NEW WORLDS
SCIENCE FICTION

No. 38 2/-

NEW WORLDS

PROFILES

J. T. McIntosh

Aberdeen

Was born in 1925 of Scots parents, one of each kind, and wrote his first story ten years later. Ten years later still he was writing heavy, serious, unsuccessful novels to justify the English Language and Literature degree he was taking at the time. In 1948, however, he decided not to make life too hard for Hemingway, Steinbeck and Dos Passos, and became a sub-editor instead. Two years later, however, the urge to write came over him again, and much to his surprise *Astounding* bought his first story and *Planet* the second.

McIntosh has remained rather more popular with editors than with readers. Editors comment enthusiastically; readers grunt noncommittally. He concentrates on technique and character — he wouldn't cross the road for a good idea. Rewrites are numerous, done before the story is sent out. Many novelettes are rewritten a dozen times before being typed.

He isn't too certain about the future of science fiction. Too much of it is negative, he says—neither good nor bad, just middle-of-the-road hack bread-and-butter work. He is trying to work towards fiction which will be worth reading even after science has bypassed it.

NEW WORLDS SCIENCE FICTION

VOLUME 13

No. 38

MONTHLY

AUGUST 1955

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Editor : JOHN CARNELL

Cover : BRADSHAW. Interiors : QUINN and HUNTER.

TWO SHILLINGS

Subscription Rates

Great Britain and the Commonwealth, 12 issues 26/- post free

United States of America, 12 issues $4.00 post free

Published on the last Friday of each month by

NOVA PUBLICATIONS LTD., 2 Arundel Street, Strand, London, W.C.2.

Printed in England by The Rugby Advertiser, Albert Street, Rugby

Definition ?

During the past few years, ever since science fiction mushroomed into public focus along with the atom bomb, there have been innumerable attempts by leading writers and reviewers (primarily American) to interpret the expression into a comprehensive definition—exactly what " science fiction " implies by a brief summarised statement. From the number of extremely erudite pronouncements on the subject it is quite obvious that no such thumb-nail explanation can be found. In fact, several absorbing books have been written about the subject as a whole. Despite their eminent qualifications, however, none of the authors or contributors have basically been able to define the *genre* simply and effectively.

They can explain how it evolved, why it is so popular (and more recently why it isn't so popular as it was), where it is leading, its impact as a means of expression in a world which has seen a fundamental revolution in technological advance in fifty years, and they have even found answers (of a kind) for *what* it is—but never in less than many thousands of words.

It is therefore quite understandable why the general reading public is apt to be confused by generic explanations and consider science fiction merely as " space stories," especially as such a large proportion of plots—whether magazine, book, radio, T.V. or film—have a central theme involving a spaceship, either as a means of transport or for character action. And plain " space stories " can become more than a little boring when examined as a whole.

Our own Survey results (see July *Editorial*) point up the fact that 35% of those who replied are in technical employment of some description, while the average standard of education can be considered as generally high—such a reading group would require more than plain action stories centred in space to hold their interest permanently. They would, I assume, require themes which would provoke thoughtful discussion and possible argument as to whether an author's extrapolation of today's knowledge would be feasible under certain circumstances in the not-too-distant future. Apart from its entertainment value (its main function) science fiction should be primarily concerned with reasoning out the possible advantages or disadvantages of a given set of theories based upon presentday knowledge built on a matrix representing *Now*, whether it be Man against Nature or Man against Machine or a combination of any two of those against the remaining one. And to be popular with the general public the plots should be located within a Time ratio which could be conceivably *in their lifetime*. That will

thrust home the reality of the plot situation if the author has handled his theme properly.

Such stories can be object lessons to a wide variety of readership—Orwell's *1984* was an extreme case of political skull-duggery taken to its *nth* degree, but there are other examples much more in keeping with the world as we may see it before the close of the twentieth century. Kornbluth's novel *Takeoff* which we serialised last year is one such and Tucker's new serial *The Time Masters* which starts next month has many roots set in presentday fact, while Clarke's *Earthlight*, recently published in Britain and U.S.A., with the possible exception of the flaming space battle at the end is a perfect example of " might-happen " scientific enterprise which may take place on the surface of our satellite sometime within the next fifty years.

It seems significant to me that the novels which are best remembered by readers and receive prominent reviews in the literary journals and newspapers are those where the science or fantasy part of the plot is sublimated to strong human characterisation based on *ourselves* in everyday life—given the variations of an indeterminate number of Tomorrows how would *we* react to the changes which would effect our lives ? Not how would the people of one hundred years hence react ! Therein lies the future success of science fiction as an accepted part of the general literature of the world, and there are plenty of novels to prove my point—Wyndham's *The Day Of The Triffids*, McIntosh's *One In Three Hundred* and his forthcoming *The Fittest*, Christopher's *The Year Of The Comet*, Crowfoot's *The Fallen Sky*, Pangbourne's *A Mirror For Observers*, Holden's *Snow Fury* (not published here yet) to name but a few. There are many others if you care to think about them for a few moments.

Another significant pointer is that almost invariably the adjudicators on the International Fantasy Award Panel have chosen titles which conform to this pattern with the added requirement of a high literary standard—1951: George Stewart's *Earth Abides*; 1952: John Collier's *Fancies And Goodnights* with Wyndham's *Triffids* second; 1953: Clifford Simak's *City* with Kornbluth's *Takeoff* second; and last year Ted Sturgeon's *More Than Human* with Bester's *Demolished Man* second. Although they do not all closely follow the pattern I have outlined they do conform to a strong characterisation of human beings as we know ourselves.

The stumbling block to a general appreciation of science fiction is the word " science " which in most cases seldom applies. What we need is not a generic definition for science fiction but a new generic title.

John Carnell

Stories concerning an alien culture always make fascinating reading and when coupled with the work of such an outstanding writer as Mr. MacIntosh, whose fourth novel The Fittest *will be published this month by Doubleday in New York, can be expected to be out of the ordinary, as his latest novelette below shows.*

THE WAY HOME

By J. T. McIntosh

Illustrated by QUINN

I.

As soon as they woke they knew they had been drugged, all seven of them.

"Who would have believed it?" Willie Blake moaned. "After everything they said and did, and—"

"And after all you did for the flower of Pinkie womanhood, Willie," said Davina sympathetically. "Fthymlas especially—this is the end of a beautiful inter-racial romance . . . Hell, I can't be as old as I feel—there haven't been that many years since the beginning of time."

They were still in the clothes they had been wearing the previous afternoon when whatever it was had happened to them. Willie, John Hunter, and George Inkson, who had been in the forest, wore sandals

and khaki shorts. Joe Lavender was almost as natty as usual in knife-edged slacks and a silk shirt. Davina wore a lab smock which was smeared with samples of most of the known elements, compounds and mixtures. Doreen Sutherland, the group's official glamour girl, was somewhat substandard in a green frock which looked, not surprisingly, as if it had been slept in. Pam Hunter, who had been in bed in the *Athens*, wore only pyjama trousers, and it was some indication of the state of the party that nobody cared, just then.

They staggered about in the hut for a while, bumping into things, swearing, holding their heads and screwing up their eyes painfully.

" There's only one thing for it, boys and girls," Davina groaned at last, " short of mass suicide. Come on—let's get down the hill and into the river. It'll be kill or cure, and at the moment I don't care much which."

Dimly they recognized the value of the suggestion and made their way unsteadily out into the blazing sunshine and down the hill. Nobody bothered taking any clothes off. Not one of them attempted a respectable dive, either. They flopped into the deep water like so many sacks of meal.

It worked. After fifteen minutes of splashing about they were themselves again, ready to take stock of the situation. They climbed out, one after another, gasping—and Pam, who hadn't cared before, borrowed Joe's silk shirt and rapidly got inside it.

" A change of clothes," Davina said more contentedly, " and I'll be a new woman—not that I'm admitting there's anything wrong with the old one."

" Hell," exclaimed Joe, " there's more important things than that to do. Has it escaped your notice that the *Athens* has gone ? We've got to work out what's happened and what to do about it and—"

" You men can work out what's happened and what to do about it," said Doreen firmly, surveying her soaking, bedraggled frock in dismay. " I wouldn't be able to think straight, knowing I looked like this."

Refusing to argue the point, the three women hurried back to the hut. The four men followed more slowly, thinking hard but not talking much.

They were left, the hut was left, the jeep was left, and the four lifeboats were left. The Miclans and the *Athens* were gone.

Where the *Athens* had been, up on the hill behind the hut, the four little lifeboats which had been housed inside the spaceship stood neatly in line, twenty yards apart and poised erect, ready for flight.

" The inference is obvious," said Hunter wryly. " The Pinkies would like us to go home in the lifeboats—leaving the *Athens* behind, of course, for them to examine at their leisure."

And it was equally obvious that the Miclan scheme was very likely to succeed. The Miclans—the Pinkies—could operate the spaceship. They must have flown it away and landed the four lifeboats from it, and the placing of the lifeboats was a plain indication of their mastery of the controls.

They could have taken the *Athens* anywhere they liked—even to some other planet of the system.

Certainly they could have the spaceship well hidden by this time. Or well defended. Probably both. The *Athens* was gone, and unless the Miclans came back and were prepared to trade, the *Athens* was going to stay gone.

It was the old story. The seven Terrans had been very careful at first, always on guard, as exploration parties always are on new worlds, dealing with new races. But the Pinkies had been friendly and harmless. Though clearly intelligent and possessing a well-developed technology of their own, they had always been impressed, even awed, by the marvels of Terran technology as these were demonstrated one by one. They had had chance after chance to take advantage of the visitors, and had never done it. Like practised con men, they showed themselves trustworthy in little things.

And gradually the seven Terrans, who after all were only a survey group, not a military expedition, equipped and trained for dealing with ingratiating, inscrutable, enigmatic, meretricious humanoids, had been less careful, more trusting, until . . .

Until the Pinkies took their ship from them.

" Let's see . . . it must have been late afternoon yesterday when they got us," said Inkson, as reflectively as if he were talking about a period in prehistory. Inkson was like that. " Can't say I noticed any Pinkies about, but I wouldn't have done anyway. I'd just have regarded them as part of the scenery. None of us would have noticed any Pinkies who weren't paying any attention to us, except Pam and Davina . . . But Pam was asleep, and Davina probably concentrating on her work in the lab . . ."

He went on slowly, painstakingly detailing where they had all been and what must have happened—" Probably small gas bombs first, then drugs afterwards to keep us out "—and explaining what most of the others in the party had been prepared to take for granted: that the Pinkies had hit them when they weren't looking.

He didn't know it, but he was demonstrating, indirectly, the other reason why the group had been caught on the hop.

This was the fact that the leader of the group was himself, George Inkson. No one knew why. Perhaps Inkson thought he knew. That

he should be there was undisputed—he was the biologist of the party, and a good one. But *leader* . . .

Inkson had hardly ever done anything wrong in his life. He had hardly ever done anything right, either. In fact, Inkson had hardly ever done anything. He had been done to. He had lived in the passive, not active voice.

Probably what had happened was that after Galactic Exploitation had selected the whole group they had realised that nobody had obvious qualifications as leader of the party. George Inkson, at forty-seven, was certainly the oldest. Davina, who came next, was equally certainly a woman, and other things being equal a man was still preferred to a woman as leader of a mixed group.

It was a pity that in this case other things weren't equal.

Hunter must have been considered, but Hunter was only twenty-four. His wife Pam, Doreen and Willie were all even younger, and Joe was an appendix to the group, in it but not of it.

So it had to be Inkson, or so Galactic Exploitation had decided.

" If there had only been the slightest warning, ever," said Willie bitterly, " we'd never have let the Pinkies—"

Joe laughed sarcastically. " Obviously," he retorted. " The essence of a surprise attack is surprise. Is that news to you, Willie ?"

" But they were always so harmless, so—"

" Guilty conscience, Willie ?" inquired Joe. " You were the one who was doing all the fraternizing with the Pinkies. Perhaps you showed some of your Pinkie popsies how to fly the lifeboats, how to operate the *Athens*, how exactly to catch us all alone and—"

" Shut up, damn you !" Willie blazed, his ears red.

Joe did shut up for a moment, for the girls came out of the hut and rejoined them. By rushing off to make themselves look presentable they had shown that they were women above all. However, by taking only two or three minutes over the job they had shown they were responsible members of the group and alive to the circumstances, too.

Doreen, a spectacular blonde, wore another of her strapless off-the-shoulder sundresses. Pam and Davina wore shorts and as little else as possible. Pam was tall and a little angular, Davina a good-looking woman for her age. It was one of the paradoxes of feminity that Davina and Pam, who could profitably have worn long, graceful sundresses, didn't, and Doreen, who could profitably have worn shorts and the merest hint of a bra, didn't either.

Davina caught the end of the Willie-Joe exchange, and said firmly : " Nobody argues around here but me. Behave yourselves, boys."

" Who made you the boss of this outfit, and when ?" demanded Joe, shooting a glance from her to Inkson.

Davina refused the gambit. " Just Providence, by endowing me with so much natural talent," she retorted. " Anyone else want to argue ?"

" We'll have months to argue," said Pam wearily. She was often wearied by the shortcomings of others, Pam. She was a tall, passionate girl who thought she controlled herself very well, but was generally regarded as being nearly always on the brink of hysteria. " The Pinkies took us as and how they liked. They could have killed us too. Where do we go from there ?"

" That's what puzzles me," argued her husband in his soft, eternally curious, persuasive voice. " Why *didn't* they kill us ? They could have, and they should have, if they were going to get any benefit from stealing the *Athens*. As it is, we'll reach Mervin eventually in one of the lifeboats, report on the Pinkies, and half a dozen cruisers will arrive here in due course to reclaim the *Athens*, smack the Pinkies' fingers and tell them to behave themselves in future. If they'd killed us, they could have hidden the *Athens* and nobody would ever have known we'd been here. It would have been—"

" What's the use of standing here and just talking ?" demanded Joe. " Let's find out about the lifeboats first. Maybe they're useless anyway." He glared accusingly at Willie. " Maybe your two-faced Pinkie friends have smashed them up inside and left them there just to—"

" You may be right, Joe," said Hunter. " The Pinkies always seemed to me to have a rather peculiar sense of humour. It might strike them as a great joke to leave us with four useless lifeboats . . ."

" Well, it won't take me long to find out if that's true," Joe exclaimed. " I'm going up to have a look at those lifeboats."

" And I'm coming with you," said Hunter agreeably.

However, Pam caught his arm. Though she didn't say anything, her expression showed what she was thinking. She didn't want to let him out of her sight.

John and Pam Hunter were a strange couple. Though neither of them was twenty-five, at times, in different ways, they each seemed to be as old as the hills. John sometimes said of himself, wryly: " I'm a very old young man, wise before my time." And Pam had an old woman's impatience with youth, almost jealousy of youth. Time and again she would say things which, if you didn't actually see her, would make you visualize an elderly spinster, snappish and frustrated. It wasn't an unjust conclusion. She was a vinegary old maid who happened to be married, twenty-two and rather attractive.

They never seemed to be madly in love. In fact, the phrase "in love" wasn't one anyone would ever think of applying to them. Yet they couldn't do without each other. They weren't so much happy together as nothing in particular apart.

John smiled at Pam, and Joe stalked across to the lifeboats alone. Like most natty men, he was startlingly skinny when seen without his smart clothes. His bottom half, though attired in slacks in which he had slept and had a bathe, was still a model for all well-dressed masculine bottom halves. His top half, on the other hand, was all skin and bone.

He was twenty-eight and the reporter attached to the expedition. But no one was allowed to specialize too much. Joe had to do a lot of things beside reporting, though officially he belonged to AP and not Galactic Exploitation at all.

Joe was completely ignoring a sun which was already stronger than the sun of Earth at midday in the tropics, though it was less than half an hour after dawn. It was the dawn which had wakened them—the explosive dawn of Micla V, with its flood of blazing light, its rolling wave of heat and its sudden startled chorus of birds who never seemed to get used to the violent transformation of night to full day.

The others were paying no more attention than he was to the super-sun climbing the heavens, taking no precautions against sunstroke. All the men were naked to the waist, and no one wore a hat.

The whole group had been immunised to sunstroke. They could be uncomfortable in a temperature of a hundred and thirty—Micla V normal—but they couldn't be victims of sunstroke or other ill-effects of over-generous solar radiation. That was a great comfort to them when they felt they were on the point of spontaneous combustion, which was most of every day.

What most of them did was wear as few clothes as possible and change them about ten times a day. They were like restless sleepers, always feeling that they'd be more comfortable on the other side. Pam, particularly, would wear something fragmentary, make an impatient exclamation after a while and go and change into something loose and shady, complain again soon afterwards and put on a swim-suit—and so to infinity.

It was impossible to be comfortable, but it wasn't in human nature not to try.

Willie looked after Joe resentfully, his lips moving.

"What's biting you, Willie?" asked Doreen cheerfully.

"He's been needling me about the Pinkies," Willie muttered. "I was just being friendly, that's all. How was I to know this was going to happen, any more than the rest of you?"

Inkson, catching Davina's whimsical, speculative glance on him, realised that he would have to take command and do something. He coughed unnecessarily, obviously wondering what to do. Then he said: " More to the point is this, Willie. You're certainly the one among us who's had most to do with the Pinkies. You're the only one who can really speak the language, for one thing. Did anything that they ever said give you any hint of this ?"

Willie was very young, reserved, quick to take offence, scared of making mistakes, always on the defensive. He was also quick to respond to any friendly word or gesture. He wasn't one to let the sun go down on his wrath.

" Well, Fthymlas really seemed to like me," he said. " I wouldn't have thought *she* . . ."

He was feeling in the pockets of his shorts. When he drew out a sodden, folded paper which started to steam immediately the sun's rays got at it, his expression indicated that it wasn't the first time he'd got a message in such a way.

" Yes, Fthymlas left this for me," he said, rather complacently. " She wouldn't go away without—"

" Read it, for goodness sake," said Pam impatiently.

Willie examined the note. His face turned white, then red, and he dropped the note like a hot coal. Doreen stooped for it. Willie jumped as if to snatch it up before she reached it, saw he was going to be too late, and straightened up as if he didn't care, anyway.

" It's in English," said Doreen slowly. " It says *Thanks, Willie. You've been a great help. I don't know what we'd have done without you—Fthymlas.*"

" If anybody thinks I helped the Pinkies deliberately . . ." Willie began unsteadily, looking round defensively.

" Nobody does, Willie," Inkson told him mildly. " It's just unfortunate, that's all. You were just being friendly, as you said. It can't be helped now. Let's go and see if Joe's found anything."

Having started them in the direction of the lifeboat into which Joe had disappeared, however, he paused and spoke quietly to Hunter. " Do you really think there may be something wrong with the lifeboats, John ?" he asked uneasily.

" There's a strong possibility," said Hunter. " The trouble is, the Pinkies aren't human, and therefore we can never really understand them. If they're very nearly human, and they are, that only means Willie could have considerable success with the local talent, it doesn't mean we can follow out their motivation and understand it. I think, myself, that the Pinkies are playing some sort of game with us. They're like cats, they like to catch something and play with it."

" What are you getting at ?" said Inkson, even more uneasily. He was making no secret of his dependence on Hunter.

" Well, they've caught us, haven't they ? They should have killed us, shouldn't they ? Doesn't that suggest . . ."

He stopped, because Pam had joined them. He knew from the furrow on her brow that she was jealous, that she wanted to know what they'd been talking about, suspected she wouldn't be told and resented, in advance, being kept in the dark.

" I think," he said, " we should get Joe out of that lifeboat. Wait a moment and I'll get him."

" No," said Inkson. " I'll go."

He crossed the thick yellow-green grass, fiddled with the airlock and disappeared inside. Doreen wandered after him, as if dragged in his wake.

" Where are you going ?" asked Hunter gently.

Doreen turned. " Just to look round inside and see how the Pinkies have left things," she said.

" Perhaps it would be better to wait," Hunter suggested.

" Why ?"

" Because if the lifeboat does blow up," said Hunter mildly, " the fewer people who are blown up with it the better."

2.

They all realized the danger together. Hunter didn't have to explain what he meant, why he thought it possible that the lifeboat might blow up. They shot quick glances at it and drew back involuntarily.

" Why didn't I think of that ?" Davina murmured. " I didn't, anyway . . . but of course the ships may be booby-trapped."

" Just what I had in mind," Hunter agreed. " Just the kind of thing the Pinkies would do. If we know anything about them at all, that is."

" Fthymlas wouldn't do a thing like that !" Willie exclaimed.

" Oh, wouldn't she !" Pam retorted. " You'd have said yesterday that none of the Pinkies would—"

" So would we all, honey," Hunter said soothingly. " Not just Willie."

Then they were quiet, watching the little ship which stood in ominous silence. It was so easy to imagine it blowing up, destroying Inkson, Joe and the five of them standing outside . . . They wanted to move away from the lifeboat, knew that it would be the sensible thing to do, yet couldn't do it because it seemed so unfeeling, so cowardly.

Yes, Hunter thought, on what little he knew of Pinkie motivation and Pinkie psychology, they wouldn't kill their friends but they would have no objection to arranging things so that their friends killed themselves. He could just imagine Pinkie technicians setting up a complicated, ingenious trap, so complicated and ingenious that they could tell themselves, if they liked, that it was a fair experiment to see if the Terrans could figure it out and put it out of action.

He could even imagine the Pinkies giving them a ceremonial, tearful funeral afterwards.

They waited, and nothing happened.

"Surely they should be coming out now," said Pam impatiently. "They've been in long enough to—"

" Only a minute or two darling," said Hunter. He didn't take his eyes off the airlock, all the same.

At last it opened and Joe and Inkson came out. The five waiting outside sighed with relief.

Inkson, however, looked worried when he joined them. " I don't like the look of things inside," he said. " The Pinkies have been fiddling with things, and you know how easy it is to sabotage turbodyne power—"

" Only if you know something about it," Joe objected, " and the Pinkies don't."

" Does any of us know what the Pinkies know and don't know ?" asked Hunter wryly.

That was unanswerable.

They had landed on Micla V two months since. No one had ever landed there before from another world, certainly no Terran ship. They had found an intelligent, humanoid race in possession, a nomadic people who lived in groups but not in cities, a people who had a well-advanced technology but couldn't build a house, had never tried, and probably never would.

The Pinkies could live anywhere on their planet except the surface of their eleven seas, without agriculture, housing, weather control, atom or turbodyne power, towns, roads, flying machines, factories or mines. The marvel of it was that with living so easy they had a technology at all.

But technology they had, technology *in parvo*. Instead of big machines they had tiny gadgets, things they could carry about with them. Tiny radios with a big range, small cutting tools, recording devices, pocket cookers . . . and if they admitted to such things, intending what they had just carried out, there must have been a lot more they hadn't shown the Terrans. So much was obvious now.

The Terrans knew about the Pinkies only what the Pinkies had allowed them to know.

" I'm going to take the lifeboat a few miles away," Inkson said, " and give it a thorough check-up. If I don't find anything wrong, I'm going to take it out in space and test it properly."

" There's no need for that," Pam exclaimed. " What would be the use of leaving the lifeboats at all if there was anything wrong with them ? Anyway, we can't do anything here. There hasn't been a sign of a Pinkie around this morning—naturally. And there won't be. Let's get into one of the lifeboats, or two for comfort, and get back to Mervin as fast as we—"

Hunter caught her arm and shook his head. " I think you're right, George. Sure you want to do the job yourself ?"

"Yes," said Inkson briefly, knowing that if he showed himself prepared to discuss the matter he might be talked into or out of something.

"For heaven's sake!" Joe expostulated. "What on earth would be the point—"

"Joe, I don't want to hear you talk," Davina declared. "Now that that's settled, how about some breakfast?"

"But it'll take so long to get back to Mervin in a lifeboat," Pam insisted, "that the sooner we—"

"It'll take so long," said Davina, "that a couple of days extra won't make any difference at all. Come and get something to eat."

They went to the hut, all except Inkson, who wanted to get on with the job right away. He'd find something to eat on the lifeboat, he said. Hunter would have liked a few words with him, but he couldn't see any way of getting rid of Pam.

They didn't talk much about the situation as Doreen and Davina fixed breakfast at the hut. Someone did marvel occasionally at the perfidy of the Pinkies, or bewail the eleven months or so it would take to reach Mervin in a lifeboat and the two months it would take to get to Earth after that, or remember something which was on the *Athens* and probably lost for ever.

Nobody saw much point in guessing what the Pinkies might have done to the lifeboats. Nobody particularly wanted anything to be wrong with the lifeboats.

They heard and saw Inkson take off in the lifeboat and almost immediately drop back to earth about ten miles away.

Lifeboats, to be of any use at all, had to be miniature spaceships, capable of returning eventually from almost anywhere the parent ship could go. For interstellar space travel wasn't like ocean travel, with shipping lanes so crowded that survivors could be picked up mere hours after their ship went down. Radio waves were far too slow ever to be of any use at distances greater than interplanetary. So if anything happened to a ship on a long run, its lifeboats had to be capable of taking the whole complement all the way home, or there would be no point in having lifeboats at all.

And as spaceships, the lifeboats were easy enough to handle in space, but very difficult to handle close to the surface of a planet. Inkson hadn't attempted a proper takeoff. He had merely taken the ship up somehow and almost immediately concentrated all his attention on landing. He hadn't aimed to be ten miles away when he landed—he simply knew he would be.

The five left behind had breakfast and took stock of what they had in the hut and in the lifeboats, and what had been in the *Athens* and was therefore permanently lost. The men changed their wet clothes.

" Suppose we cruised about in the lifeboats looking for the *Athens*," said Willie. " Wouldn't there be any chance . . .?"

Hunter shook his head. " Imagine this were Earth," he said, " which has only a third of the land surface of Micla V. Imagine searching the entire continent of Asia for one spaceship four hundred feet long. Then America. Then Europe. It isn't worth doing even on the off-chance, Willie."

He was prowling about the hut as he spoke, looking into every corner.

" What are you looking for ?" Willie inquired.

" I'll tell you if I find it."

" The Pinkies," Davina mused, " are so crafty and secretive that it's difficult even to guess at their technological level. Then there's the fact that their culture is completely nomadic—they have no cities for us to look for, yet their communications are so good that every Pinkie on the planet will know about us and what line to take . . . If we flew about looking for them, we'd never be able to find a living soul, for when we were overhead they'd be hidden in the forests, and when we landed to search for them on foot they'd—"

" What are you talking about ?" Willie demanded.

" Quiet child," said Davina. " I'm talking to the only person worth talking to around here—me." She went on: " They can't be our equals in technology, but they may be near enough our level to be able to understand everything they find in the *Athens*. And they're better than us at some things. Medicine, perhaps, portable gadgetry, certainly . . ."

" True, Davina," said Hunter. " Look at this."

There was a clock at one end of the long, low hut—an ordinary wall clock with a white face about a foot in diameter. Hunter had climbed on a chair and was examining the boss in the centre. Davina came and looked at it, standing on the chair beside him.

It looked very like the white plastic knob which had always been there, but it wasn't. It was colder, harder, yet more translucent.

" Anything anybody wants to say to the Pinkies ?" asked Davina. Nobody had ever denied that she was quick on the uptake. " Because here's your chance."

She glared at the knob from a range of about three inches and told it truculently: " You'd better bring the *Athens* back right away, Pinkies. I'm telling you that for your own good. Because if you don't—"

She started and almost fell off the chair as the white knob splintered and shivered into fragments which fell on the floor. There was a cracking, grinding sound inside the clock too. The hands shivered and stopped.

" They knew we'd seen their spy-eye," Hunter remarked, helping Davina down, " and destroyed it in case we learned anything from it. I'll have a look at the pieces, but I don't expect they'll tell me much."

They didn't. The inside of the clock was fused and bent as if by a combination of heat, electric power and heavy hammering.

" So they wanted to see how we were getting on," said Hunter. " They wanted to watch us. How well can they speak English, Willie ?"

" Not very well," said Willie, and then more doubtfully, " I think."

" In fact, you've no idea," said Davina. " Better than they pretended, certainly. That note to you indicated pretty good command of the language, idiom as well . . . Maybe they've understood every word we've been saying."

" Hadn't we better," said Hunter gently, " remove any other spy-eyes there may be before we do anything else ?"

They found two more. Davina smelled out the one above the window, Doreen found the one in the light fitting, and the microphone under the floor destroyed itself when Doreen was tapping close to it. She probably wouldn't have discovered it but by this time the eyes were gone and from the sound it must have seemed, at the other end, that someone was on the point of finding it.

" I think that's the lot," Hunter remarked. " Actually, these scanners have been pretty big by Pinkie standards. I wonder if we were meant to find them ?"

" For heaven's sake, what for ?" asked Pam.

" I don't know. But I think if the Pinkies were really trying to make the tinniest possible scanners and microphones, we'd have more trouble finding them."

" Damn it, we've been over every square inch of this place," Joe exclaimed. " Where else could scanners or microphones be hidden ?"

" I said I thought that was the lot," said Hunter gently. " They're bigger than I'd have thought, that's all. No, scanners don't matter much, anyway. I'm just wondering what else the Pinkies may have left behind here . . ."

Since everyone except himself seemed satisfied, Hunter abandoned the subject and called Inkson on the small transmitter in the hut—small by Terran standards, yet probably about five hundred times the weight and size of a Miclan radio to do the same job.

"Nearly everything shows evidence of having been tampered with," came Inkson's voice thinly from the lifeboat's transmitter " but as far as I can see, it's all been put back the way it was. Incidentally, the Pinkies must have worked at a terrific rate, and there must have been a lot of them. We were out for about fifteen hours, and during that time they learned the operation of the *Athens* and the lifeboats, dismantled everything on this boat at least and put it together again, and took the *Athens* somewhere where we won't find it.

" I've checked the entire wiring system, and that's all right. I've examined the turbodyne and it seems to be untouched. Samples of the fuel have all been as they should be. Yet I still have a feeling there's something wrong here. I'm taking the lifeboat out for a thorough test in space. After that we can be pretty sure one way or the other."

There was no argument about that. Inkson was the boss; if Inkson said he was taking the lifeboat out for a test, there was no one who could stop him. Quite apart from the fact that nobody wanted to.

Heroism is all very well, but when a gun may be loaded and it's necessary to find out for certain, nobody wants it pointed at his head while the trigger is pulled.

If there might be something wrong with the lifeboats, and Inkson was prepared to test one of them himself, everyone was prepared to wish him luck, and no one was in any hurry to volunteer to go with him.

From the hut they saw the little ship take off and climb rapidly out of sight. The radio was left open. If Inkson wanted to say anything, they would hear it.

" Galactic Exploitation isn't going to be very pleased with us," Hunter remarked casually, some half an hour later, as they were waiting. " We'll have been gone nearly two years, we'll be due two years' pay, we've lost a ship and we've nothing very pleasant or encouraging to report. Micla V isn't a market for anything very much, the Miclans don't have anything we particularly want, and as far as I can see the only useful thing we've learned is that the less Earth has to do in the future with Micla V the better."

" That's too bad," Davina agreed. " All the same, I'll be able to face Galactic Exploitation quite contentedly if I only get the chance to face Galactic Exploitation again."

" Some people are always looking for trouble," Pam said disgustedly.

" Yes, and isn't it easy to find ?" Davina observed brightly.

The radio interrupted them. It said without introduction :

" There certainly doesn't seem to be anything wrong. One meter was wrongly adjusted, but I think that was purely accidental. Quite a lot has been dismantled and put together again, and in every case the

intention seems to have been to put everything back as it was, after the Pinkies have learned as much as possible from it.

" Quite clearly, the Pinkies know far more than they ever admitted. A lot of the things they've reassembled here simply couldn't have been reassembled without understanding the principles involved. Though there are a few things which seem to have puzzled the Pinkies, generally—"

His voice stopped abruptly as if the radio had been shut off. Simultaneously, a light made everyone in the hut blink. It was a light that was momentarily stronger than the blazing sun, a light that penetrated everywhere and would have been visible even through closed eyelids.

It could have been lightning, but it wasn't. It was the destruction, instantaneous and complete, of the lifeboat and George Inkson.

There was no doubt about it. They all knew roughly what had happened.

All interstellar travel was by turbodyne power. It was a safe source of power in that its fuel was harmless, its engines at rest, were harmless, and in efficient operation it was harmless.

But already, elsewhere, it had been found regrettably easy to sabotage. Turbodyne power had an amazing affinity for turbodyne power. The smallest turbodyne out-put elsewhere in a ship, and the main drive jumped the gap, all the potential of the vast power source expended itself in one millisecond, and the ship and its contents became a flash of light.

Like the one which darted down forty thousand miles, made the six remaining Terrans blink, and told them succinctly what had happened out there in space.

" Don't let me hear anyone say anything against George Inkson," said Davina soberly. " *De mortuis nil nisi bonum*—and he's certainly one of the *mortuis* now."

That was Inkson's epitaph.

3.

After the destruction of the lifeboat there were two things to be decided.

The first was who was to replace Inkson.

" Since it isn't going to be me, I might as well give you my ideas," said Doreen. " Nobody would pay any attention to anybody but Hunter or Davina. So it's between them, isn't it ?"

" It should be a man," said Pam primly. For one thing, she didn't like Davina.

" Why not Davina ?" asked Willie perversely.

The voting was three-one in favour of Hunter, the two principals abstaining. " Oh well, next to me you're the best person for the job," said Davina philosophically. " You won't make too big a hash of it."

The second thing which had to be decided was how to deal with the problem of three possibly booby-trapped lifeboats. It was agreed that after what had happened to the first lifeboat, and Inkson, it would be insane to pile into one and drive straight for Mervin. And it was agreed almost as quickly that the chances weren't much better if they split into three pairs and took all three ships.

The final decision was that two people should be allocated by lot to lifeboats two, three and four, and that the ships should be tested in order.

" How it will work is this," said Hunter. " Two of us will be out of luck and draw the second lifeboat. They'll test it thoroughly, try to find the trap or detonator, if any, and put it out of action. The rest of us will help in any way we can, but any risks that are involved will be taken by those two. Before the rest of us go on board the lifeboat, the two who are responsible for it will have to have tested it and decided it's safe."

" What happens if they go the same way as Inkson ?" Joe demanded.

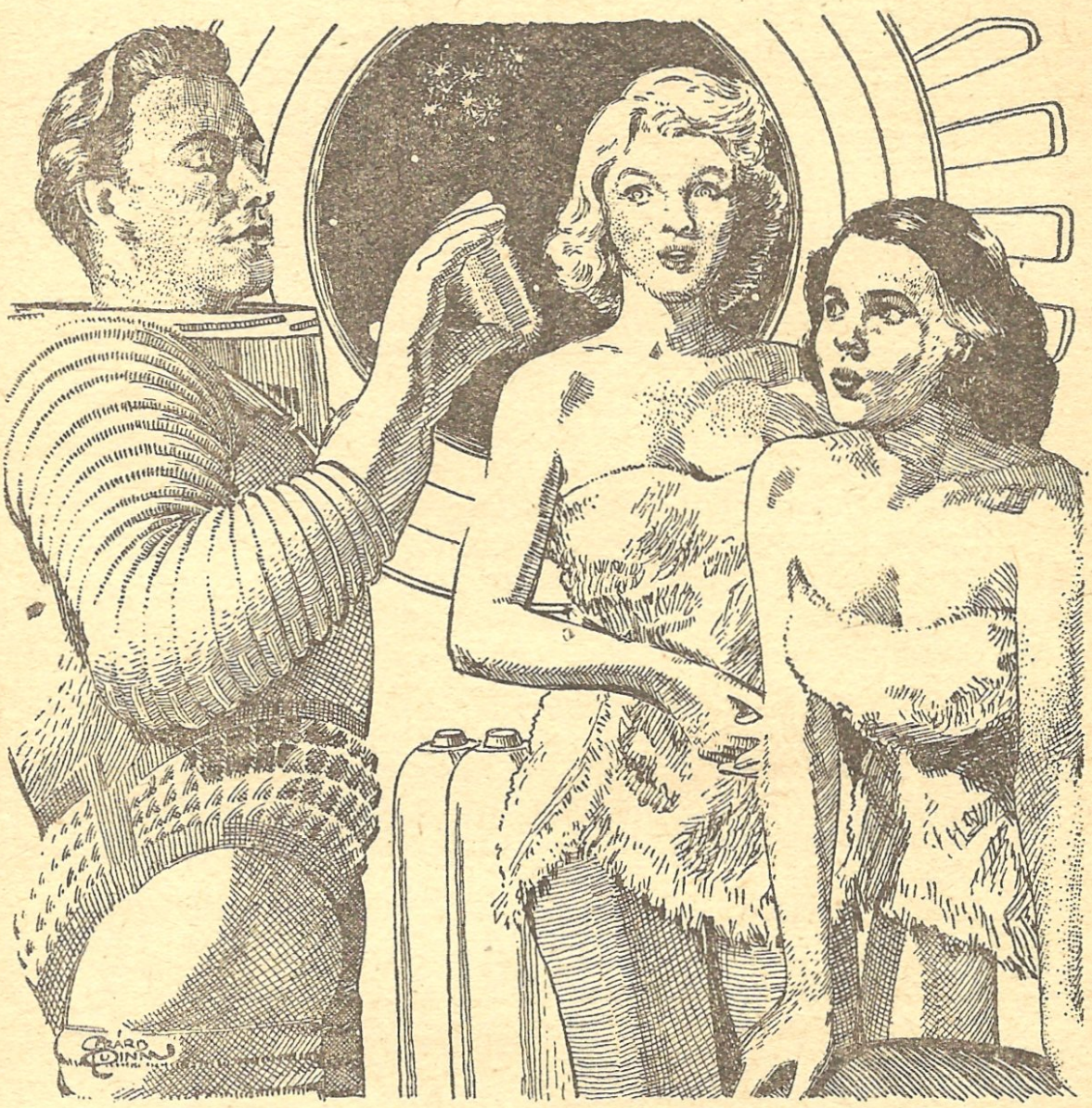
Hunter shrugged. " Then the next two will have the same job with the third boat."

" It's inhuman !" Pam exclaimed vehemently. " Can't we find a more humane scheme ? Can't anyone think of anything ? This way, if there *is* anything wrong, we're practically condemning the first two to death. Inkson told us next to nothing. The first pair have virtually nothing to go on. What can they do but try everything they can think of, until they're killed ?"

" That's true enough," Hunter admitted. " But would you rather six died than two, honey ?"

Pam shrugged, and changed her ground rapidly. Consistency had never been one of her vices. " Oh, it won't come to that," she said. " All that happened, probably, was that the Pinkies who put the lifeboat back together didn't really understand what they were doing, and left something out, or—"

Davina snorted in derision. " Stick to things you know about, Pam. *I* know about turbodynes. When a turbodyne ship blows up, it can't be an accident. A turbodyne unit is a unit—big or small, it's a single power source, and it can never be anything else. It can no more supply two separate outputs than a man can run in two different directions. If a ship blows up, it's because a second turbodyne unit has been introduced. And you can't do that by mistake.



"What happened to Inkson was no accident—and the same sort of un-accidental accident is likely to happen to anybody else who takes up one of those lifeboats without making absolutely sure there are no independent turbodynes hiding in it somewhere."

Davina seldom spoke earnestly, and that added to the effect when she did. Pam made just one more effort.

"You're not going to tell me," she said sarcastically, "that the Pinkies, who didn't have turbodynes, have learned already how to make them so small that Inkson couldn't find one on his ship—"

"I don't have to tell you," said Davina grimly. "That explosion did."

A few more objections were made, but they were only objections, not counter-suggestions. Willie, overcome by the idea of a lovely girl like Doreen being blown into nothing in particular made the chivalrous suggestion that two of the three men should take on the job of testing the first lifeboat. No one else took that very seriously—that type of consideration came about five hundred years too late. And Doreen, rather nervous at the thought of the responsibility that she might inherit, suggested that either Davina or Hunter be allocated to the fourth lifeship, whatever the draw, so that if—*if* there were further non-accidents, there would always be someone responsible to take charge. That was vetoed too. The luck of the draw was held to be fairest.

Doreen and Pam made the draw, and it was done before their eyes so that no one could ever think it might have been fixed somehow.

The first two names were those of Joe and Pam.

"Just as well," said Joe, with a certain satisfaction. "I wanted to get my hands on those things that Inkson took apart and found nothing wrong with. Damn it, if there's a turbodyne there must be something to set it going, and I can find them both."

"Well, Joe," said Davina briskly, "now you've got your chance. You show us."

"God in heaven!" Pam blazed. "How can you stand there and *gloat* that we—"

"Hold it, honey," said Hunter. "Davina isn't gloating. It's just her way."

"Well, it's a damn funny way."

"I know," said Davina. "I'm a damn funny person. But believe me, Pam, if you lick this and we can take up a lifeboat with a reasonable expectation of not going off like a Roman candle, I really will gloat."

"Oh well," said Pam, quietening down, "maybe it's just as well. I couldn't wait while you were all deciding what to do next. I'm not complaining. Only I wish . . ."

She decided not to say it, but they all knew what she meant. Neither she nor Hunter had felt entitled to interfere with the draw, but they had hoped to be drawn together.

Next two were Willie and Doreen.

Doreen took it philosophically. Doreen was a girl who was liable to be noticed only pictorially when there were a lot more self-assertive characters about. She wouldn't speak if there was someone to say what she wanted to say. Only if there wasn't would she speak up. Yet she wasn't shy. She would talk easily when people wanted to hear her, and when she knew the subject. When the subject changed,

or when she didn't agree but didn't want to argue, she would fade into the background again.

Willie was pleased with the draw, and didn't try to hide it. He was a romantic-minded youngster, and when he had found himself on a long trip with Davina, Pam and Doreen in particular, with only Pam married, he had thought . . . anyway, he had thought.

He had been wrong. Davina often talked like a woman who was desperate for a man, any man, but that was just her chosen pose. Actually she could still get men as, how and when she liked, and Willie wasn't on her list. Pam would never look at any man but Hunter. And Doreen—Doreen was merely gently evasive. Not only did she never say yes, he had never even reached the point of getting her to say no.

But Willie was an optimist, and this was another chance.

Davina and Hunter, automatically, were left with lifeboat four. That meant that no new election need be held for a leader of the party, if Doreen's fears should prove justified. She wasn't going to be left on her own, without anyone of responsibility with her. Before Davina and Hunter had to risk their lives, she would be . . . out of the way.

" All right, Pam," said Joe with satisfaction, " let's get started, shall we ?"

Pam looked at him without enthusiasm. " Are you in a hurry to get killed, Joe ?" she inquired.

" No, I'm in a hurry to get this thing done. Let's get that lifeboat taken apart."

" One thing," said Pam. " How are we going to work ? Somebody has to give the orders and somebody has to take them."

" O.K." Joe agreed. " Let's spin a coin, shall we ?"

Nobody interfered as Pam and Joe settled their method of working. Joe won the toss, and briefly and decisively told the others what he was going to do and what he wanted them to do.

Joe was impatient and not a very useful man in comparative inaction. The way to break Joe would be to refuse to let him do anything. But given a job Joe could work hard, fast and well. He had that kind of patience, and that kind only—if it was part of a job to do it over and over again until it was right, he'd do it.

Nevertheless, Hunter took Davina aside when Joe was talking to Willie and Doreen, and said: " Are we going to let them take the ship up when they feel like it ?"

" Why not ?"

Hunter sighed, visualizing what was going to happen. " Pam will get fed up after half an hour's work," he mused, " and say the lifeboat's obviously all right, why not try it out ? Joe will be a bit more careful, but even he—"

Davina was still in her serious and sympathetic mood. "I know what you mean, John," she said. "And I haven't forgotten Pam is your wife. But we agreed on this way—what can we do? It's up to Pam and Joe how they work and what risks they take. We can't order them to work another way. It's their lives—and anyway, they may be right and we wrong."

Hunter opened his mouth to snap: "For heaven's sake, am I supposed to stand back and watch my wife kill herself?" However, he conquered the impulse before it came to anything, and realized that Davina was saying exactly what he would have said, if one of the people concerned hadn't been Pam.

"Sure, Davina," he murmured. "Sure."

Hunter needn't have worried about the first part of the checkup, at any rate. Joe and Pam, with some assistance from the other four, worked on the second lifeboat the whole of the day. No one could say that the job was done in a slapdash way. Often enough, true, Hunter would hear Pam complain that there couldn't be a dead fly still undiscovered in the lifeboat, that surely a turbodyne unit must be bigger than a grain of dust, that they were chasing after shadows, that even if there was something wrong with the ship, the only way to find it was to take it out and test it.

But each time Joe merely laughed and told her that if she had no respect for her skin, he had for his. Hunter's opinion of Joe went up as he watched him on that job. There were some circumstances, undoubtedly, in which Joe didn't shine. Not these, however. Joe wasn't afraid of work and he could direct it, too.

He and Pam did all the working in the lifeboat itself. Like Inkson, they took the necessary risk of hopping ten miles or so before touching anything, so that if the ship became slowly settling dust in the course of the examination, it wouldn't take the other two lifeboats with it.

After that they dismantled whole units and passed them out to Willie, who had driven the jeep over plain and through forest to collect them. He took them back to the hut, and Davina, Hunter and Doreen examined them there.

What had destroyed the first lifeboat could hardly be anything else but a turbodyne unit of Miclan manufacture. The Pinkies had worked out and guessed a great deal about turbodyne power and operation, and had made at least one unit of their own as a detonator—probably crude and uncertain, but effective nevertheless. This they had placed somewhere in the lifeboat, to be set in action . . . somehow.

That was the problem—where, and how.

Turbodyne units in themselves are harmless. Pam and Joe were taking precautions, naturally, but probably while the lifeboat was at rest, its own turbodyne dead, there was no danger. Likewise, there should be no danger to the others, dismantling equipment of all kinds at the hut. If they found the turbodyne unit they were looking for, the only risk was that the Pinkies would have fitted it up to explode in another way.

" And that's unlikely," said Hunter, disembowelling the radio transmitter. " The whole aim in making this detonator must have been to make it as tiny as possible. It wouldn't be worth while, in sheer vindictiveness, to give it a separate detonator and explosive charge to make it destroy who managed to find it."

The four at the hut took it in turns to drive the jeep between the hut and the isolated ship. Presently a route was established missing the more difficult stretches which Willie and Hunter had found on the first two runs, and after that the double run could be done in less than half an hour.

At no time did anyone see a Pinkie, though Doreen said: " Call it intuition if you like—I could swear they're all round, watching. I didn't look too hard, myself. Perhaps if we saw them and they knew we'd seen them they'd change their tactics. Gives you the creeps, doesn't it ?"

Later in the day, when nothing of note had happened, Hunter did nearly all the runs himself and often stayed for quite a while with Joe and Pam. It was then that he saw how Joe and Pam were treating the job, and how they were standing up to it.

Apart from her impatience about the job, Pam had the temperature to complain about. On the lifeboats normal conditions were quite easy to achieve, provided the turbodyne unit could be used for power. Any temperature, humidity and oxygen content within reason could be set, and apart from a few experimental hot, sleepless nights in the hut during their early days on Micla V, the group had taken advantage of the comfort of the *Athens* at night. The lifeboats could afford the same comfort now, but only with the turbodyne in action—distinctly unsafe, in the present circumstances.

So in addition to everything else Pam had the heat to contend with. So had Joe, of course; but Joe had a job to do and the faculty of ignoring discomfort which was inseparable from the job. None of them had ever worked as hard in Miclan conditions as she and Joe were doing, and though Joe didn't seem to notice the heat, Pam kept changing her clothes and complaining. Hunter twice had to bring her clothes from the hut.

It was fortunate that they had unloaded an automatic washing and drying machine from the *Athens*. It was kept going pretty steadily. Fresh clothes didn't make much difference, certainly not for long, but at least it was something to be able to change into something fresh, clean and cool, even if it wasn't fresh for long.

Joe took Hunter aside once and said: " You know, there's no need for two people actually to test the ship when we've got it all together again. I can take it up myself. I mean—"

Hunter shook his head. " I appreciate your saying that, Joe," he said warmly. " And I'd agree to that if I felt I could. But I can't. Apart from the fact that we agreed it should be this way, you know that one person can't really handle a lifeboat. In space, yes, when there's nothing much to do. Takeoff and landing—no. I don't doubt you could get the lifeboat off the planet all right, but you couldn't run proper tests—and we have to have a lifeboat thoroughly checked, in the circumstances, before we trust it."

Joe nodded. " Just thought I'd mention it," he said.

" I wish I could say yes. But Pam drew lifeboat two."

The sum total of their work during the whole day was to confirm what Inkson had reported about the other lifeboat. Everything showed signs, usually very small, of having been dismantled and put together again. There were small faults here and there in the reassembly, not many of them and none of them apparently deliberate. The only case of actual damage was where a valve in the radio had been broken. Some Pinkie had tried to unscrew it, take it apart or release it from below, not guessing that it was simply plugged in tightly by nine pins and could be pulled straight out.

When they suspended work for the day the lifeboat was reassembled and, as far as they could tell, perfect. They agreed that it seemed safe to put it back with the others, instead of leaving it where it was, and it handled perfectly as Joe and Pam took it up and landed it close to the hut.

4.

Micla V was a world of vitality without violence, energy without uncontrolled passion.

The *Athens* group's solar radiation treatment and human adaptability generally took care of all the differences between Miclan and Terran conditions. Humidity wasn't bad, and Micla's particular mixture of radiations was pretty healthy. So long as they drank a lot, didn't eat too much and didn't over-exert themselves, the Earth people suffered only mild discomfort on Micla V.

For the rest, the region where they had landed, met the Pinkies and eventually lost their ship to them, was a land of forest and lush plain. Something kept Micla V from extremes. The forest wasn't jungle and the plain wasn't barren. Nothing on Micla V, climatically at any rate, was overdone. Plants grew readily, yet didn't propagate so greedily and so rapidly that riches became poverty and every living thing had to fight for its living.

"Part of the reason, at a guess," Joe had written in his journal, "is that Micla V has always had an easy life. Nothing has ever happened in a hurry, there has always been enough for all, so that nobody has ever had to fight to live and the various species have been able to reproduce themselves slowly, not frantically, and still survive. Everything on the planet waits and sees—and it's all very dull, with nothing much happening."

That had been written before the Pinkies stole the *Athens*, of course.

On Earth shelter had been needed, which meant staying in one place, which meant communities, which meant agriculture and other responsibilities.

On Micla V shelter had never been needed, nor agriculture, so long as people didn't stay long enough in one place to strip it—which meant moving about, which meant that any culture or technology had to be portable.

Night on Micla V was quiet but hot. It was going to be very difficult to sleep, with no *Athens* and no temperature control. But that wasn't the most pressing problem. That evening the question that mattered was whether to post a guard or not.

"If the Pinkies had meant to murder us they'd have done it when we were all out cold," said Joe, as if that settled the matter for all time.

"Whether or not they meant to murder Inkson," said Hunter reflectively, "he's very dead now. I must say I'm not inclined to trust the Pinkies' good intentions very far. It doesn't matter much to me whether I'm killed directly or indirectly."

"Yes, I think we should have a guard," Davina agreed, "not so much to hold off a million Pinkies single-handed as to be able to say in the morning that they haven't done anything new."

So it was decided. And the Hunters volunteered for the first spell of duty. Pam knew she wouldn't be able to sleep anyway.

They stayed in the hut, where they could see the three lifeboats plainly by the light of Micla V's three small satellites. The others slept on board the lifeboat which had been tested, to make quite sure it wasn't tampered with again, for safety in case the Pinkies did attack, and to be able to sleep—it was a little cooler in the lifeboat, at night, than in the hut.

Left alone with him, Pam threw herself at Hunter and clung to him with unexpected passion.

" Darling, it's not as bad as that, is it ?" asked Hunter wonderingly.

" Yes," she said, and burst into tears. She didn't make any attempt to hide them. She cried nakedly, into his face.

He was reminded, for the first time in months, of what she meant to him, in spite of everything.

" Look, Pam, I'll get Joe to change places with me," he said firmly. " No one can object. There'll still be Davina, and if something does happen to us, it'll happen to us both, not just—"

" It's not that really," said Pam in a choked voice. " I'm not afraid, I don't think I'm going to die—I just want it over with. Anyway, if I don't come through, you don't think it's going to make it any better for me knowing you're not going to come through, either ?"

" How about me, darling ?" said Hunter softly. " Do you think I want to be left without you ?"

" No, you don't," said Pam almost harshly, " but don't say that if I'm dead you'll want to be dead too. Maybe for a little while . . . only a very little while, though. You'll find something—someone . . ."

Hunter tried to rally her. " I thought I heard you say once or twice that there couldn't be anything in the lifeboat we hadn't found ? Well, what's this about dying ?"

Pam brushed that aside impatiently. She rarely even pretended to be consistent.

" Kiss me, darling," she whispered.

He did so. " It isn't for the last time, you know," he protested, half-laughing.

Nothing happened that night. The planet might have been uninhabited for all they saw of the Pinkies.

Joe's patience and unexpected capacity for taking pains broke down early the next morning. " There's nothing more we can do," he announced. " Let's take the lifeboat up."

" There's always more you can do," Davina objected. " Tap the hull, for example. I haven't seen you doing that. Drain the water tank. Dismantle the—"

" That's just it," snapped Pam raggedly. " We could go on for ever. No matter what we do, we can always think of more—and wait, and wait, and wait, while we could be getting on our way . . ."

" It's your life," Davina shrugged.

" So it's my life !" Pam blazed. " And my business too. Do you think I don't care whether I live or die ? It's this suspense . . .

Surely we've done enough now. We can't go on for ever, putting it off and putting it off. Let's get going, Joe."

Joe looked inquiringly at Hunter.

" I'm not going to stop you, Joe," said Hunter, quietly, " nor you, Pam. Maybe only one ship had a detonator. I hope so. You're all right, in a way. Davina's right—there's always more you can do, until you find the turbodyne or can say definitely there isn't one. Pam's right—you can put it off for ever. And Joe's right—considering all we've done, it's not unreasonable to try the ship out now. Nevertheless . . ."

" Exactly," said Davina soberly. " Nevertheless, we *can* do more work now. It won't do Joe and Pam any good if we think, afterwards, of all the other things—"

" There you go again !" Pam screamed. They all stared at her, and she took a grip on herself. " I'm ready when you are, Joe," she said, not looking at the others.

Within half an hour they were taking the lifeboat up. It stood on its tail exactly as the *Athens* would have done and climbed rapidly but quite unspectacularly into the pale blue Miclan sky.

Turbodynes were always unspectacular, unless two units went into operation close enough together for the gap to be bridged—then they were spectacular enough. Engines operated by steam, gasoline, fission and turbodynes had been in inverse ratio lighter and more powerful. Some turbodynes—not those in spaceships—needed mountings heavier and much more bulky than the power unit itself.

The lifeboat piloted by Joe and Pam was no more spectacular in its takeoff than usual, and the four who remained breathed a sigh of relief as they observed the fact. They didn't realize it, but they were instinctively relieved when it got out of their vicinity. It was no longer a danger to them personally. It was still a bomb which might go off, but not a bomb under their seats.

" Now you and I have a job," said Davina firmly, hooking Hunter's elbow.

" What ?" Hunter inquired. " Listening to the radio in the hut, you mean ?"

" No, Willie and Doreen can manage that. You and I had better start checking lifeboat four. We'll have to do it sometime. It won't do any harm to get some of it done now."

Hunter didn't protest. He saw why Davina had made the suggestion. It would be a nerve-racking business for him waiting by the radio for Joe and Pam to blow themselves up. Every crackle would make him jump, every glint of reflected light would seem like the flash which meant the disintegration of the lifeboat.

" All right," he said, " that's a good idea, Davina. Let's go."

Willie and Doreen went into the hut to listen to Joe's report. It didn't start for quite a while—taking off and landing are never easy operations in any kind of spaceship. Someone always has to be observing and calculating, and the other operating the ship. Willie and Doreen knew that, and that it would be some time before either Joe or Pam would have time to start sending.

So it was a period of waiting. Willie looked at Doreen, moved about the hut restlessly, lifted a pair of shoes that weren't doing any harm and put them down somewhere else, looked back at Doreen, jumped as the radio nearly said something but changed its mind, and looked at Doreen again.

She was wearing a white button-through sundress and managed somehow to look cool.

" You space girls are cheats," said Willie suddenly. Doreen looked up, surprised more by the harshness of his tone than the actual words.

" You come on trips like this," Willie went on, " getting all the glamour and excitement and attention you want, and afterwards, if the trip amounts to anything, you get your pictures in the picture sections as beautiful heroines, and everyone admires you and thinks you're wonderful, and you get thousands of offers of marriage, and—"

" What's this all about, Willie ?" asked Doreen, puzzled.

Willie had strong feelings on the subject, though it wasn't quite clear what they were or what the subject was.

" Often these are publicity trips anyway," Willie exclaimed hotly, " and you glamour girls are only allowed to come along for propaganda. That's the only reason you're here—to be lush and photogenic and—"

" Oh, I get it now," said Doreen, relieved.

Properly worked up now, Willie went on vehemently: " You get men mad about you, but that's all. They mustn't touch you. They mustn't—"

" Hold it, Willie," said Doreen, laughing. " What am I supposed to do—kiss anyone who wants to kiss me, just because I happen to be kissable ? Listen—an exploration job like this pays enough in one year to keep a careful person comfortable for nearly ten years. Well, probably I'll get married like most girls, but money always comes in handy, even if you aren't money mad, and I think I'm entitled to put a few thousand pounds behind me if I can. Isn't that so ?"

" But you're only along on this trip because you're . . ." Willie began.

" I know I'm along to supply glamour. I know I'm not all that good as a lab technician and I'm here chiefly to be photographed talking

to the natives, setting off Miclan scenery, working in the galley and generally supplying the cheesecakes, but what's wrong with that? Keep the head, Willie. Now be quiet while I make sure the set's right."

She checked rapidly, frowning, for it was about time for Joe or Pam to be making a report of some kind. However, the set was all right, and presently Pam's voice was heard.

"Takeoff showed nothing out of the ordinary," Pam said. "Are you there, John?"

"No," said Doreen. "I'll get him if you like. But we thought it would be better if he didn't listen."

"There's nothing to say, anyway," Joe's voice came. "The ship handles exactly as usual, and the only thing we can do now is report all the meter readings and exactly what we're doing. Then if anything goes wrong, you'll know what was happening at the time. We're climbing free of the moons first. Call you back in about fifteen minutes."

The radio went silent, though not dead. The green carrier-wave eye showed that there was still contact. Only when that light went out need worrying begin—and when it did, it would be too late to worry.

Willie moved behind Doreen as she sat at the radio and dropped his hand on her shoulder. She didn't move. Perhaps she didn't notice. Or perhaps at last, after all this time—you could never tell with girls.

The radio crackled once more as if to burst into speech, and Willie looked from Doreen to the loudspeaker, almost guiltily. But it was a false alarm. The radio settled into blank silence again.

He leaned over, put his hand under her chin and tried to turn her face toward him.

"Oh, stop it, Willie," she said, but not impatiently. She hardly ever lost her patience with anybody. She caught Willie's wrist firmly and pushed it away.

This produced accidentally the effect which Willie himself had failed to achieve deliberately. Her face turned to his, in fact she almost slipped into his arms as he bent down and tried to press his lips against hers.

She turned her head away.

"Now, behave yourself," she said sharply but not angrily. "When and if I want you to do anything like this, Willie, I'll let you know. Just at the moment, I . . ."

Willie caught her wrists as she tried to push him away. He sought her lips again, and again she turned her head away from him. But she was half laughing, as if at any moment she might change her mind.

They scuffled together for a long time, accomplishing nothing. Willie was scared he might hurt Doreen, and, despite everything, wasn't going to go any further until he got some encouragement or at least some diminution in discouragement. Doreen didn't want to hurt Willie either, and she couldn't really be angry. Nevertheless, she was quite determined.

The radio squawked again briefly and started to talk.

" Willie, the radio !" Doreen gasped. " We've got to—"

Perhaps Willie went a little mad for a while. Perhaps he refused to recognize the interruption, any interruption. Perhaps he understood what Doreen said only as an excuse, something to make him stop, like someone telling an attacker to look behind him.

Instead of turning to the radio he tried to clasp Doreen tightly in his arms.

She planted a hand in his chest and pushed him back. " You're wasting your time anyway," she panted. " I'm not a frightened schoolgirl, Willie. Think I can't handle tenth-rate strong-arm wolves ? Leave me alone and let's hear what—"

Willie got his arms round her and kissed her. She didn't quite let him do it, didn't quite stop him: most of her still said no, but some of her said yes. And Willie thought he had his diminution in discouragement.

Immediately her mouth was free Doreen said impatiently: " Willie, do you realize that radio is—"

Willie didn't realize anything, apparently.

Doreen knew what she wanted to do and eventually did it, though it took her some time.

She got her knee up and crashed it against Willie's chin. It was some kick. It said, in effect, " My patience is exhausted." And Willie bit his tongue, shot back like a rocket and cracked his head against the wall.

When he came to there was blood in his mouth, his tongue seemed to be four times its usual size, and his vision throbbed with his head. Doreen, immaculate and looking as if nothing had happened, was at the radio.

" I'm sorry, Doreen," he said, " but after all—"

" Not much use being sorry," she murmured grimly.

" Hell, you can't blame me for trying," said Willie in an aggrieved tone, " and since you—"

" Joe and Pam are dead," said Doreen flatly.

Willie couldn't speak. He just stared at her, his face going white.

"I couldn't hear what they were saying," said Doreen bitterly, "because I was otherwise engaged at the time—remember? Perhaps there was something important said, perhaps there wasn't. Anyway, I didn't hear it. *We* didn't hear it."

She looked up at him unwaveringly, and saw him realize what he'd done.

5.

Doreen shook her head definitely, deliberately. "No, I'm not going to tell John Hunter," she said. "That's up to you, Willie."

He saw it was no use arguing. Besides, he couldn't beg, in the circumstances. He turned on his heel and went out of the hut without a word, blindly.

The fourth lifeship stood silent, the airlock closed. He operated it and climbed the rung ladder to the control room. The ship was made for the extremes of acceleration and free fall, and moving about in it in one gravity was inclined to be inconvenient and uncomfortable.

Davina and Hunter looked up from the control board they were dismantling. Davina saw in Willie's face what had happened.

"No!" she exclaimed, her composure broken for once. "Pam and Joe can't be . . . ?"

Willie nodded miserably.

Hunter didn't speak, didn't ask for details. Instead he bent over the job he was doing and carried on with it. After hesitating for a moment, staring at Willie, Davina quietly joined him and they worked together, silently.

Willie stood awkwardly, wondering whether to speak, to help them or to go away.

Presently Hunter looked up. "Was it like last time?" he asked quietly. "Just a flash—then nothing?"

Willie had to clear his throat before he could answer. "No," he said at last. "They were too far away this time. There may have been a flash, but we didn't see it. The radio just cut out."

"What were they saying at the time?" Hunter asked. "Was it—was Pam speaking?"

"I don't know," said Willie.

Hunter frowned. "You don't know? Was it only Doreen who was listening, then? Hasn't she told you about it?"

"Neither of us was listening," said Willie, the words hardly audible. He couldn't look at Hunter.

Davina took over. " Let's go back to the beginning," she said in a matter-of-fact tone. " You and Doreen were left to hear what came from lifeboat two, weren't you ? What went wrong ? Reduce it to its simplest terms, so that we can understand."

They waited, and Willie couldn't speak.

Davina turned to Hunter. " Let's go and find Doreen," she said, " and see if she can explain this mystery."

They climbed down the steel ladder, Hunter first.

" Don't look up," said Davina primly. But when Hunter showed no signs of doing so, she said wryly: " Well, I didn't think I was *that* old. To think of all the whistles my legs have attracted in their time . . ."

" What did you say ?" Hunter asked apologetically, having heard nothing.

Davina sighed.

Willie stayed where he was. He had half expected Hunter's self-control would break down, that Hunter would shout at him or even hit him. On the other hand, he had tried to convince himself that the question of what had been said over the radio would never come up and that no one but Doreen would ever know or care that there had been nobody to listen to the last words from the lifeboat.

After all, he thought in gloomy self-justification, it was most unlikely that there would have been anything to learn even if he and Doreen had been glued to the loudspeaker all the time. Probably Joe and Pam had said nothing of importance . . .

But in an overwhelming flood of remorse he saw the enormity of what he had done. Pam and Joe had died for that radio record of what was going on, what they were doing—*and there had been nobody to listen to it.*

He was like a sentry left to guard a town, a sentry who flirted with a girl instead and found the town burned, sacked, looted and knew that he and he alone was to blame. Perhaps if he had been there he could have done nothing, perhaps, seeing the town was guarded, the attackers would have left it alone. But as it was, for ever and ever he was the sole guilty man.

It wasn't until about two hours later that Willie saw Hunter again.

" Willie," said Hunter gently, but showing some sign of strain, " I don't want to bawl you out. I never like bawling you out. I'm not the sort of fellow who enjoys bawling anyone out. But I've got to ask you if you realize what you've done. Do you ?"

" What have I done ?" asked Willie defensively.

" To begin with, you were the one who told the Pinkies most. But for you, they'd never have learned enough, without making us sus-

picious, to be able to steal the *Athens* and leave the lifeboats the way they did. We kept quiet about that, Willie, not wanting to hurt you, and knowing we were to blame too—but you must know the Pinkies' coup wouldn't have been possible without your help."

"I—"

"Now this. It may be unfair to assume that what Pam was saying at the time the radio went dead was the key to the whole thing, but it may have been. It would have been the best chance we had, the best guide—if we only *had* it."

He could have said more, a lot more. He didn't. It seemed, somehow, like taking revenge for Pam, driving home to Willie his part in it. Like making someone else suffer for his own grief.

He left it at that.

It was the quietest day any of them could remember. The absence of Inkson, Joe and Pam would have been enough to make it seem quiet. But there was also the fact that no one wanted to speak.

There was no word of sympathy for Hunter from anybody, because they all knew he didn't want it. Some people could lighten a loss by talking about it. Not Hunter. He didn't want to hear a word about Pam, certainly not as his wife. He talked about Pam and Joe merely as two members of the group, as if Pam had meant no more to him than Joe had, and no less.

His grief was *his*, and he couldn't share it. He didn't want to try, or anyone else to try.

So very little was said to Hunter. And very little was said to Willie. Doreen seldom had a lot to say anyway. Davina spoke only about the work, about the job in hand. There was no market for her dry wit just at the moment.

Doreen and Willie worked all day on their ship, doing exactly what Inkson had done and what Joe and Pam had done.

"This is a waste of time," said Willie raggedly. "We take everything apart and we never find anything. Then we take the ship out in space and it blows up. Let's get on to that part of the job and get it over with."

"Keep your head, Willie," Davina advised. "I know *I* don't want it . . . Do you think this is a waste of time, Doreen?"

"No," said Doreen, not looking up from the pressure gauge she was dismantling. "The thing is, this part has been done before, but it's never been successful. We've got to do it right this time, and it won't have to be done again."

That was the matter-of-fact attitude which was typical of Doreen, but which Willie was incapable of adopting.

With so many subjects taboo, there was nothing else to talk about but the job in hand. Even over lunch at the hut they talked about it.

"There *must* be a turbodyne as detonator," said Davina reflectively.

"And we can't find it," said Hunter. "We don't know how small it can be. We couldn't make it smaller than about one cubic foot, but there's no telling how small the Pinkies could make it."

"They're not all that good," Willie objected jerkily. "Even if they—"

"It's not a question of being all that good," Hunter said, "it's a question of the way they do things. If they can make a certain gadget at all, they can make it tiny. That's the way they think, technologically. They see no point in making a machine that they'd have difficulty in lugging around. A radio is part of a belt, a battery goes in the sole of a shoe—I wouldn't be surprised if they've been able to make a turbodyne of some kind only a few cubic inches in volume. That means we can hardly be certain we've found every possible detonator short of dismantling the whole lifeboat, which we're not equipped to do."

"In that case," said Willie, with a kind of desperate calm, "it seems to me the best thing to do is just to get into the lifeboats, get off this lousy planet, build up velocity toward Mervin and hope for the best."

"What a disgustingly unscientific idea," Davina commented, shocked. "Chances of success are small, therefore let us not try." A malicious gleam came into her eye. "You only want to commit suicide, Willie, because women won't look at you. Never mind, when you've a little more experience and are *quite* dry behind the ears, they'll come flocking. Meantime, the rest of us don't want to commit suicide. I can still attract masculine attention, when I try—except John Hunter's that is . . ."

She got down to business. "I can think of about six types of switch for the detonator," she said briskly. "Obviously, there is a small turbodyne, and obviously something switches it on. It could be a time switch. The minor turbodyne could be set off a certain time after the main turbodyne starts. We know it isn't quite the *same* period in every case, but we don't know there isn't simply a time switch.

"Then it could be a strain switch. It could be set to operate when acceleration reaches a certain force. Say 4G. It could be a simple spring-and-tumbler type—"

"Where *are* these things, though?" Willie demanded. "Why can't we find them if they're there?"

"Two reasons," said Hunter coolly. "One is their possible size. We've seen how tiny the Pinkies' gadgets are, even when they're not

aiming particularly at making them as small as possible. They may have made turbodynes and switches so small that perhaps we've seen them and refused to believe that what we were looking for could be so small. The toggle of a light-switch, perhaps. The stopper on a bottle. The cover of a book. The other reason, of course, is that we haven't looked closely enough. Inkson made a search, true, but probably a very sketchy one. Joe and Pam searched pretty thoroughly, yet every one of us could think of things which should have been done and weren't . . . Go on, Davina. What other types of switch do you think are possible ?"

" It could be a velocity switch," Davina observed. " Only I hate to think that the Pinkies have found something we haven't, something to measure absolute velocity. It could be radio-controlled, operated simply by a radio signal. It could be set off by a particular sound, a sound the Pinkies knew would occur sooner or later. It could be set—"

" It could be anything, apparently," said Willie gloomily. " Let's go, Doreen, and take our medicine. It's the same medicine, now or later."

" Willie, cut out that fatalism," said Hunter sharply. " We're not going to let this beat us. Inkson did the job the way he wanted to do it, and Joe the way he wanted it. If it comes to me, I'm going to do it my way. I'm going to stay put until I find what I'm looking for or can say it isn't there. You can let it beat you if you like. I won't."

The work on both remaining lifeboats went on for the rest of the day. By agreement, what was done now was that both pairs worked on their ships concurrently. It no longer seemed likely that there was any risk in the actual search for a turbodyne unit. It was only when the search was over, with the unit undiscovered, and the ship's own turbodyne was in action, that the danger really began.

Though he hadn't seemed impressed by Davina's summing-up at the time, Willie suddenly brought up the subject again in the afternoon while he and Doreen were checking the stores for concealed gadgets.

Tacitly Doreen and Willie had been left to work together and it had been assumed that there would be no repetition of the kind of incident which had lost them anything which Joe and Pam might have had to say.

" We ought to be able to find what kind of switch there is, by elimination," Willie remarked. " Time, for example. We could—"

" So you were listening, after all," Doreen remarked, rather tartly. " I was beginning to think you didn't care about this thing at all."

" Didn't care !" Willie burst out. " If you only knew . . ."

However, he stopped himself there and that was that. Doreen, a little ashamed now that she had managed to provoke him, didn't make any attempt to do it again, and though they were often together during the rest of the day they spoke very little.

Willie took the first guard that evening. He was to waken Doreen at midnight. "And make sure I'm properly awake," Doreen warned him. "I'm quite capable of wandering around for a few minutes and then falling asleep again, anywhere."

"I'll make sure," said Willie briefly.

She opened an eye drowsily sometime during the night and looked at the luminous dial of her watch. Twenty minutes after one. She closed the eye again.

However, as realization struck her she came fully awake and sat up. Had Willie wakened her and left her, too trustingly? No. Then something must have happened.

Some of the things that might have happened pattered ominously through her mind. The Pinkies, whom they had half forgotten—out of sight, out of mind—might have kidnapped Willie. He might have committed suicide. He might have run away into the forest. He might . . .

She jumped out of bed and dashed to the door. She was in lifeboat four with Davina and Hunter—that, too, was a tacit arrangement, arranged without explanation. She thought of wakening Davina and Hunter, but decided not to do so until she was sure something was wrong and had some idea what it was.

She did stop, however, to pick up a gun before leaving the lifeboat and running over to the hut.

Willie might simply have fallen asleep. That was certainly the most probable explanation. But there were other not improbable explanations, most of them involving the Pinkies.

Still in her pyjamas, but carrying the gun in her hand, Doreen dashed across the brightly moonlit hilltop and into the hut.

The lights were on, but Willie wasn't there. And suddenly remembering something which she had seen but not noticed in her excitement Doreen glanced out of the window.

The third lifeship wasn't there, either.

She started nervously as she heard Willie's voice. The radio was on, the green light glowing, and in front of it the recorder was running, taking down every word that Willie said.

"That's one thing settled, anyway," Willie was saying. "It isn't a strain switch. I've been up to 12G, back to nothing and up to 8G again. If there were a switch set to operate at any set strain, it would have gone off. Next thing is velocity, I think."

Doreen made up her mind quickly. She ran back the way she had come, opened the airlock and roused Hunter first and then Davina.

" Willie's taken the lifeboat up," she told them breathlessly. "He's testing it out himself."

Within five minutes they were in the hut, grouped round the recorder and radio. The recorder was set to operate only when there was something to record, and at the moment it was almost motionless, waiting for someone to speak before it would spin again.

Hunter had flung a dressing-gown about him. Davina was tousled and rather below her best. Her backless pyjamas showed she had the body of a girl of twenty, but her face, for once, was the face of a woman of forty. Nevertheless, her eyes were young and bright.

" Davina," said Hunter, removing the takeup spool from the recorder and fitting an empty one in its place, " perhaps you'd go and take a quick run through this and see what's on it."

Davina didn't argue. She took the spool and went.

Nothing happened in the few minutes she was gone. Doreen would have talked if Hunter did; since he stayed silent, she didn't ask any questions. The green light glowed silently, and the recorder stayed dead.

When Davina returned she said: " Willie wants to be a hero. He's going to die to save us all. Says it's his fault another sacrifice is needed, so it should be him, not Doreen too."

" He's right enough," Hunter observed.

Doreen stared. " You don't mean you're going to let him kill himself ?"

" Why not ? If we start sending and order him in, he'll just have to do the same thing again, with you with him this time. Now that he's got the ship up himself, which is quite a job for one man, he might as well carry on."

" I didn't think Willie had it in him," Davina remarked. " Getting the lifeboat unstuck, I mean. It's easy enough to handle in space, but takeoff from a planet as big as this needs—"

Willie began to speak again. The recorder, which had been impartially registering everything which was said in the hut, went on spinning, recording what Willie was saying thousands of miles away.

" It isn't velocity either," said Willie. " Not the *same* velocity, anyway, for I'm now travelling much faster than Inkson or Joe and Pam could have reached at any time. So it's not velocity, and it's not strain. I know that leaves a lot. We just have to hope a few more things are eliminated before I—well, before I find it."

He laughed strangely.

He was talking in a curious voice which they didn't understand for a while. Then they realized that he wasn't Willie Blake any more, he was Spaceman Blake saving his mission and going down in history.

It was a brave thing he was doing, and he knew it.

"I don't pretend to be able to draw all the right conclusions," he said modestly, "but you can, Davina. I'll get the data—leave it to me."

His voice stopped again, and they waited tensely. The recorder stopped and waited, too, as if it were a fourth living thinking member of the group.

"I hope Willie makes it," Doreen murmured at last, earnestly. "It's such a brave thing to do, going up knowing you're going to be blown apart, but hoping that someone else will be able to benefit . . . I mean, Joe and Pam didn't really *expect* to be blown up, they just knew they might be . . ."

Davina shot a shrewd glance at her. It didn't seem impossible that if Willie did make it, he and Doreen might start on the right foot together at last . . .

Willie's voice came again. "We can more or less eliminate the possibility that it's a sound switch," he said. "I think I've made all the usual sounds, and nothing's happened yet. And if it's chance movements, opening a door or anything like that, I'm going to be all right, for I'm staying here. You know, it never occurred to me that I'd get this far. I don't know how far I'm away because I haven't been able to make any calculations, but I must be nearly two million miles clear of Micla V. Very soon now I can afford to cut the drive and coast on toward Mervin. And once the drive's cut, the ship should be safe."

"He's a bit optimistic," Davina observed. "He can't be doing three hundred miles per second yet, and at that rate he wouldn't reach Mervin this century. But if he does get the lifeboat up to a reasonable velocity—what should we tell him to do? Go on, or come back?"

"Go on," said Hunter decidedly. "We can hold the Pinkies off here, if need be. We could always have done that, but there's no point in it until we know someone's getting through. If Willie can get free, good luck to him."

There was a tremendous crackle from the loudspeaker, and they jumped involuntarily. But it was only another atmospheric barrier that the lifeboat had crashed through, one of the hundreds of concentric rings that made radio communication from planet to space so difficult. They would soon lose radio contact with Willie altogether.

However, it wasn't lost yet. Willie's voice came again, though reception was much poorer. "And while it could be a time switch,"

he was saying, " the Pinkies seem to have left it an awful long time." Jubilation sounded in his voice. " It really looks as if . . ."

The green light went out.

The three people in the hut stared at it, unable to believe that such a tiny thing could be the difference between life and death, and that the death of the light meant the death of Willie, just when it seemed that he was going to come through safely after all.

" Oh, Willie, Willie !" Doreen murmured, and burst into tears.

" What could have done it ?" Hunter muttered to himself.

" I wish," said Davina fervently, " I knew."

6.

" Does that mean," said Doreen incredulously, " that all this has been wasted, and four people have died for nothing ?"

" Oh, no," said Hunter heavily. " They were trying to learn something. Well, we've learned a lot. There's a secondary turbodyne unit, and it's triggered automatically by something which probably isn't based on acceleration, velocity, or—"

" Is what we've learned worth the death of four people ?" Doreen asked wonderingly. The way she lumped them together showed that Willie hadn't meant anything to her, after all.

Hunter shrugged. Davina looked at him closely. She had often thought that strange as it might seem to people who knew them both, Hunter actually depended on Pam and would be useless without her. Now Hunter *was* without her, and hadn't even had time to grow used to the loss.

Was Hunter useless ? If anything had to be done, was it to be left entirely to her to do it ?

" Those adjective Pinkies !" Hunter swore suddenly, and Doreen, as well as Davina, stared at him, surprised. It was no use swearing at the Pinkies, and the two women realized it. They'd have thought that Hunter could be detached, if anyone could, and realize how pointless and unconstructive it was to curse the Pinkies and fate.

But perhaps, after all, Hunter was only human. Perhaps he resented the murder of his wife. Perhaps he objected to his own imminent murder.

Perhaps, like a lot of other people who spent most of their lives being calm and reasonable, he had to break at last.

As an indirect appeal to his common sense, Davina said in a matter-of-fact tone: " I don't know about you two, but I'm still very reluctant to die. This time we're going to check every square inch of the ship. Speaking for myself, I'm not going to trust myself in it until I'm really sure—"

" You can never be really sure," said Hunter. " When we've found five turbodynes, there still may be another somewhere we haven't found."

They didn't go back to bed that night. They started work right away on the last lifeboat. After all, nothing else mattered.

They worked eighteen solid hours on it. There was nothing else to do, except eat. They did the same things which had been done before, because those things had to be done, because there was no other way.

And as before, they found nothing. Eighteen hours, added to what had been done on the last lifeboat already, for no result.

Davina was dogged, Doreen silent but willing, Hunter lack-lustre and indifferent.

Again they saw no Pinkies. " I'm almost forgetting what they look like," said Davina. " Can't say I care, either."

That night they kept a watch again, the person on watch being left with some small item of stores or equipment to check to the last molecule. The next day the examination of the ship continued.

" Damn it, there *must* be a turbodyne," Davina said. " We only have to go on looking, and in the end we're bound to find it."

Much the same thing had been said before—often.

Hunter continued to say and do nothing in particular. He worked without complaint but without interest.

And at last when Doreen said: " We're finished. We can't do any more," the search was over. Unsuccessful, but over. Even Davina couldn't say there was any more they could do.

" We'll have to trust to that ship in the end," said Hunter wearily, " or stay here for ever. Which is it to be ?"

Doreen waited for Davina. Davina was waiting for her.

" If there was any hope of another ship coming here," said Doreen hesitantly, " I'd say stay. Or if this were a deserted planet, and there were a few more of us . . . But we're on a hostile world, even if the Pinkies are staying out of our way just now, and we're only one man and two women—we can't stay. I'd rather take the tiny chance that this last lifeboat can get back to Mervin than live here until the Pinkies decide to kill us or try some new amusing game with us."

" So would I," said Hunter.

Davina sighed. " You're wrong," she said, " and you know it. We should wait here, working on the ship and thinking of new things to try, until—"

" Until we go mad ?" suggested Hunter.

Four hours later, all they didn't need having been left in the hut, and the whole lot burned to ashes, they took the last lifeboat up.

Hunter was at the controls, Davina making the observations and calculations. Within seconds of takeoff she was saying sharply: "What are you doing ?"

" Taking the ship up," said Hunter indifferently.

" You're not, you're—"

Hunter turned on her fiercely, his eyes blazing at her. For a moment she was certain he was mad. But the near impossibility of Hunter ever going mad, whatever had happened and however he was acting, was enough to keep her quiet. Doreen, standing aside and leaving the takeoff to Hunter and Davina, didn't say a word either.

At last, with a sigh of overwhelming relief, Hunter shut off the drive. The lifeboat was in a tight, fast orbit about the planet, still inside its atmosphere.

" If you'd said a word more, Davina," he said feelingly, " we were finished. Why don't you use your head ?"

Without giving her time to answer, he stripped off the shirt and shorts he was wearing and stuffed them into a suction disposal chute. His shoes followed and he stood naked.

" Do likewise," he said briefly, grimly, " and don't argue."

Davina, despite the doubts of the last few days, was prepared to trust Hunter to have a good reason for what he was doing. She ripped off the overalls she was wearing for space flight, as distinct from conditions on Micla V, and stuffed them into the chute as Hunter had done.

Doreen, however, was slower. She hadn't changed into overalls yet; she was still wearing one of her flowered sundresses. She did undo a button or two, but she wanted to know what it was all about before following the example of the other two. She stared at Hunter, waiting for an explanation.

She got it, but not from Hunter. Suddenly, for no reason apparent to Davina and Hunter, she tore her dress off frantically and bundled it into the chute.

Then she stood erect, breathing hard. " My goodness," she said breathlessly, " that was—"

She didn't say what that was. She suddenly went into a convulsive one-legged dance in an effort to get rid of her remaining garments, and her shoes, in no time at all.

" I think we're relatively safe now," Hunter observed grinning. " No hurry now." He moved behind a fixed chart-table, his face pink. " You needn't be embarrassed, girls. It's much worse for me, really."

Certainly Davina didn't seem in the slightest perturbed, and Doreen, who turned out to have quite as beautiful a body as previous incomplete evidence had suggested, was more puzzled than unhappy about the situation.

" You don't mean to say the turbodynes were our *clothes* ?" exclaimed Davina incredulously.

" I don't know. Maybe they were, but probably not."

" Then what was all this about, and why was Doreen jumping about like a cat on hot bricks ?"

" My dress got hot," said Doreen. " About as hot as boiling water —I didn't wait to see how hot it was going to get."

" So I noticed," Davina remarked.

" Before we go any further," said Hunter, " I think we'd better get rid of all the other clothes we have with us on the ship."

Doreen gave a startled cry. " Is that really necessary ?"

" Probably not. But if they could reach a hundred degrees Centigrade in five seconds, they may be frying the rest of the lifeboat by now. Let's go and see."

They went to the other rooms—cubicles, rather—to find out. The question of disposing of perfectly good items of clothing merely for safety's sake didn't arise. They found nothing but charred, fused, indeterminate lumps of matter which they promptly and without argument stuffed into the nearest disposal chute to be puffed out into space.

" If those weren't turbodynes," said Davina, " what were they ?"

" Scanners," said Hunter, " or at least radio transmitters."

" Possibly," Davina nodded. " But why ?"

The circumstances didn't seem to Hunter exactly right for calm discussion. However, some explanation was clearly needed, so he gave it, carefully not looking at Davina and Doreen and pointedly hinting that neither of them should look at him.

" After Willie's ship was destroyed," he said, " it occurred to me that the Pinkies weren't beating us in technology but in tactics. Instead of looking in the lifeboats for a turbodyne smaller than we could really imagine, we should be trying to figure how they were fooling us.

" And it seemed to me that the only possibility, other than that they could make turbodynes so small that we couldn't see them, or part of something else so that we couldn't identify them as turbodynes, was that they got into the ships *after* we'd finished our search."

" How ?" asked Davina sceptically. " By magic ?"

" Magic wouldn't be necessary if the Pinkies knew exactly where we were, what we were doing, and what we intended doing. If they knew when we'd finished our search and were going to—"

" God, yes !" exclaimed Davina, slapping her bare thigh. Hunter winced. " Hence the scanners."

" Exactly," said Hunter. " When we found those scanners early on in the hut, we thought that was the end of that. Besides, we knew about Pinkie scanners, we thought they were fixed, things like plastic buttons and bits of electric light fittings. It was only when I had decided the Pinkies *must* be watching us all the time that I saw the only possibility that made any sort of sense was that our very clothes must be doing the job for them.

" See what they did ? They fitted their scanners somehow into every item of clothing in the lifeboats or the hut, so that whatever we were wearing they'd be able to hear us at least—possibly see us as well. It was certainly a miracle job. Their technology must be completely different from ours—circuits and pickups must have been printed or woven into the material, and I can't even guess what the source of power was."

" But why didn't you tell us . . ." Doreen began quickly, then stopped abruptly as she saw for herself why he didn't tell them.

" And for the same reason," said Hunter, taking that part for granted, " I could hardly examine any item of clothing too closely, to make sure—because if I was right, that would only be telling the Pinkies I knew."

Davina nodded.

" So we had to carry on the token search," Hunter went on, " and then takeoff as we did—with the second turbodyne on board, presumably."

Doreen started. " You mean it's still here on the ship somewhere ?" she exclaimed.

" Yes, but it's safe so long as our own turbodyne's idle. See now why I acted as I did ?"

" You're a genius," said Davina soothingly. " I always said so. If you never heard me that's your fault, not mine. You had to get us in an orbit and stop the drive before the Pinkies found out what you were doing and—you think the second turbodyne is set off by radio ?"

" It might be," said Hunter. " Let's look for it, shall we ?"

" But how could the Pinkies possibly get anything onto the ships after we'd finished looking ?" Doreen asked.

" We may know that when we find it," said Hunter pointedly.

There was more enthusiasm in the search than there had ever been before, now that they felt there was some real possibility of success.

" Don't bother with the detailed examination we've been doing up to now," said Hunter. " The thing we're looking for may be almost in full view. You don't have to hide a thing so thoroughly after a search as before it."

Nevertheless, they met in the control room after going through the sections allotted to them, and they had found nothing. The same old story, in fact.

Hunter had been steeling himself to meet the two women and take their nakedness for granted, but his concern was unnecessary. They were wrapped in towels. He felt cheated—not because they weren't nude, but because he was. He dived for a towel for himself, followed by feminine giggles.

It was comedy at a moment which should have been entirely serious.

" You may have carried us so far," said Davina, when he returned, " but maybe I can take it from here. Know what we should do now ?"

" Yes—search outside," said Hunter blandly.

Davina grunted. " Foiled again," she muttered.

It was Hunter who went out in a spacesuit and found the turbodyne unit, about six inches long and two square, clamped magnetically to the steel hull of the ship. How it had got there still wasn't obvious.

But it no longer mattered. There were several possible ways, possible if the Pinkies knew every movement the Earth people made, exactly where they all were, and what they were going to do next.

As Hunter had said, the Pinkies had been winning not in technology but in tactics.

Davina took the Pinkie unit apart and found the answer they had looked for so long and so dangerously.

The turbodyne went into action not when a radio signal was sent but when a radio signal was *not* sent, or didn't arrive. The turbodyne was dormant until, for the merest fraction of a second, a Pinkie transmitter somewhere lost radio contact with it. In Inkson's case, in full daylight, solar radiation might have interfered—forty thousand mile or so was enough to break contact. Pam and Joe had got further—twice that at least. And Willie, at night, when transmission was good, had reached nearly two million miles.

When Davina had dismantled the unit and assured them that all was well, Hunter started the drive, took the ship out of its orbit, and started building up acceleration toward Mervin.

For several very anxious hours the three of them waited in the control-room. However, minute by minute their anxiety decreased.

" Why ?" Doreen asked suddenly, as they waited. " Why did the Pinkies do this, anyway ? Is it just their idea of fun ?"

" There could be a point," said Hunter slowly. " They wanted us to die, but not on Micla V. Perhaps according to their ideas it wasn't their responsibility if we all died at least forty thousand miles away. Or perhaps they didn't know just how completely the explosion would destroy the ships and how impossible it is to find tiny lumps of matter

in space—they haven't space travel themselves, of course, and they don't know what it's like. Perhaps they wanted wreckage to be found, a long, long way from Micla V."

At last they knew they were safe. Inkson, Pam Hunter, Joe, Willie, Doreen, Davina and Hunter had gone to Micla V in a magnificent exploration ship, knowing nothing about the system, the planets or their possible inhabitants. Doreen, Davina and Hunter were coming back in a tiny lifeboat, sadder and wiser.

" Eleven months to Mervin," said Hunter, turning from the controls. He found himself face to face with Doreen. She had pinned and belted a big green towel to make a rather neat sarong. It was perfectly decent, so it wasn't because of that that she went pink.

Doreen was a realist, eleven months was a long time, and there were only the three of them on the ship. Her age and Hunter's combined came to only a little more than Davina's.

Hunter was remembering Pam, vividly. But what he remembered particularly was Pam saying harshly: " Don't say that if I'm dead you'll want to be dead too. Maybe for a little while . . . only a very little while, though. You'll find something—someone . . ."

He suppressed the thought, for the moment.

" So it's over," said Davina.

" No," Hunter said quickly. " It's only started. I'm coming back —aren't you ?"

" No !" said Davina definitely.

" No," said Doreen. " And yet . . ." What she meant was that circumstances alter cases. Perhaps she would change her mind. Perhaps she would come back, too.

The lifeboat sped toward Mervin.

J. T. McIntosh

This Month's Cover

Interprets artist Bradshaw's idea of a commercial stratosphere rocket of the near future on its launching cradle prior to takeoff. The cradle would run for 10 to 15 miles gathering momentum and at the critical point trolley and rocket would have insufficient weight to remain stable, owing to the speed, by which time wind pressure would force the cantilever upwards thus raising the nose of the vessel and enabling it to become airborne at the same time as the magnetic circuit is broken between ship and cradle.


GERARD
QUINN

Assuming that Man and Alien eventually meet and that such a meeting is on a neutral territory where neither can expect outside help from their own kind, how can either overcome the natural distrust and fear of personal extinction at the hands of the other —especially where there is no common link either mentally or orally ? This is the setting for one of the finest stories the author has yet written.

ALIEN

By Lester del Rey

Illustrated by QUINN.

There was only a gentle swell on the Pacific, and the sails of the little thirty-foot sloop were barely filled by the dying breeze. Larry Cross let his stringy body slump over the tiller, staring at the little island of rock and strip of beach off his port. It was the first land he had seen in three days, and improbable land. at that, since it should have been a coral reef. But it was already slipping astern, and didn't really matter, anyhow.

A drunken snore sounded from the cabin, and Cross frowned, twisting his thin face bitterly. He blew out a breath with a snort that made a wisp of sandy hair quiver annoyingly in front of his eyes, and then shrugged, returning to his dark thoughts of himself and Al Simmonds.

A dozen times when the big man had funked out during a storm and got himself stinko on his eternal cache of liquor, Cross had considered throwing him overboard. But it had remained with all his other dreams of violence and action. If he'd had any guts, he would

never have let Simmonds talk him into this crazy attempt to circle the earth in Cross's tiny sloop—or he would have quit when he first discovered what a lazy bully the big man was.

He had meant to quit at the first port, and had even tried it at Cape Town. But now, with New Zealand behind them, heading homeward, he had quit pretending. If they got back, he knew he would wind up writing their book with a joint byline, while Simmonds somehow would get all the glory and most of the money they might make.

The wind died, and the sloop drifted to a stop. Cross considered using the auxiliary, but gasoline was more precious than time. Anyhow, if they were becalmed too long, they were near enough to a regular air route to yell for help with the emergency transmitter. He glanced up, idly seeking a plane he knew had passed two hours before; the sky was bare, and he started to look down again.

Then abruptly, the sky sprouted a red spark that lanced up from the horizon. He jerked his head to follow it. In scant seconds, it bloomed into a cylinder bearing three fins, all glaring with the fury of red-hot metal. It was like the pictures he had seen of future rockets landing at supersonic speeds. But that was ridiculous . . .

Now it was arching down, already the size of a small plane. It hit the ocean in a flat trajectory. A cloud of steam leaped up, and the object bounced, skipped, and came rushing for the sloop—on a direct collision course.

Cross took one useless step toward the cabin, shouting for Al. But there was no time. He jerked savagely at the inflatable raft, pulling it free and jumping for the water behind the stern. His fingers found the valve, and the raft swelled with the hiss of compressed CO_2 gas. By luck, the raft landed right side up without spilling the attached emergency supplies. He managed to manoeuvre it under him, and began drifting back from the sloop.

The ocean-skipping monster was slowing, but still seemed to rush down like leviathan. There was a savage crunch and the sound of a thousand banshees wailing by. The raft leaped and spun, while hot air seemed to suck Larry up and drop him back. He bounced up to see the thing make a final leap and begin to sink, still steaming.

Somehow, he twisted around as the raft quieted, to search for the sloop. But the little ship was tilting forward, with its bow ripped off like matchwood. There was no time to rescue Al or look for more supplies. Larry stared at it, still not sure it could have happened. He watched the sloop sink until even its mast was gone. Then he reached for the folding paddle.

Something broke the surface, and a shout close to hysteria cut through the air. "Larry! Larry! For God's sake, help me!"

Red spots spread out on the surface as Simmonds threshed about. Larry leaned his muscles into his paddling until he could reach the bobbing head. Simmonds came scrambling aboard, screaming as his obviously broken leg struck the raft. The collision must have been hell inside the cabin. He was covered with lacerations and bruises ; under the dirty scrubble of beard, his face was white with fear and agony.

" Tangled in bunk, going down !" He dropped to the bottom of the raft, shaking sickly. " Dunno how I got free. Damn torpedo—*do* something, Larry !"

Larry yanked open the small medical kit and began tearing up his shirt. He couldn't do much for the leg, though, beyond a reasonable overdose of codein. " It wasn't a torpedo, Al. It was a space rocket, out of control."

" You're crazy. We don't have things like that yet. I know !"

Simmonds always knew everything, but Larry realized he was probably right this time. He shrugged. " Okay, we don't. So it came from Mars. Now lie still, while I paddle over to an island I spotted. We're lucky to be alive—don't crowd it !"

It was only after he began paddling that what he had said began to sink in, and the prickle grew along his backbone. Monsters from the stars, using Earth for a landing field ! He'd read a book by Charles Fort that claimed such things happened. He'd thought once about it, getting romantic about man's first contact with alien life. But to know there were things on some of the far worlds that could cut through the immense distance of space . . . He shivered until the physical ache of paddling drove it from his mind. Simmonds groaned for a while, and then passed out as the codein hit him.

It was beginning to turn dark when Larry beached the raft. Simmonds was unconscious, but still moaning faintly. There was a narrow strip of sandy beach, obviously covered at high tide, and then rocks ran up steeply for perhaps a total height of forty feet. At its widest, the island was less than half a mile across. Larry had landed where there was a broken slide up the rocky cliff, and now he began to look for possible shelter. Near the top, a projecting ledge seemed to offer some cover, if he could make it.

He left Al, but picked up one can of water, the medicine and the food. It was rough climbing, but he reached the ledge. It could have offered more shelter, but it was the best he could see. The rocky overhand projected several feet beyond the entrance, and there was a flat surface for them to sleep. He left the supplies and went down again, stumbling as the twilight deepened rapidly.

Simmonds was moaning louder and running a fever. Larry gave him more of the drug. He loaded himself with the rest of the water, picked up the flashlight, worked the big man onto his back, and headed upward again. Each step was a prolonged hell, with the flash necessary most of the way, but he made it at last. Al mumbled as Larry dropped him gently onto the flat rock and slumped beside him to rest.

A little of the water helped. He poured some down Simmonds' throat, dreading the final trip. The raft would make a better bed for Simmonds, and the fishing equipment might be needed. Above all, they had to have the little transmitter; he'd have to be ready to signal when the plane went overhead tomorrow.

When he finally began the descent, it was completely dark, with no moon. Cross carried the flashlight, using it sparingly. As he reached flatter ground, he cut it off completely to save the batteries. His hands located a large rock and he guided himself around it by touch. He reached down for the raft, found it, and groped about for the transmitter.

It wasn't there. He fumbled with the switch of the flash, swearing as the light cut on. The raft was empty. He jerked the light across the ground, locating the fishing supplies, but there was no sign of the transmitter. Then he froze, staring at the damp sand.

Footprints criss-crossed his own, circled the raft, and led off down the beach toward the cul-de-sac at the end !

Pictures of cannibals and spears leaped into his mind, to be replaced at once by the need for the pilfered transmitter. His hand jerked to his pocket and came out with a multi-bladed knife, fumbling the big blade open. He took a final look at the curve of the beach and cut off the light.

The beach was fairly flat. He broke into a slow trot, trying not to stumble or make too much noise. He judged his way by the slope of the sand; once around the bend, he quickened his run. The beach ended some four hundred feet further, bounded by the sea and an unscalable cliff nearly fifteen feet high. The sandy part was only a few feet wide at the present tide, and he should have no trouble in locating the thief, even without the light. He might need the advantage of surprise.

Fifty feet from the end, he ran full-tilt into something with the stubborn softness of flesh. He spilled onto the sand while horror clawed at his nerves. There was a thick grunt, and something sharp raked his face. Then his feet were under him, and he staggered up, flicking on the flash.

It illuminated more horror. The thing had two legs, two arms, and only one head—but there was nothing human about it. The limbs

were double-jointed and too long, with cat-like claws on the toes and fingers. There were no visible ears or nose. The skin was mottled grey-green, except for a ridge of quivering purple on the hairless head and warty growths that stuck out irregularly over the whole body. Even crouched, it was taller than Larry. Under one arm, it held the transmitter from the raft; the other hand was digging into what seemed to be a natural abdominal pouch.

Larry jumped forward, swinging the knife. The blade missed, but the thing mewed. Its legs doubled under it, and it leaped upward, a full fifteen feet to the top of the cliff. It landed upright and vanished, carrying the transmitter with it. A second later, a large rock tumbled downward, missing Larry by inches.

He dropped the knife, then had to fumble for it, expecting more rocks. None came. He found the knife, scooped it up, and dashed back toward the raft, beyond the cliff. He swept the rocks with the flash, but could see no sign of the creature.

It was no monster from Mars, Venus or any other solar planet. It was something that had come from a heavier planet, but an oxygen planet, and that meant it circled around another sun. Something that could swim out of a sunken ship at the bottom of the sea, could cover miles of water as fast as he could paddle a raft, and could leap fifteen feet from a standing start. Probably it could even see in the dark !

He scooped up what bits of driftwood he could find and loaded them into the raft, before heaving it onto his back. He fought his way up to the shelter, sweating with expectation of attack at every step. But none came. And now the moon was rising, casting its light over the island.

Larry caught a brief rest and again swept the flash over all the surface nearby. Half-satisfied, he turned to Simmonds. He peeled back the trouser leg, finding no sign that the bone had broken through the skin. It seemed to be a simple fracture. He pored over the first-aid book, getting little help, and then began making a crude set of splints, using their belts and what else he could find.

He tied Al's arms to his sides and dropped down on the man's thighs. Then, sick and shaken, he began the messy business of trying to set the bone. Simmonds came out of the stupor at the first twinge, to thresh about violently and howl piteously. But eventually, the bone seemed to be set, and Larry tightened the splints around it. He picked up the sobbing man and put him into the still-inflated raft.

Simmonds dragged himself to a half-sitting position where he could stare accusingly at Larry. " You could at least have given me a drink. I'm a sick man. That's what we packed the emergency bottle for."

"You drank that the third day out of New York," Larry told him woodenly. "And a dozen times later. Here, take this." He poured out two more of the codein pills, noticing how few were left, and trying to listen for sounds from outside.

Simmonds broke into a torrent of insults, and it took half an hour to quiet him, while Larry cursed himself for not leaving the man in the sea. But he swallowed the words as he'd learned to swallow all other knocks in a world where he didn't count for anything.

If there had been anything to stay for, he probably would never have left with the man on this trip. But he had lost his parents early, and lived about with relatives who didn't want him. He had missed a college scholarship by one point. He'd tried to write fiction and ended up doing articles about fishing and sailing. Of course, there had been a girl once—but not after his savings ran out. The only good thing he could remember was inheriting the sloop from an uncle—and now the alien's ship had sunk that.

With Simmonds asleep again, Larry went out to scan what he could see of the island. Everything was apparently quiet. The monster was still hiding, probably investigating the transmitter, unless it had dismissed it as too simple already.

He tried to realize that the creature came from a race who could travel between the stars, and that to it he was only a savage on a backward world. It was a civilized being, not a beast of prey. It was probably as desperate and frightened as he was. If he went out to make overtures of friendship . . .

He shook his head quickly. All right, so he was the savage. But what would he do if he knew a wild, possibly cannibalistic savage was on the island with him? If indeed he was even that close. Maybe he was only a semi-intelligent beast to the thing. He wouldn't trust a gorilla, though men and gorillas came from the same family and the same world. In a situation like this, each would have to assume the other meant to kill him. And if both were creatures of good will, neither could afford to show it.

The memory of the claws on the creature's hands came back to remind him that it had natural weapons. He stared at the shadows along the rough trail, shivering and yawning. He couldn't sleep with that out there—but he caught himself dozing off, all the same. Finally, he got up to scatter loose rocks near the head of the trail where they would rattle at the first step. Then he found a place in the deepest shadows where he could still watch, forced himself into an uncomfortable position, and tried to believe he would waken at the first sound. It was a scream from Simmonds that jerked him out of his sleep, just as something tall and inhuman darted past him in long leaps for the

trail. It was carrying something, but he couldn't focus or stir until it was already gone. He shook his way out of the nightmare fear and the acid shock of awakening and groped for the flashlight.

Simmonds was still screaming, but now in words. " Satan ! The devil, coming for me ! Oh, God ! God, don't let him get me ! Don't——"

Larry slapped him heavily, driving the hysteria back from him. " Cut it out, Al. It's just the alien out of that rocket. It came from the stars—not from any hell you're imagining. I saw it before, down on the beach. It's just another form of life, no more a devil than I am—I hope !"

" He had a long knife pointed right at me. He wanted to kill me. You'd have let him kill me !" Simmonds drew in a deep breath, held it, and then let it dribble out while sanity returned to him. His skin had been hot to Larry's touch, but he wasn't delirious yet. Now sudden excitement hit him, washing away the last of the terror.

" We're rich. Damn it, kid, we're made. What a piece of luck—all alone on this island with the first freak from Mars. Man, this is hotter than Lindbergh's first flight ! You still got that knife ? Yeah, and if he swam here, out of that sinking rocket, he can't have any weapons. Sure, I was just imagining the knife—too dark in here to see if he had one, anyhow." His eyes darted about the shelter, still illuminated in the dimming light of the flash. " That paddle and the knife—it'll make a fair spear."

" What am I supposed to do ? Go out and kill the thing, just so we'll have a trophy to take back ?" Larry asked sickly.

Simmonds nodded. " And what a trophy ! We'll make a million bucks. What a book ! Of course, if I could get around, I'd figure out something to catch him alive. But you're not that much of a man, kid. You'd better just spear him. Then when you signal the plane tomorrow——"

" He's got the transmitter !"

Simmonds swore hotly as Larry gave him the details. Then he shrugged. " Okay. When you get him, you'll have it back. All the more reason. How about some water, Larry ? I'm burning up."

Larry handed over the container and waited while the other drank noisily. He started to take a swallow himself, then stopped, staring at the empty spot where the second container should be. He raked his eyes over the shelter, but it was gone. The alien had taken the full container.

There was probably no fresh water on the island. If the creature needed water, and kept the transmitter so that he couldn't signal for rescue, the issue was no longer one of ethics ; it was a case of kill or

die of thirst. He located the paddle and some line from the fishing kit, clicked off the dying light, and went out grimly to begin on the spear Simmonds had suggested. It seemed necessary now.

Civilized beings ! When a civilized man could strip the first contact with alien life down to a matter of trophies, where did good will enter? Maybe the alien had been hunting trophies, too. Maybe it had missed him and gone for Simmonds with head-hunting ideas.

The sun was up before he finished the spear. It was clumsy and awkward, but it had to do. He went inside for a sip of water, noticing that Simmonds was breathing heavily and with more fever. Then he found his way around the overhang, and to the top of the island.

It was mostly solid rock, split into two plateaus by a break beginning at the trail to the shelter. His half was forty feet above the sea, and almost level; the other side was rougher, but at an average height of about fifteen feet. Except for the beach, the island rose up directly from the sea. There was no trace of water.

But he had spotted the alien. It had taken a spot on the lower plateau, opposite the shelter, partly hidden among a group of boulders, where it could watch them. Around it, the wreck of the transmitter lay spread out, beside the water container. Larry stared down sickly, knowing that they could never reassemble the transmitter now, even if he could get it back.

Then a sound from overhead made him look up to see the big plane going directly over the island on its regular route ! With the transmitter he could have had help in minutes; but it was too high to make anything of his frantic gestures.

The alien looked up too. Now it looked at Larry, who shook the spear at it and started down the slide. The alien watched his advance for a second. Then it lifted a boulder that must have weighed fifty pounds and threw it casually—farther than Larry could have thrown his spear.

He lowered his useless weapon, while the other went back to whatever it was doing to the transmitter. Larry went down the slide and into the shelter, where Simmonds was tossing about.

" Drink," the big man was moaning. " Hot—gotta get a drink. Hey, barmaid, don't I get no service here ? Got a new second baseman —all green. Real hot. Hot. Gimme a drink !"

Larry picked up the container and handed it to the other. Simmonds raised it uncertainly to his mouth, took a swallow, and another. Then he let out a yell. " Try'n trick me, would you ? Water !"

His arms heaved the container, sending it spinning to the back of the shelter, where it landed on its side ! Larry let out a sick cry and

leaped for it, tilting it back. But there was only a trickle left. The rest ran across the floor, to collect in a puddle and dribble through a crack slowly.

He dropped to the rock, burying his lips in the dirty water, sucking at it greedily before it could vanish. He got some of it, along with dust and bits of rock. Then he was looking at the damp floor, cursing himself and Simmonds.

Across the slide, he could see the alien staring at them. He shook his fist at it. But there was no time for anger now, even. Without water, the vague idea he had developed would have to be rushed. He grabbed up the rain cover for the raft, knotting its corners together to form a sack, and headed down for the beach.

He worked through most of the day, carrying sand up to the plateau and spreading it into a great S O S sign. His only hope now was to have someone in the plane spot it; he couldn't be too optimistic, but the sand seemed to show up well on the darker rock.

The alien was busy with the transmitter still, seeming to be rewinding wires and making tests. About mid-day, the thing took time off to leap from the cliff out into the ocean. Minutes later, it was back with a fish. It repeated the action several times, for no reason Larry could see, and then sprawled out in the shade, as if sleeping. He debated an attempt to surprise it, decided against it, and finally slept for a couple of hours himself. It was safer during the light of day. He'd have to be up and on guard at night.

Simmonds was crying for water now, and he gave the man half of what was left. His own lips were burning, but he barely wet them. Then he went back to enlarging his signal. It seemed to be a lot of work for a man who had nothing to return to.

He gave Simmonds the last of the water. Al was over his delirium for the time being, scared and angry over the lost water. He sat sucking at the empty container, trying to draw a last drop from it, and wailing. Larry licked his own lips and went on with his work.

The moon was coming up as he made his last trip, to put a tip on the big arrow pointing to the letters. He finished it, and began heading down again, wondering if the alien eyes were still staring at him.

Then a scream from the cave sent him stumbling forward. He heard a mewing sound, and rocks grated below as a shadowy thing leaped away. Larry grabbed a rock and heaved it, but the thing was gone. He dashed into the shelter and stopped.

Simmonds was sitting up with a can tilted to his mouth. The sound of gurgling liquid came from it. Larry jerked the container

away and capped it before Simmonds could bloat himself. "How'd you get this?"

"From him," Simmonds answered. His fear was giving place to mock bravery now. "Came sneaking up, holding it out so I could see it. I knew what he was up to. Meant to let me get it, keep my attention on the water, then kill me. So I played dumb—even made like I was scared, see? When he set the water down where I'd have to reach forward, I fooled him. Let out a yell, fell back and got that big rock back there. I gave it to him good, right in the face. If I'd had a good leg—"

The rock part was a lie, Larry realized. There had been no rock within Al's reach. But the rest of it . . . He couldn't decide. It might have been a gesture of friendship. Maybe the alien didn't use water. Maybe the water was poisoned. Or maybe it had been used as a decoy, as Simmonds had said. He didn't mention the poison possibility; if it existed, the damage was done and there was no use in scaring Al. Then he stared at a group of fish on the floor.

Al followed his gaze and blinked. "Huh? I didn't see them. Now why'd he bring a bunch of dead fish around?"

"So we'd eat them, maybe," Larry guessed. "He could see which we ate and know whether any of them are poison to us—the way we do with monkeys in a jungle. Let him worry."

He threw the fish out toward the ocean. Judging by the strength of the alien, it must have a higher metabolism than men, with a greater need of food. He and Al could live on their concentrates and let it starve.

Then a hunch hit him, and he went dashing back to the top again.

He was right. Silhouetted in the moonlight, the thing was just finishing its work. As he came to the top, it let out a mewing cry and leaped over the edge. He heard it strike the water, where he couldn't follow it.

His carefully built signal was ruined. The sand had been scattered smoothly about, without any pattern. Somehow, it had guessed what he was doing and had ruined it.

Suddenly he swung, cursing his own slowness. Now was the one time when the transmitter was unguarded. It was almost certainly wrecked, but he might get it to work somehow, enough to send some kind of a signal. Al claimed he understood electronics—it was probably a lie, but might have some truth in it. And even the alien couldn't reach the top without swimming all the way around to the beach.

He dived down the slide and began scrambling over the rocks toward the alien's camp.

The mess of the transmitter now had assumed some order ; it was back together, but in a different way, with thin wire stretched out into a queer spider-web all around it. And even to Larry, the purpose was almost certain. The thing was setting up an attempt to signal for help. There must be others, somewhere near in space. It seemed inconceivable that the small power of the transmitter could be made to work for that—but to a savage, it would be impossible that the few watts of power needed could carry a man's voice around the world.

Larry leaped forward toward it. One alien was bad, but a rescue party would spell the end, almost certainly. He no longer worried about reclaiming the set—he had to wreck this attempt first.

He skirted the last rock near the cliffs edge and lunged for the webbing, just as something came up in a leap from below, fifty feet away. The thing let out a shrieking mew and jumped toward him. His hand caught the thin wires of the web.

And his nerves went crazy ! His muscles leaped and bucked wildly, while every pain and sensation he had ever felt hit at him. He could see the alien rushing forward and realized he was tottering at the edge of the cliff. But there was nothing he could do. His leaping muscles cried in frenzy and leaped again. And suddenly the wire was torn from his hand and he was falling.

More by luck than skill, he landed in the sand on his feet. It jolted him sickly, but he began crawling away rapidly, unhurt. The effects of the force in the webbing had vanished as soon as he broke contact.

He staggered up the slide to the shelter, hardly hearing Al's semi-delirious groaning. Whatever current had been in the web-work had been like nothing he'd known before. He'd had electric shocks, and this was completely unlike them. Another few seconds, and his misbehaviour of his heart and lungs would have killed him.

Maybe it was a signal device. But it had also been a trap—and he'd walked right into it.

Then he shook his head. It proved the danger of the alien again, but not the ill will of the thing. It might have been a deliberate attempt to kill him that had failed accidentally ; or it might be that the alien signal was accidentally dangerous to men. The mewing scream might even have been warning. He couldn't tell.

The next day, Al was worse, and their water supply was dwindling rapidly. Larry cursed himself for throwing away the fish—he'd finally remembered that juice could be pressed from fish that was perfectly drinkable, a fair substitute for fresh water. He would have to try fishing, if they couldn't get help in time.

He went up to the top, carrying fresh sand. But this time, he saw that the alien had settled down. The entire top was dusted with sand now. The thing must have been busy through the whole night, and even so it seemed an impossible feat. He tried sweeping the sand away, but it had settled into every crack, and a wind was blowing, moving it back as he cleared the rock. At least for that day, there was nothing he could do.

The alien was working on the transmitter again, this time rewinding wires from the web. It leaped into the sea twice, but its movements seemed slower. He tried sneaking down while it was gone. Before he was there, a mewing cry from the slide called his attention back to where the thing stood outside the shelter.

It was stalemate. It could still travel faster than he could. But neither could get to a position to harm the other without endangering all that was at stake.

The wind picked up at night, scouring the plateau clean of sand by morning. Al had spent a hard night, but now he was quiet. Either the fever had broken and he was resting, or the trouble was getting worse. Larry had no way of knowing which. And there was nothing he could do.

He started down for sand to begin his marker again. It was too late for this morning's plane—that would come before he could carry half enough sand. But he had to be ready the next day.

Then he stopped, staring at the alien's camp. The transmitter now rested in plain view. The thing was crawling away from it—literally crawling on all fours. It stopped, sinking to its stomach, and then laboriously began inching along again, heading for a group of rocks that would give it protection.

Larry considered it doubtfully. The outwardly reassembled transmitter was too obviously good for bait. And the creature could be feigning. On the other hand, it was possible that he had been right about its higher metabolism resulting in quick starvation. All that energy couldn't come from nowhere.

He moved forward cautiously, studying the lower plateau for traps. The thing saw him coming, and began frantic efforts to hitch itself along into the shelter of rocks. It was between him and the transmitter now, but trying to get out of the way.

Then it collapsed. Larry stopped and considered it again. The way around offered a perfect chance for some pre-set rock to be shoved down on his head. The way near the creature seemed clear, except for the possible faking of the thing itself.

His hands were clammy as he moved forward, and his parched lips burned. How could a man who'd been stinting on water sweat so

freely while suffering all the pangs of thirst? He was within twenty steps of the thing—then ten—then—

Its eyes snapped open, and it came upright, staggering a little. A hissing growl came from its lips, and the hand shot for the stomach pouch again. Larry jerked the crude spear back and drove it forward.

The thing avoided it by millimetres. It staggered back and slumped to the ground. For a second, it fought to stand again, and then gave up with an almost human shrug. Its eyes opened fully on Larry, and it seemed to be waiting.

He lifted the spear and centred it. The creature made no move. Then he dropped the spear back to his side slowly. He couldn't do it. He'd made a bow and arrow once, and gone hunting. He'd stunned a squirrel, too—and then lacked the heart to kill it. Now he was seeing another dream of his ability to be a man go up in smoke.

He swung on his heel and started for the transmitter. He still half expected it to be booby-trapped, but he had to take the chance. He picked it up and moved back. The eyes of the thing followed him, and a sharp tongue of purple hue ran weakly over its lips.

Larry stopped. There was still concentrated food in the shelter—and sugar should be food for almost any protoplasmic thing. He started on again however. He couldn't afford to risk it. It was the old rhyme about the devil turning saint when he was sick.

Thunder struck from the sky. It struck again, roaring out savagely in a bull bellow. He jerked his eyes up. Coming straight down toward him was a flat-ended cylinder two hundred feet or more tall and more than half as wide. There were no fins or signs of rocket exhaust, but the air shook around it as the booming sounded.

At a height of fifty feet, it skipped nimbly sidewise and began settling on a cleared space on the higher plateau. He felt the ground shake, and then it was quiet. A door began to open, and a ramp shot out.

Larry's legs finally responded. He leaped back to the rocks to which the alien had headed. He started to dive through them, then stopped. There was a hollow there, and a flat rock that could nearly cover it. It was poor shelter, but better than none, and he still had his spear.

He grinned sickly at that. But he hung onto it as he twisted the rock frantically over the hollow and eased into it. He could still see the shelter at the top of the slide, and part of the cleared section where the alien lay now with its eyes closed.

Creatures erupted from the ship and began spreading out. One suddenly pointed, and the others came swarming down the slide in great leaps. They were beside their comrade in seconds, pouring something out of balloon-like things down its throat. In a second, the

alien sat up and began helping itself to an incredible quantity of whatever it was.

Its recuperative powers were fantastic. Larry expected it to point him out, but in that it seemed he was wrong. It gave a series of what seemed to be orders. Others broke away and began heading toward the ship, while the alien Larry knew moved more slowly after them, carrying the transmitter.

Minutes later, a group came out of the ship and headed toward the shelter, carrying bundles. Over the distance, a series of screams in Al's voice sounded, and then died down. Larry could see a group of them carrying him out on something like a stretcher, while one of them seemed to be examining his thorax with some kind of instrument.

They were quick, at least. It had taken Larry days to guess that Al must be suffering from internal injuries. Working on a new form of life, they had guessed it at once. Specimen, Larry thought. Maybe they would even try to save Al's life. He'd make a nice trophy ! At least, the alien doing the examining was suddenly motioning for speed as they headed towards the ship.

Others had been doing something inside the shelter. Now they came out empty-handed and headed up the slide, except for one who was still carrying the transmitter, doing something to it as they moved along. That one bounded toward Larry's hideout, dropped the transmitter where it had been before, and headed after the others.

Larry frowned. They couldn't leave him behind to tell about them, of course. But did they really think he was so simple that he would try their death traps ? Use the transmitter and blow up; go back to the shelter and do the same.

Then he realized he would have to do something like that. The only hope of survival he had was through the transmitter or the food and water in the shelter. With them, he might live for a few days ; without them, it would take less time. The aliens couldn't lose !

He shoved out of the hollow and headed toward the transmitter, wondering if he could somehow find what they had done to it. Then his foot slipped on a damp spot on the rock. He caught himself, and looked down to see liquid oozing from one of the balloons they had brought the alien.

Doubtfully, he sniffed it. There was one partly full, and he lifted it to his lips, tasting it carefully, and then gulping it down. It was water. The alien had been dying of thirst, not of hunger. And yet it had brought back the container to Simmonds . . .

Empathy ! Somehow, it had realized that Simmonds was sick and suffering. And it had taken a chance on its own rescue. Just as Larry

had done, he realized ; he'd hated Simmonds, but he had let the other have most of the water. He couldn't help it. And the alien had been forced to rob itself to prevent the suffering of another.

Suddenly Larry grabbed the transmitter and flung its cover open, cutting it on. The batteries were missing, but something had replaced them. He was sure now that it would work again—any mistakes the alien had made in reassembling it had been corrected in the big ship. In another half hour, the airplane would fly over on its regular course. He could signal for help. The alien hadn't meant him to die.

In two days he could be home.

His eyes swung up to the ship, where the ramp was now being drawn in. They would be going back to the stars while he would be going home—taking with them Al Simmonds, who must be too sick to wait for human rescue. And except for Simmonds and himself, they were probably glad to be going.

He kicked the transmitter with his foot, smashing it beyond repair. He let out a yell at the top of his voice, and went running across the plateau, waving his arms madly. There was nothing here for him—not even the sloop now. The only man who had ever done him a favour without any selfish motive and against self-interest was up there in the ship—a green and ugly man with iron muscles and a heart as soft as Larry had hated his own for being.

Besides, he couldn't let a race that travelled among the stars and might be coming back some day get their ideas of mankind from a man like Al Simmonds.

He reached the top of the slide, still yelling. The ramp had begun to run out again. He reached it, grabbing the outstretched arm of the alien who was waiting for him there.

Twenty minutes later, he was the first man to see the other side of the moon.

Lester del Rey

One of the problems besetting any race which attempts to colonise the Galaxy will be the infrequent opportunities of checking on any of the planets where settlers have been left. Within one hundred years the colonists may have died off or changed in such a manner that they do not remember their home planet. Or recognise interplanetary visitors.

SEE NO EVIL . . .

By E. C. Tubb

Illustrated by HUNTER

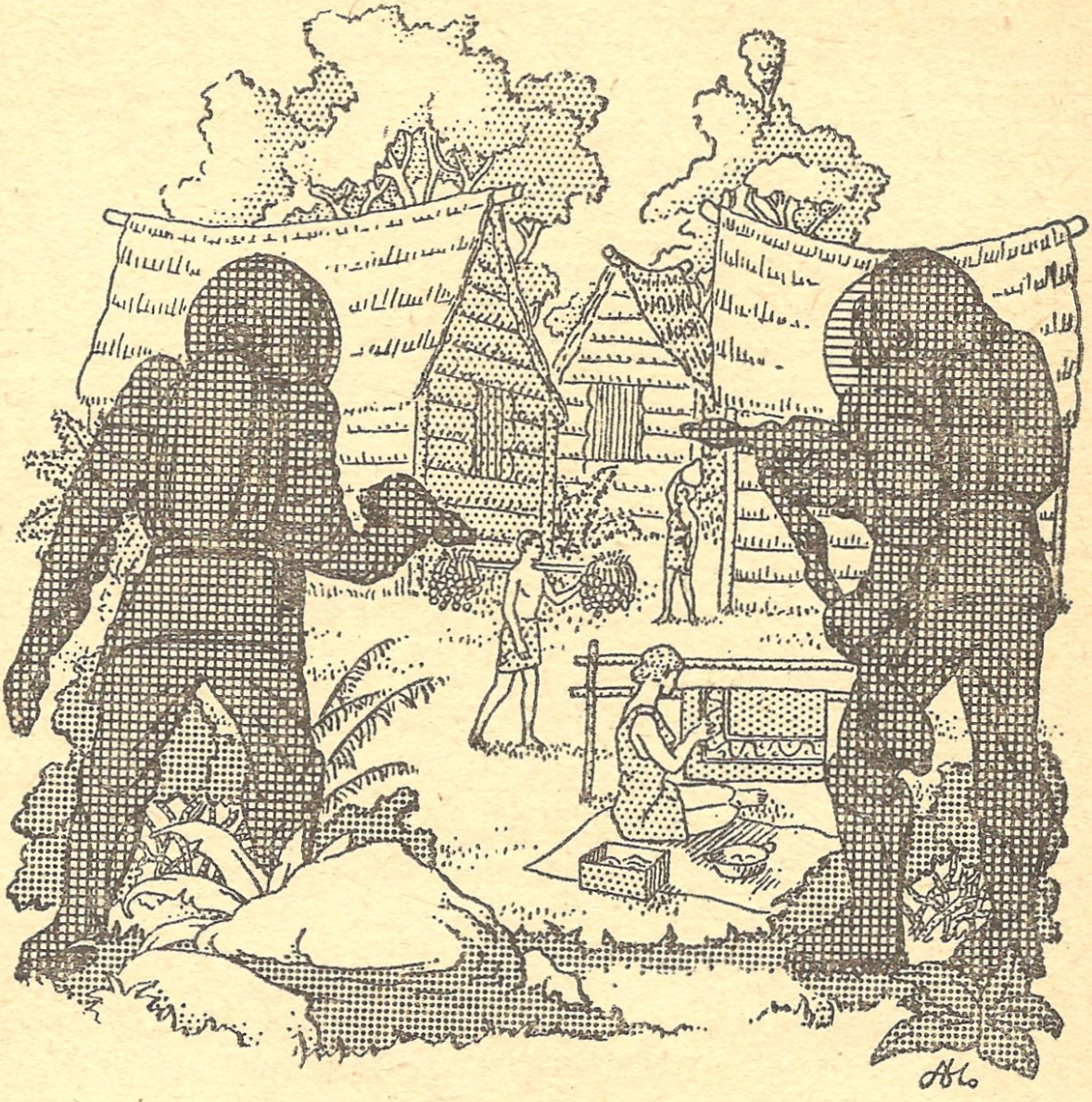
Captain Blade sometimes felt that acting as a sort of glorified nursemaid to innumerable colonies scattered among seemingly countless stars was carrying idealism a little too far. Not that he could do anything about it now. The tau-lag was too great for it ever to be possible for him to settle down to a normal life but, at times, he wished that he had never heard of the Bureau of Interstellar Colonisation.

He scowled at the blue-white sun limned against the sombre backdrop of space then looked wearily towards the astrogator.

"Which one this time?"

"Planet four." Fendris thumbed a thick volume. "Here. Planet settled in 2076. Usual mixed group dumped and left. We're their first contact in . . ." He narrowed his eyes as he mentally computated real and subjective time. "Say three hundred years. Their time, of course, not ours."

"Could be interesting." Conway the small, wasp-like psychologist nodded his bald scalp. "If they lived they should be in a primitive



mechanical stage by now. That is unless they degenerated back to a nomadic culture." He glanced towards Fendris. "Any information on the planet itself?"

"Air, water, soil. Mean temperature eighty-five, rotation one point three. Gravity ninety-seven. The usual oceans, mountains, rivers and vegetation." He slammed the book. "That's all the information we ever get. The preliminary survey ships found that it was within twenty percent of Earth, dumped their colonists, and then went on to the next system."

"And now we've got to follow them up, wipe their noses, see that they're all right, then chase after the next listed colony." Blade sounded bitter. "A hell of a life for a man!"

"You're blasé," accused the psychologist. "You've travelled too much and seen too many new planets." He shrugged at the captain's expression. "I know. It gets monotonous after the first twenty times, especially when all the colonies seem to fit into a regular pattern, but why not concentrate on the overall picture?"

"You talk like a recruiting officer," snapped Blade. "So I'm bored, who wouldn't be? It's not as if we were discovering anything new. All we're doing is to follow up the seed-ships and make sure that the colonies either survived or didn't. If they didn't we cross them off the list. If they did then we verify the list and register the planet as habitable. One day, maybe in a few thousand years or so, we'll manage to get the galaxy mapped out in terms of habitable worlds." He scowled again at the blue-white sun. "The trouble with the universe is that there are too many damn planets."

And that was the problem.

Weizacker's theory had been proved to be correct. Every star had planets. *Every* star, and almost every system contained oxygen worlds. Some didn't, of course. There were systems of fluorine worlds, silicone worlds, methane, ammonia, chlorine and worlds with such alien chemistry that they baffled the experts, but a fantastically large number of suns were ringed with apparently habitable planets. Apparently.

Mankind had literally exploded into space. The discovery of the Balach-Mandle equations had broken down the Ensteinian barrier and permitted interstellar flight. Distance was no object, velocity was unimportant, only the tau-lag remained. For while the ships winked into and out of the normal continuum, time, real time, still lapsed. It took eight years to cover eight light years. Eight Earth years to people on Earth. It took approximately eight minutes to the people inside the ship.

So the ships had leap-frogged from star to star and, at each world had dumped its cargo of men and women. Literally dumped. There was no time for the long, tedious investigations necessary to ensure that the planet was safe for men to live on. The colonists did that themselves. If they lived the world would be habitable. If they died then the planet would be regarded as unfit. It was efficient. It relieved the Earth of its burden of millions of surplus population unable to do more than exist off the ruined soil. It had spread the race and given it a new chance. It had also created a headache for Captain Blade.

They landed in a small clearing close to a river on ground that was soft and covered with trees. The site chosen was about a kilometer from the original landing place and within easy sight of the village

which should have grown there. Blade sat in the control room while the ship went ' dead,' staring moodily at the screens and half-listening to the reports coming over the intercom.

" Pile damped. Air conditioners closed. Ship stable." That was Meeson, the engineer and, as his voice died, that of Denvers the cook, ecologist, socialologist and general man-of-all-work echoed from the speakers.

" Food's ready. Come and get it."

They ate with the casual informality of men who had grown into a close-knit unit. Though large the ship had only the five of them as crew. It was enough, the ship was largely automatic, and could even have been run with less. Conway gulped the last of his coffee and held out his cup for more.

" Usual contact procedure, Captain ?"

" Yes." Blade pushed away his half-eaten meal. " It's daylight and they should have both heard and seen us. When they come investigating we'll check for disease, language, aggressiveness and understanding. You all know what to do after that."

" Record," said Meeson happily. " At least you will while I check the ship." He stretched. " This is the part I like. Nothing for me to do except wait until the passengers have done their work."

" Passengers ?" Denvers glanced at Conway and shrugged. " Is that what he calls us ?"

" Why not ? Fendris and me run the ship while in flight, you and Conway work after we've landed and poor old Captain Blade works all the time. I . . ."

" Cut it out," snapped Blade. He wasn't amused. " Let's get up to the screens and see what we've found."

The results were nil. The screens showed blue sky and green vegetation. They showed the river, clear and of a peculiar light blue, a distant range of mountains far to the north, and that was all. No men. No women. No sign at all of the people who, attracted by the noise of landing, should have come out to welcome them.

" Try the loud hailer," suggested Denvers. " Send up a signal flare and the coloured smoke. Make some noise so that they'll know we're here."

" You think they didn't hear the landing ?" Meeson stared his contempt. " A dead man would have heard the tubes as we settled down."

" They could be afraid," said Conway slowly. " Don't forget that they've been isolated here for three hundred years. They may have degenerated and, to them, we may appear like some visitation from the Gods."

" Perhaps." Blade threw a switch and reached for a microphone. " This is a ship of the Bureau of Interstellar Colonisation," he said evenly. Outside the vessel his amplified voice thundered over the forest. " We have come in peace to help you. You will not be harmed. Please approach the ship and show yourselves. You have nothing to fear." He paused before repeating the message. After the tenth repetition he replaced the microphone and switched off the amplifier.

" Shall I send up the signal ?" Fendris rested his hand on a control. Blade nodded.

A dull report vibrated through the ship as the astrogator pressed the button and a small, sleek, miniature rocket-shape streaked upwards towards the clear sky. It exploded with a gush of magnesium-white flame and a cloud of smoke, bright yellow by day and luminous by night. The explosions continued together with fresh clouds of smoke as the signal drifted slowly towards the ground.

" That should do it," said Meeson. " If there's any intelligent life within this area they will have seen and heard the signal."

" If there's any intelligent life," emphasised Blade. " The colonists could have died, don't forget. This could be a non-habitable planet." He frowned at the screens. " We'll give them until tomorrow. If they don't appear by then we'll have to go out and take a look."

" If they don't appear I say we should take-off," said Denvers. " There's no logical reason why they should have left this area. It was selected as a suitable village-site and they knew that another ship would eventually contact them. Failure to answer our signals can only mean that they didn't survive."

He didn't elaborate but they all knew what he meant. Every planet was a gamble. Each new world could harbour a virus or bacteria horribly lethal to man. With the colonists it didn't matter, they could die without fear of spreading disease, but the follow-up ships were different. They could not, and should not take the risk of contaminating other worlds.

Blade's duty, if the colonists didn't answer, was to blast off into space without unsealing the ship.

Night came and day followed it and still there had been no response to the signals. A second night scattered the sky with the clear, unfamiliar points of stars, a third, and still the ship rested on the soft ground, rearing high above the trees, making noises and emitting fire and smoke. Blade, despite procedure and regulations, was reluctant to write-off the planet.

" I'm going to take a look," he announced. " I'll wear a suit and take no chances."

" I'll come with you," volunteered Denvers. Like Blade he wanted to stretch his legs on real soil again. " We can take some weapons and walk over to the village-site." He grinned at Meeson's protest. " It's our job, remember ?"

The suits were harsh and clumsy. The heat stifling and the isolation from the scent of growing things, the feel of natural wind, the brush of leaves, the soggy, indescribable feel of real dirt beneath the feet, irksome. Both men were armed, Blade with a high-velocity pistol and rifle, Denvers with pistol and automatic shotgun. Both carried machetes. Both hoped that it wouldn't be necessary to use the weapons.

They reached the village-site after an hour of slow, cautious, stumbling progress and, as they broke into the clearing, both halted.

The village was alive with men and women.

They were tall, graceful, healthy people, their white skins tanned to a golden brown, their eyes clear, their bones undistorted. They moved with a quiet sureness, the men with loads of nuts and fruit, the women with urns of water. Occasionally a hunter by the crude weapons he carried moved down the tamped dirt of the street, and some old men sat and dreamed as they puffed at hand-carved pipes of some satin-grained wood.

" Space !" Denvers swung wide the face-plate of his suit. " Look at them ! What are we wearing these things for ?"

Blade shrugged and opened his own helmet. Thankfully he sniffed at the heavy air, redolent with the earthly smell of nature, and wished that he could rid himself of the rest of the suit.

" No disease here. Not racially fatal anyway. But why didn't they answer the signals ?" He frowned as he stared at the passing men and women. " And why haven't they noticed us ? We must stand out like a sore thumb."

" Good manners ? Or perhaps they haven't seen us yet." Denvers lifted the shotgun. " Shall I attract their attention ?"

" Not that way. These people are from Earth, remember, and a gun-shot means either a threat or danger." Blade stepped from the fringe of undergrowth. " Let's walk into the village and collect a crowd. It shouldn't take long."

He was optimistic.

They walked down the street until they came to the edge of the clearing. They walked back to the centre of the village where there was an open space like a square. They walked down to the river and then they walked back again to the square. They did not collect a crowd.

"This is crazy!" Denvers halted and stared at Blade. "It isn't natural. We've been among them for almost an hour now and no one seems to take the slightest notice." He glared at a man walking towards them, a tall, lithe hunter with a spear, a knife, and the body of some small animal draped over his shoulders. Doggedly he waited until the man was almost upon him then, unconsciously, stepped out of the way. "See that! For all the notice he took I needn't have been here. What'll we do, Captain?"

"I'll talk to them." Blade lifted his rifle and fired into the air. As the sharp, spiteful echoes died away he stepped forward and, raising his voice, spoke to the villagers.

"Hear me! Hear me! We are from Earth and we come to help you. Do not be afraid. We have arrived in the ship you can see a kilometer towards the west. We mean you nothing but good."

Silence. No response. He might as well have shouted at the wind. The villagers took absolutely no notice of either the gun-shot or his words.

"Now what?" Denvers glared at the calm faces of the villagers. Blade sighed.

"We go back to the ship and get rid of these suits. I'm roasting!"

"But what about the people here? Aren't you going to try again?"

"Later." Blade dabbed his gloved hand against his streaming features. "Let's get back to the ship."

Denvers scowled but followed the captain into the undergrowth.

Conway was politely incredulous and Meeson was frankly disbelieving.

"You saw them? You spoke to them? You walked among them and yet they took no notice?" The engineer shrugged. "Maybe you shouldn't have opened your face-plates."

"How is it that we can't see the village if it's so near?" Conway stared at the tips of his fingers. "It was a village you saw?"

"It was a village," said Blade heavily. "We can't see it from the ship because of the trees. We did not open our face-plates until after we had entered the village." He stared at the engineer. "We weren't suffering from the effects of some exotic drug if that's what you were getting at. The people were there, are there, we saw them."

"And they took no notice of you?"

"That's right."

"Incredible." The psychologist rubbed thoughtfully at his chin. "Did you touch any of them?"

"No."

"Listen to any of them speaking?"

"Not consciously." Blade flushed beneath the other's expression. "Now tell me that the whole thing was an hallucination."

"It was no hallucination," snapped Denvers. "The village is where it's supposed to be. We saw it."

"You saw what you thought was a village," corrected Conway. "You even saw what you thought were men and women." He hesitated. "Did you see any children?"

"I didn't notice any." Blade stared at Denvers. "Did you?"

"I can't remember."

"A village is normally a noisy place," said Conway. "Men talk to men and women shout to other women. You should have heard the language if nothing else. Did you recognize it?"

"I told you that I didn't hear them speaking." Blade was getting angry. "It was damn hot in the suits and we may have missed quite a lot. But the village is there."

"I doubt it." Conway smiled with quiet superiority. "The evidence is totally against it. The entire episode is typical of a self-induced hallucination. You wanted to find a village. You wanted to more than you perhaps realise—and so you did."

"So now you're accusing me of being insane!" Blade glared at the little man. "Is Denvers nutty too?"

"Perhaps." Conway was enjoying himself. "Or perhaps the hallucination wasn't merely self-induced. It could be a form of mirage, the village you thought you saw was a reflection of one perhaps a hundred kilometers or more away, or . . ."

"Supposing you go and find out for yourself?" Blade jerked to his feet and glared down at the little man. "You scientists! Sitting on your big, fat rears and trying to tell a man that he can't trust his own eyes. Come on! You too, Meeson, we'll get to the bottom of this!"

"I can't go," protested the engineer. "I've the tube-check to finish and I want to have a look at the leads."

"All right. But you're coming, Conway. Ready?"

"Yes. We're wearing the suits, of course?"

"No. Why should we?"

"Protection. Need I tell you from what?"

"There're no harmful bugs here. Anyway, Denvers and I have breathed the local air so it's too late to take precautions." Blade glowered at the little man. "Wear a suit if you want to, but me? I'm going to keep cool."

Conway didn't speak on the way to the village. Blade and Denvers were armed as before. Conway had a pistol belted around his scrawny waist and carried a portable recorder in his hand. He also had a

transceiver strapped to his chest and spoke from time to time to Fendris on duty in the control room.

He didn't say anything to the others until they reached the village.

"Well?" Blade gestured towards the long, double row of wattle huts either side of the tamped dirt of the street. "Is that an hallucination?"

"Time fifteen thirty-five," said Conway into the radio. "We are standing at the edge of what appears to be a village. Fire a signal."

From the ship behind them a rocketing plume of smoke and fire vomited up towards the clear blue of the sky.

"Good. Signal clearly visible. Now try the loud-hailer."

Immediately the thundering voice of the astrogator rolled around them. Blade winced and grabbed at his ears.

"What the hell are you playing at?"

"Checking the data." Conway spoke again into the radio and the amplified voice fell silent. "Our signals are clearly received in this area." He nodded towards the captain. "Right. Now let's investigate the village."

It was the same as before. The same tall, well-made people, the same utter lack of notice or awareness that strangers were in their midst. Looking at them, seeing the blank eyes and unresponsive faces, Blade, for the first time, began to think that perhaps the psychologist was right. No normal people would or could ever act this way. Denvers felt it too. . .

"It's spooky," he whispered, for some reason they all tended to speak in low voices. "Like being in a graveyard or something. I feel like," he struggled for the right word, "like an interloper. As if I didn't belong here." He forced a laugh. "I guess a ghost must feel like I do."

"Assuming that such things exist." Blade turned to the psychologist. "Well? Do you believe me now?"

"Apparently the village exists," said Conway cautiously. His eyes gleamed with the fanatical interest of the scientist. "Now to discover whether or not it's an hallucination."

He stepped forward to where the old men sat with their dreams. Two of them were talking together and, now that Blade concentrated, he could hear what they said and recognise the language. It was English, a little distorted, but still plainly recognisable. His shadow fell on one of the old men.

"Grimson the Hunter killed well yesterday," said the old man and his voice, like all the noises of the village, seemed strangely muted.

" Three deer and a goat." He shivered a little, staring directly towards the captain. " The spirits are uneasy."

" How so ?" His companion, equally old, equally muted puffed at his pipe.

" A cold hand touches me." The old man grunted as Blade moved away. " Ah ! It passes."

" Did you get it ?" Blade stared impatiently at the psychologist. Despite himself he felt uneasy. It is not normal for any human being to be totally ignored by others of his own race. Conway nodded and flipped the play-back switch. The voices repeated themselves.

" Real enough." Conway frowned at the old men. " A machine can't suffer from hallucinations so, therefore, this is no hallucination. A camera would make it positive."

" If we had a camera," reminded Blade. " As far as I know they haven't yet discovered an emulsion which doesn't cloud during space flight." He kicked at the tamped dirt of the street. " Well ?"

" Well, what ?"

" What's the answer ? Why do they ignore us ?"

" We aren't certain that they do." Conway looked at Denvers. " You're a sociologist. Could this apparent indifference be due to a local culture ?"

" Excessive politeness ?" Denvers shrugged. " To a certain extent, yes. Local mores may have developed an exaggerated attitude towards strangers. We had the same thing back home, remember. It was impolite to stare at the wounded, the disfigured, the eccentric, but that doesn't apply here. These people have had no strangers. We are their first visitors in three hundred years. Any normal group would have fallen over themselves with curiosity, and, believe me, the human race is intensely curious." He stared down the length of the village. " And no children. That, in itself, is totally out of character to the apparent culture here. The street should be swarming with them."

" I'm getting fed up with this," said Blade. " I didn't come all this way to be treated like dirt. Damn it ! Let's make them notice us."

Deliberately he stepped towards a woman and snatched an urn from her head. He dashed it to the dirt where it broke and spilled water in a spreading puddle. Grimly he stood and waited for the response.

He was disappointed.

The woman shrugged, laughed towards a man coming towards her, and pointed to the smashed urn.

" I slipped," she said. " You will have to buy me another urn if you expect water tomorrow."

" Incredible !" Conway stared at the scene his eyes eager. " Try something else, Blade."

" Like this ?" The captain suddenly snatched the spear from the hand of a passing hunter. He thrust it into the dirt, snatched the cured skin the man wore around his loins and hung it over the weapon.

The villagers laughed. A crowd was assembling a group of men and women thrusting themselves towards the spot chuckling with innate good-nature at the discomfitted hunter. No one looked at the three men.

" Damn them !" Blade was losing his temper. " I'll show them !"

He was a good shot and knew how to use a rifle. Carefully he aimed and fired, the thin, spiteful sound of the shots mingling with the crash of broken pottery and the gurgling of released water. Bullets whined through the air, smashing urns and pitchers and kicking up little clouds of dirt from the street. When he lowered the rifle the captain was sweating with more than heat.

Suddenly they were alone.

The villagers had gone, running towards the shelter of their huts and soon nothing was left in the street but the litter of broken shards, the spear still stuck upright in the ground, and the loin cloth flapping like some forlorn flag on the haft.

" That did it." Blade wiped his forehead with the back of his hand. " They can't ignore us now."

He was wrong.

Back in the ship they discussed it in detail. Fendris was impatient and Meeson could hardly accept what they had found. Conway was silent, his thin face furrowed in thought. Blade was hovering on the edge of frustrated insanity. To him it had become a strictly personal problem. He had never been ignored in his whole life before, and he didn't like it.

" Think," he rapped. " Think of a way to make them notice us."

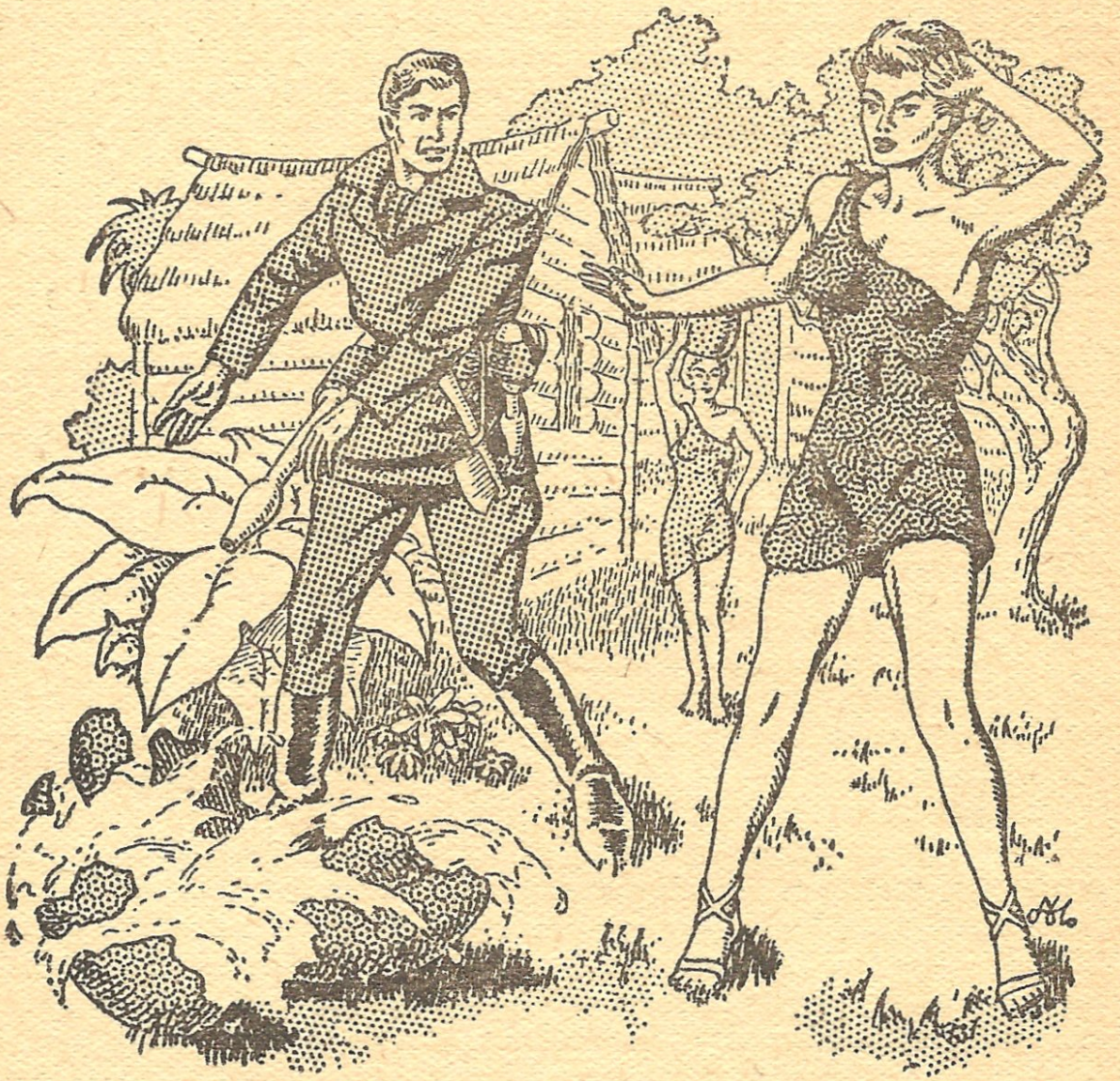
" You think they don't ?" Denvers looked troubled.

" Isn't that obvious ?"

" It could be that they just don't want to accept us," said Denvers. " You know, like a coloured man in an all white gathering back in the bad old days. They used to pretend he wasn't there."

" I suppose they would have ignored him had he fired a gun at them, or shouted in their ears, or stripped their clothes off ?" Blade made no attempt to disguise his sarcasm. " Be sensible, Denvers. Damn it ! To these people we are the first contact with civilisation they've ever had. They can't ignore us."

" Seems to me that they've done a good job so far," said Fendris drily. He glanced at the psychologist. " What happened after Blade fired the rifle ?"



" They ran away. After a while an old man came out of one of the huts and performed a sort of dance around us. He was muttering something, I got some of it on the recorder, and after a while he went away again." Conway reached for the machine. " Here, you can hear it for yourself."

The speaker chuckled, purred, then a blend of noise poured into the room. It was almost unrecognisable, overlaid as it was with grunts, harsh breathing, and fading as the old man had moved from the microphone. Mingled with it was a peculiar rattling and dry clicking.

" Bones," explained Conway, " and he had some kind of a rattle. Listen."

". . . go . . . go . . . begone . . . in the name of the Sacred One leave this spot and return from whence you came . . . we know you not, we want you not, we accept you not . . . go . . . go . . ."

" Some sort of a prayer or charm ?" suggested Denvers.

" Not quite." Conway seemed serious. " I should call it more like an exorcism."

" I know the meaning of that word." Blade reached forward and switched off the recorder. " Are you trying to tell me that that old man was trying to get rid of evil spirits ?"

" Yes."

" Ridiculous ! We aren't ghosts or devils. We're men, the same race and colour as they are. What's so terrible about us ?"

" If I knew that then I'd have the answer." Conway looked at the astrogator. " Fendris, in the colonisation records isn't there information as to what creed, race, colour and what-have-you of the original settlers ?"

" There is. Just bare data though. Number of men and women, their religion, their equipment, psycho-index, the usual stuff. Why?"

" I'd like to look at it. I've an idea . . ." Conway let his voice die as he stared at the Captain. " Don't let this get you, Blade. I'd hate to see you tear yourself apart trying to force reality into what you'd like it to be."

" I don't know what you mean."

" Don't you ? You're the sort of man who wants everything to conform to the norm. When it doesn't you want to make it fit. That village out there," Conway gestured towards the night, " has you baffled. You're a man of action, you want to make them recognise you instead of trying to find out why they haven't accepted you. You can't stand to be ignored. That means you've an internal conflict and, internal conflicts lead to mental instability."

" Nice, neat, text-book psychology," sneered Blade. " To hell with you. I've my own ideas how to solve this problem and tomorrow I'll put them into action."

" Problem ?" Conway raised his eyebrows. " Which problem ?"

" Why they insist on ignoring us."

" Don't you know ?" Conway smiled at the expression on the captain's face. " Sorry, I shouldn't have teased you."

" Do you know ?"

" I've an idea. I'll be able to prove it tomorrow."

" We'll be able to prove it tomorrow," corrected Blade. " I've my own ideas, remember ?"

Conway shrugged.

They split up next day. Meeson stayed with the ship while Conway went off with Fendris. Blade and Denvers, armed as before, followed them into the village.

" What's Conway up to ?" Blade scowled after the retreating figure of the psychologist. " Do you know ?"

" He said something about finding the children." Denvers stared uneasily about him. " I wish that I didn't have that feeling of being an interloper. I keep having to remind myself that I'm still alive."

" You're alive all right." Blade hefted his rifle. " Now to work. I'm going to make these people admit I'm here if it's the last thing I do."

They started at one end of the village and moved towards the river. Every person Blade met he accosted, shouting at them, stepping before them, even snatched things from their hands. The results were always the same. If he shouted at them they didn't reply. If he snatched things they moved on as though nothing had happened. If he stepped in front of them, they merely bumped into him, blinked, then moved to one side.

" It's sickening." Blade halted in the square and glared around him. " Look at them, laughing, talking, acting as natural as all hell, and yet the whole damn stinking bunch of them are crazy."

" I don't know about that." Denvers was beginning to look worried. " They don't act as though they're insane. They just don't seem to want to know us."

" And why not ?" Blade grabbed at a fruit a woman was eating and bit at the soft pulp. The woman carried her empty hand to her mouth, looked surprised, shrugged, and helped herself to another fruit from a basket outside a hut. " Damn it !" Fury mottled the captain's features. He flung the fruit to the ground and crushed it beneath his heel. " See that ? She didn't take the slightest notice. I'll bet that I could strip her naked and still she wouldn't care. I . . ." He broke off, his eyes narrowing with thought. " Denvers !"

" Yes ?"

" I've got an idea. Suppose we grab one of these people and carry them into the ship ?"

" Why ?"

" He'd have to recognise us then. He couldn't help it." Blade slung his rifle. " We'll pick that one. Get ready to lift him when I give the word."

The selected victim was a youngish man with a mane of smooth blonde hair. He strode towards them as if they were glass and his expression, as he bumped against the captain's broad chest, was one of startled amazement. He recoiled, took a step sidewise, and bumped into Blade again. The captain grinned.

" Watch him, Denvers. See what he does next."

The young man frowned, licked his lips with a quick flicker of his tongue, and stepped forward again. Quickly Blade moved to oppose him.

" Shall I grab him ?" Denvers moved so as to grip the young man's arms. " Now ?"

" No." Blade lunged to one side just in time. " Stand close to him so that he can't move without touching you. I want to see what he does then."

Denvers didn't like it but he did as ordered. He stood so close to the man that he could smell the not unpleasant animal-odour of sweat. He was surprised to see that the young man's face was beaded with droplets of perspiration and that he trembled as though with cold. The man stood for a moment, his eyes wide and glassy, then tried to step backwards. Denvers stopped him. He tried to move forward and bumped against Blade. He lunged to one side and met both of them. He retreated and shivered as he came into contact with the sociologist.

" He's in a cage," said Blade. " A cage of his own making and he damn well won't get out until he asks." He extended his arms. "Link hands, this is getting interesting."

Denvers didn't think so. He didn't like the expression on the young man's face and the skin of his back crawled to radiated fear. Around them a silent, watchful crowd had gathered. They weren't staring at he or Blade, they were staring at the young man, and their eyes held nothing but sympathy.

" Right," snapped Blade. " Now ! Lift him up and carry him off." He broke his grasp and gripped the victim, Denvers following his example.

The young man screamed.

He shrieked like a stuck pig, the long muscles of his body jerking as he tried to recoil from their grip. Recoil from, not escape from, and Denvers swore as he gripped the smooth skin.

" Blade ! I . . ." The roar of a shotgun blasted his words to silence.

" Drop him !" Conway stood at the edge of the crowd, the weapon clumsy in his grasp. Deliberately he fired again and dirt plumed where the slugs gouged into the street. " Blade you fool ! Let him go !"

" What ? I . . ." The captain swore as the youth wriggled from his hands, fell to the dirt, and raced up the street like a scalded cat. " Damn it, Denvers, you let him go."

" Never mind that." Conway stared around him, his thin face white. " Get back to the ship. Quick !"

"Why?" Blade straddled his legs as he stared down the deserted street. "We've nothing to be afraid of."

"Not us, you fool—them!" Conway grabbed at the captain's arm. "I'll explain later only now you've got to get back to the ship."

"Where's Fendris?"

"On his way." The little man almost danced with impatience. "Hurry!"

Blade shrugged and led the way towards the vessel.

"I should have guessed what the trouble was as soon as I saw them." It was two days later, the ship was in space, and Conway had finally condescended to explain. He leaned back and smiled at the captain. "Sorry I had to keep you waiting but I had to get my facts right."

"They'd better be good," said Blade grimly. He relaxed and shook his head. "Maybe you were right at that. Much more of those villagers and I'd have gone off the beam. Well?"

"Conflict," said Conway. "You were so intent on getting them to recognise you that you totally overlooked the fact that they didn't because they couldn't." He rested his hand on a thick book. "The final clue was in here. The original colonists were adherents to a peculiar school of thought known as Phralinism. It died out almost as soon as it was born but apparently this particular group were zealots of the worst kind. You've heard of Phralinism?"

"No."

"Briefly, they believed in a strict kind of materialism. If you can see it it exists, if you can't it doesn't. They really believed that, you know and, of course, being zealots, they had to sublimate everything to the proof of their faith." Conway sighed, his eyes vaguely regretful. "A pity we had to leave so fast. They would have made a most interesting study."

"I don't doubt that," said Blade thickly. "But what has that to do with us being ignored?"

"I've told you." Conway seemed genuinely surprised. "They landed and immediately gave free rein to their faith. If they saw it, could handle it, touch and taste it, it existed. Nothing else did. *Nothing* else." He shrugged. "Naturally they had to indoctrinate themselves to an incredible extent, their children too. They had to deny the evidence of their own memories and sublimate those memories to the new truth. Hypnotism must have been useful there. I was interested to learn that hypnotic techniques were taught to all the original colonists to replace lack of anaesthetics and for protective therapy."

" I still don't get it," said Blade helplessly. " What has this to do with us ?"

" Everything. For three hundred years they have lived in the strict belief that, if they have had no experience of a thing, that thing does not exist. They had experience of each other, the trees, the world they live on. They did not have experience of star ships, strange noises from the sky, strange men strangely dressed. Literally, for them, we did not exist and so, as we did not exist, they couldn't see or hear us." Conway shrugged. " Simple. I could do the same thing myself with elementary hypnotism. If you're interested I could so fill you with hypnotic compulsions that you would refuse to admit that Fendris say, or Denvers, could be, or was, on this ship." He chuckled. " It might prove amusing at that."

" I'm not laughing." Blade rubbed at his chin. " It's incredible."

" But a fact." Conway became serious. " When you spoke to them their ears registered sound but their minds refused to admit that impression. The ship signals were the same. It was outside their experience and so did not exist. To have admitted the existence of either us or the ship would have been to deny the indoctrination of three hundred years. They couldn't do it, not and remain sane. You saw what happened to that youth you tried to carry into the ship."

" You mean he was going crazy ?"

" Of course. Conflict again. To him evil spirits had gripped him and were carrying him off to a place unknown. Any other explanation would have been to deny his faith." Conway sighed. " The mind is a peculiar thing, Blade. We can teach it anything, anything at all. I knew what had happened when I saw how they taught their children. Hypnotism, of course, and constant repetition of their dogma. The poor devils grew up in a tight, idea-proof world of their own. Anything we did to them had to be accounted for by blaming the supernatural."

" And if we'd stayed ?"

" Insanity, for them of course, not us. They would have been tormented until they either moved their village to a new site away from ' malicious ghosts ' or have had to resolve an overwhelming conflict by escaping into insanity. We'll have to write off the planet, of course, they could never stand a second influx of colonists."

" Incredible," said Blade again. " The isolation did it, I suppose. No outside stimuli to endanger their creed." He broke off and stared at the psychologist. " Ghosts," he said wonderingly. " If they thought that we were ghosts then . . .?"

" Our own legends ?" Conway nodded. " I've thought of that. Interesting, isn't it ?"

Blade didn't answer.

E. C. Tubb

In the July issue author Alan Guthrie had a story entitled "No Space For Me" in which he theorised that Man would never be able to attain space-flight owing to Space not being his natural environment. Mr. Newman's current article points out that Guthrie's theory may not be so far out of line as at first appears. Unless something new in the way of protection is forthcoming the cosmic rays may well keep Man within his own atmosphere.

COSMIC RAYS

By John Newman

One of the greatest scientific mysteries of the past forty years has been that of the nature and origin of cosmic rays. With incredible energy, more than any man-made accelerating such as cyclotrons or synchrotrons can provide, they constantly smash into the rarefied, upper atmosphere of our planet. We now have a very extensive knowledge of what they are and the transformations that take place as they pass through and are absorbed by the atmosphere but there is still much to be learnt about their true origin. However, during the past few years, physical and astronomical data have been combined to evolve a theory that does explain everything that we do know about cosmic rays.

We on the surface of the Earth are shielded from most of the original radiation, the primary rays, that collide with and smash up the molecules of the very thin upper air with the production of secondary rays.

It is as if we receive the shrapnel from a rain of shells well above us, only a few of the shells getting through to the surface. It is for this reason that so much cosmic ray research is carried out on mountain tops and by sending up instruments in high altitude balloons and rockets to measure the effects of the primary rays.

It is just as well that our atmosphere does protect us from them, for they are highly penetrating and damaging to human tissue ; even the average energy cosmic rays have a thousand times the energy of the alpha and beta particles from radium, whilst a few are millions of times more energetic. The majority of cosmic rays are absorbed between a height of 80,000 and 120,000 feet with the production of radio-active carbon and hydrogen, together with less dangerous secondary rays ; less dangerous because the energy of single cosmic rays is split up into smaller units with less penetrating and ionizing power.

It was first thought that cosmic rays were similar to X-rays but it was later shown that they are the positively charged nuclei of atoms travelling at enormous speeds, sometimes approaching that of light. They are particles rather than rays and, like bullets, their high energies are due solely to their high speeds.

There is always a certain amount of high energy radiation at the Earth's surface due to the radio-activity of minerals but, by sending up balloons carrying ionization meters, it was found that after an initial drop the amount of radiation increases with an increase in height. It was also found that the radiation comes with practically constant intensity from all parts of the sky, night and day, all the year round. This does show that the majority of cosmic rays cannot originate in the Sun or in any particular near part of the Galaxy. As our sun is of a normal type it follows that most cosmic rays cannot be created by normal stars.

Over ninety percent of cosmic rays are the nuclei of hydrogen atoms, the remainder consisting of the nuclei of helium and heavier elements. It cannot be a coincidence that this is nearly identical with the average composition of both stars and the great clouds of interstellar gas and dust that make up half of the mass of the Galaxy. It does suggest that cosmic rays are produced by either abnormal stars or by the acceleration of interstellar matter by electrical field forces in space. In fact, both processes contribute to the production of cosmic rays.

Whilst the total number of cosmic rays striking our atmosphere is small, six on every square centimetre a minute of which only one in a thousand has a high energy, this is equal in intensity to the energy of the starlight that we receive. So the total energy of cosmic rays is

equal to the intensity of all the energy pouring out from all the stars, fantastically large even by astronomical standards. But there is a great deal of difference between stellar and cosmic radiation ; stellar radiation consists of heat and light that are electromagnetic waves that, unless they pass very close to a massive body such as a star, travel in straight lines through the Galaxy and into the inter-galactic void. On the other hand, cosmic rays are positively charged particles whose paths can be easily bent and twisted into curves and spirals by electrical fields. Their paths are then very much longer than if they travel in straight lines ; the essence of the present theory is that, in this galaxy, their paths are about a thousand times longer. Thus, the actual intensity of cosmic rays in space is a thousand times more than would be expected from their rate of production. In effect, they are stored between the stars.

If there are electrical field forces in space acting on the particles, this not only explains why their intensity is so great but also explains their high speeds and the fact that they appear to come equally from all directions. A particle entering such an electrical field is deflected and stands a statistically greater chance of gaining rather than losing energy—it tends to be both accelerated and its direction randomized. The longer that a particle wanders round the Galaxy the greater the chances of it hitting many such fields and reaching large energies. The only limit is the age of the Universe.

Now, we know that interstellar space contains an average of one hydrogen atom in every cubic centimetre and that it is a good conductor of electricity (like the space in a vacuum tube) so that it is impossible for large electrostatic fields, stationary electrical fields, to exist. But we also know that electrical fields can be set up by moving magnetic fields and that magnetic fields *do* exist in interstellar space. This is proved by the fact that light from distant stars is polarized, its waves sorted out so that most of them vibrate in only one plane. The greater the distance of the star the greater the amount of polarization ; and the only way in which this could occur is for needle-shaped particles in dust clouds, traversed by the light, to be orientated, just as are compass needles by magnetic fields. These magnetic fields have been calculated to be quite large enough to twist the paths of cosmic rays to prevent most of them escaping from the Galaxy.

The magnetic fields are created by the inter-movement of interstellar gas and dust clouds containing ionized atoms. From their known densities and speeds it has been estimated that they are quite capable of producing magnetic fields of sufficient magnitude to line

up the dust particles to cause the observed polarization of starlight. Whilst the magnetic forces in space are weak, they are very numerous and extend over enormous distances—a small force acting for a long period is as effective as a large force over a short time.

But there is a minimum speed below which the magnetic fields will not accelerate particles to cosmic ray energies. Where do the low energy cosmic rays originate ? The correct answer was not found until 1947 when it was found that they had their origin not in one but in two places in the Galactic scheme, both places being the centre of intense magnetic fields.

The Sun does produce some cosmic rays, these being generated by the changing magnetic fields in sunspots, and they are most intense when there are active solar flares. They are of very low energy and amount to only about a millionth of a millionth of the sun's total radiation output, far too small to account for the observed intensity of cosmic rays in the Galaxy. Whilst it is not impossible for there to be stars that broadcast most of their energy as ' soft ' cosmic rays, not one has been discovered nor can physicists imagine any nuclear reactions necessary for such stars. Add to this the fact that they would have to be fairly common, about one star in a thousand, and their existence does become very likely.

It is now believed that the greater part of cosmic rays originate around special types of stars that have intense, rapidly changing magnetic fields. The first of these was discovered in 1947 by Babcock using the 100-inch Mount Wilson telescope and measuring the field by the changes in the spectral lines when they were analysed by a spectrometer. The fields of these stars are extraordinarily strong even by laboratory standards when using powerful electromagnets. The field of star HD125248 varies between +7000 and —6200 gauss over a period of three and half days and, as the field extends several diameters outside the star's atmosphere, it can act like a giant cyclotron. The nuclei of atoms of gas drawn towards the star are swung round and round the star, gaining energy, until their speed is enough for them to break free. It has been calculated that, in this way, particles can be accelerated from rest up to medium cosmic ray energies, although it alone cannot account for the very high energy ones.

The ultimate source of the energy of cosmic rays lies in the nuclear energy of the stars ; the interstellar clouds that create the magnetic fields that create the electrical fields that speed up the cosmic rays would soon use up their kinetic energy if it was not constantly replenished by the explosions of abnormal stars such as novae and supernovae that eject vast amounts of matter and energy into space. Even the

magnetic fields of the variable magnetic stars are due to little-understood nuclear changes in their interior.

Recently, the study of cosmic rays has been greatly intensified because of the emphasis being placed on discovering the structure of the nuclei of atoms. Cosmic rays are a ready-made source of high speed missiles that, whilst uncontrollable, are guaranteed to smash any atom that they should chance to hit. What began as pure research many years ago has already led to the development of new techniques and apparatus and to the discovery of two new types of particles, positrons and mesons. Both were theoretically predicted before their discovery in the secondary radiation from cosmic rays.

Positrons—positively charged electrons—are found in cosmic ray showers produced by a cascade process when very energetic particles hit the nuclei of atoms. The collisions produce high energy photons that split into positive and negative photons that, in turn, produce other photons until the end result is a group of an equal number of positrons and electrons, sometimes a million or more of them.

The lower energy particles found at sea level are mainly secondary particles but about eighty percent of them are still quite penetrating and it was found that they can be either negatively or positively charged and have masses between those of an electron and a proton. These are the mesons predicted by Yukawa way back in 1935. The study of them, eight have so far been identified, is leading to an understanding of the cohesive forces in the nuclei of atoms, essential for further fundamental developments in nuclear physics and so to really efficient and cheap nuclear energy.

Variations in the intensity of cosmic rays all over the world have been investigated and it has been found that the Earth's magnetic field, small as it is, does effect the path of cosmic rays. They are deflected towards the magnetic poles, where their intensity is greatest, and curved in so that a slightly larger number arrive from the West compared to the East. This was found by using cosmic ray telescopes to accurately map the cosmic ray intensities from all parts of the sky, telescopes constructed of Geiger counter tubes set one on top of another and so connected that they will only count when two or more of the tubes are activated by a single cosmic ray coming along their axis.

The study of cosmic rays is helping us to understand the basic structure of matter in the Universe and it is this knowledge that will eventually lead to simpler and more efficient ways of releasing atomic power—it will possibly lead directly to the development of interplanetary, atomic rocket drives. But there is another side to the picture, not quite such a pleasant one. Once Man steps into space he is no

longer protected by thirty or so miles of atmosphere, he is subjected to the raw energy of cosmic rays. An unshielded man of average size in free space would have about three million an hour passing through his skin into his body. Many of them would pass through unchecked and without harming him but others would hit several atoms in his flesh or bones, destroy the cells and release the dangerous decomposition products into his blood stream, from where they would be absorbed and poison the vital organs throughout his body. A few chemicals have been found that, when injected into the blood, will slow down this effect but they cannot entirely prevent it. At the moment it rather looks as if the exposure time of a space pilot will have to be limited to a few weeks.

Light shielding would only worsen matters. Many cosmic rays that would otherwise pass straight through him without being absorbed would generate secondary radiation in the shielding and pass on to be absorbed by his body. Heavy lead and concrete shielding would only be possible if unlimited nuclear power was available to lift it from the surface.

All of the planets, except Mercury, have reasonably thick atmospheres that act as shields. On the surface of Mercury the intensity of cosmic rays is a half of that found in free space, the other half is shielded by the planet's own bulk. Mars has a relatively small atmosphere but, even so, at its surface it is equivalent to that on Earth at an altitude of 56,000 feet, well below the height at which the majority are absorbed. From being a mystery, cosmic rays have become a boon to science but it looks as if they are going to be a curse in the future—another hazard added to the many awaiting the first extra-terrestrial explorers.

John Newman

Delegate To USA

Author Kenneth Bulmer of London has been chosen as Britain's representative to attend the 13th World Science Fiction Convention to be held in Cleveland, Ohio, in September this year (see June *Editorial*) and will be sailing in August for New York. Arrangements are being made for him to send us an on-the-spot account of this yearly outstanding event.

Stories centred around mutational changes in Mankind possibly leading to homo superior *have long been intriguing—van Vogt's novel* Slan *was probably the main springboard culminating last year in Sturgeon's* More Than Human. *However, in their early stages mutants as such may well be exterminated through fear, loathing—or indoctrination.*

FIERY PILLAR

By K. Houston Brunner

Illustrated by QUINN

The captain watched the clock with red-rimmed eyes. Seven minutes to go. Seven minutes until the beginning of freedom. Seven minutes before he could stop having to watch every move he made, every word he spoke, in case he should make a mistake. Maybe, his mind added as the inevitable coda, maybe he'd made his mistake already.

God, but I'm tired, he thought suddenly. It was always bad at the end of the day ; but the days were like sheets of paper—each one light in itself, but two hundred, three hundred piled together, and you began to notice them ; ten times that many, and it was a load too great for a man.

Too great for me, said the captain to himself.

There was silence in the outer office, for the young constable who worked there had been called away a few minutes ago, and the In tray on the desk before him was empty. It was very quiet.

The clock moved slowly, its ticking aggressive in the silence. After a while the captain got up from behind his desk. His mouth was dry and foul with nervousness, and it was hot despite the air-conditioning; muggy, almost tropical, though it was not summer. It was always hot now. He drew himself a cup of water from the cooler on the wall, and when he had swallowed that, he rested his sweating palms on the cool plastic of the water-tank in the hope that it would somehow spread through his body.

At length he threw the disposable beaker into the waste basket and walked over to the window. With a flick of his finger he lowered the shade and stood looking out. Night was falling, but there wasn't any more night, really—not this side of Earth—since Steffel crashed.

At first, with a conscious effort of will, he kept his eyes on the buildings to the west, which looked as if they had been washed with a mixture of blood and water, their reddened sides ominous and louring. Then, after a while, he yielded with a sense of complete annihilation and turned and gazed directly at The Pillar.

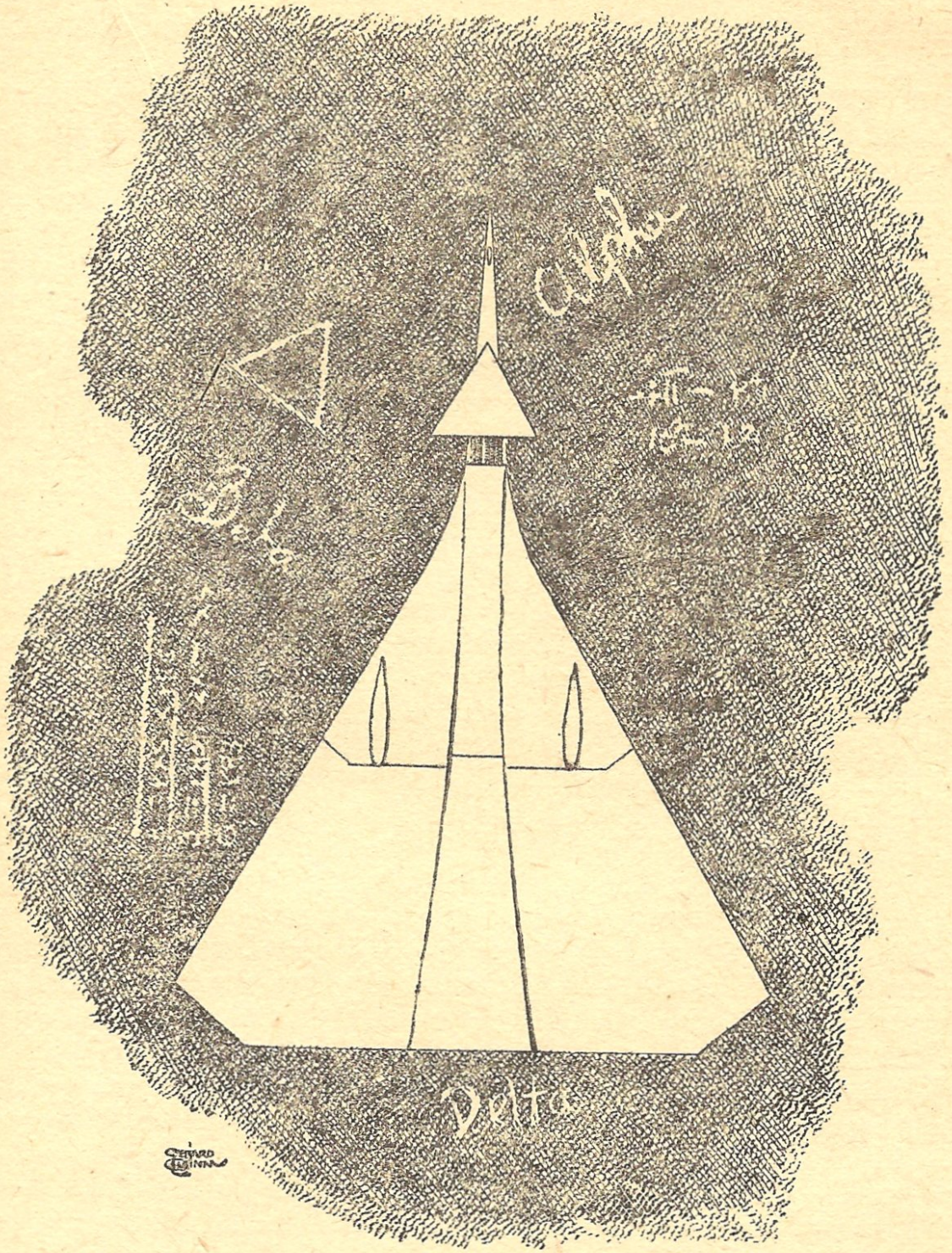
It leapt out of the Earth and bloomed into a column of brown-red fire and climbed straight up for ninety miles. It was screened, of course, with screens that would stop everything down to the very hard gamma, but they had left the heat and the visible light as a reminder, and it was always hot and the sky was always a lurid coppery-red like molten bronze, the air thin, sulphurous and unsatisfying with the stench that beat the filters.

He hated to think what it would be like if the filters broke down.

He stared at it unseeing, thinking back to a day before he was born, thinking of Steffel and the ship that man had taken to Centaurus—and brought back. He had not been there to see it, but he had heard the dry, precise voices of the men who knew about such things, and he could recall them as clearly as if they had been speaking in the room behind him. They said something about a false materialisation in prime space, an error—such a small error in a journey of four and a half light-years, but big enough—which had brought him out inside the crust of the Earth. *That* was the fire which fed The Pillar.

It was dying, of course, but it would be more than a century before its angry redness cooled to black, and there would always be a vast sterile scar to mark its place.

They said *if*, did the men with the precise voices. They said if the ship had been a little more massive, if it had materialised a thousand miles inside the planet instead of ten, there would have been no Earth.



They told the world that, and the world counted its four million dead and said no. So there were no more starships, and one more dream was filed and forgotten, and The Pillar threw its atomic fire ninety miles into the sky like a bloody fountain and stood as a memorial to a dead ideal.

But there were other things which kept the memory of the starship alive, which made it still a living horror in the minds of the men of Earth. The captain's eyes strayed again, this time to a bulky folder in the Out tray on his desk, its cover the green of confidential information, its title in big black letters standing out as if it were carved in high relief. It said MUTANTS.

He looked at the clock and found that the seven minutes had ticked away. Now, with a clear conscience, he could become himself again —not wholly himself, but less of a living lie than now. He picked up the heavy police gun which lay in its slick patent leather holster on his desk, and was on the point of locking it in the weapons cabinet when there was a sudden urgent shout from somewhere below him in the building. In a moment the single voice had climaxed into a roar, compounded of mingled screams and barked commands.

Blood lust. That was a mob.

He slapped the belt of the gun around his waist and ran through the ante-room of his office and out of the door. At the landing which overlooked the main hall of the police station he paused and glanced down. Men came running from the interior of the building, some of them already half changed into mufti and on the point of leaving for home. He took the stairs two at a time and caught Rowland, the young constable who worked in his own office, at the foot.

" What's going on ?" demanded the captain harshly.

" Mob trouble, sir," said Rowland, drawing the thong of a truncheon over his wrist. " Hasn't the exchange phoned you yet ? Ward went out after a mutant on Grayle Street—one of the neighbours turned in a suspect and search. He found one, and picked up the crowd on the way back. They're trying to get it out of the car."

The captain nodded and pushed through the men who were milling in front of the door. Outside the street was a mass of men and women, shouting at the tops of their lungs; one of the station's patrol cars— he recognised the registration mark—stood at the foot of the steps which led down from the entrance, and a group of blood-seeking men were hammering with loose stones against the armoured windows of it. Inside the car, two white-faced policemen—a constable and a lieutenant—were struggling to hold down something which kicked and wriggled and moved. The captain wasted no time on looking at the men inside the car. They were safe enough, unlesss someone had a fragmentation bomb handy. It was the mob itself which worried him.

" Thank heaven you came, sir," said a young sergeant who stood alongside him on the steps. " This is going to be nasty."

The captain nodded, his eyes wandering over the crowd. He picked out the ringleaders and issued curt orders to have them brought in,

and men moved purposefully out from behind him, swinging their nightsticks. With the exact precision of a drill movement, two constables to each ringleader, they cut out the chief of the troublemakers and brought them by main force back up the steps.

The crowd quietened as if it had been gassed.

Allowing himself a slight smile of satisfaction, the captain ordered the rest of his men to form a cordon up the steps and let the men in the car get out. Pushing and shoving, they cleared the way. The cowed mob yielded willingly.

" That's one of the cleverest things I've ever seen," said the sergeant who had welcomed the captain's arrival.

" It's just a knack of recognising the dangerous people," said the captain. " Once a crowd loses its head, anyone can handle it."

" Not everyone can spot the head, though, sir," said the sergeant, and the captain almost told him he was too right. Not ten men in a million could have so quickly and quietly sorted out those key rioters. It was dangerous, but it had to be done.

The cordon was formed, and the door of the patrol car opened. The lieutenant got out apprehensively, and then turned to the constable who was still inside. Together they brought out the thing that was kicking and wriggling. The policemen forming the cordon relaxed their pressure against the crowd for a second, and a stunned silence moved outwards across the street as the lieutenant turned and dragged —led was not the word—the creature with stumpy legs and big, misshapen head which he had been holding on to in the car.

The captain saw it, and for a moment felt sick, but he thrust the consciousness of that out of his mind when he sensed the sudden recrudescence of the crowd's hatred. He shouted, " Quickly ! Get that thing inside ! They're going to turn nasty on us !"

The lieutenant broke into a stumbling run, but someone on the side of the steps had regained his wits more quickly than the police cordon. The light of The Pillar glinted on an upraised bottle as it whirled overhead and struck the young constable holding the mutant on the side of the head.

At that, he slipped and fell, and the crowd broke in like waves surging over rocks. The captain turned, found Rowland at his elbow, caught hold of him and dived into the seething riot. Between them they got the injured constable to his feet and saw him look round for the man who had flung the bottle, intent on making him suffer.

The captain said urgently, " Rowland ! Help me get this mutant inside !"

Rowland's face twisted in an expression of sick disgust. He said, " Sir, wouldn't it be better—?"

" It would not," cut in the captain. " Once we get it out of sight, they'll calm down. Grab hold !"

His face still distorted, Rowland obeyed, and they manhandled the monster through the wide swing doors and into the calm interior of the police station. Rowland, who was leading, glanced around for instructions.

" In that office on the right," said the captain firmly. Rowland, sullenly, led the way.

Inside the office he dropped the mutant on the floor. It struck its gross, ugly head against the leg of a chair and lay still. Without a glance at it Rowland ostentatiously crossed the room to the washplace next door and ran the tap loudly splashing over his hands, as if he had been forced to touch filth and been defiled.

The captain let him go, sighing. *One healthy, right-thinking, well-educated mutant-hater*, he thought sourly. He went back to the hall for a moment, but already the noise from outside had halved itself, and was dying even as he listened. It would be a while yet before all the rioters had been booked, and there would have to be a traffic diversion until the street was cleared of injured people, but he could safely leave his juniors to look after that. He went back into the office he had just left, to find Rowland returning.

" Shall I draft a euthanasia recommendation for this ?" Rowland asked.

Careful ! the little guardian in the captain's mind warned him. *Watch yourself. Say and do the things he expects.*

He nodded, and handed across a pad of blank paper from a shelf beside him. As Rowland took it and began to write in details, the captain looked musingly down at the thing on the floor.

He said, " It's odd how you can think you know people and yet not know them at all. I was born in this town and I've spent almost all my life here, and I couldn't have imagined even the most loving of mothers wanting to hide *that*."

" But they do, sir," said Rowland, raising frank, boyish blue eyes to meet the captain's.

Boyish—the captain caught the concept and deliberately dismissed it. *I'm only six years older than he is*, he reminded himself, *and both of us are a little younger than The Pillar.*

He glanced out of the window. From this room one could not see the fiery fountain directly, but the reflection of its light played on the interior of the room. It was inescapable.

He took the completed euthanasia recommendation from Rowland with a muttered word of thanks, and bent over the nearest table to sign it. Halfway through writing, he paused and raised his head like a dog sniffing the wind. There was something at the edge of his mind —something that promised to be very important . . .

He drew a rough sketch of the mutant on a blotting pad, a frown of concentration furrowing his forehead.

Suddenly he had it, and the frown was replaced by a look of anxiety. He finished signing and folded the recommendation, and as he took it up he noticed what he had been drawing. With a shudder he tore it across and threw it away. That was dangerous !

Striving to keep his voice steady, he handed the folded paper to Rowland. " Here you are," he said. " You'd better get the hospital to pick up the mutant and have it put down."

Put down. Like an animal. But it wasn't a man, and it wouldn't be murder, though it had to be done through the due processes of the law. He said aloud, " Sometimes I think it would be a whole lot simpler if we just let the mobs get at them."

" It'd save a hell of a lot of paperwork, sir," agreed Rowland.

" By the way," the Captain added, judging his tone with care, " what were you called away for in the first place ?" He was already afraid of the answer.

" Oh, that," said Rowland casually. " Hesselbaum committed suicide."

The captain kept the whirling chaos in his mind from showing in his face. He said, " Hesselbaum ?"

" Yes, sir. You know him. The crank who kept trying to tell everybody that he'd found Steffel's mistake. Wanted us to try again."

The raging terror of The Pillar was distilled into Rowland's youthful tenor voice as he spoke.

That Hesselbaum. *The* Hesselbaum. Steffel's co-designer of the starship—the only man who was still bold enough—or stupid enough —to voice his hopes of one day opening up the stars to man.

" Of course," said the captain levelly. " I remember. He got his name in the telenews every now and again, didn't he ? I didn't know he lived in our precinct."

" He didn't," said Rowland. " Not exactly. But the local force called up Homicide here to ask if we wanted to check on the death. It looks like suicide, but you never can tell in cases like that. Of course, he was pretty widely hated."

" Of course," nodded the captain. *Hated—obviously. Because he wasn't convinced that the stars were out of reach. Because he, as Steffel's aide, was held responsible—*

As if in answer to the thought, the mutant on the floor stirred, and Rowland kicked it scientifically behind its bulbous head with his heavy black patrol boot. It slumped back into stillness. The captain suppressed a useless impulse to rush forward, and instead looked over the constable's young, muscular body, from his fair hair and friendly, freckled face to that same boot which had just delivered the kick. He wondered how someone seemingly so young and pleasant could hide such a streak of cruelty—and then knew that the reason could be found in the name of mutant and all that it implied, and that in any other circumstances Rowland would have been as likeable as he looked.

Though, of course, he was jealous of his too-youthful superior ; but that was to be expected.

The captain said, " Yes, I see what they mean about Hesselbaum. Maybe we'd better go over. Find out if they can get a car out of the street yet, and we'll go along."

The street was—littered, the captain thought wryly—with injured men and women, trampled in the now vanished riot. There were a dozen or more ambulances out in the streets, and white-coated stretcher bearers, doctors and nurses moved among them. But there was a clear enough path for the patrol car to leave the station, and he sat back in his seat. Rowland offered him a cigarette and he took it with a word of thanks, lit it and turned to watch the city.

Their route took them straight towards the banked millions of force projectors which reared up around the foot of The Pillar. As close as this, it hurt to stare with the naked eye, and the driver had to pull down the polarised shields across the windscreen. Though it was now long after sunset, the town was bathed in the eternal red glow, as if a door had been opened on the furnaces of hell, and it was bright enough to drive without lights.

They passed the almost imperceptible demarcation line which divided the old town from the new. Like peasants living on the slops of Mount Etna, men had come back to the foot of the fiery pillar, creeping year by year across the once sterile ground, planting it with tropical plants, training them up so that they should not bend in the eternal light wind which blew towards the updraught of The Pillar, because it was no man's land. Steffel had taken it and paid for it with his life and the life of four million people.

By this time, the houses were new, many of them makeshift, and dwindling in number as the car rolled on. Sometimes a curious passer-by looked at the official black of their vehicle; sometimes they were ignored. Most of the time they travelled without seeing anyone.

At length, when there were no more houses, the captain turned to Rowland. " Funny tastes Hesselbaum must have had," he said into an aching silence. " Living out here by himself so close to The Pillar."

" He was screwy," said Rowland casually. " Obviously. I hear he chose to live so far out so that he could see The Pillar and be reminded that he wanted to make it happen again."

Raw hatred burned in his voice.

The car swung off paved road on to a rough track before the captain could make any answer. It was as well. What he might have said would have been dangerous. In other company—eccentricity; here, now, with Rowland and his jealousy of his senior officer, it might mean demotion or more, or less.

And that's where the danger lies, the captain thought. *There are two things you can't outrun. One's suspicion and the other is hatred. I've come in for my full share of both—I'm no more than six years older than he is, and he's a constable and I'm a captain ; the youngest captain in the force. Maybe I came ahead too fast, running away, looking for a position of safety. Now that I am what I am, I can't stop running, or that too would call forth suspicion. I must run, like Alice, and stay in the same place.*

The car halted finally before a lonely house, built as if by a child with an erector set, seemingly almost at random. It looked as though it had been put down by accident in the wilderness less than a mile from the edge of the force projectors, and the heat was terrible and the bulk of The Pillar reached up as if to overshadow one man and his hopes.

The thump-pump of a generator came clearly to them in the silence made by the shutting off of the car's turbine.

" Wait here," said the captain curtly to the driver as he and Rowland angled themselves through the inconvenient shape of the doors and walked without hurrying down the unmade path which led to Hesselbaum's home.

Excitement mounted in the captain's mind as he crossed the threshold into the dim interior and glanced around. A hum of voices came from somewhere to his right.

Then someone said clearly, " That must be the meatwagon. I'll go and see."

A door at the far end of what might have been called the hall of the house if it had been built to a plan opened, and a sergeant of police came out. He stopped on seeing the captain, and then came forward slowly.

" I'm Sergeant Fraser," he said. " Is there anything I can do for you, sir ?"

The captain introduced himself, and watched the sergeant's eyes light up. " I've heard of you, sir," he said. " I'm glad our call to Homicide didn't get lost. Frankly, I didn't expect anyone to show up."

" I heard old Hesselbaum committed suicide," rumbled the captain. " Didn't he ?"

Fraser pushed open another door close to them, and stood aside. The captain went past and looked at the thing on the table.

Hesselbaum lay slumped down without even a cover over him. He had been fat to the point of grossness, and his flabby face was etched with wrinkles born of twenty-seven years' disappointment and frustration, and the eyes that had stamped him a visionary were closed. Around his mouth was the discolouration left by hydrocyanic acid.

Unlovely in death he lay, a man who had offered his race the stars and seen his gift repeatedly refused. Now he had gone to join his former colleague—Steffel, whose memorial was the biggest raised to any single man in history. The captain felt his eyes misting over, and he turned away.

" I don't see anything that points to murder," said the sergeant at length. " But maybe you'd like to see where we found him, sir ?"

" I certainly would. Wasn't it here ?"

" No, sir. In another room out the back. I'll show you. This way."

He chose a door apparently at random from three which were side by side at the back of the room, and waited for the captain to follow him.

" Is there anyone else here ?" the latter inquired.

" They've been and gone, sir. Just took a quick look around. I was only waiting for the ambulance to come and pick him "—he jerked his thumb at Hesselbaum—" up and take him away. They're being a heck of a time over it, though."

" We had a spot of trouble over a mutant," put in Rowland from the other side of the body. " There were a dozen or so ambulances out clearing away the injured. That's why they've been so long."

The sergeant nodded.

" I thought I heard you talking to someone when I came in," pursued the captain. " Or were you having a chat with yourself ?"

Fraser laughed diligently. Politeness to superiors seemed to be part of his stock in trade. " That's a man from Physics, sir," he explained. " Name of Kelliher. We brought him along because you know what everyone used to say about old Hesselbaum. Experimenting and that stuff."

The captain felt himself tense. " Did he find anything ?" he said in a determinedly steady voice.

" The jackpot. In the same room where we picked him up," Fraser stated. " This way, sir."

He went out of the door, and the captain, with a nod to Rowland asking him to follow, came after him. He found himself in a long dark corridor, windowless, and baking hot. At the far end of it the sergeant's shadow suddenly grew momentarily large and then vanished as he turned right.

" Solved it yet, Kelliher ?" the sergeant asked of someone unseen.

The captain reached the end of the passage and turned right. He stopped dead in his tracks, his shadow monstrous on the wall behind him, for the room was all glass down the far side and beyond it the vast glare of The Pillar loomed and brooded tumultuously. He saw Fraser standing next to a thin young man with thick contact lenses that made his eyes bulge unnaturally, whom he knew to be Kelliher. But he wasted no time on the men—it was what ringed the walls which took his attention.

He looked around once or twice before he said in a shaking voice, " Is this house wired for interplanetary video or something ?"

" No, sir," said Kelliher weakly. " But it might well be for all we know about it." He looked as if he was going to burst into tears.

The captain eyed him with sudden interest. This man was genuinely sorry about something. And it couldn't be his failure to make sense of this room. He knew of Kelliher by reputation; he didn't fall down over much. In fact, in his own branch of forensic science he was as much a success as the captain in his line of homicide detection.

Behind him, he heard Rowland give an impatient sigh, and realised that he was blocking the entry. He stepped forward into the room, his mind busy with the paradox of Kelliher even as he mentally ticked off the items he knew among those along the walls. Cyclotron; meson counters and generator; electromagnets—two, weighing each about a quarter of a ton; cathode ray oscilloscopes; the electric generator whose thumping he had heard on their arrival; and any amount of electronic and magnetogravitic equipment whose function he could not even guess at.

He listened politely to Fraser's exposition of the chalk lines, which, rather smudged, showed where the body had been found; where the phial of poison had fallen; where the suicide note had been found.

" Classic suicide, sir," Fraser said enthusiastically. " The note's gone back to our headquarters, but I read it before it went. Usual

farewell cruel world stuff, all about what blind fools we were not to want another Pillar."

Involuntary, the captain's eyes went again to the raw red fire beyond the glass wall. He said, " Yes, I don't see any reason to suspect murder here. Kelliher !"

Kelliher looked up. He was leaning over a workbench examining a bundle of notes on rough paper. He said, " Sir ?"

" Is there anything interesting in those notes ? They might help to confirm the immediate suicide motive."

" Nothing to do with that, sir. Here, take a look at them." He stretched out his arm and the captain took the bundle and glanced at them with interest. He could not follow the mathematics which they bore himself, but there was a tense excitement in Kelliher's bearing which told him that they might well be important.

He looked up and gazed straight at the melancholy young man. If his interpretation of that sadness was correct, he *might* be more successful than he had dreamed possible. He said, " Would you go over these with me ?"

" Certainly, sir," said Kelliher. He spread the notes out on the bench before him, and the captain came around to look over his shoulder.

" Do you know anything about spacedrive theory ?" asked Kelliher, his interest quickening. The captain shook his head.

" My mathematics isn't up to that—but I can follow it if you run through it."

" All right then, sir. What we've got here is the basic equations of the stardrive circuit. You know the idea—you transfer from the four-dimensional into a five-dimensional continuum. That involves fifth-order equations, and there aren't any rational solutions for those. What we've got here is a detailed exposition of why there's The Pillar."

His voice tailed off as the captain, sensing something wrong, motioned him to silence. He looked up and found Rowland and Fraser watching them. Fraser's face was puzzled only, but the expression in Rowland's eyes was startling in its malevolence.

" You two can wait in the front room," said the captain coldly. He called on all his personal magnetism and compulsion, though he knew, now, that he had overstepped the danger mark. He wanted to sigh and relax, but there was no going back. There would never be any going back.

The sergeant willingly, Rowland sullenly, they turned and left the room. When they had gone, the captain looked at the astonished Kelliher. " I'm sorry," he said. " Go on."

Kelliher hesitated a moment, and then took up a page of graph paper. He said, "As I was saying, it's no wonder Steffel made an error. Here—" He took a slide rule from his pocket and began to work through the equation which stood out in bold black lettering on the criss-cross blue background. The captain followed it, enjoying the strange sensation of feeling the absolute rigorous rightness of a perfectly logical mathematical calculation.

"This is absurd, of course," Kelliher said absent-mindedly, "and pointless—but anyway, that was Steffel's mistake." He found his answer, worked out an antilog on his slipstick, and wrote it in sprawling figures. "Three quarters of a million miles. Exactly enough to account for—that." He gestured at the redness outside.

The captain said slowly, "But this is marvellous!"

Kelliher straightened, his eyes full of wonder. He said, "Sir—you mean you don't hate him?"

"No—why should I? He was a great man. Maybe some day people will remember that. You needn't worry about me, Kelliher. I've been accused of being a little unorthodox before now." He gestured as if to brush it aside. "That's beside the point. What you mean is that old Hesselbaum had done what he claimed? That he could make starflight safe?"

Kelliher's shoulders sagged. "No, sir," he said. "It isn't all here. Look."

He pointed to the last sheet of the notes. It was torn raggedly in half.

"What's missing," he said, talking very rapidly, "is the description of a detector which would prevent a ship in five-space materialising in four-space inside a planet. He had it all right—all the preliminary math is here, and he's used expressions derived from it in other places. But my math isn't up to finishing it off. In fact, I doubt if there are ten other men in the world who could finish it besides Hesselbaum."

"And he's dead," said the captain, a faraway look coming into his eyes. "Kelliher, do you know how long he's been dead?"

"About an hour or ninety minutes," said Kelliher. "I think a passer-by heard him scream, or something."

It was enough.

"Out of my way," said the captain suddenly. He pushed past the end of the bench and headed for the door. After a moment's startled hesitation, Kelliher ran after him.

Fraser and Rowland stood up at the captain's entry and stubbed out the cigarettes they had been smoking. He gave them no chance to speak, but said, "Sergeant, you and Rowland wait outside, will you?"

" Suits me, sir," said Fraser, making for the door. " It gives me the creeps sitting in here with the body."

Rowland caught his arm. " Wait a moment," he said. " Sir, just what are you going to do ?"

" It's no business of yours," said the captain briefly. " Do what I tell you."

" No," said Rowland, his eyes gleaming, his breath coming fast. " I'm not going to leave you alone in here."

The sergeant caught at him, trying to quieten him, but he wrenched free. Kelliher, who had come up behind the captain, breathed loud in amazement and stepped forward.

" Let him talk," said the captain slowly. He felt a calm certitude. This was the hour of destiny. This was his fate—he was long past the point of no return, and he could no more have stood against what was to come than he could have disclaimed that which was his birthright.

But Rowland's eyes gleamed danger in the red light of The Pillar.

" All right !" said Rowland venomously. " You've had this coming for a long time. There was something phoney about your quick advancement, captain. I've heard people swear that till you came along half your cases would never have been tried for lack of evidence. And you always seemed to be pretending to hate, even when we had to deal with mutations ! Now you and Kelliher have been talking about the stardrive, haven't you ? About *that*, and the others you want to make !" His voice rose to a shout as he flung out an arm towards the glow of The Pillar.

Abruptly he quietened, relaxed. In a level tone that yet rang loudly and clearly in the tense silence, he said, " You are a mutant, aren't you?"

Fraser and Kelliher drew sudden deep breaths in a unison that was as perfect as if they had rehearsed it. Mutely, they turned to the captain, as if to ask what he would have done with this insane accuser.

The captain wiped his forehead with his sleeve, aware again that it was searing hot. He said, after an eternal pause, " Yes, I'm a mutant."

The others drew back from him as if from a snake.

In an infinitely tired voice he went on, " I'm not the kind of mutant that Ward brought in this evening, Rowland. I have the power to read a little of people's minds—that's all. I couldn't hide it for ever, I suppose. As you said, that's what got me my reputation and my rapid promotion. I guess I went ahead too fast."

He slapped his open hand on the table beside Hesselbaum, and the sound filled the room like a shot.

" But I don't want to hide it any longer ! Listen, Rowland—if you can. Do you think I don't hate The Pillar as much as you do ? For

all the twenty-six years of my life—I was born here, remember—I've watched it and remembered it as a memorial to man's hope of the stars ! Now I've got the chance to prove that it wasn't all wasted—that it has redeemed itself by producing me !

" In Hesselbaum's notes there's reference to a device which would make starflight safe, which would prevent there ever being any more Pillars. But the details are missing—and the only person who knew what they were is Hesselbaum.

" I want to try and get that from his mind."

Fraser said, " Sir, are you crazy ?"

" No, it's possible. I've tried it on murder victims, to find out if they knew who killed them. But it takes concentration. This late, I may need an hour or more, and every second is vital."

Pleading, his eyes bored into Rowland's, but found no pity there—only blind, unreasoning, conditioned hatred.

" I've got the chance to show that men can have the stars after all. Are you going to let me take it ?"

He gazed beseechingly at Fraser, read there only incomprehension and a little disgust.

" All right," he finished, his voice flat and dead. " I've said what I can. You're the judges."

Kelliher had moved around beside Rowland now, and the three of them stood facing him in a semi-circle. Rowland's mind was made up; Fraser did not understand. He turned to his last hope—Kelliher, a man who believed in a dead dream. The stars for man ! Man for the stars !

But a mutant is not a man. Killing a mutant is putting it down, like an animal. There is no death penalty for the deed, for it cannot be murder. It cannot even be manslaughter. And what can an animal know of the dreams of men ?

Then the tension broke.

Rowland clawed his police gun from its holster, his face twisted into a mask of feral hatred. With a hand shaking from fear, he levelled it at the captain. Kelliher seized it, wrested it from him.

He shot the captain through the heart.

K. Houston Brunner

Remember Turret Captain Dexter of the Taranto in "The Black Spot" in February? Transferred after that incident in the Solar-Paladian war to a scouting cruiser he is now in the unenviable position of having some information vital to Earth's strategy locked up in his mind—and cannot remember just what it is.

TOTAL RECALL

By Kenneth Bulmer

Illustrated by HUNTER

Admiral Don Juan Refugio de la Starza was a man on whom responsibility had once ridden easily. As commander of the advanced echelon of the Ninth Fleet he had been subjected to a series of stunning blows, delivered with all the cunning, power and ferocity possessed by Palladians on the highroad to victory. Now he looked like a man whose responsibilities have ridden him into the ground.

"When the advanced echelon travels in the rear of the fleet, Will." Don Juan said sourly with a nod towards the celestial globe. "Then even the dimmest crewman must realise Something Is Up."

His Flag Captain could find nothing to say in answer to that. The moment of ineffectiveness was broken by a message carrier. It plunked softly from its tube and said: "*Report on spaceman reference designation two-one. Request immediate person-to-person contact. Holmes.*"

Will Curtis looked his surprise at the admiral and took the carrier from the basket. It was still warm from its quick burrowing through the vitals of the ship. Inside was a micro-film report which could be studied at leisure.

"Spaceman two-one? Wasn't he the madman they took out of that life-shell?"

"Yes." Don Juan snapped an order to the communications rating and almost at once Doctor Holmes' face stared out from the inter-ship screen.

"Well, Doctor," Don Juan said. "You wanted a person-to-person."

Holmes was short, stout, an olive complexion and liquid eyes giving him a deceptive appearance of slowness. He began without preamble.

"That poor guy they fished out of the life-shell, admiral, is possessed of a message. I'm working—"

Don Juan interrupted, a frown marring his habitual look of detached efficiency. "Possessed, doctor?"

Holmes laughed uncomfortably. "I mean that he has a message to deliver. He is in a state of complete collapse. The medics added

to that by knock-out injections. I'm trying to get that message out of him—on his own ravings it's a vitally important operational move of the Palladian fleet—"

" That's right," interjected Will Curtis. " He came from the scouting cruiser *Amphion*. She was in touch with forward elements following up their recent successes—" he coughed here and went on quickly "— her last sub-radio contact was broken; we haven't heard from her since."

" Well, what is this message ?" Don Juan demanded testily.

" That's the trouble, Admiral." Doctor Holmes spoke concisely and without emotion. " This man has partial amnesia, the message is in his mind, somewhere, but it's going to be the devil's own job to get it out."

Don Juan put one lean hand to his neat silver torpedo beard and considered. He regarded the stellar plot, taking up half the rear bulkhead separating the Fleet Command Room in which he stood from the Operations Room where crewmen flicked their magical equipment to build a picture of surrounding space. In three-dimensional full-colour this segment of the galaxy glowed in simulated life. A single scarlet thread showed the track of advanced echelon, retreating from the Lornni sector and the victorious ships of Pallas, extending onwards towards the regrouping area in the Katlin sector. Behind him, he knew, all space belonged to the enemy. In front ?

Who knew what dangers lurked there, between him and the main body of Ninth Fleet ? His scouting screen reported in at regular intervals—negative summaries. Until *Amphion* began a message indicating contact—to be chopped off brutally by some unknown disaster. And now a single survivor had reached the flagship with that message —and the vital information was locked in his brain, clamped behind the closed portals of amnesia. The fate of the fleet hung on the whims of a man's mind. Thousands of mens lives depended on one man's mental sickness.

Don Juan considered. And he did not find the picture pretty.

He must know—at once—what that message was. That it concerned the enveloping movement of the Palladian Fleet he was confident. Already, other cruisers were on their way towards the area where *Amphion* had last reported. But time ticked away; they would, in all probability, arrive to find clean space, the Palladians gone about their business.

" Get that man's mind open, doctor !" Don Juan ordered peremptorily. " The safety of the fleet depends on you."

Doctor Holmes said tiredly: " Very good, sir." He switched off and went back to the couch where the spaceman lay. He looked

down, pity in his eyes, pity for what he must do to the mind lying dormant behind that forehead. Pity—and a tinge of fear. Like every other man in the fleet, Holmes laboured under the knowledge that Earthmen had been beaten, soundly beaten, in space flight; and the knowledge was bitter.

He sat down beside the couch, staring at the gaunt face with its shadowed eyesockets, and wondered just what had happened out there, out in the vast nothingness of space, to turn this man's mind in upon itself. He said, softly, but with an insistent beat, over and over again: "Dexter. Dexter."

He kept it up. "Dexter. Dexter." Then: "You are boarding *Amphion*. You are going into deep space. Dexter. Dexter."

A black curtain. A black curtain of nothingness. No—not nothingness. Air. A hand weakly extended, passing through that black curtain—*quiet* ! *No noise* !

Noise would mean death. He was sick with fear.

A voice. Calling from beyond the edge of reality.

"Dexter. Dexter. You are boarding *Amphion*. You are—"

Light. Sudden, slashing light. He was standing in the lock of the scouting cruiser *Amphion*, his gear dumped on metal treads by his feet, wondering what this latest prank of the high brass meant. They had hoisted him out of *Taranto* fast enough after the affair of the black spot and posted him to *Amphion*, Commander Li-Chin. The inner valve opened.

"Turret Captain Dexter ? I'm Lieutenant Praczkwi, exec. Welcome aboard."

Dexter smiled for Praczkwi's benefit. He was wondering what sort of ship this would be—scouting cruisers were notorious for their loose-knit discipline that could tighten up like soaked cord in times of action. He shook the lieutenant's outstretched hand and was directed to his quarters.

"Commander's conference in half-an-hour, Dexter," the lieutenant said.

"Aye, aye, sir." Dexter had one scrap of consolation. At least now he could throw off that odious nickname bestowed on him—"Droop-eye." Ridiculous. Droop-eye Dexter. Right out of a tri-di space opera. He went forward only half conscious of a speculation as to his length of stay aboard this ship.

The commander's conference was brief and to the point.

"You know the Ninth Fleet's taken a beating," Commander Li-Chin said, his round face grave. "We are ordered to scout our Pals' next move."

Praczkwi grinned. "That sounds like our handwriting. Might get a crack at the Paints."

Not a muscle of Li-Chin's face moved. Then he said in his solemn way: "Our job is to scout, lieutenant. Not to fight."

Praczkwi's grin faded. He said: "Aye, aye, sir." His glance at Dexter was full of meaning.

Li-Chin said, "In pursuance of that policy I feel that you may regard yourself as redundant aboard, teecee. I assure you that if we are jumped and are forced to fight, you automatically become the most important man aboard."

Dexter grinned faintly. He contented himself with a respectful: "Aye, aye, sir." *Amphion* was fast, cranky and designed to get from point A to point B with as little elapsed time as possible, without thought of comfort for her crew. She had a single turret in her tail mounting twin 60 mm. energy-weapons. Popguns. If she ran into anything that had the legs of her her number was unquestionably up.

"We'll hope that we keep clear of the Paints," Li-Chin finished. "Right. Let's get moving."

And so the little shell of air and light and warmth so proudly called *Amphion* slid away from the battered Ninth Fleet, headed out in solitary grandeur to discover what next was brewing in the agile minds of Earth's enemies.

The ship was ranked a scouting cruiser by courtesy only. Her size and armour were beneath the notice even of a destroyer—she couldn't be ranked a destroyer because her twin 60 mm. weapons were even more of a laugh—yet, because of her function and purpose in the battle-order of the fleet, she had to be ranked a cruiser. And, Dexter ruminated with some concern, Lieutenant Praczkwi was consumed with the desire to go out and slug the Palladians. The ship had been hurriedly transferred from the reserve echelon, flung forward to add eyes to Admiral Starza's advanced echelon—and her exec was filled with a reserve's ideas of glory.

A situation which did nothing to help Dexter sleep. He had discovered, not without distaste, that he was the senior warrant officer aboard. That had accounted for his inclusion in the Commander's conference. It also meant that he had about twice as much to cope with as he wanted, and far too little time to spend with his crew in the turret.

Precisely ten minutes after he had turned in he was roused by the strident chortle of the all-stations alarm.

He found his crew closed up and waiting, a little jumpy but transparently eager. The turret smelt close after the comparative freshness of the ship's corridors.

" Hear this ! Hear this !" The annunciator set high in the turret's rear bulkhead crackled formally. Then, with typical light-craft desertion of discipline: " A Paint ! Closing in fast. Bearing Red Two-ten azimuth six three."

Before Dexter gestured the turret had swung as far as the bulge of the hull would allow. His crew were alert. Dexter allowed his left eye-lid to droop in thought. Li-Chin would duck this encounter, spear away in sub-space and continue on, with a sighting report back to the flagship. Praczkwi would yearn in vain for his fight.

He almost jumped at the annunciator's incredible command.

" Turret ! Am veering to bring enemy to bear. Commence firing as soon as possible."

He had no time to wonder just what had transpired up there in the nose. The screen showed a trailing wedge of stars, elongated by motion as the scanner fled around the ship's turning circle. The stars steadied, became chips of ice that merged into the familiar background of space. Into their sub-space globe a single blob of light edged, paralleling their course, showing clear and distinct through the concentric rings of the visual sight.

" Automatics coupled in, teecee."

Dexter nodded. Wait until the Paint showed a definite outline in the sights, until radar locked on, until their puny guns could hurl their spitballs of energy with some chance of hitting. But don't wait too long . . .

And he was terrifyingly unsure of this crew.

" Keep that input steady," he growled in his captain's voice. He stared at the free-shooting gunner in his cradled basket. If that was Scrappy White up there . . .

" Radar jinxed, teecee !"

Dexter knew that was coming; but now that the enemy had in reality thrown off the clutching hand of his radar, their anti-wave equipment baffling *Amphion's* power to grip and hold a target, he became even more tense. Everything depended on the gunner, sitting hunched up over his sights. Dexter took a deep breath.

" Uncoupling radar, teecee." The radarman sat back in his chair. If only Dexter dared climb up there, into the shadows between the twin breeches, and take over the gunner's position—but he could not. Regulations. Harmony. Discipline. Somewhere in his mind a little voice said grumpily: " Radarmen ? Why don't they get pensioned

off ?" He grinned at that; they might as well be for all the use they were with anti-radar devices developed to such a pitch of cunning.

He checked range and relative velocities. His eyes ranged the turret, marking, controlling, noting everything that went on—and everything that might. The Palladian swung away—*Amphion* matched courses smoothly—seeking to claw free of that single turret and blast the Earth ship from her bow. Any minute now. Dexter found time for a prayer that *Amphion* had shaken the Palladian's radar.

Time.

" Fire !"

In the silence tortured atoms ravened through the weapons, were collected, juggled, spewed out in chunks of energy. One after the other. Like a stream of shells from an automatic-cannon. Heat backlashed at the crew. Sweat poured from their bodies.

Scrappy—he should be up there—he'd have pinned that Paint by now . . .

" Got him !"

On the screen light fanned beautifully, washed back over the faces of the crew, threw their grinning masks into semblances of gibing cretin faces, all hollows and highlights.

" Nice shooting, teecee," Li-Chin's voice came from the speaker. " You took all his underpants away. Only the command sections left."

Dexter found he was trembling all over. He took longer than he liked to bring that shaking under control. By that time the speaker was blurting again.

" Dexter. Report to control cabin, on the double, please."

What the hell ? He shrugged and told the petty-officer in charge to keep the crew on their toes, went quickly through the armoured hatch and up to the control cabin.

Li-Chin's round yellow face was wreathed in smiles.

" Want you to take a run over to the wreck, Dexter," he said as though suggesting a walk to the nearest bar. " She's a—she was a scout, same as us. Might have something interesting aboard. Might have more information on her tapes than we could pick up in a couple of light centuries scouting around."

" Aye, aye, sir." Dexter didn't have to enquire why he had been chosen. Praczkwi's sullen face, bent ostentatiously over the computor, told him that gentlemen was in disgrace. And, anyway, it might be dangerous. Better to risk a Turret Captain than a full blown, regular lieutenant.

Both ships had cut their sub-space drive—*Amphion* in the same fraction of time that had seen the Palladian's drive shot to fragments—

and their twin-hyper-space globes had vanished. They rode now in real space, the stars an unwinking crystal waterfall beyond the edge of sight.

The enemy had been a scout of much the same calibre as *Amphion*, Dexter saw as he jetted across, controlling his shoulder rockets to bring him curving in under the gaping lock. Li-Chin hadn't been so battle-happy after all.

Despite himself there were shivers of apprehension running up his spine as he caught the edge of metal and hauled himself aboard. His gun was thrust bravely forward. That was a laugh, too, when you came to think about it. He had spent a forlorn afternoon on the Moon shooting at insipid targets with a blaster—apart from that he knew as much about blasters as he did about the cybernetic controls of a battle-ship.

Palladian control systems paralleled Terran procedure closely. He punched the right button and waited whilst the lock cycled, then pushed on through. The alien ship was in complete darkness.

A black veil hung before his eyes. Sweat dribbled down his face wetly. His mouth was a vast furnace. He thrashed—*noise. He mustn't make a noise.* He groaned and thrashed on the couch.

Doctor Holmes leaned back. He passed a shaking hand across his forehead. It was as wet as the man on the couch.

" You poor devil," Holmes grunted. He had a pain in his back. He felt lousy. And he still hadn't pried the message from this wreck's brain. His annunciator called.

" Holmes !" Admiral Starza's grim brown face jutted at him. " What progress ?"

" I'm employing total recall, sir. Running back through his memories previous to whatever caused his amnesiac block and coming up on the message, as it were, from the rear."

" Well ?"

" Not there yet, sir. It's all on tape. He keeps rambling about a black veil. I think he'll come out of his shock-state if he can pierce that veil—"

" Veil ? Look, Holmes. The Paints are preparing to cut down on us—I can feel it in my bones—and that man might have—must have —the answer to what they propose." Admiral Starza hesitated, and then said reluctantly: " Don't you Psych wallahs have a breaking technique ?"

Holmes had dreaded this. Now that it had come he felt bound to oppose the suggestion. Yet he could not, if challenged, have proffered any logical reasons for his action. Certainly, he didn't like breaking

any man's mind, with all that that entailed. But something about this youngster, lying sweating and helpless, tore at him. Was he getting soft-hearted in his old age?

"I think I can get the message out without recourse to breaking his mind, sir—"

"Well—hurry it up! I want results. And I want them fast. The advanced echelon—the fleet—no, by thunder, *Earth* depends on it!

"Aye, aye, sir." Holmes turned back to the man on the couch. "Dexter. Dexter." Keep the voice cold and metallic and penetrating. Pierce through those layers of unimaginable mental obscurity, start the train of memory again. Tear down that veil. "Dexter. Dexter. You are entering the Palladian scout—"

A thick, choking, miasmic and yet invisible veil. Black. A voice from beyond the bounds of time.

"You are entering the Palladian—"

It was dark. His foot struck the lip of the lock and his outside pickups caught the sound. Air, then. He prodded himself along the ship—what was left of it—heading for the control room. In free-fall—the anti-gravs had been shot away with the rest—he had to be careful he didn't fetch up against a bulkhead with too much force. That way he could snap his wrists like kindling.

His helmet torch cut a sharp circle from the metal walls, the beam only slightly fuzzy. The Paints breathed good air. There was starlight enough to see by in the alien control cabin. He passed rapidly through a closed and empty space, probably a storeroom, lying hard up against the control-room bulkhead and stared around.

Dead men. Three—four, slouched in their rubber chairs. Ignore them, find the log, get out the tapes, get back to *Amphion* on the double.

The alien log gave him trouble. He was familiar enough with the language of Pallas, both written and spoken. He recalled briefly, with pleasure, the litigation concerning those land purchases, but that was millions of miles off, a part of his previous life, before he had been swept up into the maniac maelstrom of inter-stellar war.

The log gave him mechanical trouble. His handlers at his sleeve ends were too clumsy for the job. Only one thing for it—take off his suit, break out the log and extract the tapes. It was nasty. But there was no other course.

Getting out of his suit in free-fall might have been a tricky problem if the Palladians hadn't installed Terran type wall magnetic-clamps. He felt his suit *plunk* against the clamps and then released the helmet and hauled himself out of the suit, rather than taking the suit off himself.

A dark shadow obscured the log as he worked at it. He looked up quickly, fear twisting his stomach. He cursed with the quick, unthinking reaction of terror.

It was only *Amphion*, hauling in, blotting out the everpresent starshine. He was just on the point of realising that the two ships must make quite a blip in anyone's radar, hanging freely like this in real space, when *Amphion* shone like a lambent traffic signal.

Then the cruiser was a twisted ruin of metal and slag, with the puffball of vapouring gasses rushing away in colourful magnificence.

He was quite blind for some while.

When he had recovered, he had had ample time to realise his position. And he knew, quite calmly, that he was a dead man.

Alone, in the wrecked guts of an alien ship, his own vessel a smashed spectre, he might as well cut his throat. Only—the blood would globule about very messily. For the sake of something to do, quite without any real rationalisation, he freed the tapes and read the last message.

Somehow—he had the impression of an olive face and dark, liquid eyes, bent over him from some remote place beyond the confines of the galaxy.

A noise. A clink of metal on metal. Of course. A Paint, come to have a look at their friend. A spaceman from the ship which had butchered *Amphion*.

He looked quickly past the distorted embers of his ship, seeking the enemy. He spotted it. A small, single-place job. A fighter, carried by a carrier and dropped into action when necessary. A couple of big torpedoes. Air. A-Drive. And precious little else.

But ample to smash a cruiser.

If he could get to that ship—the noise came again from the storeroom towards the stern. He considered. The gun. He found it on its cord, floating by the spacesuit. With it warmly in his fist he pushed off from the wall, floated to the control-room door. Let the Paint come on through—and blast him.

Light bludgeoned his eyes.

His hand felt as though he had dipped it into molten lead. The scream was ripped from his tortured throat. his muscles fighting to obey both his will and his reflexes.

The gun had gone, flared into nothingness. He counted his fingers almost foolishly. Four—and a thumb. Was that right? For a long moment he couldn't be sure.

Something limp and snaking and yet incredibly strong caressed his shoulders. He felt it constrict, and then he had been jerked from his handhold, his feet trailing, and was flying helplessly through the thick air into the storeroom. He had time to swing his feet in a manoeuvre

which bunched his stomach muscles, and hit the far wall with his boots.

Why hadn't the Paint shot again ? The answer came at once in the thick voice of a Palladian talking English.

" Terran—prepare to die."

Some part of Dexter's mind whispered slyly: " Very dramatic." And the other part, the part that whimpered with terror agreed. " Very likely—he's right."

Moving with the exaggerated care of a man seeing a blind woman across a traffic-congested road, Dexter slid the rope from his shoulders in an agony of fear that he might tug it sufficiently for the Palladian to feel. He wondered why the alien had still not shot again. His own gun, a modern plastic weapon, had been destroyed; luckily it had been plastic and not metal otherwise his hand would have gone with it, but he remembered vaguely that Palladians very often carried two guns.

He realised that the Paint wouldn't shoot yet for fear of giving his own position away.

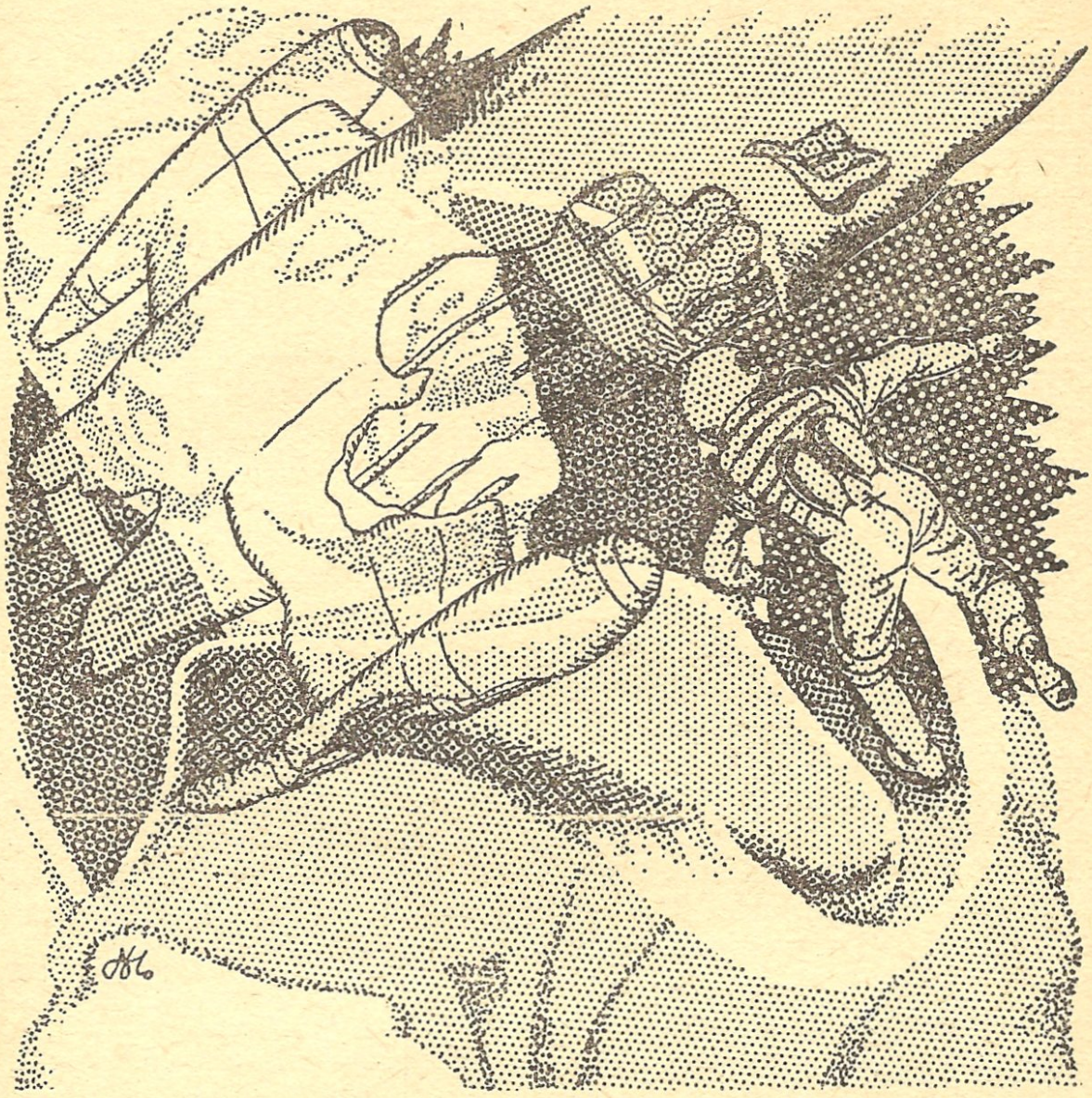
A good theory. The trouble was—Dexter didn't have a second gun.

Around him pressed utter darkness. It was so thick he could taste it. Beyond the door leading onto the corridor and the airlock lay the alien's ship—the avenue of escape he must take. The control room door had shut under the drag of his own violent lunge into this room, like a fish at the end of a line. He felt that this must have been the torpedo flat, empty now and closing round him like the blind walls of a coffin.

His forehead was damp and he knew that each time he moved his head drops of sweat flew off. He tried to control the shakes; but his whole body trembled in long shuddering surges that he could do nothing about. There was a sour taste of bile in his mouth.

He heard a slithering, evil sound in the darkness and stillness and came to a quivering alertness. The Paint was shifting around, trying to find him. He moved quietly away, drifting along one wall with his finger-tips barely touching the metal. Quietness. He strained his ears.

This was a deadly game of blind-man's bluff, played with men's lives at stake. And not only his life; the lives of the Fleet—that message had been a routing order to the cruiser, giving directions for closing up with the main Palladian Fleet. He couldn't spare the time to bring the whole message into his mind now; he had to concentrate every sense on staying away from the Palladian, of staying alive. He had to seize his chance to get through the door and along the corridor to the alien ship and so back to the Fleet with that message. But, right now, he had to keep alive.



Hanging before his eyes the blackness of the room was like a palpable mist, a cloth of sheer darkness, unrelieved by a single gleam of light. So vastly different from the blackness of space, which was shot through with the fire of countless stars. He stared sickly at that black veil, tried to peer past it, to see the alien, to find some way of knowing where the other was—to kill him.

A noise. *Him*? It could not be, it mustn't be. *He mustn't make a noise*!

Dexter groaned and thrashed on the couch, his face and chest river-beds of sweat. His mouth was dragged down all to one side and his closed eyes were screwed into his eye-sockets until they had the semblance of a death mask.

Holmes reached out a hand for a cigarette. This was proving to be a tougher job than he had anticipated. Any minute now and Old Admiral Starza would come demanding onto the screen, flaying with his icy words, forcing his own personality through that slick brown face and ordering Holmes to break Dexter's mind. Holmes felt woolly, unable to concentrate.

" Doctor Holmes !" Here it came now. " Have you extracted that message yet ?"

" Not yet admiral. I have reached the stage where the message has been read—right now the poor devil's all tied up with a hand-to-hand fight he had with a Paint, in the black guts of a ship. That was the black veil—"

" I don't give a damn for black veils ! Get that message ! I'll expect a report from you in fifteen minutes !"

" Aye, aye, sir." Holmes didn't even trouble to look at the screen. Instead, he tried to worry his way past this problem—Dexter must have killed the Paint, otherwise he wouldn't be here, and the memory of that was blocking out everything else. He had to force the gunner to recall that hideous experience, in full detail, and expunge it from his conscience in order to free the clogged paths of memory.

And if Dexter's mind was wrecked in the process then Holmes was well aware that Admiral Starza would not even figure it into his calculations. Holmes looked morosely at his cigarette. When that had burned away he must have the answer. Dexter lay like a wrung-out floorcloth on the couch. Holmes began again to work on his mind.

" Dexter. You are in the Palladian cruiser . . ."

The darkness that swathed him in choking sweat magnified sounds, threw the slightest chink of noise in swelling bursts from wall to wall, deafened him. His heart thundered like a stallion's hooves. Surely the Paint must hear that ? He daren't move without first summoning all his nerve to force him; he was so confident that the alien was stalking him that he tried to move and battled against his fears, deriding himself for a craven.

His only weapon was his space-knife—eleven inches of tough alloy-steel, razor-sharp along front edge to point and back in a reverse curve to the thick backbone. Jim Bowie had whittled the master-pattern of that knife from wood, and the very first one had been forged with steel from a meteorite. Now the knives took Earthly steel back into the dark spaces between the stars where perhaps they crossed the lonely path of the first knife's metal.

Dexter put his damp hand on the knife. He rubbed his palm down his coveralls. Then he froze as the slither of flesh on cloth shrieked into the darkness.

He moved away from there fast, trying to control his breathing, trying to get himself under orders from the higher centres of his brain. It was not easy. As he drifted surrounded by the heavy blackness he realised that he had no means of judging where he would land on the walls. He might put his outstretched feet right on the alien's head.

His nostrils wrinkled. He sniffed. A scent, pungent, sweet, fleeting —alien. The smell of cosmetics.

Dexter's mind steadied down in that instant of realisation, became calm and purposeful and deadly.

So the Palladians painted their fighting men's faces ? They compensated nature for bestowing colour and vivacity on women—perfectly logical. And here, in the close dark confines of a ship perfectly fatal —for the Palladian.

Dexter refrained from chuckling. He held his knife with a loose grip that could constrict in the instant of final thrust and punted gently from the far wall, moved quietly across the closed space, nostrils quivering, searching hungrily for the scent that would lead him to the alien. There was almost a feeling of shame in him that he should take advantage of the Paint in this way. Somehow, it wasn't quite sporting.

He couldn't see the knife; but he knew it was pointing uglily outwards, ready to rip and slash. He breathed in deeply, seeking his prey. He was still full of fear; but that fear had been crystallised by this single chance, tempered and transformed until it was a great sustaining strength.

He had to pick up the alien's scent, close on him swiftly and silently and dispose of him with a single blow.

Air currents moved lazily around him, disturbed by the passage of his body. He would have to take those into account during the final flurry of action. The scent grew stronger. He made a tremendous effort and controlled his breathing, drawing long slow breaths, tasting the air and, as it were, manoeuvring himself up along the perfumed alleyway through the darkness.

The sweet cosmetic scent was overpowering—he must be near. Something collided gently with his outstretched left hand. In his instinctive revulsion his muscles pulled his hand away, the scent was all around him, a bulky object surged up against him—his right hand thrust forward, the knife sliding in—noise, light, chaos. He screamed hellishly.

Doctor Holmes laid his competent hands on Dexter's shoulders and pressed the tortured man back on the couch. Both men were sweating.

Dexter's lips writhed back from his teeth and he twisted his head from side to side on the pillow.

" Steady, boy. You're safe now."

Shockingly, Dexter swore. " He wasn't—" he began and then broke off, going again into that mightmarish scream which had brought him out of the recall of the events behind the black veil and back into the hospital of the fleet flagship.

" It's all right, Dexter," Holmes soothed. " So you killed him. Relax. It's all right." His broad hands held Dexter down, fighting silently and intently with the threshing body, combining to weave a symbolic dance of flesh.

Holmes' intercom came on and from the tail of his eye he saw the brown impatient face of Admiral Starza glaring down at him. Holmes ignored the interruption. He didn't want to hypo Dexter again, yet he must have his hands free. He grunted philosophically and slid the straps across, pinned Dexter to the couch, hoping that the constriction would not inflame the man's already ultra-sensitive mind-conditioning against confining walls. He daren't hope that he was near, and yet he had to believe. The message must come through now.

Dexter looked at the straps with eyes that made Holmes feel a devil. He licked his lips.

" Message."

Holmes leant forward, aware of the hiss of indrawn breath from Starza in the screen. This was the first rational word Dexter had spoken. The first thought he had had when his mind had been freed of the weight of guilt and fear throttling it had been of the message he carried.

" Yes, Dexter," Holmes said gently. " You can pass on the message now."

But the gunner's mind went off wandering again. The eyes closed. His nostrils pinched in, then flared as though seeking that sweet, alien scent he had spoken of. Holmes lifted an eyelid. He muttered softly, reached for a bottle and spatula and contrived to force a small quantity of the liquid past Dexter's closed lips. It was messy. Dexter moaned and twisted, trying to lift his right arm against the straps. The hand that had held the knife.

" What is it, Doctor ?" Starza's voice whispered.

" He went through total recall of the incident where he killed the alien, admiral." Holmes was speaking as much for his own benefit as the admiral's. " But there is still some sort of block. I don't know that it was total recall. I think he can give us the message now, though."

" Well, hurry it up !"

Holmes choked down his reply, began to speak again to Dexter. The gunner moved his lips like an old, toothless man. He whispered broken words, speaking Palladian. Holmes knew that tapes were running giddily through electronic pick-ups, recording this message, translating, analysing and computing the impact of its meaning on the war-strategy of the fleet. He discounted all that, concentrating on the single thought of this broken man's mind. That, he would not allow to go under.

Admiral Starza was beaming. His brown face shone like a chestnut. He said: "That tape he read was routing orders for the Palladian fleet. You've done well, Doctor. I shan't forget. I think we have a chance not only to evade the enemy; but to deliver a serious blow into the bargain."

"That's good, admiral." Holmes looked at Dexter. "And what about this man?"

Admiral Starza shrugged, turning away from the screen.

"Competent Turret Captains are scarce, Doctor. I suggest you return him to fighting trim as soon as possible—that should be no problem. You didn't break his mind."

No, Holmes agreed bitterly. His mind wasn't broken; but it wasn't cleared, either. There was still a sombre shadow of something—guilt, remorse, fear, self-loathing—some twisting circumstance that prevented Dexter from regaining full control of himself.

Holmes could imagine the claustrophobic terror of that dark space in a smashed alien ship. The terrifying fear of making a noise. The sensation of being hunted, of being the target for a deadly killer. Dexter must have been through hell. No wonder he wrapped himself in the comfort of a black veil and refused to allow his mind to pass that barrier.

But, what had happened? Dexter had tracked the alien by scent—a clever dodge—had floated up on him and killed him. That last instant when Dexter's mind had refused to go on and had jerked him out of recall and back to the couch—had something gone wrong then?

"Dexter," Holmes said, and made up his mind. "You are floating in the darkness, you are tracking the alien—"

The sweet cosmetic scent was all around him. He touched something with his left hand, recoiled instinctively, his right hand sliding the knife forward, forward into—light and noise and sheer terror.

The alien had tricked him.

He had slashed a floating space-suit, with cosmetics daubed on the helmet. The smell sickened him. His knife only partially punctured the tough rubberised fabric, and in the blaze of light from the Palladian's

gun, he saw the suit run and dissolve and fill the room with the stink of burning rubber.

And still the Palladian hadn't killed him.

Why ?

For what reason was the Paint torturing him like this ?

All his carefully built up reserve of courage was oozing away like fuel from a ruptured tank. Around him the air stank of burning rubber. He could hear little clickings and susurrations from all directions. After that single flash of intolerable fire the darkness had shut in again, like the lid of a coffin. He thirsted for the sight of the stars, of light, of open space. He had an instant's clear vision of himself going insane —and then that was chopped off as, quite without any volition on his part, he was scrabbling for the door leading onto the corridor.

His back itched in expectation of the bolt that would fry him. He felt a thousand fingers dragging at his spine.

He could not stop himself. His panic defied his brain, sent frantic orders to his hands. Open the door ! Tumble through ! Get away from this grave, out into the light ! He was sobbing with fear.

As the door opened and he fell through, free-fall allowing him to bounce crazily from wall to wall, he could not believe that he was still alive. He could remember nothing.

And from behind him, from the darkness and smell of burning rubber, from the grave, came a long, low laugh.

Turret Captain Dexter sat up against the straps of the couch and stared wide-eyed at Doctor Holmes.

He said, as though his mouth was full of porridge: " Why did he let me go, Doctor ? Why ?"

Holmes stood up, shaken, disturbed by this abrupt transformation in the gunner. He took out a cigarette to gain time for his brain to work. Dexter stared round vacantly.

" You feel okay now, Dexter ?"

" Sure. I feel fine. I must have had a black-out or something. I vaguely remember going down the airlock and taking the life-shell —instruments basically similar to ours—and haring it back for the fleet. I gave you the message, didn't I ?"

" Yes." Holmes didn't like this—not one little bit. " Yes, you gave us the message. The fleet is altering course to catch the Paints." The doctor spoke gravely. " You suffered shock and amnesia. I induced memory and you recalled what had happened and catharsis took care of the rest. But the pattern was not typical, anything but."

Dexter shook his head and winced. "Have I got a headache! I remember panicking and getting out. The Paint let me go—and he laughed. Why, doctor?"

"I thought your amnesiac block was caused through your reactions at killing the Palladian. It was obviously caused by the unnerving experience you went through, enough to turn a man's hair white. You're lucky to be in full possession of your faculties, Dexter. But as to why the Paint let you go—"

"This is war," Dexter said slowly. "Nasty business. Kill your enemy if you can. But it's better to kill two aliens than one. If you could do that—kill two, I mean—you'd let one go, wouldn't you?"

"I suppose so."

Dexter made up his mind, wobbling and vague though his suspicions might be, and woolly his thought processes.

"I'd like to have a word with the Admiral, doctor."

"Well—he's busy right now—we're changing course to conform with what the computors have told us. Your message, you know."

"It's about that—and it's important."

Holmes defied discipline and pressed the call. When Admiral Starza's face came on the screen, he said: "Turret Captain Dexter requests permission to speak to you, sir."

Dexter forgot the formalities. He began to speak and did not stop until he had got out of himself all his fears and premonitions.

"I read a message on the Palladian's tape, sir. You know it was a routeing order. And you think you can catch the Paints with their pants down. But the alien I was fighting with knew I'd read that message, he stood at the doorway before he shot my gun out of my fist and then he lassooed me. He tricked me again later, and still didn't kill me. I'd say he wanted me to get back to the Terran fleet with that message." Dexter took a deep breath and stared levelly at Starza's picture in the screen. "I'd say we were being played for suckers all along the line!"

Admiral Starza considered. He took stock of this Turret Captain and saw the man, recognised the type. A man taken from his civilian job, whatever it might be, given a uniform and put into the Space Navy. Conscientious, willing, gifted with more intelligence than the run-of-the-mill regulars of the peace-time Navy. A man with his own opinions.

"Doctor," he said evenly. "What is your advice with regard to this man's state of mind?"

Holmes said: "Teecee Dexter is now perfectly normal. The experience through which he went temporarily unbalanced him; but the recall technique, coupled with his own powers, have remedied that. I think we should take note of what he says."

Admiral Starza smiled tiredly.

" So it all comes back on my shoulders again, eh ?" he said softly, really to himself. His brown face frowned down on nothingness, the eyes black as flies. Admiral Don Juan Refugio de la Starza was a man whom responsibilities had all but broken. He turned away from the screen and motioned to his Flag Captain. Will Curtis looked up questioningly.

" They say that message is a dud, Will," Don Juan said dully. " I wish to God I could find a strong enough path to steer. That boy Dexter went through hell, got himself into a spot with a Paint and near enough went off his head. He thinks they let him get back with that message—and it's likely. Damn likely."

" I hesitate to suggest anything," Curtis began awkwardly.

Don Juan said: " It's up to me, Will. We both know that." His fists clenched. " But it seems a damned shame we can't have a crack at them."

" Shall I order change of course—back to our rendezvous with the Ninth ?"

" Yes. I cannot take the risk. It seems clear that the alien cruiser was knocked out before fresh orders came through and the alien Dexter met knew that. He sized up the situation and let our man back with information that had been changed."

" Or he let him back, knowing we'd act on that information, and thus knowing just what we'd do !"

" Of course ! If only Earth had more ships and men—but one day we will. One day we'll come back to this sector of space—and it won't matter what message may be hidden from us. We'll ride back in victory one day, Will."

The old admiral leaned back against the rail round the celestial globe where the echelon's change of course threw glittering fish shapes among the stars and tried to find hope for the future.

" One day," he said. " One day we'll come back and tear down that black veil."

Kenneth Bulmer

THE LITERARY LINE-UP

Although serials were placed third in our recent *Survey*, the majority of replies showing a preference for novelettes and short stories, the interesting fact on the month by month ratings is that serials are invariably placed top or second. Probably impatience has a lot to do with the *general* opinion that three issues is too long a time to wait to complete a story. On the other hand there can be no cheaper method of reading a first-class 60,000 word novel—for your 6/- (the price of the three issues) you also get a further 90,000 words of fiction into the bargain !

It is not our intention of discontinuing serials although longer stories will be more prevalent, so next month sees the opening instalment of another outstanding Wilson Tucker novel—*The Time Masters* —originally scheduled as a Nova Novel but now transferred to this magazine. It's Tucker at his best, too, with all the mystery and suspense he incorporated in *Wild Talent.*

Dan Morgan returns after an absence from our pages of over a year with a novelette entitled " Life Agency " and we shall also be introducing Chad Oliver another outstanding new American writer with a fascinating gem of a short story. Oliver's first book-length novel, *Shadows In The Sun*, published this year in New York by Ballantine Books, received outstanding acclaim from American reviewers and will be published in this country in the Autumn by Max Reinhard Ltd. Alan Barclay will be included with another of his Jacko stories entitled " The Single Ship " as outstanding an idea and probably more powerful than " The Real McCoy " in April.

Story ratings for No. 35 were :

1.	Star Ship (Part II) - - - -	E. C. Tubb.
2.	Outrider - - - - - - -	James White.
3.	Compassion Circuit - - - -	John Wyndham.
4.	Samson - - - - - - -	Alan Guthrie.
5.	Survival Ship - - - - - -	Judith Merril.
6.	Ferrymam - - - - - -	Richard Rowland.

Chislehurst, Kent.

You have published some very good stories recently—and some very, very bad ones. The serials are generally good. The shorts are too often bad, but one recent short which stood out high above the others in quality was " Outside " by Aldiss. I hope you will cultivate this author.

Now for a particularly bad short: " Forgetfulness " by Martyn . . . the suggestion of a centre-pivoted door overlapping on each side, for the purpose of vacuum sealing, is quite useless. Consider such a door separating a cabin at atmospheric pressure from a cabin at zero pressure. On the pressurised side, there would be a couple on one half of the door tending to close it, and a couple of equal moment on the other half tending to open it ! The door would be in unstable equilibrium : a knock or vibration of the bulkheads might swing it open slightly, letting out a gush of air; this gush would tend to swing it farther open; whoosh goes all the air—and goodbye to anyone inside !

At the end of the story, the air coming from the hole sends the man rushing " like a pea shot towards the asteroid." This I couldn't swallow; so I took the trouble to do a few calculations. Making a few assumptions, all very favourable to Mr. Martyn, I find that the man would be moving away from the ship after 10 seconds of the " blast " with the " tremendous " velocity of about 9×10^8 centimetres per second* And incidentally, I fancy it would get rather chilly in a cabin separated from the void by only a thin metal hull, unless they wasted power galore keeping the temperature up.

John A. Wiseman.

London, W.9.

With reference to points in Mr. Wiseman's letter, the centre-pivoted door, far from being useless, is about the only method of operating a door with opposing pressures. If it were a normal door opening towards an air-filled room against a vacuum, the pressure against it opening would be in the neighbourhood of thirty tons. Opening towards a vacuum the strain against the locking bars would be as great. As it is impossible to foresee just which compartment would be air-filled and which would be vacuum, some system of operating the door both ways is essential. By letting the pressure almost cancel itself out the door, as Mr. Wiseman says, is in almost equilibrium—but *not* an unstable equilibrium, because the specified overlap would naturally provide for a greater pressure holding the door closed than the one trying to force it open. A one-inch over-lap for example would provide four-hundred pounds of pressure holding the door shut. Rather more than could be shifted by a little vibration.

Anyone who has ever seen the destructive force of released compressed air will admit that its potential is usually under-estimated. However, even taking Mr. Wiseman's figures without argument, I still wouldn't like to be dashed against a piece of rock at a speed of over two hundred miles per hour.

Mr. Wiseman is obviously suffering from the common delusion that space is 'cold.' Space is a vacuum and a vacuum can have no temperature. Heat loss would only be by radiation and would be partly replaced by energy received from the Sun. It would be wholly replaced by the animal heat of the crew, the radiated heat from the lights, and the generated heat from the motors, engines, stoves, etc. The problem in space isn't to keep warm—but to get rid of the heat!

Phillip Martyn.

(* 9×10^3 centimetres per second = 9 x 1000 centimetres per second = 90 meters x 3600 = 324 kilometres per hour = 202.5 miles an hour.)

Todmorden, Lancs.

Some time ago, as a student and protagonist of Modern Art, I had to defend my cause over a certain portrait by one Graham Sutherland. This seemed easy at the time but lead me to seek a more-or-less universal analysis to apply to Artwork. It came out like this.

Firstly decide what the particular artwork is. Not so easy when considering some answers I received during my 'enquiry.' In the instance quoted above it is first and last *a painting*! And should be judged solely as such. Secondly, the type of painting: Landscape, Sea-scape, Still Life, Abstract Composition, or as in this case, a

Portrait. Thirdly, and least important: the actual subject of the painting—Sir Winston Churchill. In portraiture it is conventional that the finished work should be almost life-like although this is by no means universal or essential.

All great art should be creative and not imitative. In sculpture a piece of sculpture is created showing the character of the materials used and the method of execution. The subject, as in the case of Henry Moore, is only suggested by observed reality. The form and rhythm are used to create something—not to imitate an already existing entity. This then is briefly my theory.

Once these three categories had been examined the remaining niceties of form, colour, etc., would fall into their true and respective positions, I thought. The method ought to be applicable to all forms of Art—Painting, Sculpture, the Graphic Arts, Music, Literature, and Dancing. You can imagine my pleasure when, a few months after making my thesis, I found it supported and embellished by the late Helen Gardner, an American historian and critic, in the Introduction to her book *Art Through The Ages*.

The following passage, which I quote from the Introduction, applies to literature :

" So with literature . . . a writer uses words; he combines them into phrases, sentences into paragraphs or verses; and by repetition, variation, and movement toward a climax he creates a pattern which not only conveys the context but, because of its inherent capacity to arouse emotional response, vivifies the content, gives it a dynamic quality that is not inherent in the mere meaning of the words and sentences. Thus music is not a mere succession of sounds, nor literature one of the words alone, but a *related* and integrated succession."

And again this one sentence can be applied to any realm of Art, though in the context it referred to painting: " If you see it only for its subject matter, as an illustration or as an historical document, or for its associational ideas or its general mood, then you have not grasped its maximum significance."

Aside from Art my dearest hobby is science fiction and through recent discussions as to the merits of such as literature I attempted to apply my analysis. Unfortunately, my knowledge of the niceties of literature is small and so I was not as diligent and thoughtful as I would have wished. But here J. T. McIntosh's letter in the April issue comes into bearing. In most of the older types of science fiction (which comprises J. T.'s class I) the subject matter seemed to be more important than the composition and presentation. " Space opera " automatically falls into this group and is essentially romantic. This closely parallels the Romantic style of painting in which the subject

matter was dominant, and produced a maudlin and almost vulgar Art not to be accepted as good. Subject dominance in literature, where sheer writing is minor, will, I believe, be equally as poor.

The Class II type is nearer to the ideal of my analysis and, if I am right, more acceptable as good literature. In the shorter story the subject matter doesn't seem to get out of its proper place and if this be so your reviewer Leslie Flood need not worry about the shortage of long novels retarding the acceptance of science fiction as literature—rather the reverse.

Science fictioneers seem worried by the lack of recognition of their pet subject. I think I have the reason for this. I think critics will examine literature on a scale similar to the one I have proposed. If therefore science fiction is lacking in construction and good technique, as I fear much of it is, the critics will not accept it. As for the man-in-the-street, I think he will accept our literature when he can appreciate Modern Art. The best science fiction by analysis deals with abstract ideas rather than realities—if the layman cannot understand such an idea when presented visually I cannot see him doing so when the idea is presented less obviously.

My analysis also connects up with the discussion between Alfred Bester and Jim McIntosh—my view means that the 'plodding' English type of story, all else being equal, would rate higher than the one with the clever twist.

A. Taylor.

Merthyr Tydfil, Glam.

I was greatly intrigued by the recent correspondence between authors Alfred Bester and J. T. McIntosh which you published, particularly the one from Mr. Bester regarding the difference between British and American writing styles. What he says is true—up to a point. This habit British authors have of working steadily to an obvious ending has often annoyed me, but many stories of this type are really very good. But surely in his statement Mr. Bester cannot include Eric Frank Russell, John Wyndham, E. C. Tubb, William F. Temple, J. T. McIntosh, and others of equally fine calibre ?

I read both American and British science fiction and can only come to the conclusion that Bester's puzzlement is caused by the fact that many British authors now writing are new to the field and only just maturing. In America, as far as I can see, most authors are already well established and able to spread 'twists' all over the place. This topic could make a really interesting discussion.

Alun W. Rees.

P.M. Hospital, R.A.F. Halton, Bucks.

Personally, I think science fiction is drifting on the edge of the main stream of modern writing and that it will stay there unless somebody starts paddling in the right direction. I know that a lot of things have been said about "science fiction and literature" but at least these particular things are being said by someone who tries to write science fiction, and not the average milk-shake drinker who reads the s-f reviews in the *Observer* or props up the breakfast table with a cheap edition of *The Trial* or an old copy of *New Directions*.

The lowest type of fiction writing is the kind where the writer decides the convolutions of his plot first and then adds his characters who follow the rails of the plot imprisoned in their tramcar of events, occasionally emitting clatters of dialogue, until the good tramcar meets the bad tramcar coming the other way loaded with bad men—or in modern science fiction, mad geneticists breeding little mutant tramcars. These tramcars collide with a crash from which the good one emerges with an almost uninjured complement of characters (a shoulder wound, perhaps—"It's nothing, doc. I set the bone myself")

There are really very few examples of this type of story now being published. Most of the markets have folded up and not even some of the American havens of corn are quite the same. Main Stream fiction, as expressed by the straight novel, is fiction where after the initial setting of the scene and the basic situation, all action taking place is a logical development and extension of the character conflict. I cannot see how a writer can write a legitimate action story if the action isn't related to the character conflict. This is where most science fiction fails. At the moment, it has to have action to sell but there aren't the characters to support the action. Theoretically the highest form of fiction writing should have no action on the lowly physical plane and consist entirely of character conflict, taking place, of course, in a symbolical setting!

"A Case Of Conscience" is the nearest to this vile ideal that I have read in science fiction, although I liked the story very much, even though the author, James Blish, added *such* tone to it by referring to 'Finnegan's Wake.' Sturgeon could have been a good writer of this kind of Freudian, stream-of-consciousness writing, although he has perhaps been in pulp magazines too long. He had most of the psychological trappings and style in *More Than Human*. Bradbury is nearest to this Main Stream when he isn't writing science fiction! John Christopher is a good example of the straight novellist writing *down* to science fiction. I myself am a frustrated Hemingway type, as I suspect a lot of other science fiction writers are. Hemingway seems to be able to write a serious novel with interplay of characters (usually

expatriates, soldiers, or noble, simple, tough guys) and places it in an exotic, adventurous setting. He writes a combination of main stream fiction and *Wide World* backgrounds. That is what I would like to try and do but at the moment I cannot describe actual exotic settings with sufficient detail and accuracy to be convincing.

In the middle of these two extremes of thoughtless action and actionless thought comes the majority of science fiction stories. Of course, there are rudimentary satires (I don't count *Player Piano* as rudimentary) and some humourous stories and mixtures of detective stories and science fiction, but mainly science fiction, like all new mediums of literary expression, takes itself seriously. And quite rightly, too.

Personally, I think that modern, serious, Main Stream writing should contain some science fiction elements, since the straight novel or story supposedly attempts to portray chosen characters' relation to their environment as completely and accurately as possible (*Ulysses* for example) and, in our time, co-operation between man and machine is a very great part of our adjustment to civilisation. And what is modern science fiction but the relationship of men (and sometimes, women) to machines, or, perhaps more accurately, machines to men ?

All this adds up to the opinion that Main Stream writing should have a tinge of science fiction, but that science fiction, by its occupation with machinery, automatically prevents itself from becoming Main Stream Literature.

Richard Varne.

Reading, Berks.

I very much enjoyed " Gomez " (February issue) and it points up the remarks Bester made in his Guest Editorial in *Science Fantasy* No. 12 anent the difference in technique between British and American science fiction—Kornbluth, for whom I have a great admiration, is an economical and effective writer whose characters, to me at any rate, possess a sort of stock humanity. Perhaps that forms a contradiction in terms, and yet it implies that despite the straight-out-of-formula assembly of actors, the tale manages to lose their cardboard natures in the genuineness of their actions. It's a hard point to put over, I fear —perhaps Tubb's " School For Beginners " acts as a good explanation. This plot, you may recall, was done under the title " Sea Legs " by Frank Quattrocchi in one of the early *Galaxy's*—from memory, October or November 1951. The American story was much concerned with mechanical details, and read well enough, but Tubb's treatment is by contrast specifically *human.*

K. Houston Brunner.

Bournemouth, Hants.

I believe that the two main factors in the decline of science fiction were ' tripe ' and repetition. ' Tripe '—no other form of adult fiction can offer such drivel as some of the stories that find their way into science fiction magazines. Even western and love stories have a certain code, which makes the poorest story in this *genre* reasonably acceptable. But science fiction has no code—anything goes. Some critics have labelled science fiction as " adult fairy tales." Too much of it is not even adult.

Repetition—the space-opera story has been grossly overplayed. Nine people out of ten think that *all* science fiction stories deal with space travel to other planets, inhabited by beautiful princesses and/or three-eyed monsters. I recently tried to get a friend interested in science fiction and loaned him, in succession, three books by the better authors chosen more or less at random. He complained that they were too much alike. Now this should be an impossible charge to make, but when I looked more closely I found they all dealt either specifically or incidentally with space travel. On further investigation I find that fully four-fifths of my books, which were not chosen by me in the first place, deal to a large extent with this subject.

I think that is fairly representative of the whole field at the present time.

Alan Hunter.

London W.C.2.

A correction to the point which appears on page 127 of No. 37 (July *Book Reviews.*) No agent sold *Hellflower* to The Bodley Head. It was negotiated direct between the managing directors of Abelerd-Schumann and the British publisher some years ago.

Pearn, Pollinger & Higham Ltd.

Science Fantasy No. 15.

We wish to inform readers of our bi-monthly companion magazine that the next issue will be delayed one month and not published until August. The unfortunate reason for this is that insufficient suitable material has been coming in lately and although scores of MSS are received every month few of them reach the literary standard required. Rather than fall below standard we have postponed publication for four weeks.