedding feast. It was not that he had any doubt of her happi- ness; it was just that the banal two- word question was the best utter- ance that he could find — unless, of course, he were to sing.

"Ohhh, happy, yes!" At the moment Eury' was no more arti- culate than he. But the truth of her words was in her voice and in her eyes, marvelous as some song that Ordell might have made and sung.

Of course he was not going to be allowed to get away, even for his honeymoon, without singing one song at least.

"Sing something, Ordell!" That was Hyman Bolf, calling from across the vast banquet table, where he stood filling his cup at the crystal punch-fountain. The famed multi- faith revivalist had come from Yaty system to perform the wedding cere- mony. On landing, his private ship had misbehaved oddly, the hydro- gen power lamp flaring so that the smoke of burnt insulation had caused the reverend to emerge from his cabin with irritated eyes; but after that bad omen, everything had gone well for the rest of the day.

Other voices took it up at once. "Sing, Ordell!"

"Yes, you've got to. Sing!"

"But it's m'own wedding, and I don't feel quite right — "

His objections were overwhelm- ingly shouted down.

The man was music, and indeed his happiness today was such that he felt he might burst if he could not express it. He got to his feet, and one of his most trusted man- servants, who had foreseen that Or-

dell would sing, was ready to bring him his self-invented instrument. Crammed into a small box that Ordell could hang from his neck like an accordion was a speaker system from woofer to tweeter, plus a good bit of electronics and audionics; on the box's plain surface there were ten spots for Ordell's ten fingers to play upon. His "music box," he called it, having to call it something. Ordell's imitators had had bigger and flashier and better music boxes made for them; but surprisingly few people, even among girls between twelve and twenty, cared to listen to Ordell's imitators.

So Ordell Callison sang at his own wedding, and his audience was enthralled by him as people always were; as people had been by no other performer in all the ancient records of Man. The highbrowed music critics sat rapt in their places of honor at the head table; the cultured and not-so-cultured moneyed folk of Zitz and Toxx and Yaty, some of whom had come in their private racing ships, and the more ordinary guests, all were made happy by his song as no wine could have made them. And the adolescent girls, the Ordell fans who crowded and huddled inevitably outside the doors, they yielded themselves to his music to the point of fainting and beyond.

A couple of weeks later Ordell and Eury and his new friends of the last fast years, the years of success and staggering wealth, were out in space in their sporty one-seater ships playing the game they

called Tag. This time Ordell was playing the game in a sort of reversed way, dodging about in one corner of the reserved volume of space, really trying to avoid the girl-ships that fluttered past instead of going after them.

He had been keeping an eye out for Eury's ship and getting a little anxious about not being able to find it, when from out of nowhere there came shooting toward Ordell another boy-ship, the signals of emergency blazing from it across the spectrum. In another minute everyone had ceased to play. The screens of all the little ships imaged the face of Arty, the young man whose racer had just braked to a halt beside Ordell's.

Arty was babbling: "I tried, Ordell — I mean I didn't try to — I didn't mean her any harm — they'll get her back — it wasn't my fault she —"

With what seemed great slowness, the truth of what had happened became clear. Arty had chased and overtaken Eury's ship, as was the way of the game. He had clamped his ship to hers and boarded and then thought to claim the usual prize. But Eury of course was married now; and being married meant much to her, as it did to Ordell, who today had only played at catching girls. Somehow both of them had thought that everyone else must see how the world had changed since they were married, how the rules of the game of Tag would have to be amended for them from now on.

Unable to convince Arty by argument of how things stood. Eury

had had to struggle to make her point. She had somehow injured her foot, trying to evade him in the little cabin. He kept on stubbornly trying to claim his prize. It came out later that he had only agreed to go back to his own ship for a first-aid kit (she swore that her ship's kit was missing) after her seeming promise that he could have what he wanted when he returned.

But when he had gone back to his ship, she broke her own racer free and fled. And he pursued. Drove her into a corner, against the boundary of the safety zone, which was guarded by automated warships against the possibility of berserker incursions.

To get away from Arty she crossed that border in a great speeding curve, no doubt meaning to come back to safety within ten thousand miles or so.

She never made it. As her little racer sped close to an outlying wisp of dark Taynarus, the berserker machine that had been lurking there pounced out.

Of course Ordell did not hear the story in such coherent form, but what he heard was enough. On the screens of the other little ships his face at first seemed to be turned to stone by what he heard; but then his look became suddenly wild and mad. Arty cringed away, but Ordell did not stop for a moment for him. Instead he drove at racer's speed out where his wife had gone. He shot through the zone of the protective patrols (which were set to keep intruders out, not to hold

the mad or reckless in) and plunged between outlying dustclouds to enter one of the vast crevices that led into the heart of Taynarus, into the maze where ships and machines must all go slow and from which no living human had emerged since the establishment of Hell.

Some hours later, the outer sentries of the berserker came around his little ship, demanding in their well learned human speech that he halt and submit to capture. He only slowed his little ship still further and began to sing to the berserker over the radio, taking his hands from his racer's controls to put his fingers on the keys of his music box. Unsteered, his ship drifted away from the center of the navigable passage, grazing the nebular wall and suffering the pocking blasts of microcollisions with its gas and dust.

But before his ship was wrecked, the berserker's sentry-devices gave up shouting radio commands and sent a boarding party of machines.

Through the memory banks of Hell they had some experience of insanity, of the more bizarre forms of human behavior. They searched the racer for weapons, searched Ordell — allowed him to keep his music box when it too had been examined and he kept on struggling for it — and passed him on as a prisoner to the jurisdiction of the inner guards.

Hell, a mass of fortified metal miles in diameter, received him and his racer through its main entrance. He got out of his ship and found himself able to breathe and walk

and see where he was going; the physical environment in Hell was for the most part mild and pleasant, because prisoners did not as a rule, survive very long, and the computer-brains of the berserker did not want to impose unnecessary stresses upon them.

The berserker devices having immediate control over the routine operations in Hell were themselves in large part organic, containing culture-brains grown for the purpose and some re-educated captured brains as well. These were all examples of the berserker's highest achievements in its attempt at reverse cybernation.

Before Ordell had taken a dozen steps away from his ship, he was stopped and questioned by one of these monsters. Half steel and circuitry, half culture-flesh, it carried in three crystal globes its three potentially-human brains, their too-smooth surfaces bathed in nutrient and woven with hair-fine wires.

"Why have you come here?" the monster asked him, speaking through a diaphragm in its mid-section.

Only now did Ordell begin at all to make a conscious plan. At the core of his thought was the knowledge that in the human laboratories music was used to tune and tone the culture-brains and that his own music was as superior for that purpose as it was by all other standards.

To the three-headed monster he sang very simply that he had come here only to seek his young wife, pure accident had brought her,

ahead of time, to the end of her life. In one of the old formal languages in which he sang so well of deep things, he implored the power in charge of this domain of terror, this kingdom of silence and unborn creatures, to tie fast again the thread of Eury's life. If you deny me this, he sang, I cannot return to the world of the living alone, and you here will have us both.

The music, that had conveyed nothing but its mathematical elements to the cold computer-brains outside, melted the trained purpose of the inner, half-fleshly guardians. The three-brained monster passed him on to others, and each in turn found its set aim yielding to the hitherto unknown touch of beauty, found harmony and melody calling up the buried human things that transcended logic.

He walked steadily deeper into Hell, and they could not resist. His music was leaked into a hundred experiments through audio-inputs, vibrated faintly through the mountings of glassite cases, was sensed by tortured nerve-cells through the changes in inductance and capacities that emanated rhythmically from Ordell's music box. Brains that had known nothing but to be forced to the limit of their powers in useless calculation — brains that had been hammered into madness with the leakage of a millimicrovolt from an inserted probe — these heard his music, felt it, sensed it, each with its own unique perception, and reacted.

A hundred experiments were in-

errupted, became unreliable, were totally ruined. The overseers, half flesh themselves, failed and fumbled in their programmed purpose, coming to the decision that the asked-for prisoner must be brought forth and released.

The ultimate-controlling, pure berserker computer — pure metallic cold, totally immune to this strange jamming that was wreaking havoc in its laboratory — descended at last from its concentration on high strategic planning to investigate. And then it turned its full energy at once to regaining control over what was going on within the heart of Hell. But it tried in vain, for the moment at least. It had given too much power to its half-alive creations; it had trusted too much to fickle protoplasm to be true to its conditioning.

Ordell was standing before the two linked, potentially-human brains which were under the berserker itself, the lords and superintendents of Hell. These two like all their lesser kind had been melted and deflected by Ordell's music; and now they were fighting back with all the electric speed at their command against their cold master's attempt to reaffirm its rule. They held magnetic relays like fortresses against the berserker; they maintained their grip on the outposts that were ferrite cores; they fought to hold a frontier that wavered through the territory of control.

"Then take her away," said the voice of these rebellious overseers to Ordell Callison. "But do not stop singing, do not pause for breath for

more than a second, until you are in your ship and away, clear of Hell's outermost gate."

Ordell sang on, sang of his new joy at the wonderful hope that they were giving him.

A door hissed open behind him, and he turned to see Eury coming through it. She was limping on her injured foot, which had never been taken care of, but he could see that she was really all right. The machines had not started to open her head.

"Do not pause!" barked the voder at him. "Go!"

Eury moaned at the sight of her husband and stretched out her arms to him, but he dared do no more than motion with his head for her to follow him, even as his song swelled to a paean of triumphant joy. He walked out along the narrow passage through which he had come, moving now in a direction that no one else had ever traveled. The way was so narrow that he had to keep on going ahead while Eury followed. He had to keep from even turning his head to look at her, to concentrate the power of his music on each new guardian that rose before him, half-alive and questioning; once more each one in turn opened a door, Always he could hear behind him the sobbing of his wife and the dragging stepping of her wounded foot.

"Ordell? Ordell, honey, is that really you? I can't believe 'tis."

Ahead, the last danger, the three-brained sentry of the outer gate, rose to block their way, under orders to

prevent escape. Ordell sang of the freedom in living in a human body, of running over unfenced grass through sunlit air. The gatekeeper bowed aside again, to let them pass.

"Honey? Turn an' look at me, tell me this is not some other trick they're playin'. Honey, if y'love me, turn?"

Turning, he saw her clearly for the first time since he had entered Hell. To Ordell her beauty was such that it stopped time, stopped even the song in his throat and his fingers on the keys of music. A moment free of the strange influence that had perverted all its creatures was all the time that the berserker needed to re-establish something close to complete control. The three-headed shape seized Eury and bore her away from her husband, carried her back through doorway after doorway of darkness, so fast that her last scream of farewell could scarcely reach the ears of her man. "Good-bye . . . love . . ."

He cried out and ran after her, beating uselessly on a massive door that slammed in his face. He hung there on the door for a long time, screaming and pleading for one more chance to get his wife away. He sang again, but the berserker had re-established its icy control too firmly — it had not entirely regained power, however, for though the half-living overseers no longer obeyed Ordell, neither did they molest him. They left the way open for him to depart.

He lingered for about seven days there at the gate, in his small ship and out of it, without food or sleep,

singing uselessly until no voice was left him. Then he collapsed inside his ship. Then he, or more likely his autopilot, drove the racer away from the berserker and back toward freedom.

The berserker defenses did not, any more than the human, question a small ship coming out. Probably they assumed it to be one of their own scouts or raiders. There were never any escapes from Hell.

Back on the planet Zitz his managers greeted him as one risen from the dead. In a few days' time he was to give a live concert, which had long been scheduled and sold out. In another day the managers and promoters would have had to begin returning money.

He did not really co-operate with the doctors who worked to restore his strength, but neither did he oppose them. As soon as his voice came back he began to sing again; he sang most of the time, except when they drugged him to sleep. And it did not matter to him whether they sent him onto a stage to do his singing again.

The live performance was billed as one of his pop concerts, which in practice meant a hall overflowing with ten thousand adolescent girls, who were elevated even beyond their usual level of excitement by the miracles of Ordell's bereavement, resurrection and ghastly appearance.

During the first song or two the girls were awed and relatively silent, quiet enough so that Ordell's voice could be heard. Then — well, one girl in ten thousand would scream

it aloud: "You're *ours* again!" There was a sense in which his marriage had been resented.

Casually and indifferently looking out over them all, he smiled out of habit and began to sing how much he hated them and scorned them, seeing in them nothing but hopeless ugliness.

For a few moments the currents of emotion in the great hall balanced against one another to produce the illusion of calm. Ordell's deadly voice was clear. But then the storm of reaction broke, and he could no longer be heard. The powers of hate and lust, rage and demand bore all before them. The ushers who always labored to form a barricade at a Callison concert were swept away at once by ten thousand girls.

The riot was over in a minute, ended by the police.

Ordell himself was nearly dead. Medical help arrived only just in time to save the life in the tissues of his brain.

Next day the leading cybernetic-psychologist on Zitz was called in by Ordell Callison's doctors. They were saving what remained of Ordell's life, but they had not been able to open any bridge of communication with him.

Ercul, the psychologist, sank probes directly into Ordell's brain, so that this information could be given him. Next he connected the speech centers to a voder device loaded with recordings of Ordell's own voice, so that the tones that issued were the same as had once come from his throat. And — in response to the

crippled man's first request — to the motor-centers that had controlled Ordell's fingers went probes connected to a music box.

After that he at once began to sing.

They took him to the spaceport. With his life-support system of tubes and nourishment and electricity, they put him aboard his racer. And with the autopilot programmed as he commanded, they sent him out, fired along the course that he had chosen.

Ercul knew Ordell and Eury when he found them, together in the same experimental case. Recognizing his own work on Ordell, he felt certain even before the electroencephalogram patterns matched with his old records.

There was little left of either of them.

"Dols only two points above normal bias level," chanted the psychologist's assistant, taking routine readings, not guessing whose pain it was he was attempting to judge. "Neither of them seems to be hurting. At the moment, anyway."

In a heavy hand, Ercul lifted his stamp and marked the case. *I certify that in this container there is no human life.*

The assistant looked up in mild surprise at this quick decision. "There is some mutual awareness here, I would say, between the two subjects." He spoke in a business-like, almost cheerful voice. He had been enough hours on the job now to start getting used to it.

But Ercul never would. END

INTERSTELLAR TRAVEL AND ETERNAL LIFE

by R. C. W. Ettinger

Certain primitives recognize only three numbers: one, two, and many. Other primitives — present company not excepted — can categorize life spans in only three ways: normal, extended, and greatly extended.

There is little psychological distinction between life spans of a thousand years, a million years or eternity, for obvious reasons. A thousand years will almost certainly produce such vast and profound changes that we can scarcely speculate on what will interest us then; it is even possible that Destiny will have been fulfilled. Nevertheless, just for the fun of it, we may conjecture about the chance of individuals living literally forever. To many, this is an "obvious" impossibility; but what is "obvious" is often wrong, and appears to be in this case.

Oddly related to the question of immortality, as we shall see, is that of interstellar travel; in fact, the former appears to be necessary for the latter.

At first thought, the obstacles to

Robert Ettinger is the man who, a few years ago, electrified America by proposing seriously what most of us had thought was only a "science-fiction" idea — i.e., immortality by means of freezing. Now he turns his attention to some of the consequences of that kind of immortality — and what it means to some other major science-fiction ideas!

interstellar journey are impressive. The human life span is short, and human tolerance of acceleration small; interstellar distances are vast; the limiting velocity of light can be approached only by enormous expenditure of energy.

What of it? Human life may be extended, or astronauts frozen (which would increase their acceleration tolerance as well), or robots may be used; we will soon have fusion energy and later possibly total-annihilation energy. Many writers have assumed the difficulties will be overcome.

For example, in *Planets for Man*

(Random House, 1964) Dole and Asimov anticipate flight at a large fraction of the velocity of light, "although the expenditure of energy needed for accelerating to such velocities are enormous." They note that, "If one is willing to spend 20 years en route, then trips to start 4 light-years away (the nearest) could be made at one-fifth the speed of light (37,000 miles per second); trips to stars 10 light-years away could be made one-half the speed of light (93,000 miles per second); trips to stars 15 light-years away could be made at three-quarters the speed of light (140,000 miles per second); and so on." They also point out that relativity theory becomes important at speeds close to light, and that subjective time of travel in this case would be greatly reduced for the astronauts; they would age much more slowly than the stay-at-homes.

This sounds very nice, but it is much too vague. Others have looked more closely and found the picture not so rosy. For example, Sebastian von Hoerner has contributed a horifying little analysis in a compendium called *Interstellar Communication* (W. A. Benjamin, 1963, ed. A. G. W. Cameron).

First, he notes that if a live, unfrozen crew is used, and if they cannot tolerate permanent acceleration of more than 1 g (Earth normal), then long subjective times and extremely long objective times are required to reach any but the nearest stars.

If 10 years pass for the crew, the observers on Earth will measure

24 years for the round trip, and the range will be only 3 parsecs. To reach to 5400 parsecs (roughly only a tenth of the diameter of the galaxy) would require 36,000 years, which would feel like 40 years to the crew for the round trip. How very discouraging!

But the energy considerations are even more discouraging. In fact, they rule out everything except total annihilation fuel and photon thrust; and when the acceleration requirement is added, the power demands are simply absurd. According to von Hoerner (and others) to produce 1 g acceleration by emitting radiation in the backward direction requires — hold on! — 100 million horsepower per ounce of loaded rocket! Furthermore, this power must be gotten rid of. A technology capable of this would have to be able to build an engine as powerful as an auto engine (200 horsepower) weighing a tenth as much as a paper clip and also able to radiate energy about as fast as a 100 kilowatt battery of searchlights; all this *before* even beginning to consider payload and fuel.

Avenues of Interstellar Flight

George Gallup, the renowned pollster, reviewing 30 years of opinion-sampling, has pointed out that the public often has remarkably good judgment — frequently better than that of the experts in their own fields! (The people wanted air power built up long before the military agreed, *etc.*, *etc.*) And it has often been pointed out that in American

history the only realist is the optimist. A "mere, vague" optimism about future progress is probably a better guide to interstellar prospects than von Hoerner's carefully documented pessimism.

But fortunately, we have more than vague optimism to go on. Under certain assumptions, long trips might be acceptable, and if human passengers are desired and generations are not to pass, they could be frozen for most of the trip, with a few thawed out from time to time to stand watch . . . as all science-fiction readers are aware. It is also possible to beat down the obstacles by sheer brute force: when intelligent, self-repairing and reproducing robots are made, considerations of cost will virtually disappear, and it may not be beyond the bounds of reason to build a ship of planetary size, if necessary, to carry a small payload; in other words, we need not be limited by "reasonable" fuel-load ratios.

Finally, of course, there is the possibility of new breakthroughs in principle producing a whole new ball game with Einstein replaced as umpire, as Newton was before him. But there exist presently only the most tenuous hints of this, and we will not count on it.

For now the most reasonable attitude, I believe, is that interstellar flight will not be impossible even for relatively crude technology, and will not be easy or trivial even for highly advanced technology.

How this relates to immortality we shall see.

Before asking whether one can live forever, we must ask whether one can live indefinitely — *i.e.*, whether "natural death" can be eliminated. And the first question in this category is whether senility can be prevented or/and cured.

In general terms, it seems obvious that it can: given a sufficient degree of technical skill, one can prevent or correct the disorders and malfunctions that make the body and brain decrepit.

Indefinitely extended life is even possible for *our* generation, through either cryogenic interment or suspended animation. At present the only hope is cryogenic interment — freezing the newly dead in the hope of eventual revival and rejuvenation.

Statistics and Expansion

Apparently most scientists assume that eternal life is impossible for fundamental physical and mathematical reasons, which have been made explicit by James S. Hayes. (In "Technological Routes to Immortality," *The Scientist Speculates*, Basic Books, 1962.) However, I think Prof. Hayes is wrong, both in his reasons for giving up on unlimited life in the full and in the limited substitute he suggests.

He says, first, that if there is any chance at all of accidental death in a normal life span, then in the long run death is certain; second, that even if fatal accidents were somehow completely eliminated, any birth rate, however small, would eventually re-

sult in population pressures that even emigration at the speed of light could not relieve; third, that in any case an immortal could not retain all his memories, since the physical storage requirement would eventually bring the day when a solid sphere of organized matter expanding at the velocity of light would not be adequate.

He then suggests that the accident problem be met by sharing one's identity with several others in several bodies, and the storage problem by culling memories periodically to keep only those most valued: "Since personal identity, like life itself, clearly consists of an ordered structure of information, a 'message,' and since messages can be replicated indefinitely many times, there is no reason why any one personal identity could not be simultaneously made available to several brains and be said to inhabit simultaneously many bodies By the use of many bodies the probability of the accidental extinction of a personal identity can be made as small as we please. A time may come when almost every person one meets will have at least some part of his identity in common with oneself. Under these conditions the death of a body would not be a reason for grief, as now death is a reason for grief."

Perhaps we might not object too strongly to periodic weeding out of excess baggage in our memories, since selection and loss occur routinely in our ordinary lives anyway, willynilly. But few, I imagine, will agree that personal identity "clearly" (1) consists of an "ordered structure of information." Elsewhere (in

The Prospect of Immortality, Doubleday, 1964) I have considered the problem of identity in chapter length and concluded that it is very far from solved. It will suffice here to point out, in Prof. Hayes's own words, what most people will consider a *reductio ad absurdum*: "If identity resides in ordered information, the distinction between the metaphorical immortality of a man in his work and his literal personal immortality is one of quantity rather than (or as the Marxists would say, transforming into) one of quality. It is merely a matter of a difference of a few orders of magnitude in the amount of information transmitted."

Rejecting his solution, we must find loopholes in his mathematics, and then a way to crawl through the loopholes.

The first is not difficult, because his arithmetic is based on a false premise, *viz.*, that the probability of death in a year (say) must have a lower bound. For non-mathematical readers we can illustrate the point, and also illuminate an old riddle, by explaining Zeno's Paradox.

Zeno asked how can I get from here to there? Obviously, I must first cover half the distance, and to do that I must first cover $1/4$ the distance, *etc.*; he journey may be mentally broken down into an *infinite* number of finite segments, each requiring finite time; since the sum of an infinite number of non-zero intervals is infinite — is it not? — infinite time must be required to move any distance.

The answer is that the sum of

an infinite number of non-zero quantities is *not* necessarily infinite. (This is obviously so, since a two-inch line can be divided into an infinite number of segments, but the total of those segments is still two inches, not infinity. The sum $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} \dots$ is infinite; the sum $\frac{1}{2} + \frac{1}{3} + \frac{1}{4} \dots$ is infinite; but the sum $\frac{1}{2} + \frac{1}{4} + \frac{1}{8} \dots = 1$. The sum of an infinite series can be finite, if the terms of the series diminish fast enough.

Now we see how, in principle, Hayes' second and third obstacles can be overcome. We need never give up breeding altogether (although it will not be required for evolution); we need only reduce the *rate* of reproduction fast enough, indefinitely, without ever reaching zero. And we need sacrifice no memories (although we will have plenty to spare. We need only regulate their rate of accumulation. Note carefully that we do not even have to acquire memories more slowly — only more slowly as a percentage increment per unit time per unit volume of space. The annual percentage growth in brain tissue will have to decrease, but not the tonnage.

Now, a reader of decent sensibilities will be stunned by the word "tonnage." Tons of brain tissue? Of course, there is a certain apparently irreducible minimum amount of matter, in mass and volume, required to store a unit of information, and if we jettison no memories, eventually we must become gigantic. Even storing "our" memories in a separate mechanical store or computer, plugged in at will, cannot avoid

giantism, for several reasons. In any case, we do not *want* to avoid giantism — it is our salvation with respect to the accidental death bogey.

There is a certain risk of catastrophe per year per cubic yard, and we can hardly expect to keep reducing this risk fast enough, forever; hence any ordinary individual must expect a fatal accident sooner or later. But a *society*, if it spreads out fast enough, can have a non-zero probability of infinite life.

Can an individual do the same?

Certainly! To begin with, we may think of ourselves as located at a point in space. But we are not: each of us occupies an appreciable volume, and can sacrifice considerable material without disaster. For example, rays from radioactive elements constantly damage or kill cells of our bodies — thousands daily — but we replace them and carry on, and in fact do not even notice it.

Of course, it is absurd to think we can just grow huge and keep this up indefinitely. Neither can we stomach the notion of submerging ourselves in a "hive" organism, with individuals playing the role of cells in a super-being; we do not want to be reduced to the status of bees or ants or anything similar. The answer is that we will develop a new type of body, the parts of which will not be physically glued together.

It is simply a matter of communication. The hemispheres of a brain, for example, in principle ought to be capable of integration by wires, or even radio, rather than nerves; and the same thing is true of smaller

components. We must envisage a race of titans, each multicorporeal, his body divided into myriad components attenuated over a large and increasing volume of space, integrated by something like radio waves. If a star goes nova, only a few planets may be lost — a trifle, a toenail.

As always, there will be a price.

In particular, the giants will live slowly, of necessity. If you are spread over a trillion cubic light-years, and your nervous system signals from one part of you to another at the speed of light, it will take you a long while to think and act. It is interesting to speculate, however, that *this* may explain the mysterious absence of emissaries from higher civilizations: any civilization much beyond the present human stage enters the macro-cosmic phase and is completely out of touch.

In addition to size and slowness, the giants might have another bizarre quality: intermingling of bodies. If the purpose of giantism is immortality, avoiding catastrophe by having one's parts scattered over immense volumes, any small volume (say a planet) would not have to be reserved for a single individual. Thus a galaxy, say, might support billions of individuals, each one scattered onto billions of planets and each planet supporting parts of billions of different people.

People? Beings, rather. Or even gods. They could hardly be much like ourselves, whose psychology and culture are strongly dependent on the physical character of our bodies. Their lives would not necessarily be

entirely mental, but they would indeed be strange. They could not stand, sit, walk, talk or even have a definite location in any easily understood sense.

An obvious nasty conjecture is that the giants are already in our region of space, and in fact we, all unwitting, are their "cells"; that our organization, from our point of view, is inefficient and often unpleasant may interest them not at all.

An even nastier conjecture is that we are not yet cells, but will shortly be taken over for that purpose, when we reach an appropriate stage of development. But "they" would hardly work in such a sloppy manner, nor use fully self-conscious cells.

I hope it is understood that I am not postulating nor predicting the existence of Giants. I think any such development unlikely in the extreme; instead, I think it nearly certain that new discoveries and ways of thinking will appear in the next few centuries to outmode all such questions.

I cannot conceive that we will ever seriously worry about eternal life as contrasted with life "merely" extended for thousands or tens of thousands of years. I doubt very much that the present "limiting" laws of physics — those of relativity and quantum mechanics — will retain their supposed fundamental character forever. The purpose of the little exercise above, other than having some fun, is just to put in their places those who take smug and narrow views concerning what can and cannot happen, in the indefinite future. — R.C.W. ETTINGER END

Judgment Fled

by JAMES WHITE



Illustrated by

GRAY MORROW

The alien ship swung in orbit, outside Jupiter. Earth had to launch its tiny ships to meet it!

WHAT HAS GONE BEFORE

In the Spring of 1978 an object which later proves to be an alien spaceship enters the solar system and takes up a near-circular orbit some sixty million miles from the Sun. Every radio and optical telescope which can be brought to bear is directed at the Ship, but it neither sig-

nals nor replies in any detectable fashion to the signals being directed toward it.

The decision is taken to divert and sacrifice the Jupiter Probe, an unmanned observation satellite then on its way to the Jovian system, in an attempt to gather information on the

intruder. As a result there is relayed back to Earth a series of low-definition pictures of a vessel shaped like a blunt torpedo with a pattern of bulges around its mid-section. The Ship is half a mile long.

Silently and, some think, implacably the Ship orbits like some vast battleship cruising off the coast of a tiny, backward island. Inevitably there are natives who want an even closer look, and two small, sophisticated dugout canoes are modified and readied for launching.

Choosing men for the Prometheus Project is no easy task. If the human race is to derive the maximum benefit from this first contact with a highly advanced alien culture — always assuming, of course, that the extraterrestrial crew is friendly — the six men must represent the widest possible spread of the social and physical sciences. The men must also be capable of surviving the longest and most hazardous voyage in human history and of asking the right questions at the end of it. And so, despite the hundreds of eminent and respected scientists who volunteer for the trip, the final decision lies with the space medics who insist on sending six men unknown in the higher scientific circles and respected only by their friends — four experienced astronauts and two who are still under training. These six will, it is thought, stand a fairly good chance of bringing home the bacon.

It is perhaps significant that none of the six chosen to crew the P-ships are married.

In P-Two there is McCULLOUGH, a doctor and nominally a

lieutenant colonel who has been undergoing training for MOL service, and veteran pilots Captain BERRYMAN and Major WALTERS. P-One's crew consists of Colonel MORRISON, leader of the expedition and Major DREW, both of whom are trained astronauts and Captain HOLLIS, a physicist engaged on ion drive experiments. On Earth the project is headed by General BRADY.

During the first few days of the voyage McCULLOUGH is worried about the psychological effects of living continually within inches of his two companions for a year or more, not to mention the loneliness and boredom of such an extended trip in space. But he soon discovers that the series of lectures — they are subjected to three or four per day, followed by searching oral examinations — designed to prepare them for the widest possible contact with the aliens leaves them no time to feel lonely or bored. BERRYMAN and WALTERS help him over his occasional bad spots until he is able to adjust to P-ship conditions.

On P-One the atmosphere is not quite so happy, however. At the request of MORRISON, McCULLOUGH undertakes an extended period of EVA involving a fifty-mile trip to the other ship in order to treat the physicist HOLLIS, who is suffering from a very painful and unsightly skin condition.

McCULLOUGH becomes disoriented during the trip across and is almost lost. When he discovers that HOLLIS' trouble is mainly psychosomatic and self-inflicted, due in part to the behavior of MORRISON and

DREW, he becomes very angry with all three of them but manages to conceal it. By the generous application of lanolin cream and some very rule-of-thumb psychology he is able to straighten out the situation on **P-One**, but he is very glad to return to the relaxed and relatively happy atmosphere of his own ship.

During their final approach to the alien vessel a few weeks later everything they do and see is relayed to **Prometheus Control**, who in turn relays it to the radio networks of the whole world. Practically every adult member of the human race is listening for the results of this first contact, and excitement is intense. General **BRADY** tries to direct operations from Earth, but because of the radio time-lag and the various political pressures being brought to bear on him regarding contact procedure, his instructions are confused and self-contradictory.

The men in the **P-ships**, however, have no need to be reminded of the importance of what they are about do or of the necessity for caution. They have already discussed contact procedure among themselves in great detail. Their approach to the Ship is slow and open; they advertise their presence by radio signals and flares, and they continue in this fashion for the best part of a day until **MORRISON**, realizing that the aliens either won't or can't reply to their signals, orders **McCULLOUGH** and **WALTERS** to board the Ship.

Entrance is effected through a personnel lock set into what appears to be a large cargo hatch — after first opening and closing the seal scores

of times to acquaint the alien crew of their presence. During their subsequent investigation of the lock chamber **WALTERS** and **McCULLOUGH** are able to ignore the worrying out loud being done by **BRADY** and **Control** and even to forget the countless millions of listeners hanging on their every word. For the lock chamber's lighting, manual controls and fittings gives valuable data on the visual range, manipulatory appendages and technical capability of the aliens and their planet of origin.

In the hope of gathering samples of the aliens' atmosphere they secure permission from **MORRISON** to close the lock's outer seal and obtain air samples from the adjoining empty corridor. The alien crew — the two men have begun to doubt whether the Ship has a crew! — continues to ignore them. Closing the outer seal causes them to lose radio contact with the **P-ships**. **WALTERS** is about to investigate the corridor when a dimly seen, alien something makes a vicious attack on him and slashes his spacesuit. **McCULLOUGH** helps him back to the safety of the lock chamber, but discovers that the Ship atmosphere is at a higher pressure than their suit air pressure, and it is forcing its way inside.

WALTERS begins to cough.

IX

“I feel an awful fool,” said **McCullough**, looking apologetically at **Walters**. “I should have realized it in the Ship. At very least

I should have suspected it when I examined him here."

"Granted that changing suits in the corridor would have been easier on Walters's throat and eyes, I doubt if you would have been allowed to complete the operation when the aliens arrived. So you have nothing to reproach yourself with, and those photographs you took . . . Well, altogether it was a very nice job."

"And I'm not complaining," said Walters.

For the analysis of the air sample taken in the corridor had shown that the alien atmosphere was not harmful to human beings and was, in fact, much less toxic than the air of an average city. But the sample taken in the lock chamber contained a quantity of vaporized liquid which could only have come from the leak in the hydraulic system. Apparently the stuff Walters had breathed was about as damaging as a similar quantity of tear gas.

But McCullough had conducted his examination of the hapless pilot as if he had been engaged on a slightly premature post-mortem.

"Now we must decide what to do next. I'd like the doctor and Major Walters to put forward any suggestions they may have. After all, you two have more Ship experience than anyone else. How do you see the situation now?"

"I can't see anything," Walters said hoarsely. "My throat is too sore."

There was an irritated, over-amplified sigh from the speaker grill. McCullough nodded quickly to Walters, then began to speak.

So far as he was concerned the trip inside the alien vessel had not answered any of the major questions regarding its origin and purpose. It remained a hulking brute of a ship nearly half a mile long, orbiting the Sun at a distance of one hundred and sixty million miles, seemingly in a powered-down condition, and refusing to acknowledge all signals. The precision with which it had been inserted into orbit, together with the reactions of what must have been a damage control party of its crew, seemed to rule out the earlier theory that the Ship was in a derelict or distressed condition.

Present indications were that it was deliberately refusing contact because it was here merely to conduct a survey of some description. Perhaps they did not want contact with an inferior race or had orders forbidding such contact. McCullough was very careful to use the word "survey" rather than "reconnaissance," but he was afraid the people at home would jump to conclusions no matter which word he used.

So far as the physical structure of the Ship was concerned, photographic and other observations made it clear that it had not been designed to withstand massive accelerations or even a take-off from an average planet. However, if the netting they had observed covered all the corridors in the ship, it was unlikely that they had gravity control either inside the ship or as a means of propulsion. Since there were no rocket venturis or any other visible signs of conventional reaction propulsion capable of moving such a massive vessel, it

seemed obvious that whatever method of propulsion was being used the ship remained in the weightless condition whether it was under power or not.

Where the crew of the alien ship was concerned they had a little more to go on.

"In addition to the physiological details in the photographs," McCullough went on, "which will tell us a lot when we have a chance to study them properly, we know that the crew is composed of three distinct species. The alien with the white fur or clothing seemed to be in a position of authority or influence over the others. Even though their curiosity regarding us must have been intense, the others left the area as soon as type Three appeared."

McCullough went on. "The second type, which we encountered first when Walters was attacked, is much more aggressive or impulsive than Type Three. As I see it, the Three is their equivalent of an officer while the Twos are a damage control party of crew members who were angered by the damage to their lock's hydraulic system and expressed their anger by taking a swipe at Walters. But if we assume that their orders were to ignore us and let the repairs wait until after we had gone away, and the Type Three arrived on the scene to remind the others of their orders in no uncertain terms and chase them off"

"They followed the Three," Walters put in. "It didn't chase them."

"I don't think that matters," said McCullough, then continued: "Taking a swipe at one of us is, in the

circumstances, an understandable reaction. It is not a friendly reaction, of course, but it does show that we have certain emotional responses in common which could form a basis for a wider understanding in time — if we are allowed to maintain contact with them.

"I, personally, do not think we will be.

"For there can be no doubt that they know we are here," McCullough ended seriously. "Perhaps they have known about us from the moment we left Earth. But we are not welcome here and we should leave before they take more positive steps to discourage us."

For a long time there was silence, then Berryman said, "Surely we've come too far to just turn and run. We can investigate and photograph those hyperdrive blisters, or whatever they are, without actually entering the Ship. I agree it is good sense to run away. But make it tomorrow or sometime next week."

"I . . . I agree," said Hollis from P-One. The over-amplification which made the colonel's voice sound authoritative simply magnified the physicist's timidity. "*Accurate photographs of those generators — which must be connected with their propulsion system — might not give us everything we want to know, but they would at least keep our people from following too many useless avenues of research.*

"*At the same time I agree with the doctor. We should not go into the ship again if we aren't welcome.*"

There came a sound of Morrison's

throat being cleared, and Hollis broke off. Obviously the colonel was willing for the other to speak so long as he said the right things. Talking about leaving was not one of the right things, so it was equally obvious that the colonel also wanted to stay.

Walters found his voice suddenly and said, "We made a mistake by damaging their lock mechanism, but that doesn't necessarily mean they will chase us away like small boys caught robbing an orchard! That would be too . . . too petty an act for a race capable of interstellar flight."

"I'd like to think so, too," McCullough said sharply. "But I keep remembering the petty things we did in the sailing ship and stagecoach era and how many of us are still doing them."

"But we're unarmed!" Berryman broke in. "Our ships are downright primitive by their standards. And in a sense we belong to the same club. Space travel is not as dangerous for them as for us, of course, but . . ."

"But you feel," McCullough finished for him, with a sarcastic edge to his voice. "that the alien captain should pipe the plucky primitives aboard with full honors. Don't you think it possible that this sort of thing may have happened many times to this particular ship? Maybe they are a little tired of primitives busting a gut to get out to look over their ships. So much so, perhaps, that they won't even toss a metaphorical coin into the water to see us do tricks for them because of the danger of us fouling their metaphorical propellers."

"Walters's idea of the alien might be too noble," Berryman protested, "but yours is too base and cynical. This isn't like you, Doctor."

"No, indeed," said Walters, stifling a cough. "And aren't we forgetting that practically *all* of this is sheer guesswork? They might not be noble or base. They might not even be all that far advanced technically, judging by their ship's construction. And I don't think we should run away until we at least know what we are running away from.

"As for the doctor," he ended biting, "I think the blood circulation to his feet is beginning to fail. They are growing quite cold."

"I asked for your views on the present situation, not about each other. Calm down, gentlemen. We are not going to leave, not immediately and not even next week. It seems Control has been keeping us in the dark — for our peace of mind, they say — about certain new developments which make it necessary for us to stay put. The period mentioned was a minimum of three weeks.

"You see, our people were a little late in cutting the transmission to the networks when things became exciting at the ship, and the political side-effects have yet to be evaluated. At the present time I am receiving new, modified, amended or downright contradictory orders on an average of three times a day."

The incident on the Ship had gone out in its entirety, via translators or commentators where non-English speaking nations were concerned, to practically everyone on Earth. Prometheus had wanted to cut transmis-

sion, but a quite incredible amount of pressure had been brought to bear on them to continue relaying the signals from the Alien — it was already being capitalized and used in the same sentences with words like *Invader* and *Enemy* — and so far as the colonel knew they would still receive everything he sent. He had used his discretion, however, regarding the signals recently received from P-Two.

Already there was talk of trebling NASA's appropriation, building an armada, knitting warm sweaters — public reaction was fluid and still somewhat confused, but the general feeling was that something positive should be done. It was being suggested that the US and Russia pool their space capability against the common enemy.

"The Russians would already be out here with us if they hadn't jumped the gun by launching that rather ambitious manned Venus Orbiting Station just before the Ship appeared. Their present capability may be stretched to the limit keeping it supplied. However, if our stay out here becomes extended, Biakonur have offered Prometheus the use of two of their high-acceleration supply vehicles, with no strings attached other than that they must not be used to carry weapons.

"You will appreciate the political implications which have grown out of our handling of this situation — our bungled handling of the first contact, some say. The UN is being quite critical.

"But now we must try to devise tactics to cover this situation. You

are all free to interrupt and offer suggestions at any time."

The first interruption came within seconds, from Berryman, who suggested very strongly that it would be a criminal waste of opportunity to run away without trying to find out a little more about alien science and, if possible, culture, adding that any tactics used against the aliens must be purely defensive. Hollis, Walters and McCullough interrupted to agree with this, and Drew said that considering the relative sizes of the vessels concerned they had no choice.

Irritated, Morrison replied that he had no intention of declaring war on anybody, and would they all please make their suggestions more constructive and less general in nature.

Finally it was decided that P-One and P-Two would be joined together nose-to-nose. There was provision for doing this in design, and the result would be that Walters would have access to both command modules without having to don a spacesuit. There would also be a saving in power by having one life-support system serve two ships, since it might come about that the other men would be absent on the alien Ship for extended periods of time. The duties of this single watch-keeping officer would be to maintain contact with the men investigating the alien vessel and Prometheus Control and report progress.

Drew had a lot to say on the subject of defensive weapons. They had no intention of hurting, much less killing, anyone on the alien ship. But if they did re-enter the vessel they

would have to have a means of protecting themselves and their irreplaceable spacesuits from injury. With the aid of the doctor's as yet incomplete physiological data on the known alien life-forms they devised and built a prototype weapon, rather like a ski-stick, which would fend off aliens and prick them lightly if they became too persistent.

They discussed alien motivation and possible methods of communication at great length, and somehow it became an accepted, although not formally agreed, fact that they *would* go aboard the alien ship again.

Many hours later while they were closing with P-One for the docking operation, Walters said hoarsely, "I'm sorry for what I said back there, Doctor. I should not have criticized your feet, not after what you did for me on the Ship. But you put up such a good, sensible case for leaving I thought the colonel might decide there and then to do just that, and this is such a unique opportunity for . . . for . . ."

"Getting clobbered?" Berryman asked, grinning. He went on, "But I wouldn't apologize, Walters, if I were you. It seems to me that if your mind was capable of really devious thinking, and if you weren't just an *amateur* psychologist, you would have realized by now that he was indulging in a piece of psychological sleight-of-hand. Probably he had it all worked out with the colonel in advance — talking good, sound common sense, verbalizing all our own secret fears and survival instincts, then making us argue against them to show how superior we thought we

were to him. In short, and to mix a metaphor slightly, propping up our weakening resolve with an obviously broken reed.

"Not that he is likely to admit any of this, of course."

They were both staring at him.

McCullough felt his face burning, but deep inside him there was another and much more pleasant feeling of warmth. It occurred to him suddenly that there were none so blind as those who could see perfectly, but shut their eyes because they happened to be looking at a friend.

"It's a thought," said McCullough. To himself he added, *A happy afterthought.*

X

As the only member of the expedition with both a spacesuit and first-hand alien experience, McCullough was placed in charge of the second boarding party. Those were the reasons given by Morrison and, without actually saying so, the others gave McCullough the impression that they considered it a sensible arrangement.

Five minutes after leaving the P-ships, however, Morrison was no longer even pretending that McCullough was in charge.

The entry point chosen was a personnel lock about one hundred yards aft of the first one. McCullough operated the seal mechanism and entered, followed by the colonel, Berryman, Hollis and Drew. This time he did not slam the door or test the hydraulic actuator to destruction. In-

side he demonstrated the working of the light switches. The chamber differed only in detail from the previous one, but this time they were going to examine the fine details.

There were no aliens in the lock chamber or in the corridor outside.

Morrison had brought a spotlight from P-One. Using the access doors on four sides of the chamber and the large transparent panels set into them he snapped the space between the Ship's double hull while Drew kept watch on the corridor and reported progress to Walters on P-Two. Berryman, Hollis and McCullough scoured the place for identification numbers.

"I realize," said Berryman during the first few minutes of the examination, "that robust construction together with simplicity of design is supposed to reduce the danger of component failure, but this angle bracket is so simple it is downright crude!"

But the badly finished support bracket, like all the other small structural members they were examining, possessed the expected symbols of identification.

Their idea was simply that any piece of machinery beyond a certain degree of complexity — from a car or light airplane up to and including spaceships half a mile long — required an enormous amount of prior design work, planning and tooling long before the first simple parts and sub-assemblies became three-dimensional metal on someone's workbench. The number of general assembly and detail drawings, material specification charts, wiring diagrams and so on

for a vessel of this size must have been mind-staggering, and the purpose of all this paperwork was simply to instruct people of *average intelligence* in the manufacture and fitting together the parts of this gigantic three-dimensional jigsaw puzzle.

If normal human practice was observed, and the aircraft engineers who had lectured them on the trip out insisted that there was no easier way short of waving a magic wand, then these drawings together with the components they described must include exact instructions for the placing of these parts within the jigsaw.

It was possible that the aliens had some exotic method of identifying components — such as impressing each part with a telepathic identity tag or tactile coding systems instead of using visible printed symbols. But considering the size of the project and the tremendous number of parts to be identified they were fairly sure that the aliens would do it the easy way, which was to mark the surface material of the component with symbols which could be read at a glance.

The system used on the Ship seemed to be some kind of vibro-etch technique. It was nice to know that, in the philosophy of aircraft and spaceship construction at least, the e-ts and humans thought alike.

"You notice there are no curved lines in these symbols," said Hollis at one point. "The result of having pincers instead of fingers and an opposable thumb, would you say?"

"Not necessarily," said McCullough. "If we had continued to use Roman instead of Arabic numerals"

"Discuss your findings later, gentlemen," said Morrison impatiently. "We will take a quick look along the corridor. Berryman and I will move aft, Hollis and McCullough forward, and Drew will guard the lock chamber. Go only as far as the first intersection — that should make it impossible for any of us to be cut off. Make a map showing door positions and anything else of interest. If the doors have transparent panels, sketch in room dimensions and contents.

"Be as quick as you can," he ended. "If you meet anything, retreat or defend yourselves without hurting it. All right, Drew, crack the seal."

They split up as directed, McCullough keeping slightly ahead of Hollis so as not to prod him with his ridiculous weapon. Since the Ship seemed to be designed for free-fall conditions there was no clearly defined floor, ceiling or walls in the corridor. The netting was supported a few inches out from each wall and stretched taut and was interrupted at regular intervals by the entrances to what seemed to be storerooms. Being cautious men, they shone their lights only into the rooms whose doors had transparent panels in them and left the others alone even though they would have opened at a touch — they were simple, sliding doors rather than pressure seals. Every door bore two sets of identifying symbols placed upside down to each other so as to be easily read whatever the direction of approach.

Lighting fixtures and switches were

set at intervals along the corridor, but McCullough did not turn them on. The torches of Hollis and himself gave enough light at short range and there was no point in letting the aliens in their control-room know that the humans had moved into the corridor.

At the intersection one corridor continued forward while another curved away in each direction, following the lateral curvature of the hull so that they could see only twenty yards or so along it. Just at the limit of vision in each branch there were the mouths of two other corridors paralleling their own.

"If we went back along one of them," said Hollis, pointing, "and then took the first outboard turning, we should meet up with the colonel and Berryman."

"Do you want to try it?" said McCullough.

"No," said Hollis.

The physicist busied himself with his sketch pad while McCullough kept watch in four directions. But they were not disturbed by anything until the colonel's voice ordered them back to the lock chamber.

Ten minutes later they were outside the Ship again and heading for a lock close to one of the big transparent blisters. Hollis was literally babbling with excitement over the prospect of tinkering with a real live — Walters on P-Two warned that it was probably several million volts live — hyperspatial generator. McCullough said nothing and thought seriously about Colonel Morrison's voice.

Morrison had the irritating habit

of using too much volume during transmission and sounding like a short-tempered hurler of thunderbolts rather than the simple voice of authority. But now the doctor was beginning to wonder if the over-amplification and, perhaps, the judicious use of the tone control to make it sound deeper as well as louder, was the sole reason for Morrison's stern-sounding, authoritative tone. Certainly the difference in his natural and radio voice was amazing. McCullough had the uncomfortable feeling that every time the colonel opened his mouth in ordinary face-to-face conversation he nibbled away a little of his own authority.

It was becoming obvious that the Colonel Morrison who Berryman, Walters and himself knew as a voice from P-One was not necessarily the same person that Drew and Hollis knew on the colonel's own ship. It was becoming much easier to believe Morrison capable of gossiping like an old woman to Drew while excluding Hollis and allowing the physicist to get into the sorry state McCullough had found him in when he was shot across to the other ship.

At the same time McCullough knew that he must guard against a too-sudden reversal of feeling. One unexpected weakness — especially in an area so susceptible to misinterpretation as a tone of voice — did not mean that the colonel was automatically weak, ineffectual and unsuited to wield authority and had, therefore, no right to their obedience.

McCullough worried about the colonel all the way to their next point of entry.

This time they stayed only a few minutes in the lock chamber and did not go into the corridor at all. Access to the space between outer and inner hulls was by a simple, unpressurized sliding door, and the air on the other side of it was at corridor pressure. Masses of cable conduits, plumbing and enigmatic cabinets sprouted among a forest of girders on all sides, except where a narrow ladder of netting stretched forward through a tunnel cleared in the metallic jungle. At the other end of the ladder the colonel's spotlight showed the entrance, if their calculations were correct, to one of the blisters.

"Use our own lighting," Morrison said, "and don't wander away from the net. We might accidentally short-circuit something and kill ourselves."

"I don't think so, sir," said Berryman. "The cables all seem to be well insulated."

"I agree," said Hollis, "but we should examine the markings on cables entering the blister to help us separate lighting and instrumentation circuits from power lines."

"Be careful anyway!" said the colonel sharply. "Drew, guard the lock chamber. The rest of you follow me."

Two days ago Berryman might have argued against the colonel like that, McCullough thought, but not Hollis.

The atmosphere remained tense until they entered the blister through an airlock. Inside they found no atmosphere at all. This did not surprise Hollis, who said that he

had expected the generators to operate in a vacuum. A few minutes later they discovered that the vacuum was maintained by having the blister open to space, although the openings in the transparent canopy were too narrow to allow passage to a man or, McCullough suspected, an alien. Sunlight flooded through the transparent plastic, throwing dazzling highlights off the bare metal and pale blue ceramics all around them. The two P-ships were clearly visible in the black sky and the canopy was no barrier to communications.

"There are bare power lines in this room," said the colonel stiffly, "so be careful."

"Yes, sir," said Hollis quickly. "But I don't think there will be any danger from them — the generator isn't switched on. At the same time, it will take weeks to study this place properly and I should like to make absolutely sure of our safety while doing so."

His idea was to short the power lines where they entered the blister. He was fairly sure that the generator's design incorporated protective fusing and similar fail-safe devices so that the valuable generator itself would not be destroyed. If *he* was building the thing, that was how Hollis would do it. There was perhaps no need for him to point out that this intricate piece of equipment was *not* a crudely built structure — it looked as if it had been put together by watchmakers.

It was also possible that the generator would not operate if foreign bodies, themselves, were present in the blister. At the same time Hollis

said he would feel much more comfortable investigating the place when he was less likely at any moment to be struck by alien lightning.

"You're the physicist," said the colonel. "But it occurs to me that spiking one of their generators will make them feel annoyed. Even more annoyed than slamming an airlock door!"

Instead of netting, a light plastic ladder arrangement curved around and through the masses of equipment projecting into the blister, twisting and widening out into an outside tennis-racket shape where it was obvious that more than one alien was meant to work on it. Hollis did not talk during the investigation except for the single occasion when he told McCullough with great fervor that his camera contained the most valuable pictures ever taken.

But McCullough was only half listening to him. He had the feeling that they were all being too enthusiastic, not worrying nearly enough about the people of the Ship and what they would think of all this, and generally tending to forget where they were. Maybe they wanted to forget where they were, of course, and the enthusiasm and lack of proper thought were aids to accomplishing this. But McCullough had the awful feeling that they should all stop and have a good, long think.

He wished Morrison would take a firm grip on the situation and *make* them stop and think!

The colonel's last remark had brought back to his mind the name of the old-time author responsible for a story called *First Contact*. He

had also written one entitled *The Ethical Equations* and, during the trip out they had talked over these and a great many other fictional first contacts — science-fictional data being the only kind available to them — and the ethical equations had been very thoroughly discussed.

They had all gained, McCullough now realized, much comfort from them.

In substance the equations stated that if one did a person or alien a good turn an equal reward would ultimately be forthcoming, and that the same would apply if someone did something wrong. Eventually an exact balance of punishment or reward would occur. Assuming then that the crew of the alien Ship did, after their own fashion, subscribe to this ethic, what had the human boarding party done that was inherently, basically wrong?

They were guilty of blundering into a situation which they did not understand. They had damaged alien property and they were guilty of trespass. Their intentions had not been evil, of course, but that fact would not be apparent to the aliens. However, an intelligent extraterrestrial species capable of crossing interstellar space should possess enough understanding or empathy to credit another intelligent species with the normal amount of scientific curiosity, and the sins of trespass and minor property damage were venial to say the least.

But in the deeper recesses of his brain, in the levels of mind which operated on hunches and gues-

work and insufficient data, McCullough refused to be reassured or even comforted. To the contrary his fear mounted steadily with every hour which passed. And when Walters's voice sounded suddenly in his phones he started so violently that he almost lost his camera.

"Sir!" said the pilot. "*Drew reports activity in the corridor outside his position. Five Type Twos along the corridor in the direction of your blister. He had the lock chamber lights switched on and saw them clearly, though they didn't see him.*"

"Everybody out!" said the colonel. "Hurry it up! We'll go back the way we came, avoiding the corridor. I . . . I don't think we should attempt a formal contact just yet"

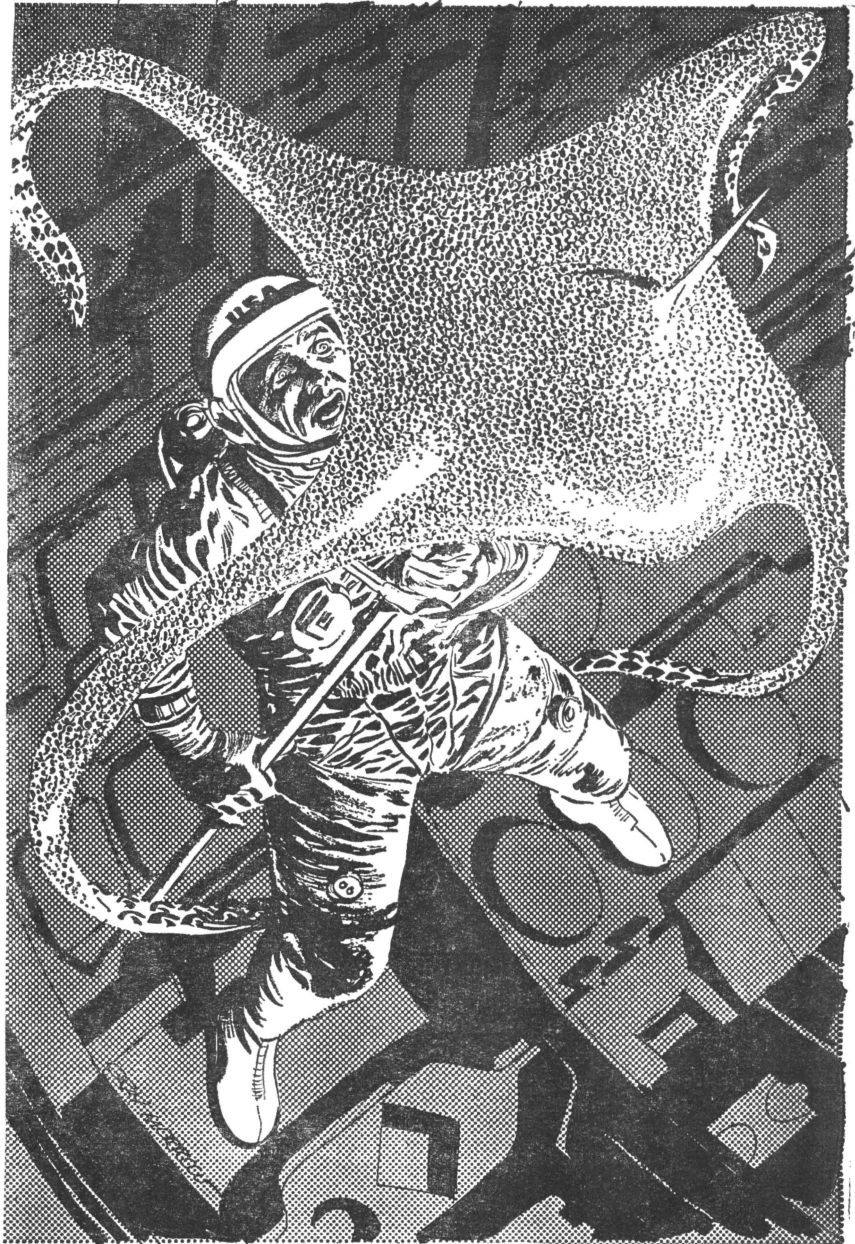
"*He also says there is something like a Type One in the inter-hull space, clinging to the netting.*"

"We'll ignore it," said Morrison, "and hope it does the same. Hollis, *move!*"

They went through the blister lock and along the net, with Morrison leading, Hollis and McCullough facing each other on opposite sides of the netting and Berryman bringing up the rear. They pulled themselves hand over hand towards Drew and the opened lock chamber while their eyes searched the dark spaces between the cabinets and masses of plumbing on all sides of them.

"Doctor!"

Morrison's spotlight had picked out a small, bristling alien, something like a Siamese twin porcupine, which was flip-flopping along the net away from them. McCullough still could not see what it used for hands.



"Got it," he said, replacing his camera and hurrying on.

Drew had taken up a classic defensive position outside the open door, crouching with one leg hooked into the net to steady himself. The shaft of his ski-stick was wedged against the wall plating with the business end pointing back the way they had come. A little self-consciously Morrison took up a similar position on the other side of the opening and waved the others through.

McCullough entered first, then Hollis. They turned to assist Berryman then and had a hand under each armpit when it happened.

His radio went into a howl of oscillation as four voices tried to use it at the same time, and McCullough saw aliens swarming towards them out of the dark spaces between the supposedly solid masses of equipment. Morrison and Drew he could not see at all. The colonel had lost his spotlight, and Berryman was being pulled away from them.

One of the aliens had anchored itself to the combing with two of its tentacles while the other two were wrapped around the pilot's feet. Another e-t had swarmed onto his back, its sting jabbing furiously — McCullough could hear it clanking against Berryman's air tanks. He knew that it had only to shift its position by a few inches for the pilot to be very horribly dead.

XI

For several seconds McCullough could do nothing except stare in fascination at the colonel's spotlight

as it was sent spinning to and fro by the struggling, colliding bodies around the entrance. Lit by that wildly rotating beam, the scene took on the flickering, unreal quality of an old-time silent film. The spotlight was blinding and confusing the men as much as the aliens, because it was some time before McCullough realized that Berryman had freed one foot and was using it to kick at the tentacle holding the other — he had been viewing the operation as a series of disconnected stills.

Hollis was mouthing at him — the suit radio still emitted a constant howl of oscillation because too many people were trying to use it at the same time — and pointing at the wall net. The physicist was on his knees beside the sliding door and had worked his feet and lower legs between the net and the wall. McCullough got the idea and did the same, and together they took a firm, two-handed grip on each of Berryman's arms and pulled hard.

Berryman came free of the first alien so suddenly that his visor cracked against the edge of the opening, and the force of the pull sent him shooting past so quickly that they had to grab his feet. The second alien was still clinging to his back, still stabbing at his air tanks.

A pair of legs were coming through the opening. McCullough gave one of them a tug to help whoever it was on their way. There were long tears in the fabric covering one leg, and blood was oozing out of one of them.

The constant howling made it difficult to think.

They pulled Berryman down between them, hooked his legs into the netting, then concentrated their efforts on the alien clinging to his back. Its tentacles were still wrapped tightly around the pilot's chest, and Hollis pushed the butt of a ski-stick between the alien's underbelly and Berryman's back and tried to lever it away. The alien jerked violently — he must have prodded a sensitive area — but did not let go. Then McCullough discovered the answer. If they reached under Berryman's chest and gripped the tentacles by their tips they could be peeled back relatively easily.

There was a muffled clang. McCullough looked round quickly and saw that everyone was inside. Drew was slotting his weapon into the piping which ran along both sides of the sliding door and through the ring handle so as to form a bar. Possibly the aliens could open it, but not without tearing out a chunk of their hydraulic system.

The howling in his earphones was beginning to break into fragments of words and sentences.

“. . . My suit's torn. I'm losing air Get it off me! Get it off Shut up, all of you, and Stop it wriggling or it will stab My leg, dammit, where's the doctor? Off your radio and open your visors Quiet, and open your helmets!”

McCullough kept quiet as ordered, realizing suddenly that he himself had been contributing as much as everyone else to the uproar. But he did not open his visors because his hands were full of alien tentacles.

For the few minutes it took to pull

the twisting, heaving body off Berryman's back, McCullough had a really close look at the alien. There was a shallow recess between the roots of its tentacles, set so low as to be almost on the edge of its underbelly, and in it there was the soft, wet gleam of something which could only be an eye. The opening and closing mechanism seemed to be a double-lid arrangement operating vertically rather than horizontally and the eye was quite definitely looking at him. The ends of its tentacles quivered as they tried to pull away, and for some odd reason McCullough was reminded of the big, stupid, friendly dog he had had once and of the time he had tried to teach it to shake hands.

But this creature certainly was not friendly — at least, not as human beings understood the word — and neither was it stupid. Unless

He was unable to finish the thought because Berryman had wriggled from beneath the alien and the creature was bouncing up and down between them as it tried furiously to curl and then uncurl its tentacles. Berryman snatched a weapon which was floating nearby and slid it under the being. He pushed it away as Hollis and McCullough let go, and the alien went spinning helplessly into the center of the chamber.

“But I wanted to put it with its friends in the corridor,” said Hollis when he had his visor open. “In here, outnumbered five to one, it might panic and injure itself — ”

“Are you *sure* this air is breathable?” Berryman broke in, speaking through his smashed visor. There was

a long incised wound across his nose and one cheek.

"Doctor," said the colonel. "Have a look at Drew's leg. And my shoulder"

"*Hollis!* Behind you!"

The alien had made contact with the wall net, steadied itself and then launched itself furiously towards the physicist. Berryman got his ski-stick up in time and the alien struck it squarely but did not stop. The butt of the weapon was driven back against the wall, but still the being did not stop. The metal collar piece holding the plate which kept the tip of the weapon from penetrating more than half an inch slipped backward along the shaft. The point, with the alien's considerable velocity and inertia thrown against it, drove into its body until stopped by the interior of its carapace.

It began to slap the shaft of the weapon with its tentacles, violently at first, then more slowly. Suddenly its tentacles tried to tie themselves in knots and it became completely still.

McCullough launched himself towards the alien, knowing that he was in no danger from it now. He gripped one tentacle where it joined the body and gently withdrew the ski-stick.

This was much worse than a little property damage or trespass. Much, much worse.

For a long time nobody spoke. McCullough looked slowly around at the other four men, trying desperately not to think. The spacesuits of Morrison, Drew and Berryman

were torn or otherwise rendered useless. The colonel and Drew were injured, perhaps seriously. And, as an added complication, their wounds might well become infected with alien micro-organisms — an infection against which their bodies could have no defence. In any case they should be moved out of his place, and quickly. But there were only two useable spacesuits, the physicist's and his own. Hollis's would fit only Hollis. McCullough's might, at a pinch, fit Drew but nobody else. He was afraid to consider all the implications — they were too terrible. But more than anything he did not want to think about the contorted alien shape he was holding and the frightful things which must surely happen as a result of its death.

"Doctor," said the colonel in a voice harsh with pain, "you're supposed to know how to treat human beings. Leave that thing alone, it's dead anyway."

He was glad to be able to give his undivided attention to the injured, but somehow the alien cadaver seemed always to be in sight whenever he looked up from a patient, and it became more and more difficult not to think about it. The blood of both species was the same color, a fact which should not have surprised him considering their closely similar atmospheric requirements, and the droplets filled the compartment like dark, frozen rain. The absence of gravity, as well as making it difficult to control bleeding, made it completely impossible to deal quickly with even a simple wound.

Even with the patients cooperating

by lacing their arms or feet into the wall netting, and Hollis doing his best to hold McCullough in positions while he treated them, it took a long time.

Morrison was in bad shape. An alien had tried to fasten itself onto his head and chest, but the colonel had been able to interpose his elbow just in time. His forearm was a little longer than the full extension of the alien's horn, so that while his helmet had been hammered into so much scrap metal and his shoulder and upper arm were a mass of punctured and incised wounds, he had escaped with his life. Drew, apparently, had discarded his ski-stick in favor of his feet, and one leg had suffered in consequence, although the injuries were much lighter than the colonel's. Berryman had a badly lacerated face, caused by running it against the edge of his broken visor.

But it was the spacesuits which had suffered worst of all, first from the attacks of the aliens and now at the hands of McCullough.

Cutting and extending the tears in the fabric of the suits, pulling back the plastic and metal foil and the tubing of the air-conditioning systems, affected him much more deeply at times than probing and cleaning the wounds. If they were not already fatally infected the wounds would heal — the human body was self-repairing to a fantastic degree. But increasing the damage to a suit which was not reparable was to inflict a wound of a much more serious nature. In space the suit was much more than a protective skin. Walters, who was in a position to know, had insisted that it was analogous to

both womb and placenta and that losing it prematurely could give rise to a really drastic form of birth trauma.

The thought of being without his own suit in this place was enough to drive McCullough to the edge of panic, and he hated to think of how the others would feel when the shock of their injuries wore off and they realized the full extent of what had happened to them.

His thoughts had taken a Freudian and definitely morbid turn by the time he had finished with them. He found himself staring at the dead body of the Two and wondering if any of them would see home again.

The colonel spoke suddenly. His voice sounded very weak, and either he was not using his suit radio or the Two's horn had wrecked it. He said, "You will have to report our . . . our predicament, Doctor. And tell Walters to send the technical material and photographs at the same time. Hollis will have to help you with this — he is the only one of us capable of understanding what he saw in the blister and passing it on. When all this has been done you will maintain continuous radio contact with us until something has been worked out.

"We will have to move into the corridor while you are leaving," Morrison ended, launching himself slowly towards the inner seal, "so don't waste time."

"It might be better if I stayed," said McCullough awkwardly. "None of you are completely fit, and if they attacked again while you were in the corridor . . ."

"I can't risk losing another space-suit," said the colonel as he checked his slow flight with his feet and good arm. "Drew will organize our defenses. He's very good at that sort of thing."

"And the first thing we do," said Drew savagely, "is take the guards off these stickers! Anything that comes at us again will get six or eight inches of metal in its guts instead of a harmless little jab. Cold steel has a very demoralizing effect on human beings — that's why bayonet charges have retained their popularity through the ages — and maybe —"

"No!" McCullough protested. "We've killed one of them already — by accident, of course — and we can't even imagine the trouble that will cause. But if we start killing them deliberately . . . I mean, we must all think very carefully about this before we make another move which might be misunderstood."

"And I think we've been thinking too much!" Drew said, his voice rising almost to a shout. More quietly he went on, "If a person acts like a wild animal then that is how he should be treated! And I think we should dump that . . . that carcass. The damn thing gives me the creeps!"

"While quietly bleeding to death," said Berryman hastily, in an obvious attempt to restore peace, "I have given serious thought to this problem. It seems to me that there are just three things we can do. The first is to return the body to its friends by leaving it in the corridor — a course which might very well anger

them even more. The same applies if we keep it in here where they may be able to see it through the lock window. Or lastly, we can hide it from them, with little probability of them ever finding it, by having the doctor and Hollis take it away.

"I favor the last alternative," Berryman concluded, "because, while the aliens may feel fairly certain that it is dead, they cannot be absolutely sure of this — they may assume, or hope, that their friend is a prisoner. If they do not actually see the dead body there might be enough doubt in their minds to make them proceed more cautiously against us."

"My thinking exactly," said the colonel. "Take it to P-Two, Doctor, and find out what makes it tick."

"You have to know your enemy," said Drew viciously, "inside and out."

"Surely you are not suggesting. . . ." began McCullough aghast, then stopped. He was trying hard to think as they must be thinking. *He* had not had his arm and shoulder gored by an alien's horn or had his leg torn by alien claws. *He* was not aware, not as personally and subjectively aware as they were, that his space-suit was useless, with everything which that fact implied. McCullough's skin, and his even more precious spacesuit, was still in one piece. He had been exposed to, but had not suffered, violence.

But violence was a chain reaction with a positive K-factor. Once begun it quickly became self-sustaining. From the outset it had been the aliens who had acted violently, or reacted violently, towards the hu-

mans. Now the situation had deteriorated to the point where it was becoming uncontrollable because both sides were using violence.

If the aliens reacted violently to the venial sin of trespass, how might they react to one of their people being murdered and dissected?

XII

In the general confusion of the past few hours McCullough had forgotten one very important fact, and that was the effect of explosive decompression on an unprotected human or unhuman body. As soon as it was exposed to space the soft, almost flat underside of the e-t swelled like a great, lumpy football and burst wetly. Nothing he could have done in the way of a post mortem could have made the alien look worse than it did just then, and by the time he reached P-Two with it he was looking forward to investigating this completely strange life-form.

But there were more urgent matters to be attended to first.

It was not until they had processed the film, and the pictures taken in the blister were on their way pulse by pulse to Earth, that they were able to fully satisfy Walters' curiosity about the fight in the ship. And then it was only by having him listen while McCullough made his report to Prometheus Control. The physicist, meanwhile, had returned to the Ship with a supply of food and water for Morrison and the others.

Before leaving, Hollis reminded them that the water he was taking would be permanently lost to them,

for without the P-Ship's reclamation system there was no chance of them being able to use it again. He apologized for mentioning this fact but thought that somebody should bear it in mind in case they were contemplating a lengthy stay.

McCullough agreed and added yet another unpleasant datum to his report.

“. . . That is the situation in detail,” McCullough said a few minutes later. “Our most urgent need is for spacesuits to evacuate the injured men, or if they cannot be evacuated, food and water to extend our staying time on the Ship until evacuation is possible. There is also the possibility that their wounds may become infected with alien bacteria, against which their bodies may have no defense, and they will die. However, it seems to me that the chances are about even of the alien pathogens running rampant throughout their systems and killing them in a matter of hours or alternately, of them having no effect whatsoever because the human body is too strange and alien an environment for the e-t pathogens to survive in it. There is also the possibility that our antibiotics will be as effective against e-t infections as they are against —”

“*Brady here,*” a voice from Control broke in. It was a gruff, impatient yet concerned voice belonging to the person on whose shoulders the responsibility for the Prometheus Project and the combined weight of eight stars did not rest lightly. It went on, “*You are in a mess, Doctor, I agree. Have you considered moving one of the P-ships into the lock, taking the*

men on board in shirt-sleeve conditions, leaving one man with a suit to operate the lock mechanism?"

"The lock is too small to take a complete P-ship without wrecking it!" McCullough broke in. "Berryman had that idea, too. But I've already told about it at the beginning of my report."

". . . If this idea isn't workable," the general was continuing, "your only hope is to elicit the aid of the alien ship's crew in getting them out. Are you sure they are as aggressive as you say?"

"But I've already told you . . ." began McCullough, then stopped. It occurred to him that the distant general was reacting only to the first few sentences of the report and, as McCullough remembered them, they had not been particularly coherent.

"Stop talking, McCullough, while I'm trying to . . . !" said the general irritably, then in an aside to someone, "Yes, yes, I'd forgotten the time lag. Now let's see . . . McCullough!"

"Yes, sir," said McCullough, out of sheer force of habit. Holding conversation with a half-hour delay between each line of dialogue took some getting used to.

Walters, who was tuned to Berryman's suit frequency, said quietly, "The aliens have gone. Both corridor and inter-hull space are empty. Berryman says their wounds are painful but so far are not unduly inflamed."

"Since the material in your report is urgent and may require a quick decision at any time," the general went on briskly, "I propose listening

with one ear to your report as it comes in while at the same time filling you in on the rather delicate political situation which is developing here. Colonel Morrison is aware of the position as of last night, fifteen hours ago, to you, but it has changed since then. It changes every time you open your mouth, Doctor, and I wish you would remember that and speak accordingly.

"Briefly, the position is this . . ."

Every transmission made from the area of the alien Ship had been relayed in its entirety by all the major networks. The same applied to the pictures taken during the approach and examination of the first airlock and the shots McCullough had taken of the aliens. The reason for such widespread coverage was simple. Public support and interest in space-flight was on the wane because of the tremendously expensive hardware needed — especially when pushing out beyond the orbit of Mars — and a blow-by-blow illustrated account of the first meeting between humanity and an extra-terrestrial culture should revive it if any thing could. But now that the meeting had degenerated into violence, had become literally a blow-by-blow affair, the idea had backfired.

People were no longer just interested, they were choosing sides and becoming fanatical.

At first Prometheus had tried to wrap a security blanket around the whole incident, but they realized the uselessness of this when they were reminded that the P-ships' signals could be received by relatively unso-

p sophisticated equipment; and the stills, although a little more difficult, required only a moderately sized radio telescope coupled to the resources of any large newspaper office.

That was why McCullough was being urged to choose his words carefully when reporting to Control. If at all possible he was advised to play down the seriousness of any given event or development — the people at Control would realize the true gravity of the situation and act accordingly, he was assured — and at all costs avoid displays of fear or anger. It would be an even better practice if McCullough could rehearse his report briefly before transmitting it so as to remove all emotionally loaded words and phrases.

“But *sir* — !” began McCullough, then stopped. A picture of Brady sitting in Control drifted in front of his mind’s eye to be replaced by one of Berryman, Morrison and Drew, frightened and injured and hiding from an alien threat fifty-odd million miles from home, and the thought came to him that Brady must be stupid or he, McCullough, was supposed to be that way. He did not see how their situation could be described in anything but emotionally loaded language without making it sound farcical. If someone was to die, or if the three men in the Ship were to succumb to an alien infection, how was he supposed to report that? As a spot of trouble, perhaps? Or a Bad Show? If the general was really serious in what he had said McCullough might not be allowed to report a death at all!

“ . . . *One good point is that the*

eavesdropping is strictly one-way. They can hear every word you say but they can’t pick up our messages to you. However, I cannot at the moment give you detailed instructions regarding your present situation. Since you are on the spot you must use your own judgment. Just be careful not to”

While the general was talking McCullough became aware of another voice in the background — a tiny, harsh, nervous-sounding voice which fought against a constant rattle of interference. He realized suddenly that the voice was his own, speaking the words he had spoken thirty minutes earlier. He could even hear Brady interrupting him again, so that for a few seconds there was one McCullough and two General Bradys talking. It struck him as being wildly funny and he began to laugh.

Walters looked worriedly at him but remained silent. Not so the general.

“ . . . *With the whole world listening to every word you say, you must realize that political capital can be made out of the lightest, unconsidered word. So don’t even say ‘Good morning’ without thinking about it first*”

The general went on to say that as the next officer in line of seniority to Colonel Morrison, Lieutenant-Colonel McCullough should be prepared at any time to take full control of the expedition. Should casualties occur, should McCullough be forced to assume command, he must be very careful in the matter of wording his reports. The general

was not suggesting that he *conceal* the fact that casualties had occurred. He must use his own discretion in this, or perhaps a simple verbal code could be worked out which would allow the communication of sensitive material. The next-of-kin had the right to know, naturally — but McCullough had no idea how each simple incident at the Ship was being blown up out of all proportion by the news media.

“ . . . While I don't approve of the emotional frenzy they are whipping up over this, one good point about it is that the supplies you need will be forthcoming. I don't mean to suggest that we would not have sent them anyway even if you did not have the support and sympathy of billions of people, but if you stop to consider how much it will cost to send you just one extra spacesuit, or the price of even a few sips of water”

“If you're *really* worried,” said McCullough sarcastically, “we might be able to steal water from the Ship! This would mean us forcing ourselves to overcome a certain . . . repugnance, shall we say. But have you forgotten that we have an aversion to using even a fellow astronaut's reclaimed water, and for that reason the psychologists insist that our waste fluids are individually recycled — ”

McCullough broke off. He was supposed to be careful of everything he said and this was, after all, one of the less-publicized aspects of space-travel

His sarcasm would take just over sixteen minutes to reach General Brady and the same time for the

other's reaction to bounce back again. But it seemed suddenly as if the project's Chief was telepathic and that thought travelled much faster than light because Brady went on apologetically, “*We are not counting the pennies on this however, or even the millions of dollars, so there is no reason for concern over this aspect of the situation. Just take it easy, do your best and, before you open your mouth, remember all those listening millions who are ready to jump to wrong conclusions.*”

“*And now we will consider the matter of urgent supplies.*”

“*These will reach you via a modified high-acceleration probe in forty-one days — a five-day countdown, which has already started, and thirty-six days for the trip. We will discuss rendezvous procedure later. Right now I must tell you that the payload is an integral part of the vehicle and ask that you give urgent thought to its composition. Should priority be given to food, water, replacement spacesuits or weapons, and in what proportion?*”

“*No doubt you will want to talk about this with the men on the Ship, so I'll sign off now. Good luck to all of you.*”

The general was followed by a McDonnell man who talked endlessly about the weight and size limitations of their supply vehicle and the rendezvous problems. McCullough left Walters to listen to him while he relayed a shortened version of Brady's instructions to the men in the Ship. He spoke to Drew because everyone else was asleep. Drew did

not want to wake the colonel and McCullough agreed that the matter could wait for a few hours. But the mention of sleep made him pause for a moment to calculate how long it had been since he had any, and the immediate result of his calculations was a jaw-wrenching yawn. He told Drew that Walters, Hollis and he now would stand radio watch in turn while the others caught up on their sleep and asked to be called if there was the slightest change in the condition of their wounds, or any other emergency.

Hollis returned while he was talking. As if his arrival was the cue a dry, pedantic voice replaced that of the McDonnell man. From the physicist's expression McCullough knew that questions of a highly specialized and technical nature were about to be directed at Hollis. He wanted to avoid another delayed-action dialogue starting up while they were all so tired, so he broke in to say that they all needed rest and would resume contact, unless there was a sudden emergency, in twelve hours.

To Walters and Hollis he suggested — McCullough did not feel comfortable about giving orders, despite his technically superior rank — that they get some rest while he stood first watch.

The physicist nodded and began struggling out of his suit prior to strapping in. Walters, who was already strapped into his couch, linked fingers behind his neck and elaborately closed his eyes. Shortly afterward the pilot was asleep and Hollis had his eyes closed, pretending. He was scratching surreptitiously at the side

of his neck turned away from McCullough. Despite himself the doctor felt his own eyes closing.

Obviously he was going to need something more strenuous than worrying about the physicist's mental health to keep him awake, and his first thought was the investigation of the alien cadaver. But he could not work here — it would be stretching even Walters's sense of humor to the breaking point if the pilot was to wake up to find the module filled with drifting alien entrails — and the lock where he had left the specimen was too cramped. The best thing would be for him to move to P-Two's command module, which he would have all to himself, and use the other ship's radio to listen for trouble developing at the bridgehead.

After listening to Brady and Drew, he thought irritably, even I'm beginning to think like a general!

But as his examination of the e-t proceeded McCullough's tiredness was forgotten. He had begun by assuming that the alien's vital organs, including its brain, would be housed high under the protective carapace, and his assumption proved correct. He was able to identify and isolate the lungs, the odd-looking muscular pump which was the heart and the mechanism of ingestion, digestion and excretion. At easy major steps in the examination he took photographs.

There were puzzles at first, but one by one they were solved as he charted the digestive, respiratory and, so far as he was able with the instruments available to him, the nervous system. Tracing the connections to the eyes, ears and to the vicious

weapon projecting from its underside was relatively easy — the thing was simply a curved horn with a small degree of mobility and not, as he had at first thought, a sting. But there were a few puzzles which refused to be solved. The being's reproductive system was a completely closed book to him.

He still had no idea what sort of environment could cause a creature shaped as this one was to evolve, and there were points which bothered him about angles of vision and the degree of control the being exercised over all four tentacles. There was no evidence of specialization in any of the appendages.

He wondered if ambidextrous was the right word to use for a being with four hands, but he was too weary to solve that puzzle as well. He began to tidy away the grisly pieces of alien which floated about the command module, thinking that he would have to waken Walters so that he, McCullough, would have a chance to sleep on his many problems.

But when he did go to sleep, there were no solutions waiting to rise out of his subconscious. Instead he dreamed only of Berryman, Morrison and Drew and of the nightmarish fates which could befall them, culminating in one which involved a fungus growing out of their wounds and spreading over their whole bodies until they became great, livid, mobile sponges which mewed and gobbled appealingly at him while they chased him along the bright, net-covered corridors of the alien ship.

That one woke him up screaming.

Six days went by, and none of the men on the Ship died or even became infected. Perhaps their bodies were too alien an environment for extra-terrestrial micro-organisms to survive in them, or it may have been that Earthly medication and antibiotics were a match for most germs regardless of origin. McCullough's pleasure and relief over this was intense, but the feeling was banished shortly afterward by his row with the general.

McCullough had evolved a number of theories about the alien Type Two, but he wanted to have his conclusions regarding some of the more puzzling aspects of its physiology vetted by someone more eminent in the field. He prepared, and had Walters transmit, a group of eight photographs taken during the alien's post-mortem before commencing his verbal report, and in the thousand-odd seconds it took for the signal to reach Earth and for the general's first reaction to come back, he said quite a lot.

Too much, obviously.

"Silence! Stop talking at once!" Brady's voice roared at him suddenly. *"For God's sake, STOP TALKING!"*

But so far as the general was concerned there was nothing that could stop McCullough's voice arriving for at least another half an hour, and Brady quickly realized this. He was still angry but his tone became almost resigned as he went on, *"You are supposed to be very careful of every word you say, McCullough. If*

you do or say anything wrong, it reflects on all of us. Not just on you people out there or on the project personnel, our whole country and its ideology suffers as a consequence! Don't you realize that what you've just done will cause a storm of criticism and censure from inside as well as outside the country, that a large section of the world's population is going to feel angry and ashamed of what you have done out there?

"Every time you open your mouth, McCullough, you lose friends and we lose support! Think, dammit, before you talk!

"There are some who will be pleased with what you are doing," the general went on bitterly. "The biologists who are too interested in finding out what makes an alien tick to think of ethical and political side-effects. And there are the various groups advocating that a stronger line should be taken against these unfriendly aliens. But even you must be aware of how much trouble is caused by people who object to dissection practiced on domestic animals and pets, and now YOU have to start cutting up a member of an intelligent extra-terrestrial species!"

And so it went on.

McCullough remained silent with a considerable effort. A lot had happened during the six days since the fight with the aliens. From Earth the first high-acceleration supply vehicle had been launched, preceded, accompanied and followed by thousands of words of cautious advice. In P-Two McCullough had completed his examination of the alien and had passed his thoughts about it

to the three men marooned on the Ship. His chief reason for doing this had been to give them something else to think about other than their wounds — wounds from which they had not really expected to recover. But now that recovery was simply a matter of time, it was a little embarrassing for McCullough that his theory had been accepted *in toto* by everyone but himself.

The reason for that, of course, was that it made them feel less guilty over some of the things they had done.

But it was, after all, only a theory, and the facts on which it was based could be interpreted several ways. McCullough had transmitted a group of pictures and a number of verbal facts before the general had started having hysterics. He had not even mentioned his theory. Apparently Brady did not want to hear it. Brady did not want to hear *anything!*

"Doctor," said Walters in a whisper. "You've been tapping that mike with your finger for the past ten minutes. When the general gets around to hearing it he will think something terrible is happening."

"Something is," said McCullough, "I'm losing my patience."

He paused, then choosing his words with great care, went on. "Since I am forbidden to discuss my findings on the Type Two alien's physiology, or draw conclusions from them or even ask questions regarding them from people who are more knowledgeable than myself, there is nothing more to say except this. The photographs and verbal report transmitted so far represent facts, and both my theory and the questions

arising from it are implicit in these facts if you bring them to the attention of the right people. Message ends."

The general was still complaining bitterly. McCullough tuned him down to a whisper and knocked off the transmit switch. He picked up the length of modified tubing Walters and he had been working on, then told the pilot that he was going to the Ship and that he would send Hollis back as soon as he arrived there. If the general or any lesser light from Control wanted to hear from them, they should talk about hyperdrive generators and nothing else.

He entered the lock chamber a few minutes later and Hollis left it, closing the outer seal behind him. Immediately there was a rush of air entering from the corridor which was quickly followed by the three marooned men. Even though there were no aliens outside the chamber, the men's movements were fast, precise and economical — a complex, well practiced drill. Outwardly at least they were adapting to conditions inside the Ship. Before McCullough could speak Drew dived towards him, checked himself expertly against a lashing point and said, "Is that the new weapon?"

McCullough nodded and with obvious reluctance handed it over.

"I know how you feel, Doctor," said Drew. "You are worried about this new form of frightfulness you are about to unloose on our little world. But this isn't a mass destruction weapon. We will be discriminat-

ing in its use and only kill aliens who are trying to kill us — "

"But they are aliens!" said McCullough angrily. "My theory could be completely wrong."

"I think not," said Colonel Morrison, joining them. "In any case we are badly in need of a Two-stopper, and it looks as if you've given us one."

When a Two was stabbed with one of the existing spears it was still possible for it to inflict considerable damage before it died, so the weapon had been shortened slightly so as to make it handle like a sword. At the business end the tubing had been cut diagonally in the manner of a hypodermic needle and the tip flattened and given a razor edge on both sides. A few inches back from the tip the blade curved through an angle of about thirty degrees so that it looked a little like a bull-fighter's sword.

The effect would be to inflict a deep punctured wound, after which the damage could be multiplied and compounded by giving the weapon a quick, semi-circular twist before tugging it free. The thought of the frightful internal devastation a properly delivered thrust and twist would inflict on the victim's body made McCullough feel physically as well as mentally uncomfortable. He was still not sure how he had become a part of this thing.

Hippocrates and Aesculapius, he thought, would not have approved of his behavior in this matter.

His only real excuse for producing the weapon was an unsatisfactory one even to himself, the fact that the Two's horn was also a cruel and

deadly instrument of destruction. There was also the fact that the damage it would inflict on vital organs, the massive hemorrhaging it would cause, would paralyze the alien with shock and cause death within a few seconds, so that in a way it was almost humane.

The colonel's voice broke in on his thoughts, giving him a welcome change of mental subject. Morrison said, "What I really want to know is how much freedom of action I am allowed. Can we use your own initiative regarding the local situation and the problems rising out of it, or must all our thinking be done from the Cape?"

"Our thinking is being done," said McCullough with a deliberate lack of inflection in his voice, "by the Russians, the Buddhists, the United Nations and the Society for the Prevention of Cruelty to Animals."

They were all watching him very intently.

Morrison's shoulder and arm were still giving him pain, McCullough knew, and the other two were by no means comfortable. They had all lost a good deal of blood and been under constant strain with inadequate sleep since being marooned on the Ship. The bright blue lighting made it impossible to conceal subtle changes of expression or variations of facial pallor.

They were all staring at him so intently that the thought uppermost in his mind must have been plain for all of them to see.

I want to go home!

"Go on, Doctor," said Morrison harshly.

"Very well, sir," said McCullough. "Our problem, or rather *your* problem, is this. We are being told what to do by people who do not know all the facts and who don't want to be told them because of the effect the telling might have on public opinion. Their instructions to us, if you could call them instructions, are so general in nature and so hedged around with qualifiers and warnings that they don't really seem to mean anything. We need help. Not only are we not getting it, we are being ordered not to ask for it!

"I, personally, would like corroboration of my findings in the Two autopsy," McCullough went on, anger gradually replacing the fear in his voice. "Moral support, if you like, for a theory and a decision I am too much a coward to take alone. Instead of giving me the necessary support, Brady nearly had a fit and would not let me finish explaining the situation! I don't know what has happened to them back there. They act as if *they* are having an emergency instead of us!"

"In a sense, they are — " began Morrison.

"I think you're being too unselfish, sir," said McCullough biting. "It is my considered professional opinion, for which I do *not* need moral support, that the mental and physical stresses involved in coping with the local situation are severe enough without also making us responsible for possible changes in the political situation at home.

"The whole idea is ridiculous! We are in the limelight as no other group of men has ever been, we know

this. In a sense we may be standing trial for our whole race. But our work here will be more valuable, or reactions more honest if you like, if we don't allow ourselves to be paralyzed with stage fright!

"I would like permission, sir," McCullough ended less vehemently, "to request information and assistance from Control without having to consider mass audience reactions."

"You have a point, Doctor," said Morrison, after a short pause. "At the same time, we can't afford to ignore public opinion completely."

"But that's the way Brady talks!"

"I'll think about it, Doctor," said Morrison sharply. "Right now we must discuss the food and water situation, weapons, tactics and . . . and a change of base. While we are here we may as well find out as much as possible about the Ship. And while we're talking, Doctor, I'd like you to look at my dressings."

McCullough wondered if the colonel was looking for sympathy, then immediately felt ashamed for thinking such a thing. Morrison's injury was painful and inflamed, although not infected, and it was only one of his many problems. For his physical impairment had seriously undermined his authority. With one arm virtually useless he was dependent on his inferior officers not only for protection but for the kind of assistance which was more common in a nurse-patient relationship. And cut off as he was from direct contact with Control, he could no longer speak with all the authority of Earth behind his words. As well, the project had come thoroughly unstuck.

At the present the colonel must be feeling frightened and impotent and pretty much a total loss to himself and everyone else, and as a doctor McCullough should not be aggravating these feelings.

It was a time for applying oil to the situation, or perhaps butter. Not broken glass.

McCullough stayed on the Ship three days. In that time their "bridgehead" was moved twice, on both occasions to compartments close to the generator blister so as to facilitate the work of Hollis. Despite the Twos which attacked them at frequent but irregular intervals, and at times kept them pinned down in their base for hours on end, the work of gathering information about the Ship went on.

When friction developed, which was frequently, he applied oil. McCullough was sure that his bedside manner had never had such a strenuous workout in all its long life. But his charm did not work very well on the colonel. Despite the arguments on the necessity of gathering further data to either support or disprove his theory, Morrison would not allow him to attempt communication with the Twos.

Twos, the colonel had said

Some time later McCullough was showing geometrical drawings to one of the white, furry Threes while Drew kept reluctant watch. Before he could get anywhere with the alien flying carpet they were attacked suddenly by a pair of Twos. Drew killed one of them, and McCullough would certainly have died or been very

seriously injured if his furry alien had not attacked the other Two. He was even more fortunate to escape with a whole spacesuit.

If anything, the incident had increased his uncertainty about the Twos.

Were they highly intelligent beings caught in the grip of a xenophobia so intense that they attacked all strangers blindly, without thought? Were they less intelligent types, some kind of slave class, perhaps, who were capable of only a limited degree of mentation and whose reactions were little above those of an animal? Or was his theory, wild and largely unsupported as it was, correct?

Was the extraterrestrial life-form, Type Two, sentient, nor not?

XIV

During his next report to the general, McCullough's voice was as neutral and unemotional as any human voice could be . . . to begin with, anyway.

"In the light of additional data gathered within the past few days," he said carefully, "we may have to considerably modify our thinking regarding the purpose of the alien ship and its crew.

"Firstly, the Ship — "

The alien vessel had made a controlled approach and had been inserted into an orbit which showed every indication of being pre-calculated, McCullough went on, after which it had taken no action of any kind. This, however, did not preclude the possibility that it was gathering data, since the forward section con-

tained a number of transparent protective blisters which might very well house sensory equipment of some kind. In fact, the primary — perhaps the only — purpose of the Ship was the gathering of such data.

Where the Ship's construction was concerned, and here McCullough had to admit that they had investigated only a very small fraction of the vessel's enormous volume, they had come to certain fairly definite conclusions.

The way they now saw it, the Ship's construction was based on a design philosophy in which weight was of little or no importance. Apparently its source of power was so efficient that there was no necessity to save an ounce or a pound here and there by putting lightening holes in structural members or designing down an angle bracket so that it would take only the amount of stress necessary to its function plus a fractional safety overlap.

All the indications pointed to the fact that the Ship had been built in space, probably in an extra-Solar asteroid belt or close to a small moon where metal and the means of working it were at hand. The more sophisticated power, control and life-support systems had almost certainly been built on the home planet and transported piecemeal to the hull. What little they had seen of the layout of corridors, wall-nets and numerous access points to the Ship's interior made them certain that all this had been designed to assist the vessel's builders rather than its crew.

They may have been guilty of

grossly overestimating the intelligence and capabilities of the crew as well.

"We have complete data on only one of these three life-forms," McCullough went on, "and that is the tentacled, starfish-shaped Type Two. During all our meetings with them these beings have been completely and uniformly aggressive, so much so that after the second alien attack Drew remarked that if they behaved like wild animals they should be treated as such. My subsequent physiological investigation of the Two revealed a brain structure and nervous system which appeared unusually small and uncomplicated and a lack of fine control in the appendages, facts which supported Drew's theory.

"We are all now of the opinion that we have been trying to establish intelligent communication with the alien equivalent of guinea pigs!"

Their current theory was that the Ship was an interstellar probe of some kind carrying experimental animals which had escaped and overrun the ship and killed its crew. There was also a strong possibility that they did not, and had never had, a crew and that the life-support system and internal lighting was initially for use during the vessel's construction and was subsequently being used by the animal passengers. This being the case they felt free to fight a defensive war against the alien life-forms infesting the Ship while they mapped, photographed and learned everything they could about the vessel's equipment and function.

Priority, however, would be given to finding a method of patching in to the alien life-support system. The

reason for this, as had been already explained, was that the water used by the marooned men was almost completely lost since only a fraction was recoverable to be put through the P-ship's recycling system.

"Our water is being carefully rationed," McCullough continued, "and at the present rate of consumption the supply will last for thirty-two days. This will take us three days past the arrival time of the supply vehicle, but *it* will carry only a forty-day supply of water: A few minutes simple computation will show that unless we can return the marooned men to the P-ships where the water supply can be recycled properly, our supply problem is logistically insoluble.

"We have already drawn heavily on the food meant for the return trip," McCullough ended grimly, "and if we don't find a local source of water we can never come home."

About the only thing McCullough did not have to worry about was General Brady's reaction to this latest report. Earth and Prometheus Control were only a few weeks off the time when they would pass behind the Sun; the relay vehicle designed to circumvent this difficulty was not yet in operation, and incoming messages were rendered almost unintelligible by interference.

Not completely unintelligible, of course. By asking Control to repeat every sentence anything up to ten times Walters was usually able to piece together a complete message. Unlike McCullough, however, Walters had nothing better to do, and

somehow a signal lost a good deal of its urgency and emotional content when it had to be repeated so many times.

Precisely on time the high-acceleration supply rocket homed in on P-One's beacon and was taken aboard the alien ship. It contained, in addition to the promised water, a twenty-day supply of food, film, paper and a collapsed, carefully packed spacesuit. Some well-wisher had tucked a .45 automatic inside the spacesuit, probably on impulse and without taking time to think about packing it properly, and the forty-G acceleration of the supply vehicle had caused the heavy gun to tear a large hole in the hip and leg sections, rendering the suit completely useless.

They had lost a spacesuit and gained an automatic pistol for which there was no ammunition.

Their search pattern took the form of a flat spiral which wound slowly around the lateral axis of the Ship while moving even more slowly forward. At regular intervals a temporary base was set up with a search radius of twenty-five yards or more, depending on the available accommodation and the hostility and numbers of the local population. When completed the search pattern would still leave a long, empty core of unexplored territory in the three-dimensional map they were constructing.

They found only storerooms and compartments packed with equipment whose shapes and purpose were slowly becoming familiar to them, and the ever-present netted corridors linking them together. It seemed ob-

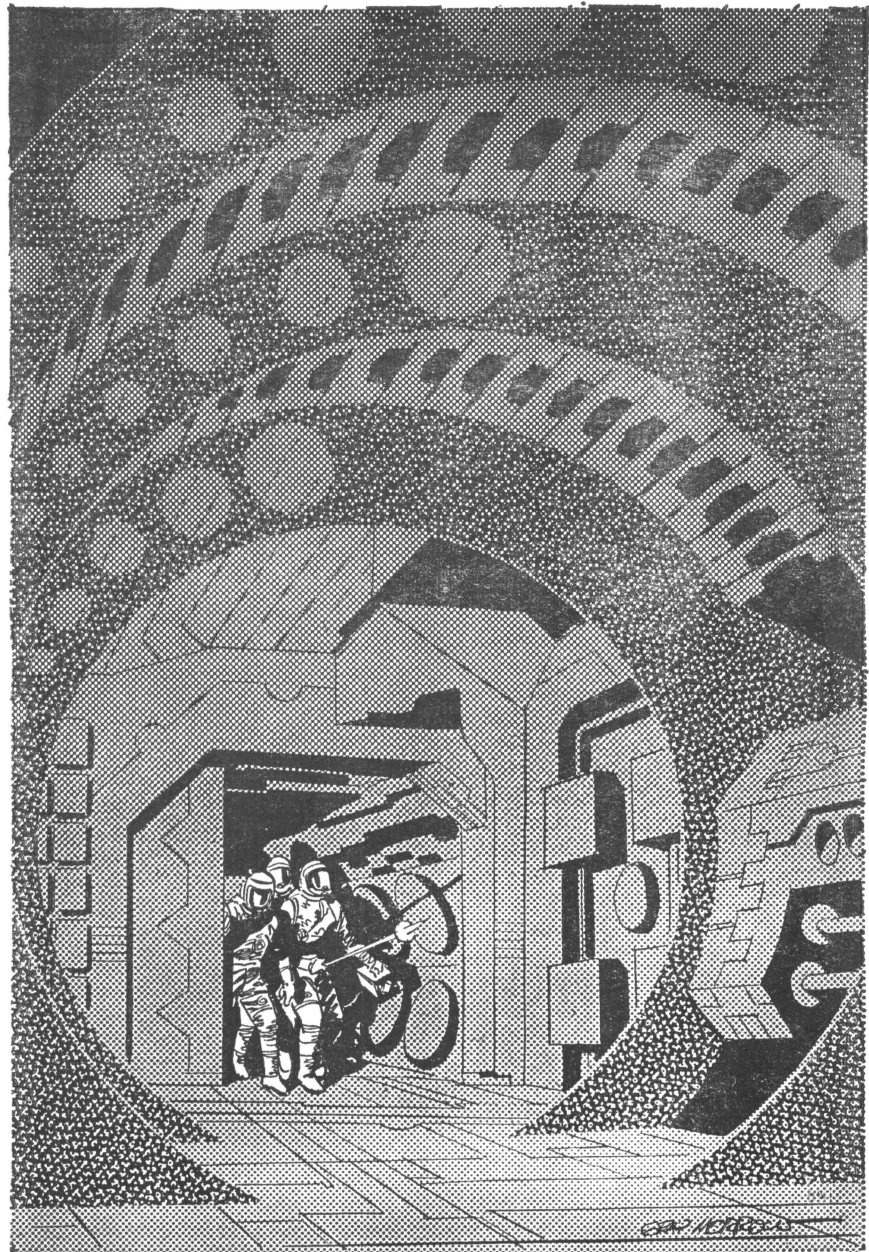
vious that the crew's quarters, if any, as well as the life-support system and other essential services were deep in the as yet unexplored center of the Ship.

"It is very bad tactics to cut ourselves off from the outer hull and contact with our ships," said the colonel as they paused, between sorties, to fill in another small section of their map, "but it seems to me that there are certain periods when the risk is lessened. You must all have noticed the regular decrease in alien activity and numbers which seems to occur every five or six hours. If we assume this to be due to periodic feeding we can, at these times, push the search deeper into the Ship. Or we might try following some of the e-ts — at a safe distance, of course — in the hope of them leading us to the source of the food and water."

Hollis said, "The absence of e-ts is not entirely regular, sir. There seems to be a longer absence, possibly due to a sleep period, between every few meals. This could be an important datum in calculating the length of their day and the rotation of their home planet."

"Personally," said Drew impatiently, "I am more interested in gathering data which will aid our survival. For instance, if one of us should lose his weapon, is there enough known about their physical makeup for us to use an e-t form of karate on them? Or put another way, Doctor, where is the dirtiest spot I can plant my boot?"

Reluctantly, McCullough told him. They did not deliberately try to



kill the aliens, doing so only when the Twos attacked them — which was always. Once they came on a dead Two whose condition suggested that it had been partially eaten. This was another important datum, Hollis said, which gave strong support to McCullough's theory that the e-ts were experimental animals running wild rather than sentient beings.

This did not comfort McCullough as much as it should have done, because he was developing a new theory. It rested on the premise that the Ship had suffered some kind of non-material catastrophe — the psychological pressures of a too lengthy voyage, perhaps — which had driven the crew insane so that the Twos were either the survivors or descendants of the original personnel now reduced to little more than animals.

But he did not mention his new theory to the others because it would have made them unhappy and uncertain again.

Hollis and Berryman were becoming expert at identifying and tracing power and control lines without actually knowing what it was the lines powered or controlled. It should be possible, they insisted, to utilize one of these currently dead circuits to carry radio messages from deep inside the Ship to the metal of the outer hull. In effect the circuit or section of plumbing would be an extension of their suit antennae. And, since the signals would be in the form of radio frequency impulses rather than a flow of current, there was little danger of them inadvertently switching on one of the alien controls or mechanisms.

In order to test this idea and also to get a line on the whereabouts of the Twos' feeding place, the next base was established some forty yards in-board.

It was a large gray-walled compartment filled with disciplined masses of plumbing and the usual sealed cabinets growing out from all six sides. A quick search showed it to be empty, and McCullough guarded the only entrance, which was a sliding door rather than the airtight seals found under the hull area. Hollis, Berryman and Drew were bunched together with Morrison floating close by, started to argue about a Two they had killed and whether or not they had defended themselves before or after it had actually attacked. They began talking loudly, vehemently, obviously feeling safe in this bright alien cupboard, when the Two which had been hiding somewhere in the compartment landed among them.

There were shouts, curses and a scream that jerked on and off regularly, as if someone was trying to hold a high note while his back was being clapped. McCullough swung round and raised his weapon, but the center of the room was a confused mass of twisting, struggling bodies which were rapidly becoming obscured by a growing red fog, and there was nothing he could do. The Two had wrapped its tentacles around someone and was furiously disembowelling him with its horn while the others tried to tear it loose and kick and stab it to death.

When they finally succeeded in pulling it away, McCullough launch-

ed himself towards the man, grabbed him around the waist and held him tightly face to face so that he would not be able to see his terrible wounds. Then he told the man lies in a gentle, reassuring voice until Drew separated them, saying harshly that the colonel was dead.

Berryman, Hollis and Drew were watching him, obviously waiting for instructions or possibly for some indication that he was unwilling to accept his responsibility. McCullough squeezed his eyes shut in an attempt to obliterate the sight of Morrison's body from his mind's eye as well as from normal vision. He tried to picture the colonel alive, as he had been a few days or hours ago, but great soft balls of coagulating blood like tacky grapes drifted against his face as a reminder that all images of Morrison alive would inevitably lead to the one he was trying to blot out of Morrison dead. It was impossible for McCullough to think of the colonel without seeing the grisly thing which spun slowly beside him like a bloody catherine wheel. Because it had once been Morrison it inhabited every second of the past as well as the present. It was only in the future that the colonel did not really exist.

There was a feverish sort of logic about that thought, McCullough told himself. He must think only of a time when the colonel did not exist. To avoid bringing up memories of him, he must think only of the future. But there were a number of futures and they began flickering past his mind's eye like pictures from

the Black Museum. A drowning man was supposed to see his past life passing before his eyes, but McCullough was seeing an endless succession of future deaths, so he opened his eyes and stared back at the others.

He said, "Berryman, find an empty tool locker or something and put the colonel's body in it. Wire or wedge the fastening so's those animals won't be able to get at him. When you've finished go to the nearest hull lock chamber and report what has happened to Walters. Today we planned to follow the Twos to their food and water supply, and that is still at the top of our list of priorities.

"However," he concluded, "if you hear a disturbance, don't come charging to our rescue. Stay in a safe place until the next lunch break and then make your way back here. Understand?"

Berryman looked from Hollis to Drew and then back to McCullough. Despite the differences in rank and the military discipline which was supposed to bind them, this, McCullough knew, was something in the nature of an election. From his expression it was obvious that Hollis was voting a timid positive; Drew's features registered an angry negative, and Walters's opinions, since he was no longer directly involved in the Two-human running battle which was being waged in the Ship, were not being considered. It was Berryman, therefore, who had the casting vote in this election, and while the silence dragged on McCullough wondered what qualities this normally light-hearted pilot thought important

is a leader, and if his qualifications were insufficient how exactly Berryman would let him know about it.

He would be an extremely tactful and kindly mutineer, McCullough thought.

Finally Berryman nodded and said drily, "The colonel is dead. Long live the lieutenant colonel."

It had been Morrison's intention to probe the Ship as deeply as possible today and to follow the aliens to their feeding place despite the risk of the Earth party ending up being surrounded by practically every Two in the Ship. McCullough's instructions were not unexpected, and they probably thought that he was carrying on as planned out of respect for their dead colonel. Or, if they were feeling cynical, because he could think of nothing better to do.

As he led them into the corridor McCullough wondered why it was so important to him that he should get as far away from the colonel's body as possible. In the past he had treated automobile accident cases and examined the pulverized remains of jet pilots who had hit the deck at close to Mach One, so that Morrison's body was not by any means the worst sight he had had to witness in his life. He had even seen a mator gored repeatedly by a bull on one occasion, and while he had felt clinical concern for the unfortunate man, some detached portion of his mind — a group of rebel brain cells, perhaps, which had abstained when the majority were taking the Hippocratic Oath — had been glad that on this occasion the bull had been able to hit back.

It was just that in some obscure fashion the colonel's had been such a *dirty* death. McCullough did not want to think about it at all.

They spotted a Two about ten minutes later and trailed it at a distance of twenty yards or less, depending on the turns and twists of its route. At intervals they wrapped pieces of paper around the netting so that they would be able to find their way back again. But the Two ignored them, either because it did not see them or because it had something more important on its mind. A few minutes later it was joined by another of its kind, then three more, none of which showed any interest in their pursuers. The men were pushing deeper and deeper into the Ship now, and large stretches of the corridors were permanently lit — they did not have to switch on the corridor lighting here and could not even see the switches which controlled it. They also became aware of a low, moaning sound which rose and fell and changed pitched constantly but erratically and grew steadily louder.

Suddenly there were three aliens following them and gaining steadily.

Before they became sandwiched too tightly between the two groups of ets McCullough led his party into the next empty compartment. Its sliding door had a large window so he did not switch on the room lights. While waiting for the second group to pass he had a few minutes to look around, and he discovered something which almost made him call off the search for a water supply.

This compartment was different from the others they had examined. Even the light which filtered in from the corridor made that very plain. The cable runs and ducting were absent or hidden behind flush wall panels, and the objects occupying the room had the unmistakable, finished look of items of furniture. In the center of the room there was suspended a long cylindrical shape which could very well be a free-fall hammock.

"They've gone past," said Drew, opening the sliding door. "We'll have to hurry — they're turning into an intersection."

Very carefully McCullough marked the position of the compartment on his map, then left with the others. He still felt that he should have made them stop until they had examined and considered all the implications of the room they had just left.

A lab animal would not require a furnished room. Which meant that there were intelligent extraterrestrials on the Ship.

He needed time to think. The search for water could be postponed for a few hours or days while they decided what was the best thing to do. McCullough was the boss and he would order a return to base.

But McCullough did not give the order because everything began happening at once.

They turned into a corridor unlike any they had seen before. One wall was made up of heavy wire mesh through which they could see a large compartment filled with Twos while other Twos fought and wriggled their

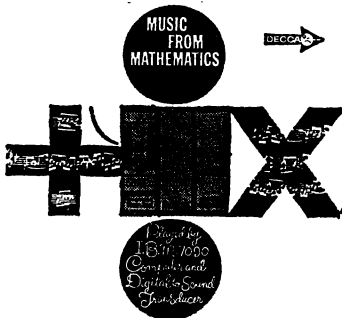
way through gaps in the mesh. Inside the enclosure the fighting and jockeying for position was so vicious that several of the e-ts were dead. The object of the fighting seemed to be to gain a position near a long plastic panel running along one wall of the enclosure. From the panel there sprouted a large number of open, small diameter pipes and a similar number which terminated in rubbery swellings. The fighting which was going on made it difficult to see what exactly it was that was oozing out of them.

"Semi-liquid food from the pipes, I think," said Hollis excitedly, "and what looks like water from the nipples!"

He broke off as a single, deafening chime reverberated along the corridor, and they heard their first alien voice.

It could have been his imagination, but McCullough felt sure that the sound was subtly unlike the alien gobblings of the Twos. The word-sounds seemed more complex and meaningful, somehow, and there was almost a quality of urgency about them. He knew that it was ridiculous to read meanings into a completely alien sequence of sounds, but his feeling of being warned remained strong. Each time the voice paused the single, tremendous chime was repeated — or perhaps the voice was speaking quickly between chimes.

The Twos on the other side of the mesh became more agitated when a chime sounded, but they did not stop either eating or fighting each other.



MUSIC OF TOMORROW

Here is music composed on computer and transducers, ranging from computer-played versions of Christmas carols and rounds to the complex sounds that offer a new dimension in musicology. Composers include Dr. John R. Pierce, Dr. M. V. Mathews, David Lewin, James Tenny, etc. 18 selections on a 12-inch, high-fidelity, long-playing record produced by Decca. A "must" for your record library and a conversation piece for all occasions. Priced \$5.75 postpaid — send in the coupon today.

Galaxy Publishing Corp.
421 Hudson Street,
New York City 10014

Yes, send me my 12-inch hi-fi record of *Music from Mathematics* right away. I enclose check or money order of \$5.75.

Name

Address

City & State Zip Code

(Offer good in U. S. A. Only)

Drew said something about Pavlov to Hollis, and McCullough unstrapped his tape-recorder. Drew swung his weapon to point at a nearby speaker grill, where it would be possible to get a recording without too much interference from the feeding animals, but he never completed the movement. There was a blinding double flash as the spear touched the mesh and the corridor wall.

Drew jerked violently, then became motionless except for a slow, lateral spin.

A second alien voice joined the first one and the meaning sounds increased in intensity.

The new voice seemed to be speaking the same language. Very often it repeated the same word-sounds as the first voice, but it spoke over or around it and did not pause for the chimes. Sometimes it spoke quickly and at other times the words were dragged out and their pitch, volume and inflexion varied so widely that it seemed to be trying to sing. McCullough felt confused and stupid as he blinked away the green after-image of the flash and tried to make some kind of sense out of what was happening. He needed time to think.

But he was given no time to think, because Berryman was coming back and shouting at them from the other end of the corridor.

"Doctor! Doctor! Walters says the generator blisters are beginning to glow — all of them that he can see from P-Two! *He says the Ship is leaving!*"

TO BE CONCLUDED



HE THAT MOVES

by ROGER ZELAZNY

STOP
WAIT TILL THE GATE OPENS
TURN LEFT
TURN RIGHT
PROCEED TO THE NEXT
INTERSECTION
TURN LEFT
BEAR TO THE RIGHT
TURN RIGHT

He walked along the thoroughfare, his way empty of everything save for the echoes of his footsteps, the buildings turned to black, himself.

The signs were there only for his benefit. He moved past them, following their instructions:

MOUNT THIS STAIR
ENTER HERE

He moved through the enormous

building, breathing heavily. The stairway without had been far too large for one of his kind to negotiate with ease.

As he entered, he felt something like release — from the pressure of all the eyes, or whatever they called them, that had been fixed upon him from invisible positions of security. He cursed, then chuckled.

Absolutely alone now, he continued to follow the signs. They led him into a gigantic room, indicated his destination.

He pursued them through the carnage, across the black floors, past the stage, still set, until he stood above the remains that lay beneath the sign that said **HERE**, with an arrow pointing downward.

Then he saw what remained, and he unfolded the thing that he bore

and began filling it with that which had died.

She stirred. She sucked in the night air, sighed, opened her eyes. She lay upon a hillside, and the net of the sky hung heavy above her with its bright catch of stars. She wore an asphodel in her long, dark hair. When she felt strong enough, she sprang to her feet, prepared to flee.

"Please wait," said a voice, and she turned, waiting, for it was human.

"Yes?" she finally said, in the same strange language in which she had been addressed.

"I aroused you and I mean you no harm. Don't flee — please."

The figure of a small man moved into view, features indistinct.

She waited until he drew near.

"Who are you?" she asked.

"My name is Eric, Eric Weiss," he said. "I helped you to escape."

"Escape?"

" — From the place where they had you confined," he finished.

"You speak their language"

"So do you. We all do."

"All? I don't understand. They told me I was going to sleep. Why did you arouse me?"

"I was lonely. I have friends, but I was lonely nevertheless. Yours seemed a lovely and sympathetic face."

"I understand. Can you tell me what is happening, and why?"

"Perhaps," he said. "I'll try."

As he drew the shroud up over the shoulders of the dead man, Francois continued to glance about

the enormous room. The place was filled with corpses, but the one he tended was the only human body among them. He did not let his gaze dwell long upon the shapes of the others. There had been as much violence on the floor as upon the stage that he viewed.

Shuddering, he hurried. But he whistled while he worked.

They walked along the crest of the hill, and she looked down upon the field of people, caught like ants in amber, standing within their towers, there in the starlight.

"What is your name?" he asked her.

"Sappho," she said.

"Did you write poetry?"

"Sometimes."

"And live on an isle called Lesbos?"

"Yes."

"I had no idea," he said, "though I suspected that everyone down there was once noted for something. If it will please you to know it, portions of your poetry survived for thousands of years. You are a legend. Would you care for a drink of water?"

"Yes, please."

"Here. I've some fresh fruit also. I gathered it in a grove farther to the north."

"Thank you."

"I believe that some sort of end is in sight," he said.

"I beg your pardon?"

"I was awakened once, from out of my tower of jelly, and asked to do a job for our — owners. Something in the jelly — DNA, I believe,

is what a friend called it — gives us a common tongue which they understand. They had, before awakening me, come into possession of an entire world which was locked to them."

"Locked?"

"Yes, it was an artificial planet which served as an enormous vault. They could not enter it, with all their machines and scientists, so they aroused me to open it for them. I did it with a small file, some wax and a length of copper wire. Then they returned me to this place, my usefulness being a thing of the past. Only I resolved to escape, and I did. Were you ever so used by them?"

"Yes. They aroused me and they spoke to me, saying: 'Sappho, we need you to seduce a matriarchy with your song' — and I did this thing, for I thought they were gods. Are they not?"

"No," said Weiss, "not at all. In my day I was considered a great seeker after things beyond mortality, and I know that they are not gods. They are a race of creatures possessed of an interstellar culture far exceeding anything mankind ever developed. They inherited us and they used us."

"What do you mean?"

"Another race collected us. Recently the others lost a war to this one, who found us here and decided to use us to exploit their winnings. I feel that there is much concerning the sciences of the older race which they do not understand."

"Why do we permit them to do as they would with us?"

"Madam, the human race is extinct."

"How can that be? We are here. I do not understand"

"Nor do I, fully. I am told, though, that it killed itself off in a great atomic holocaust. I only just recently learned what 'atomic' means, and I appreciate the fact that this is probably what happened."

"I'm sorry. You're going too fast for me."

"We're dead, that's what I'm trying to say. Every creature that lived on the planet Earth is dead, save for the samples. From among these, we have been revived."

He gestured at the others, encased in the jellies that nourished and sustained them.

"Do you know that if you were to die again, this night, and if ages from now someone were to find a bone here upon this hilltop and stick it into one of those towers, it would reconstruct you — molecule by molecule, cell by cell — so that you could one day be awakened, possessed of everything you now possess, arranged in precisely the fashion you are now arranged, and including the last thought that flickered through your mind before you died? They have the power to regenerate a creature from any fragment. I had to repick the flower you wear in your hair, for a full-grown plant hovered above your head when I freed you. Portions of our corpses were obtained; we were rebuilt in this fashion."

"I remember," she said, "my passing. I wept and I cried out. It was strange to reawaken aboard one of their vessels. So they preserved the dead and they make them to live again"

"They didn't. It was the race they destroyed that preserved us. I doubt that this one even understands the process involved. Possibly that first race thought we might be worth studying sometime, but never got around to it. That's only a guess. They rifled our graves and they preserved in their towers of jelly those whom they thought represented certain worthwhile qualities of the race. Apparently, they had been watching us for thousands of years."

"And they thought me worth preserving?"

"The fact that you're here is answer to that. I think they made a good choice."

"I find it unbelievable," she said, "despite my experience on the world of the mothers. I was never that popular."

He shrugged.

"I was. But I never thought that anyone would care to save me in this fashion."

The night was cool, silent about them.

Francois bore the remains down the gigantic stair and back along the thoroughfare in the direction from which he had come. Even the robots did not come to aid him. The entire thing was in his hands, upon his head. They all stayed out of his way, and they watched as he left the city turned to black.

In the distance, he saw the ship.

The stars shone less brightly as dawn began in the east.

"After they had fought and won their war," Weiss told her, "they

discovered us. They weren't sure what sort of spoils we were, but they'd come into possession of some kind of record of this place, so they knew what we could do. We had been neatly filed and tabulated. They knew our talents, our abilities. So they began awakening us and asking us to do things for them — quite politely, I must add."

"What were you," she asked, "that you unlocked a world?"

She saw the whiteness of his smile within the morning shadows.

"Eric Weiss," he said. "I can escape from anything anybody can put me into, including a mound of living gelatin. At your service, lovely lady." And he bowed. "They knew I could unlock a world for them, but they made the mistake of thinking they could reconfine me afterwards."

"Why do you think that the end is in sight? You said that earlier."

"I feel that some catastrophe may soon occur, that is true," he told her. "I can return you to your sleep, if you wish. I had thought . . ."

"No," she said, "I wish to remain awake. Tell me the rest of the story."

"All right. They recently sent for one of our kind, to go to their home world for purposes of staging a special entertainment for their rulers. I managed to speak with him for some time, from where I had hidden myself near their vessel. I learned what they wanted of him, and I made him aware of many of the things I had learned concerning this race. He based his decision upon what I told him — though I tried to dissuade him. You see, beyond that high ridge

to the north there is a small colony of those I have freed, of which our owners so far know nothing. Thus have I gained the counsel of many, as well as information from those few who had been awakened and employed. Now another man has been sent for. Machiavelli, who analyzed the situation, thinks that we may be doomed."

"Why?"

"Well," said Weiss, "if the political situation is truly what he guessed it to be, and the man with whom I spoke is now dead, as I fear he must be"

Francois entered the ship and called out the words he had been told to say. The hatches closed behind him, and the vessel rose into the air. He locked his burden in one of the cabins.

There was a great silence about him.

He sat and watched stars through the viewport for the entire journey.

He realized that there was no real need to have locked the cabin.

"You see, the first race — the one that did the thing — is dead," said Weiss, "and now *they* have done it. If what Machiavelli thinks might happen happens, then they will probably destroy such a menace as the remaining sample — ourselves."

"What's that?" She pointed.

He looked up. The great, wedge-shaped vessel cruised silently above the valley, its many fins slicing the brightening air as it descended, drew nearer.

"That," he said, "is the ship bearing the last man to depart here. Its design is the same. He should be returning with the remains of the player. I am convinced that he can tell us our fate, if he is not in restraint or dead himself."

Francois stepped down from the vessel, which closed itself behind him and rose immediately into the air. He placed the corpse upon the ground and watched the ship climb at a great speed. Suddenly, it was replaced by an orange-gold fireball, and after a time there came a sound as of thunder.

In the distance, he saw two figures advancing toward him. He waited for them to approach.

"What is the verdict?" Weiss called out.

"We live," he replied. "They told me of their fears and asked for pardon before I did this thing. It would seem that it was indeed as had been rumored there and guessed here. In order to gain his position, their last head of state slew his gens-brother and married his wives. The son of the slain Lord suspected this, but had no evidence. He slew his stepfather, however, after witnessing his reactions to the play. The entire court perished in the uprising that followed."

"Then why — ?"

"It is difficult to conceive of a race sufficiently advanced to conquer an interstellar empire, yet as gullible as this. But they based their conclusion on a sort of logic. Each of us who has been aroused has demonstrated a great ability along some line. They now consider these

divine attributes. The first race had disturbed him and died. Their ruler disturbed him also, and carnage was wrought within his court, and he perished. They are now convinced that we are the gods of the old race, and they fear our wrath. They quarantined the palace until one of us could be gotten to remove the body. Now they would have no more to do with us. As you witnessed, they even destroyed the ship that was involved in the act.

"If I gave a damn about life or death, I might even fear the curse myself," said Francois, hefting the body and bearing it toward the valley of the mounds, whistling as he went.

After a time, Sappho touched Weiss' arm. He smiled at her and stared into her dark eyes.

"What are those little trays before each mound?" she asked.

"I don't know. I've never been able to figure that out."

"They are like," she said, "the offering trays my people laid before the gods, in the old days of Earth."

"You mean — ?"

"I believe that we were indeed the gods of the first race. For some reason, they worshipped the greatest among men and preserved them here in eternal slumber. I know that man behind you — the one with the necklace and the war-tattoo. He is Agamemnon."

Ahead of them, Francois removed the shroud and began the task of placing the broken body back into its mound of preservative. They moved to join him.

"A race that sought its gods from among another race?"

"It is no more foolish than to seek them anywhere else, is it?"

They watched Francois at his task.

"That poor man," she said. "The one who saved us." And there were tears in her eyes as she spoke.

"If that first race thought he was a god, they took a hell of a chance when they moved him," said Francois.

"Perhaps," said Weiss, "they thought that moving him to honor him would absolve them of the curse he had promised."

"And the conquerors did not believe in the gods of those whom they had vanquished — until now," said Francois. "We're free. This world is ours. They'll never bother us again. I — Damn!"

Weiss rushed to his side, but it was too late. He had slipped upon a portion of the gelatinous substance, and his temple had struck against the only rock in sight. He lay very still.

They raised him and placed him within another mound.

I don't believe it's what it seems," said Weiss. "It was only coincidence. It had to be."

"At least he'll recover, won't he?"

"Yes, I should think so. We will all recover from death or injury, for so long as this jelly lasts — which should be long enough to get the human race back on its feet again."

"What are those words on the piece of stone he struck? Are they of your language?"

"Yes," and he read, silently:

GOOD FRIEND FOR IESVS SAKE
FORBEARE,

TO DIGG THE DVST ENCLOSED
HEARE!

BLEST BE YE MAN YT SPARES
THESE STONES,

AND CURST BE HE YT MOVES
MY BONES.

"It says that he would resent being
disturbed," he told her.

"His face is so kind," she said.
"Who was he?"

"Nobody really knows for sure,"
he said.

Sappho removed an ancient flower
from her hair and placed it at the
feet of the broken man in the capsule.

Eric Weiss turned away from her
strange, sad eyes, prisoner once more
in the barless cage of himself. END

NOW IN GALAXY!

A TRAGEDY OF ERRORS

Complete Short Novel
by Poul Anderson

THE BIG SHOW

by Keith Laumer

SALES OF A DEATHMAN

by Robert Bloch

CRAZY ANNAOJ

by Fritz Leiber

TOTAL ENVIRONMENT

by Brian W. Aldiss

— plus Algis Budrys, Willy Ley and many others
in the February *Galaxy* — don't miss it!



Dear Editor,

Where has your magazine been all my life?

I started reading science-fiction at the age of eleven, and it took me to the advanced age of fifteen before I discovered *If*. Man! It was electrifying, almost as exciting as discovering girls.

I don't know why it took me so long. Perhaps it's where *If* is located on the newsstands. Being surrounded by *Playboy* and *True Detective* doesn't make it any easier to get noticed even with your great covers.

As for your content, you run more good stories than anybody else on the market. I especially liked your serials *Spaceman* and *Faust Aleph Null*. While we're on the subject, how about one by Andre Norton? I'd like to see more of her in your magazine.

I also enjoy "Our Man in Fandom" which is much better than a science article would be. After all, there are plenty of books on science in the library, but none on Fandom.

"Hue and Cry" is also very good. It gives your readers a chance to express their ideas and is almost always entertaining I say *almost* always because you keep printing

letters that remind us how great science-fiction was in the "thrifty thirties", "facetious forties" and "flabbergasting fifties". Well, from where I'm sitting the "swinging sixties" are even better. So how about running more information on current trends in s-f instead of all that reminiscing.

Remember. Writing styles are not the only thing that has changed about science-fiction over the years. The reader has too. Today's teenage fan will be just the right age to colonize the moon, be on the first expeditions to Mars and Venus, build underwater cities, and a lot more if the world doesn't go to pot first. In any case I'll keep writing if you keep putting out such a good magazine. And who knows? You may be the first one to get a fan letter from the moon. — Bill Burrows, 334 Sherwood Ave., Staunton, Va. 24401.

* * *

Dear Editor:

Faust Aleph-Null is a put-on. Of its seventy pages of actual text, nineteen are concerned with meticulous and boring details of conjuration. Even Blish realizes that this is a little much and telescopes the summoning of eleven demons in-

to a single paragraph in Part 3 (after spending four pages summoning nineteen others) “. . . perhaps in recognition of the growing weariness of his Tanists.” (Part 3, page 147) Me, too.

It has an idiot plot as well. Only by assuming that both Ware and Baines, as well as Baines's assistants, are amoral and insane can the reader even begin to accept what is going on. Baines has no motivation for setting loose all the demons of Hell except curiosity and the sadistic streak that he denies is part of his personality. He says, “I invented it, I called it into being, I'm paying for it — and no matter how else you describe it, *I made it, and it's mine.*” (Part 3, page 155) The man is a megalomaniac. Ware, knowledgeable as he is in arcane doings, refuses to believe that Baines's scheme is as destructive as it obviously is. Since “. . . Armageddon requires the prior appearance of the AntiChrist,” (Part 3, page 135) and he is sure no AntiChrist yet exists, he doesn't worry. He doesn't stop to think that anything less than Armageddon can spoil his precious search for knowledge. World War Three — or simply some large-scale, unnamed social, political or economic upset — need not be Armageddon, yet it can make Ware's money worthless and make it impossible for him to procure the tools which are crucial to his conjurations. And if he thinks the loosed demons *won't* wreak as much havoc as they can, even though it must be short of Armageddon, then he's an idiot.

And the rest are idiots to believe that Ware will protect them any longer than is necessary for the

cashing (if possible) of that five million dollar check. Since he's amoral and a magician (and they are *not* magicians), he has a hold over *them*, not *vice versa*.

The only enjoyable part of the story is Blish's faannish digs at other writers: Fr. Anson (Heinlein), Fr. Bonfiglioli, Fr. Boucher, Fr. Vance, Fr. Selahny (Zelazny, or perhaps Delaney) and himself as Fr. Atheling. But is *If* a fanzine?

As for the rest — well, I can read a good part of it in *Ceremonial Magic* by Arthur Edward Waite. I don't think that any kind of story ought to serve primarily as a vehicle for the author's research. *Faust Aleph-Null* was tedious and unsatisfying; occasional good fantasy would be a welcome variation in the *If* bill of fare, but the Blish piece definitely does not fit in that category. — Phyllis Eisenstein, CMR Box 291, 36 CSG, APO N.Y. N.Y. 09132.

* * *

Dear Editor:

First things first. For the last two years or so, you have had a report, in the December issue, on the preceding World Science Fiction Convention (in '65, a special feature by Robert Bloch; in '66, an editorial by yourself). Question: will you continue this practice this year? I certainly hope so.

I was sorry to see *WOT* go, although I was never able to afford both it and *If* at the same time, my affluence being more than somewhat limited. Still, I'm glad to see that *If* now has Sam Moskowitz's articles on sf's history. Incidentally, I was rather puzzled by the omission, in “When Women Rule,” of the matriarchy described in *Search the Sky*.

This seems to be a much more logical one than many of those discussed in the article. Of course, it was only dealt with in a portion of the book, and so might have easily been overlooked.

Now that *Worlds of Tomorrow* has been combined with *If*, it becomes more and more obvious that *If* and *Galaxy* are simply extensions of the same magazine, especially feature-wise. *If* has Lin Carter's series on fandom and Mr. Moskowitz's history lessons; *Galaxy* has Willy Ley's science articles and Algis Budrys' book reviews. Soooo, as long as they're practically one and the same anyway, why not combine them into one extra-large bi-monthly?

I can see it all now. You could call it *Worlds of If in Tomorrow's Galaxy* or *Tomorrow's Galaxy of Ifs*, or possibly even *If: A Galaxy of Tomorrows* (so as to fit all three titles in). It would have about 460 pages — which is about how many pages we get now in two *Ifs* and a *Galaxy* every two months — allowing plenty of room for all the current features and maybe a new one or two. There'd be lots of room for fiction, and you might even run a full-length novel in each issue, as well as short stories. The price would be rather high — \$1.75 to \$2.00 — but when you come right down to it, we're already paying that much for the equivalent.

Besides, there's another way around the cost. New readers are bound to think it's a book at first, so you could work up an arrangement with, say Ballantine Books and go into simultaneous hard and soft cover editions. Subscribers could pay a few dollars more and get hard

cover magazines delivered right to their door.

And it's sure to attract new readers, many of whom will think it's a new series of books comparable to Judith Merrill's "Year's Best SF" or Ace's "World's Best Science Fiction: 1950-and-so". Who knows? It may even be reviewed in other magazines.

Well, back to reality. *International Science Fiction* sounds good. I just hope that the British writers, who already have a fairly large readership in the U.S., do not monopolize the magazine. Not that I want the British banned entirely, of course, but if the purpose of the magazine is to familiarize American readers with foreign authors — put it this way, what American science fiction fan needs to be introduced to Arthur C. Clarke?

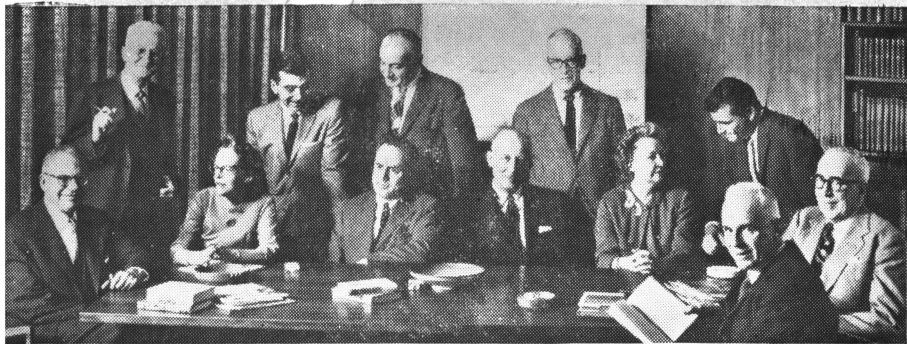
I favor some identification of the "Firsts" in each issue. After all, they're often the people to watch. Look at Larry Niven. — John Borger, Box 66, Rt. 4, Parkersburg, W. Va. 26101.

* * *

Dear Editor of 3, almost 4, SF Mags:

In this corner, all green on *INTERNATIONAL SCIENCE FICTION*. Will buy. Sounds like a good idea — but you should spend more time writing SF than editing it. I suppose most of the authors will be British, but of the French, German, etc., authors, have you given any thought to publishing an occasional story in its native language? Some of us language nuts might appreciate it. (The material in *Quinto Lingo* is rather dull.)

Good luck on your first new magazine in four years. — Stanley Perrin, 1919 Dobson Street, Evanston, Illinois 60202.



Seated: Bennett Cerf, Faith Baldwin, Bergen Evans, Bruce Catton, Mignon G. Eberhart, John Caples, J. D. Ratcliff. Standing: Mark Wiseman, Max Shulman, Rudolf Flesch, Red Smith, Rod Serling.

“We want to test your writing aptitude”

By Gordon Carroll

Director, Famous Writers School. Former editor, *Reader's Digest*, *Time*, *Inc.*, *Coronet*

If you want to write, my colleagues and I would like to test your writing aptitude. We'll help you find out if you can be trained to become a successful writer.

Several years ago, we started the Famous Writers School. Our aim was to help qualified people acquire the skills they need to break into print. We poured everything we knew about writing into a new kind of professional training course, which you take at home and in your free time. After a solid grounding in fundamentals, you get advanced training in the specialty of your choice—Fiction, Non-Fiction, Advertising or Business Writing.

Each of your writing assignments is examined by instructors who are themselves professional writers or editors. Your instructor spends up to two hours analyzing your work. He blue-pencils corrections right on it — much as an editor does with established writers. Then he returns it to you with a long personal letter of advice and specific recommendations.

This training works well. Our students have sold their writing to more than 100

publications including *Reader's Digest*, *True*, *Redbook*.

Stephen Novak of Wayne, N. J., says, “I just received a check from *Ellery Queen's Mystery Magazine*. That's 11 stories sold in six months.” Doris Stebbins of S. Coventry, Conn., who has sold six stories to *Woman's Day* for \$2,050 writes, “Taking your Course has made it all possible.”

Writing Aptitude Test offered

To find out if you can benefit from this training, send for the School's Aptitude Test. If you test well, or offer other evidence of writing ability you may enroll. But there is no obligation to do so.

Famous Writers School

Dept. 6659, Westport Connecticut 06880

I want to know if I have writing aptitude. Please mail me, free, your Writing Aptitude Test and 48-page illustrated brochure.

Mr. _____
Mrs. _____ Age _____
Miss [Circle one and please print]

Street _____

City _____

State _____ Zip _____

Accredited by the Accrediting Commission of the National Home Study Council.

volume 1 NUMBER 1

A new science-fiction magazine
with a new concept in publishing

Each issue will be filled with
stories by Foreign Authors



INTERNATIONAL

SCIENCE-FICTION

Will give American readers a chance to read the science-fiction stories by Authors popular in the rest of the world. Written and translated by the top writers throughout the world.

We hope you will like it.

PLEASE LET US KNOW!

NEWSSTAND ~~ONLY~~