

NEW WORLDS SCIENCE FICTION

No. 75

VOLUME 25

2/-

Serial

EQUATOR

Part One

Brian W. Aldiss

SPACE

IS A PROVINCE

OF BRAZIL

John Wyndham

MORGAN'S GALATEA

Clifford C. Reed

TRAINEE FOR MARS

Harry Harrison

LIFE HUTCH

Harlan Ellison

Features

**12th Year
of Publication**



Clifford

C.

Reed

London



Internationally, *New Worlds* is probably the world's leading science fiction magazine. Not because it is read in so many countries (most good magazines circulate overseas) but because of its international galaxy of writers. This month we introduce Clifford C. Reed, who was born and educated in Durban, Natal, and comes from a South African family.

He has been a civil servant, brush salesman, storekeeper, school teacher, and cashier, but in 1950 when he was 39, he and his wife decided they wanted to see some of the world and he resigned a permanent position in Johannesburg to come to England, where he now works for an engineering firm. "We expect to remain here until our son has finished his education, but after that we have no plans," he states.

"I came into science fiction," he continues, "by way of Wells, Doyle, Kipling, Yates (I would rate *The Stolen March* as the finest fantasy novel written) classical mythology and the American pulps. Since then I have sold stories in South Africa, England and the United States."

During the last war he served in the South African Artillery. His interests are in social work (his wife is Warden of an old peoples' home) walking and drawing.

NEW WORLDS SCIENCE FICTION

VOLUME 25

No. 75

MONTHLY

SEPTEMBER 1958

CONTENTS

<i>Serial :</i>			
Equator	Brian W. Aldiss	....	4
Part One of Two Parts			
<i>Novelette :</i>			
Space Is A Province Of Brazil	John Wyndham	....	94
<i>Short Stories :</i>			
Morgan's Galatea	Clifford C. Reed	....	42
Trainee For Mars	Harry Harrison	....	60
Life Hutch	Harlan Ellison	....	83
<i>Article :</i>			
Outward Bound (3)	Kenneth Johns	....	76
<i>Features :</i>			
Editorial	John Carnell	....	2
The Literary Line-Up	....	....	82
Postmortem	The Readers	....	124

Editor : JOHN CARNELL

Cover Painting by LEWIS, illustrating "Equator"

TWO SHILLINGS

Subscription Rates

Great Britain and the Commonwealth 12 issues 28/- post free

United States of America 12 issues \$5.00 post free

Published on the last Friday of each month by

NOVA PUBLICATIONS LTD.,

Maclaren House, 131 Great Suffolk Street, London, S.E.1.

Telephone : HOP 5712

Sole Distributors in New Zealand :

MESSRS. P. B. FISHER, 564 Colombo Street, Christchurch, N.Z.

All characters in these stories are purely fictitious and any resemblance to living persons is entirely coincidental. No responsibility is accepted for material submitted for publication but every care will be taken to avoid loss or damage. Return postage must be included with all MSS.

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

You

One of the best and most interesting definitions of science fiction as a literature I have yet read is contained in anthologist Edmund Crispin's introduction to Faber and Faber's *Best S-F Three* (which Leslie Flood will be reviewing next month). He also successfully rationalises why there are addicts to the genre—and why other people dislike it so.

"Science fiction is a reactionary type of reading," he states. "It harks back to a literary intention which the Renaissance outmoded and the rise of the novel came near to obliterating altogether—I mean the intention of depicting human beings in their relation to entities having an importance, or at any rate a potency, as great as or greater than the importance or potency of the man animal itself. In science fiction these entities may very occasionally, as in the older literature, be of a religious or quasi-religious nature ; but more often they have to do with the laws and potentialities, so far as these are known or can be guessed, of the physical universe which humanity inhabits. Thus, where mainstream fiction, thanks to the monotonously humanistic bias of the last five centuries of our culture, has been almost uniformly catatonic in its withdrawal from environment, science fiction seeks to direct man's attention outwards once more — to mitigate the creature's excessive preoccupation with himself and his society by throwing emphasis on the temporariness and precariousness of his situation within the macrocosm.

"It is this aspect of science fiction, I believe, that is chiefly instrumental in making addicts like the genre so much and detractors like it so little. Addicts and detractors alike are heirs to a tradition, in the arts and entertainments, which by implication represents man as the unbudgeable cock of an inexpugnable roost ; which finds greater interest and significance in the imagined adulteries of one out of 2,700,000,000 nonentities than in the death of a galaxy ; which can visualise no worthier function for the terrifying complexities of the non-human creation than to serve as a picturesque *mise-en-scene* for the posturings of *homo sapiens*. But the addicts are

• • • • and S-F

to some extent dissatisfied with this narcissistic, complacent cultural heritage ; while the detractors, having swallowed it whole, inevitably show signs of distress when confronted with the strictly antithetical scale of values offered by science fiction. In short, no reader who seriously, and all the time, regards the man animal as a being darkly wise and rudely great can hope to get much pleasure out of science fiction so long as that particular persuasion continues unaltered. Science fiction is essentially for those who are capable on occasion of a touch of real scepticism about the importance and worthiness of their own species.

"The means which science fiction uses to satisfy and encourage this scepticism can easily be summarised. "You," it says (meaning humanity), "are not the only pebble on the beach"; and goes on to suggest that some of the other pebbles may be very large and formidable indeed. The aim is to make man look small ; and the technique is to revalue him by showing him in the presence of some *other* thing over which his control is partial or uncertain or in extreme cases non-existent."

There is much more to Mr. Crispin's evaluation—and it has to be read in the light of the stories he has chosen for this particular collection of stories (all by American writers, incidentally). Nevertheless, it shows the fundamental tenets of science fiction very clearly, although some reviewers took exception to his tilt at "the monotonously humanistic bias." It seems strange to me that reviewers have shown so little interest in science fiction *except* where a novel has appeared with strong characterisation and human interest (practically all of which have been of the 'doomed-Earth' variety—Wyndham, Shute, Orwell, Christopher, Stewart, and others).

I think Crispin is very right in his diagnosis, and, unfortunately for the reviewers but not for us, science fiction short stories will always be the backbone of the genre.

John Carnell

EQUATOR

We have come to expect the unusual from Brian Aldiss in his stories—even the theme of this two-part serial is different to the usual alien invasion theme. Here we find that Earth peacefully offers sanctuary to the inhabitants of a huge starship who are looking for an inhabitable planet upon which to dwell. Whether Earthman and alien can live together in harmony is the focal point of the story.

By BRIAN W. ALDISS

Part One of Two Parts

I

Evening shadows came across the spaceport in long strides. It was the one time of day when you could almost feel the world rotating. In the rays of the sinking sun, dusty palms round the spaceport looked like so many varnished cardboard props. By day, these palms seemed metal; by evening, so much papier mache. In the tropics, nothing was itself, merely fabric stretched over heat, poses over pulses.

The palms bowed stiffly as Scout Ship AX25 blasted up into the sky, peppering them with another spray of dust.

The three occupants of the ship were rocked back on their acceleration couches for only a few seconds. Then Allan Cunliffe got up, strolled casually over to the port and gazed out. Nobody would guess from his composed face that the ship had just embarked on a hazardous mission.

"At once you begin to live," he said, looking down at the world with a kind of pride.

His friend, Tyne Leslie, nodded in an attempt at agreement. It was the best, at the moment, that he could do. Joining Allan, he too looked out.

Already, he observed wonderingly, the mighty panorama of sunset was only a red stain on a carpet below them ; Sumatra lay across the equator like a roasting fish on a spit. Outside : a starry void. In his stomach : another starry void.

At once you begin to live . . . But this was Tyne's first trip on the spy patrol ; living meant extra adrenalin walloping through his heart valves, the centipede track of prickles over his skin, the starry void in the lesser intestine.

"It's the sort of feeling you don't get behind an office desk," he said. Chalk one up to the office desk, he thought.

Allan nodded, saying nothing. His silences were always positive. When the rest of the world was talking as it never had before, Allan Cunliffe remained silent. Certainly he had as many mixed feelings about the Rosks as anyone else on Earth : but he kept the lid on them. It was that quality as much as any other that had guaranteed a firm friendship between Allan and Tyne, long before the latter followed his friend's lead and joined the space Service.

"Let's get forward and see Murray," Allan said, clapping Tyne on the back. Undoubtedly he had divined something of the other's feelings.

The scout was small, one of the Bristol-Cunard 'Hynam' line, a three-berth job with light armament and Betson-Watson 'Medmenham X' accelerators. The third member of the team, its leader, was Captain Murray Mumford, one of the first men ever to set eyes on the Rosks, four years ago.

He grinned at the other two as they came into the cabin, set the autopilot, and turned round to face them.

"Luna in five and a fraction hours," he said. Once you had seen Murray, you would never forget him. Physically, he was no more and no less than a superb specimen of broad-shouldered manhood. Five minutes with him convinced you that he had that extraordinary persuasive ability which, without a word being said, could convert potential rivals into admirers. Tyne, always sensitive to the currents of human feeling, was aware of this magnetic quality of Murray's ; he distrusted it merely because he knew Murray himself was aware of it and frequently used it to his own advantage.

"Well, what's the picture?" he asked, accepting a mescahale from Allan, trying to appear at ease.

"With any luck, we'll have a pretty quiet job for your first live op," Murray replied, as they lit their mescahales. "The target area, as you know, is Luna Area 101. Luna Intelligence reports a new object outside one of the Roskian domes. It's small and immobile—so far, at any rate. It's outside a dome on the southern perimeter of Area 101, which means it is fairly accessible from our point of view."

"What's the state of light there now, Murray?" Allan asked.

"Sundown in Grimaldi, which contains Area 101, was four hours ago. Intelligence suspect the Rosks may be planning something under cover of darkness; we have imposed a lot of shipping restrictions on their Earth-Luna route lately. So our orders are to slip in from the night side and investigate—obviously without being seen, if possible. Just a quick look over, personal inspection in space suits. We should not be out of the ship for more than twenty minutes. Then we streak for home again, heroes all."

The starry void blossomed up again in Tyne's midriff. Action; this was what he feared and what he wanted. He looked at the lunar map Murray carelessly indicated. One small square of it, low in the third quadrant covering Grimaldi, had been shaded yellow. This was Area 101. Beside it, in the same yellow crayon, one word had been written: Rosk.

Tyne noticed Murray studying his face intently, and turned away. "World Government made a great mistake in allowing the Rosks a base away from Earth," he said.

"You were the diplomat when Allan and I were just squaddies in the Space Service," Murray said, smiling. "You tell us why Area 101 was conceded to them."

"The official reason given," Allan said, stepping in to back up his friend, "was that while we were being kind to aliens we could not expect a space-travelling race to be pinned to one planet; we were morally obliged to cede them a part of Grimaldi, so that they could indulge in Earth-Moon flight."

"Yes, that was the official face-saver," Tyne agreed. "Whenever it is beaten on any point of an agenda, World Government, the United Nations Council, declares itself 'morally obliged.' In actual fact, we had rings made round us. The Rosks are so much better at argument and debate than we are, that at first they could talk themselves into anything they wanted."

"And now the Space Service sorts out the results of the politicians' muddle," Murray said. It sounded slightly like a personal jibe ; Tyne could not forget he had once been in politics ; and in his present state of tension, he did not ignore the remark,

"You'd better ask yourself how fine a job the S.S. is doing, Murray. Human-Roskian relations have deteriorated to such an extent this last year, that if we get caught in Area 101, we may well precipitate a war."

"Spoken like a diplomat !" Murray exclaimed sarcastically.

The three of them spent most of the next four and a half hours reading, hardly speaking at all.

"Better look alert. Put your books away," Murray said suddenly, jumping up and returning to the cabin.

"Don't mind Murray ; he often behaves like a muscle-bound Schoolmaster," Allan said laughing.

Not often, Tyne admitted to himself, without bothering to contradict his friend aloud. Murray had drunk with them several times at the Madeka Hotel in Sumatra ; his manner then had been far from schoolmasterly. He thought of Murray knocking back carioka till the early hours, rising later to eat with a monstrous appetite, while Allan and Tyne beside him pushed away at the large, unappetising breakfasts the hotel provided.

The immediate present eclipsed Tyne's thoughts as the great black segment of moon slid up at them. It was like falling into a smile-shaped hole. Radar-guided, the scout became a tiny, moving chip of a ship again, instead of a little world in its own right.

A few lights gleamed far ahead : Rosk lights, shining up from Area 101.

"Strap in !" Murray said, over the intercom.

They were braking. As deceleration increased, it felt as if they were plunging through water, then soup, then treacle, then wood. Then they weren't plunging at all. They were feather-light. With a bump, they stopped. They were down.

"All change ; please have your alien identity cards ready !" said Allan. Tyne wondered how he was feeling, even as Allan smiled reassuringly at him.

Murray left the cabin, walking with something like a swagger. He was pleasantly excited. For him, this was the simple life, with no cares but the present one.

"The radar-baffle's on," he said. "No signs of alarm from our friends outside. Let's get into our suits as fast as possible."

They climbed into the spacesuits. The process took half an hour, during which Tyne sweated freely, wondering all the while if their ship had been sighted by Rosk lookouts. But there was no alternative. The spacesuit is a tool: a bulky, complex, hazardous, pernicketty tool for surviving where one is not meant to survive. It needs endless adjustment before it can be trusted. There was not a spacer in the system who did not hate spacesuits, or envy the Rosks their immeasurably superior variety.

At last they had lashed, strapped, dogged and screwed each other into place. Three monstrous robots bumbled round slowly in the confined space, nearly filling the ship with their bulk; they made with slow, underwater, gestures for the hatch. Five minutes later, they were all standing on the lunar surface in complete darkness.

In what were already regarded as the old palmy days, before the Rosks arrived in the system, Tyne had frequently been up to the moon, on pleasure and business. He was not prepared for how bleakly uninviting the place appeared now. In the Grade-A darkness, Grimaldi was a desert of frozen soot.

"We've something less than half a mile to the target dome," Murray said, his voice a whisper in the headsets. "Let's move!"

They saw by infra-red extensions. Murray led them along by the crater edge, treading round spines of outcropping debris. The alien domes became visible as black breasts against sequin-studded silk. Through the little grille of his suit window, Tyne saw the world as a plaster mock-up of a reality too unreal ever to be true. He himself was a pigmy imprisoned in the iron bowel of a robot heading for destruction. Fighting off that irrational sensation, he peered ahead for the strange object they had come to investigate.

Something lay ahead. It was impossible to see what it was. Tyne touched Allan's arm. The latter swung round, and then stared in the direction in which Tyne pointed. Murray paused, making a clumsily impatient gesture to them to come on. Perhaps he feels vulnerable as I do, Tyne thought, sympathetically, pointing again through the blackness for Murray's benefit.

Next second, they were bathed in the ashy glare of a searchlight, skewered neatly in mid-gesture.

The light came not from the domes ahead, but to one side, from a point by the crater wall. Tyne just stood there, blinded, knowing they were trapped.

"Drop !" Allan shouted.

"Shoot the light out !" Murray said. His great metal-claw went down piston-fashion to the service pistol, came up levelling the cumbrous weapon, jerked with the recoil. Allan and Tyne heard the shots only as vibrant thuds through Murray's suit mike.

He got the light. It cut off—but already another beam was striking out from the nearest dome, swerving and sending an oval across the ash towards them. Probably they were being fired at, Tyne thought detachedly ; you would not know until you were hit. He had his pistol out and was firing too, rather wildly, but towards where the enemy attack would come from.

"Here they come ! Make for the ship, Tyne !" Allan bellowed. As the new searchlight swamped them, Tyne caught a glimpse of moving forms. The Rosks had been lying in wait for them. Then a hammerblow struck his shoulder, sending illuminated pain like a crazy neon system all over his body. Gasping, he heard his suit creak with all the abandon of a falling tree. He was going over . . . and as he went, he had a jigsaw puzzle, upside-down, glimpse of approaching Rosks.

When the Rosks had arrived in the solar system four and a half years before, one unambitious day in March, 2189, an epoch ended, though comparatively few people realised it at the time. Man's time of isolation was over. No longer could he regard himself as the only sentient being in the universe. On his doorstep stood a race superior to him scientifically if not morally.

The shock of the Roskian arrival was felt most severely in those countries which for several centuries had been accustomed to regarding themselves as the world's rulers, or the arbiters of its conduct. They were now in the position of a school bully, who, looking carefully over his shoulder, finds the headmaster standing over him.

The Rosks came in one mighty ship, and a quarter of the world's population quaked in fear ; another quarter cheered with excitement ; the wiser half reserved judgement. Some of

them, four and a half years later, were still reserving judgement. The Rosks were no easier to sum up than Earthmen.

Superficially, a Rosk resembled a man. Not a white man but, say, a Malayan. Their appearance varied from one to another, but most of them had light brown skins, no bridge to their noses, dark eyes. Their body temperature was 105.1 degrees, a sign of the hotter planet from which they came.

When the Rosks arrived, Tyne Leslie was the youngest second secretary to an under-secretary to the Under-Secretary of the British Corps of the United Nations Council. He had witnessed the endless fluttering in ministerial dovecotes that went on all over the world as the realities of the Rosk-Man situation became apparent. For the true situation emerged only gradually, while language barriers were being broken down. And the true situation was both complicated and unpleasant.

Man learnt something of this impasse from a yellow-haired Rosk, Tawdell Co Barr, who was one of the first Roskian spokesman on the U.N.C.

"Our mother ship," he explained, "is an interstellar vessel housing four interplanetary craft and something more than five thousand of our people, male and female. Most of them are colonists, seeking only a world to live in. We have come from a world you would call Alpha Centauri II; ours is the first interstellar voyage ever made from that beautiful but overcrowded planet. We came to Sol, our nearest neighbour in the vastness of space, seeking room to live—only to find that its one habitable planet is already swarming with men. Although we are happy to meet another sentient race, the depth of our disappointment otherwise cannot be measured: our journey, our long journey, has been in vain."

"It's a civil speech," Tyne commented, when he heard it. And other civil speeches followed, each revealing at least one awkward fact about the Rosk visit.

To begin with, these facts almost passed unnoticed among the general run of humanity.

After the first wave of shock had passed round Earth, a tide of optimism followed. The real difficulties inherent in the situation only emerged later. Rosks were heroes; most people managed successfully to hide their disappointment at the lack of bug eyes and tentacles in the visitors. Nor did they worry when Tawdell Co Barr revealed that the Roskian political system was a dictatorship under the supreme Ap II Dowl.

Civility, in fact—an uneasy civility on Earth's part—was the order of the day. The big ship circled Earth inside the lunar orbit, a handful of Rosks came down and fraternised, speaking either to the councillors of the U.N.C. or over tridee to the multitude ; or they visited some of the cities of Earth.

In return for this hospitality, they presented men with microfilm books about natural and social life on Alpha Centauri II, as well as specimens of their literature and art, and preserved samples of their flora. But no Earthman was allowed to enter their ship. Scientists, politicians, celebrities, newsmen, all were politely refused admittance, and provided with acceptable explanations.

“Our ship is as inviting as a charnel house,” Co Barr admitted, gravely. “Many of our people died on the journey here. Many are dying now, from dietary or sunlight deficiencies, or from mental illnesses brought about by life-long incarceration. For we have been exiled for two exhausting generations in the night of space. We can go no further. All we ask, all we beg of you, in your mercy, is a place in which we may rest and recover from our ordeal.”

A place . . . But what place ? At first it seemed an almost impossible question ; the U.N.C. convened practically without a break for weeks on end. For the first time in centuries, all nations were united—in a determination not to allow the Rosks onto their territory.

In the end, two decisions emerged. First, that the Rosks should be granted an Earth base. Second, where it should be.

Both answers were inevitable. Even Tyne, from his back seat in the debate, saw them coming. In the human attitude to the Rosks lay both fear and envy ; even if mercy should permit it, it was impossible to demand of the Rosks that they leave the solar system again. Such a move might provoke them to defiance of man. They might in desperation fight for the land they required. And what weapons they might possess was unknown ; indeed, what gifts their science might yield upon more intimate acquaintance was a matter for general speculation.

As for the site of the base, it had to be in an equatorial region. Earth's equatorial belt was about as warm as Alpha II's temperate zone. A site in the middle of Africa might be too inconvenient ; a small island might prove too selfcontained. The increasingly mighty nation of Brazil would tolerate no Rosks near her borders. After many squawkings, orations,

protests and uses of veto an area of eighty square miles just south of Padang in Sumatra was finally ceded as a Rosk base.

"For this small gift our gratitude is immeasurable." Ap II Dowl, making one of his rare personal visits, said. There were many who considered his choice of adjective unfortunate—or deliberate.

So the Rosks landed on Earth in their massive ship. It soon became clear that they never intended to leave again ; they had had enough of space.

Earth was unwilling to play permanent host. The Rosks, multiplying behind a perimeter they had rapidly fortified, represented a threat no less ominous for being unformulated. Yet how to evict them ? It seemed to Earth's statesmen that the only possible line of action was to *nag* the Rosks into leaving.

Unfortunately, the more they scratched the sore, the more it itched.

Nation after nation sent its representatives into Sumatra, to see what could be seen, and to pick up any Roskian secrets, if possible. In the big U.N.C. council chambers in Padang, Man and Rosk haggled and talked, demanded and conceded, bluffed and argued. The situation was at once funny and tragic. That old hope of profitting other than materially by the contact of two races was quite lost to view.

Except on diplomatic errands, Earthmen were not allowed into Rosk base, Rosks were not allowed outside it—yet in practice spies on both sides infringed these laws. Padang became full of spies : nation spying against nation, race against race. The situation became more complex still when, in an attempt to ingratiate themselves, the U.N.C. ceded the small Lunar Area 101 to the visitors, to allow them to test out their four interplanetary ships.

"This move touches my heart," Tawdell Co Barr declared. "We came as strangers ; you welcome us as friends. Together, Rosk and man will build a new and lasting civilization."

By this time, such fair words rang hollow.

Whether Tawdell meant it or not, the hopes he expressed were the hopes of many men, everywhere. Unfortunately, this was Tawdell's last public speech ; he disappeared into the Rosk base and was not heard of again. It was believed in diplomatic circles that the yellow-haired Rosk had been too friendly

towards man for his overloads' liking. Ap II Dowl's dictatorship, which had been formed in the harsh environs of the ship, now took the reins. His henchmen sat at the council tables, and relations between the two sides slowly deteriorated.

The spy patrol in which Murray, Allan and Tyne served was only one instance of that deterioration.

II

Something like a lemon. No, a melon. No, it was stretching ; a cucumber. No, it was bending ; a banana. No, curling ; a slice of melon. No, a melon again. Or was it—it was all distorted—was it a face ? It rippled, solidified. It took on a firm jaw and eyes staring fixedly down. It became Murray Mumford's face, seen through a haze of weakness.

"Oh," groaned Tyne. He was in a bunk which still rippled at the edges, staring up at Murray.

"How is it ?" Murray asked. "Feeling better ?"

"Drink of water," Tyne said.

He gulped it down when it was brought. His head cleared, he remembered the incident at 101, the numbing blow on his spacesuit.

"Where are we, Murray ?" he asked.

"One hour out from Lunar, unpursued, heading back home," Murray told him. "I was too quick for the Rosks. I thought you were never coming round. How do you feel ?"

"This is the best part of me," Tyne said ironically, raising his gloved left hand. Beneath the glove were substitute steel fingers and palm ; his real hand had been amputated after an air crash several years ago.

"I don't think there's much more wrong with you," Murray said, "apart from a few bruises. The Rosks fired on us. A bullet hit your suit glancingly on the shoulder ; luckily no joints split, and shock absorbers took most of the blow. How do you do it—magic rabbit's foot ?"

"How did I get here ? Didn't I black out ?"

"You blacked out all right, went down like a felled ox. I part-dragged, part-carried you here," Murray said. "Fortunately, as you went down I managed to shoot out the second Rosk searchlight."

"Thanks, Murray," Tyne said, and only then, with a rush of guilt, remembered his friend. "Where's Allan ?"

Murray turned away, drawing his thick brows together as if in pain. "I'm afraid Allan didn't make it," he said quietly.

"How do you mean, didn't make it?"

Swinging back to the bunk, as though he had suddenly found the words he wanted, Murray said, "Look, Tyne, this may be difficult for you to take. Things got out of hand back there. It was a nasty spot—you know that. When you went down, I grabbed you and got you over one shoulder. Allan shouted out to me to run for it and leave you there. It must have been a moment of panic, I suppose. He wanted to leave you for the Rosk. I told him to cover my retreat, and the next thing I knew, he was waving his gun in my face, telling me he'd shoot me if I did not drop you!"

"Allan!" Tyne protested. "Allan said that?"

"Have you ever panicked?" Murray asked. "There are situations where your moorings break loose, and you don't know what you are saying or doing. When I saw Allan's gun in my face, and felt the Rosks coming up behind, I—I lost control of what I was doing, too."

He turned his head again, his big body tense in a way Tyne had never seen it before. The man on the bunk felt his mouth go dry as he asked, "What did you do, Murray?"

Space slid by outside, sly, snakey, cold as time at a crisis, ignoring Murray as he said, "I shot Allan. Right in the stomach."

Tyne was bound down on his bunk. He could only wave his steel fist and his flesh fist, impotently.

"There was nothing else to do," Murray said savagely, clutching one of the waving wrists. "Listen to me, Tyne, should I have left you there, out cold? We weren't supposed to be in Area 101—we had no legal right. Would you rather have come to with a group of killer Rosks round you? I did the only thing I could. Allan Cunliffe mutinied; as captain, I dealt with it on the spot. There's no more to it than that."

"But I know Allan," Tyne yelled. "How could he—he wouldn't—he's not the sort—"

"We none of us know each other," Murray shouted back. His face was dark, suffused with a feverish look of excitement. "We don't even know ourselves. In a moment of crisis, something takes over from us—our id, or something. That's what happened to Allan. Now shut up, and think things over till you see I did the only possible thing."

He strode forward into the cabin, slamming the door behind him, leaving Tyne alone.

Tyne lay where he was, churning the whole thing over in his brain. He could believe neither that his friend was dead, nor that he had lost control of himself. Yet he could not do other than believe ; after all, a submerged rivalry for promotion had always existed between Allan and Murray ; perhaps in those frightening seconds in the dark, it had come to a head.

Once before they landed, Murray returned to the crew room, to look in at Tyne. His manner was still tense.

"How are you feeling now?" he asked.

"I don't want to see you," Tyne said grimly. "I'll see you at the court of inquiry. Till then, keep out of my way."

His face setting into harsh lines, Murray came across to the bunk and put his hand over Tyne's throat.

"Watch what you're saying and who you're saying it to," he said. "I've told you the facts. I don't like them any better than you do. If Allan had not suddenly turned coward, he'd be here with us now."

Tyne brought his steel left hand over, claspings the other's wrist, squeezing, squeezing. Letting out a gasp of pain, Murray pulled his arm away ; a bracelet of red flesh encircled it. He allowed Tyne one look of malice, then went back and shut himself in the cabin. It was the last Tyne would see of him for a surprisingly long while.

When they landed, Tyne lay patiently for a time, then bellowed for Murray to come and release him. Webbed straps, fastening under the bunk, ensured that he could not release himself. No answer came to his shouts. After twenty minutes, the rear air lock opened, and two Sumatran medical orderlies entered with a stretcher.

From them, Tyne gathered that he was back at Patrol H.Q. Murray had phoned straight through to the hospital, telling them to collect him from the scout for examination.

"I'll come round for examination later," Tyne said, testily. "Right now, I have to report to the Commander."

"Don't worry ; the Commander has already been informed about the state of your health," one of the orderlies said.

Despite Tyne's protests, the man was adamant. From his replies, it seemed as if Murray had cast some doubts on Tyne's sanity. So Tyne was carted to the military hospital on a stretcher.

Procedure there was no more rapid than in any other hospital. It took the doctors a long while to decide that Tyne

Leslie was sane but savage, bruised but sound. In between the examinations were periods of waiting. All this, Tyne thought angrily, smoking his way through a packet of mescahales, was Murray's doing : the scout captain had fixed this so that Tyne's report was delayed. Well, he would fix Murray. Murray was going to be in trouble.

After two hours, buttoning up his uniform, he hurried over to Squadron Office. There a surprise awaited him. Murray had not reported in from his mission. Murray had not been seen. Suspicion and curiosity brewing in his mind, Tyne hurried over to the billets where the squadron lived. Nobody there had seen Murray either ; his room was empty, none of his kit disturbed. Over his bed, a pretty half-caste girl stared saucily, blankly, from her photograph. Written in babyish letters across it were the words "Love from Mina."

The sun was gathering its full, mid-morning glory about it. Ignoring it, Tyne ran to the main gate to question the traffic cop on duty under his concrete umbrella. Yes, Captain Mumford had left in a staff car just after breakfast, heading for town.

"Thanks," Tyne said. He thumbed a lift into town himself, riding the five miles of dust and sunshine in grim impatience.

He knew he should have reported in properly before leaving camp ; above all he should have reported Allan's death. But in an obscure way he felt time to be vital. Murray had inexplicably disappeared ; it would be easier to find him while the trail was hot. The time was 10.50.

Padang was one of the most interesting cities on Earth. To every layer of its life, the nearness of the Rosk base gave an agreeable frisson of excitement. The feeling that something gigantic might happen any day hovered over its hot, scented streets. It was an international city. Among the native Indonesians and Chinese moved U.N.C. delegates from all over the Earth, or their wives, mistresses or followers. Street vendors hawked national emblems of every conceivable kind, from rising suns to leeks. It was also an inter-system city, the first on Earth, for Roskian U.N.C. delegates, prominently displaying their lapel permits, strolled through the city or sat at restaurants. It was, above all, a boom city. Along the gay Tida Appa, skyscrapers rose. Among the palms, the shanties, the picturesque two-storey streets : solid blocks of flats rising. Above the crowds : fifty different flags drooping in the heat.

After the politicians came the business men ; after the business men, the underworld. By winking through your hotel window, you could buy yourself a lawyer, a woman, or a long float, face down, in the sewers.

Dropped in the centre of town, outside the post office, Tyne slipped through the great undercover market, and headed up Bukit Besar. He entered the Merdeka Hotel. It seemed to him the obvious first place to look for Murray. The Merdeka had been the nearest equivalent to home for Allan, Tyne and Murray. They had grown to love its efficient service, its poor food, its constant bustle.

The place was full now, mainly with the sort of minor diplomatic staff Tyne had once been ; nervous, cheery men downing their whiskeys and keeping out of the sun—and waiting, waiting and watching. Pushing through the hall, Tyne went round the back way, to the back stairs.

He thought he saw Amir at the end of the passage, looking round and then dodging out of sight. But that could not be. Amir, the brightest boy on the staff, would have no reason to hide in that way ; he had become almost a personal friend of theirs.

Climbing the back stairs, fishing his key out of his pocket as he went, Tyne reached Room Six. This was the room Allan, Murray and Tyne shared. Had shared . . . Unlocking the door, he went in.

The immense influx of foreigners had caused a housing shortage in Padang. Hotel rooms were impossible to find ; only by paying through the nose for this one all the time did they enjoy the privilege of using it at weekends.

A hurricane had hit Room Six.

Tyne whistled. All their kit, their civilian clothes, everything, had been flung into the middle of the floor. Someone had searched the place, thoroughly, in a hurry. Who ? Why ?

"I don't like it," Tyne said aloud. He went and shouted over the bannisters for service.

As he waited, he stood in the middle of the room, thinking. He was involved in a mystery. Something odd had happened on the moon—he had not heard the truth about that, he felt sure. Now something odd had happened here. Why had Murray deserted ? Where had he gone ? A numbing suspicion that he had murdered Allan overtook Tyne. But why ?

He went back onto the landing and shouted for service again.

Hatred for Murray filled him. It reached back, embracing Murray-in-the-past. The big man's easy manner now seemed no longer likeable, but the sign of a boundless superiority. His ready, cheerful smile became false, the arbitrary grimace of a murderer. Yet supposing he had killed Allan . . . he could so easily have told Tyne that the Rosks had shot him—Tyne, after all, was unconscious when it all happened. Nothing was sure. Rather, one thing was sure : Tyne wanted to get hold of Murray and wring the truth out of him.

He went out onto the landing to bellow for service again, and nearly bumped into a little maid.

"Where's Amir?" Tyne asked.

"Amir has a day off today."

"What? First time I've ever known him have a day off."

"Amir is not so well today. Has a bad head and takes medicine. What I can get for you?"

Suddenly, he wanted nobody to see into the room. He felt weak, tired, hungry ; this was his first man hunt.

"Will you bring me some breakfast, please?"

"Breakfast is long finish, sir."

"Make it lunch then, anything."

Going back into the room, he locked the door on the inside. He started methodically tidying the muddle on the floor. It hurt to fold up Allan's belongings, knowing he would not want them again. Some of Murray's civilian clothes were missing, but a uniform was here. So.

Lunch came promptly, a denationalised dish of chopped sausage, cabbage and rice, followed by tasteless plankton jelly. A big new plankton plant down the coast at Semapang provided more and more food for the island ; as yet, its products were more nourishing than appetising.

With the meal, Tyne's spirits rose. He had ceased to be a second secretary to an under-secretary of the Under-Secretary because he wanted action. Here it came. The original instinct that had led him to Sumatra had been sound. He had been static, stale, discontented, a man without manhood, set on a career of his father's choosing that bored him thoroughly. His chief task had been minute passing ; how suitable that that should be a synonym for time wasting !

But the equator is the hottest bit of the planet, the bit that goes round fastest, though that is not apparent to the senses. Now something was really starting to spin.

On his way out, he ran into the proprietor, and asked for Murray.

"Sorry, I don't see him today," Mr. Niap Nam said. "If he come, I don't see him. Now it is best for you to leave by the back way. In front is having a little trouble from the Displaced. Maybe shooting from these foolish men."

"Thanks, Niap," Tyne said. He had heard the noise in the street but had taken no notice of it. In a moment, one shot was fired, the shouting rose to a crescendo, then came the sound of people running. Tyne slipped out the back way, through the courtyard, under the cassia tree. The Displaced were a group of terrorists, largely formed from natives whose kampongs had been evacuated to make room for the Rosk base; their daily acts of violence—often the sticky-bombing of diplomats' limousines—added an additional spice of risk to life in Padang.

Tyne headed for the Roxy. If anyone knew where Murray was, it should be Mina, the little half-Dutch girl (her other half remained unspecified) who occupied most of Murray's spare time. Tyne looked at his watch. It was just after noon; his enemy, for already that was how he thought of Murray, had as much as four and a half hours' start.

The Roxy was an all-day cinema. Now the boom was on, the solids flickered in the big perspex cube for twenty-four hours out of the twenty-four. The foyer was large, deep, lush, with people coming and going, or just standing smoking.

On the ice cream counter, Mina squeaked with pleasure at the sight of Tyne. Yes, she was nice: dark, lively, animated; perhaps after Murray was out of the way . . .

"Yes, he came to see me here," Mina said, in answer to Tyne's question. "Is he in some sort of trouble, Mr. Leslie, can you tell me? He had a look as if something is striking him not so funny."

"Perhaps he had his shoes on the wrong feet," Tyne said, and then waited patiently for the girl to control her shrieking laughter. He had forgotten how the silliest remark set her going.

"I've got to find him, Mina," he said. "The Commander wants him urgently. Did he say where he was going?"

"No, Mr. Leslie. All he say is not even 'give a kiss,' but just 'hello.' That is why I think perhaps something is striking him not—"

"Yes, not so funny. I know. What else did he say besides 'hello,' Mina? Did he ask you to meet him later?"

"Excuse a minute." She turned, all smiles, to serve a tall Pakistani, and then continued, "All he say to me is that he goes to the plankton plant. I can find him at the plankton plant. What for he wants to go to that place for, Mr. Leslie?"

"Perhaps to plant plankton," Tyne suggested, turning away unsmiling as she doubled up again with fluty laughter. What the devil would Murray be going out there for? Walking blindly, he almost bumped into a fat man in a white linen suit.

"Follow me to hear about Murray Mumford," the fat man said; speaking from the corner of his mouth and appearing to take no notice of Tyne. As Tyne stared after him in surprise, the fat man pushed through a swing door into one of the adjoining bars. For a moment, Tyne wondered if he had heard all right. Then he shouldered his way through the door.

A miniature solid a foot high fluttered on the bar counter. It was silent. Piped from the full-size cinema solid, it showed only half the original. As such, it was almost unintelligible: but its job was to lure bar-flies inside to see what the original was about. At present, the breasty half of Lulu Baltazar reclined on pillows gesturing meaninglessly.

Tyne flicked his gaze from the cube to the fat man. The fat man was sitting in the far corner with his face to the door, raising two plump fingers to the waiter. The waiter was nodding and smiling like an unctious fool. Several people sat about, drinking.

"Who are you?" Tyne asked the fat man, on reaching his table. "Sorry, but I don't remember you."

"Sit down Mr. Leslie," the stranger said. "Remember your manners and thank your lucky stars I found you before anyone else did."

"Who are you, I asked?" Tyne said, sitting down. "Have you a message for me from Murray?"

"Here come the whiskies," the other said, smiling as the waiter set the glasses down. "Let me drink to your continued health."

Tyne pushed his away.

"I'm in a hurry," he said. "How do you know I am after Murray? I suppose you overheard what I said to the ice cream kiosk girl? Are you trying to be funny or helpful?"

The fat man downed his drink and then, looking quizzically at Tyne, usurped the one Tyne had pushed away. Without troubling to answer any of Tyne's questions, he said, "If you want to call me anything, Stobart is as good a name as any. I'm a U.N.C. agent. I can arrest you by flicking my fingers, should I feel like it."

A bit—a very nice bit—of Lulu Baltazer was climbing into a dynocar. The waiter was smiling and nodding like a fool to new patrons.

"You talk as if you've just popped out of a cloak-and-dagger solid," Tyne said.

"Don't reveal your genteel background, son," Stobart said curtly. "I'm real enough, as you'll find out if you start playing tough. And remember—I've got no sense of humour."

"All right. You're real," Tyne conceded. "Then tell me this. Why should a U.N.C. agent reveal himself as you have done? Why should he be interested in me, or in Mumford? If you were a thick-eared M.P. from camp, I could understand it."

"You couldn't understand a thick-eared hatstand. Look, son, you are dabbling on the edge of deep waters. Stay out. That's all I'm here to tell you: stay out! The finding of Murray Mumford is top priority, and you'll only be in the way of several interested parties."

As he spoke, he slid the whiskey back to Tyne, who took it and drank it. Stobart raised two fingers in the air, and the waiter doubled over, courtseying, with more drink.

"Let me in on the mystery," Tyne said. He disliked the note of pleading he heard in his own voice. "Why did Murray kill Allan Cunliffe? Why are the U.N.C. and not the police or the Space Service after him?"

"You're inquisitive," Stobart said stonily.

Tyne went red in the face. He took one of the empty glasses in his left hand and squeezed. He went on squeezing till a little pile of glittering fragments lay on the table.

"Answer my questions," he said.

Stobart laughed. "You've got a temper," he said, and blew the powdered glass over Tyne's jacket. Before Tyne could move, the other had grasped his left wrist in an unshakeable grip.

"Listen to me, Mr. Leslie," Stobart said. "Stay out of this. Mumford lied to you, I don't doubt. He wouldn't let you see how big this thing was. I want to hear what he told you

happened outside Area 101 ; then I'll tell you what really happened. Fair enough ?”

Sullenly, Tyne repeated the story Murray had told him on the scout ship.

“Hogwash,” Stobart exclaimed at the end of it. “While you were out cold on the moon, the Rosks *caught* you and Mumford. He had no time to get back into the ship, man, not with you sleeping peacefully on his shoulder. They caught him as easy as kiss your hand, and persuaded him to carry vital information down here, to a Rosk contact in Padang who will pass it to the Rosk Sumatra base.”

“How could they persuade him? What was the information? Why couldn't he have told me the truth?”

“You innocent fool !” Stobart said. He has stopped looking at Tyne now, as if he had lost interest in him ; his watery eyes slid round the other customers in the bar. “Do you think Mumford would tell anyone the truth ? He has turned traitor ! He's helping the Rosks ; don't bother to ask me what they offered him for the job. And don't bother to ask me what the information is ; if I knew I shouldn't tell you.”

“I can't believe it ! Why couldn't the Rosks carry the information themselves ? They've got four small ships plying between Earth and Luna.”

“If we knew all the answers, we'd not be looking for Mumford now,” Stobart said tersely. “And that's all I've got to say to you. On your way, Leslie, blow. Go back to camp and play spacemen before the shooting starts.”

“You're drunk, from the way you talk and look,” Tyne said quietly. “Or does your mouth always hang down like an old red sock ?”

“There's a Rosk sitting up at the bar disguised as a Sumatran business man, watching us like a hawk,” Stobart replied, without batting an eyelid.

“I'm from Neptune,” Tyne said. “How did you get hold of all this information, Stobart ?”

The fat man swore at him. “Think I'd tell you ? For the last time, get, Tyne. You're up against organisations. You'll never find Murray Mumford. Go on, on your feet, beat it ! The free whiskey is finished.”

A bit of someone was wrestling with a bit of Lulu Baltazar as Tyne passed the bar. He boiled inside. His face burned. He hated every cubic inch of lard in Stobart's body, but his

intelligence told him the man's advice was sound. If Murray was really involved in trouble so deeply, the affair had passed out of Tyne's hands.

Avoiding Mina's eye, he strode out onto the Roxy's steps. It was raining heavily. The streets ran with water. Further up the street, two miserable policemen stood beside a smoking Russian Pudenta ; the Displaced had struck again. The time was 1.15.

Inside the cinema, Stobart watched with satisfaction as the Rosk agent slid from the bar and left, almost directly after Tyne Leslie. Stobart liked his job. As long as you stayed in control it was as comfortable as an old armchair. With the right psychological push, anyone could be induced to do anything. Even a random factor like Mr. Tyne Leslie.

III

Tyne decided to cut through side streets. He might dodge most of the rain that way. The sooner he got back to base, the better ; there would be trouble awaiting him for failing to report in from a completed mission. He felt full of defeat. He had even forgotten to ask that slob Stobart about Allan.

Rain pelted down his neck. His light tropical suit would be soaked in no time. A taxi slowly overtook him, splashing his legs.

"Jump in for a good ride, sir," the Chinese driver called cheerfully.

It was a sound idea. As Tyne bent to open the back door, it was flung wide. Strong hands grasped his hand, catching him off balance, pulling him into the car. He felt it gather speed even as he struggled under a heavy rug which was thrown over him. Someone was lying on top of him, pinning him down. Tyne fought to get his steel hand free. Then a blow caught him on the nape of his neck.

For what seemed like an eternity, he lay half-suffocating under the rug, in a drifting state between consciousness and unconsciousness. Lurid colours curled and coiled in his head. When the car began to bump, as if it had left the road, he took an intelligent interest in the world again. An odd hissing noise rose outside ; they were driving through long grass.

The occupant of the back of the car had climbed off Tyne now, and was arguing with the driver. It was something about

damage to the machine. Money was offered, the driver was refusing it.

At length the car stopped. Tyne did not struggle as his wrists were lashed behind his back. The hands that touched his felt feverishly hot. Undoubtedly their temperature was 105.1 degrees.

He was hauled unceremoniously out of the car by his shoulders, rolling over in knee-deep, wet grass. As he struggled to his knees, and then to his feet, he saw the Chinese driver accept a wad of dollars, grin and rev the engine. The Rosk took Tyne by the belt of his pants, pulling him out of the way as the car backed round and shot back up the track in the direction it had come from. It disappeared ; man and Rosk were alone.

Tall trees, secondary growth rather than true jungle, surrounded them. The only sign of human existence was an old native hut sagging under its own weight, although in the distance came the regular sound of traffic : a highway not too far off.

"Let's walk, shall we ?" the Rosk said, pleasantly, pushing Tyne ahead.

"If you've nothing better to offer."

It was still raining, but without passion, as they started down the track. Tyne had hardly managed to get a glimpse of his assailant. He looked like a Malayan. How ironic, Tyne thought, that this race should have set itself up in Sumatra ! They could pass anywhere here unnoticed. In England, they would stand out a mile.

"Fond of the country ?" Tyne asked.

"Keep walking."

The track grew worse. The rain stopped as if a celestial tap had been turned off. The sun came out ; Tyne steamed. Through the trees, the ocean appeared. It lay there flat as failure, stagnant and brassy.

The cliffs were steep here, deep water coming in close. Together, Tyne and his captor slithered down a perilous slope. At the bottom, three great palms fought motionlessly for position on a minute ledge, their stony trunks canting over the water. Down below the surface, their roots extended like drowned fingers ; Tyne could see fish among the fingers. Then, without warning, he was pushed off the ledge.

He went down among the roots, the water burning up his nose. He struggled frantically. He was drowning ! With his hands tied, he was helpless.

There was hardly time to think. The Rosk was swimming beside him, tugging his collar. In no time, they slid into darker water under the cliff, and surfaced. Water streaming from his mouth and clothes, Tyne gasped painfully, floundering up rough steps as the Rosk dragged him out.

They were in a cavern, the mouth of which would be hardly visible even from the sea, thanks to the big palms outside. Conditions were claustrophobic in the extreme. The water came within two-foot-six of the slimy roof ; there was no chance of climbing out of the water—one just stood chest-deep in it. Bitterly, Tyne remembered that the Rosks had strong aquatic traditions.

In the middle of the cavern, in deeper water, floated a small submarine. It looked battered and ancient, and was streaked with rust. It might have been a veteran from the Malayan Navy, but Tyne could not certainly identify it.

The conning tower was open. A dark head now appeared, exchanging a few barked words with Tyne's captor. Without delay, he was prodded aboard.

Inside, it was like crawling round an oven, both as regards heat and size. Tyne was made to lie on the bare steel lattice of a bunk, his hands still tied behind his back. When the sub began to move, the motion was barely perceptible.

Shutting his eyes, he tried to think. No thought came. He only knew that the repulsive Stobart's warning had been well founded but too late. He only knew that he coveted the life of a second secretary to an under-secretary of the Under-Secretary.

"Up again now," the Rosk said, prodding his ribs.

They had arrived.

Pushed and goaded from behind, Tyne climbed the steel ladder and thrust his head into daylight.

The sub had surfaced out to sea. No land was visible, owing to a haze which hung like a steam over the smooth water. A native, low-draught sailing ketch floated beside them, a mooring line from it already secured to the sub's rail. Three presumed Rosks showed predatory interest when Tyne appeared. Reaching over, they took him by his armpits and hauled him aboard, to dump him, dripping, on deck.

"Thanks," Tyne snapped. "And how about a towel, while you're feeling helpful?"

When his first captor had climbed aboard, he was urged down a companionway, still dripping. Below decks, structural alterations had created one good sized room. The ketch was perhaps a hundred-tonner. Evidence suggested it had been used as a passenger boat, probably to nearby islands, before it passed into Rosk hands.

Five male Rosks and a woman were down here. They were dressed in Rosk style, with an abundance of oily-looking cloth over them that seemed highly out of place on the equator. Relaxed here, among their own people, the *foreign-ness* of them became more apparent. Their mouths, perhaps by the quick, clattering language they spoke, were moulded into an odd expression. Their gestures looked unnatural. Even in the way they sat on the plain wooden chairs was a hint that they found the artifacts alien, out of harmony.

These were beings from Alpha Centauri II, beings like men, but inevitably always estranged from man. The physical similarity seemed merely to mark the spiritual difference. As though life on Earth, Tyne thought, wasn't complicated enough without this . . .

The Rosk who had captured Tyne in Padang was delivering a report, in Roskian, to the leader of the group, a coarse-looking individual with nostrils like a gorilla's and a shock of white hair. He interrogated Tyne's captor at length, searchingly, but in a manner that suggested he was pleased with the man, before turning to address Tyne in English.

"So now. I am War-Colonel Budo Budda, servant of the Supreme Ap II Dowl, Dictator of Alpha-Earth. We need information quickly from you, and shall use any means to extract it. What are you called?"

"My name is Pandit Nehru," Tyne said, unblinkingly.

"Put him on the table," Budda said.

Moving in unison, the other Rosks seized Tyne and laid him, despite his struggles, heavily on his back in the middle of the table.

"Pandit Nehru was a figure in your history," Budda said, impatiently. "Try again."

"Martin Todpudde," Tyne said, wondering just what they did or did not know about him.

Evidently they did not know his name.

"You were talking to a U.N.C. agent," Budda said, "at half past twelve by your local time, in the Roxy Cinema, Padang. What were you talking about?"

"He was telling me I should change my socks more often."

A terrific side-swipe caught Tyne on his right ear. The world exploded into starlit noise. He had forgotten how unpleasant pain could be; when he reclaimed enough of his head to render hearing partly possible again, a lot of his cockiness had evaporated.

Budda loomed over him, gross, engrossed.

"We people from Alpha II do not share your ability for humour," he said. "Also, time is very vital to us. We are about to select from you a finger and an eye, unless you tell us rapidly and straightly what the U.N.C. agent spoke about to you."

Tyne looked up from the table at their foreshortened faces. What were these blighters thinking and feeling? How did it differ from what men would think and feel, in their position? That sort of basically important question had never been intelligently asked or answered since the Rosks arrived, nearly five years ago. The great, seminal, emancipating event, the meeting of two alien but similar races, had been obscured in a fog of politics. The merging of cultures boiled down to a beating-up on a table.

Tyne had been on the talking end of politics. Now here he was on the receiving end.

"I'll talk," he said.

"It's a wise choice, Todpuddle," Budda said; but he looked disappointed.

This acceptance of his false name gave Tyne heart again. He began a rambling account of the murder of his friend Allan, without saying where it took place.

Within a minute, the Rosk who had captured Tyne came forward, clattering angrily in Roskian.

"This fellow says you lie. Why do you not mention Murray Mumford?" Budda asked.

Turning his head, Tyne glared at his first captor. He had had no chance until now to get a good look at him. Like a shock, recognition dawned. This was the man drinking at the bar of the Roxy, whom Stobart had named as a Rosk agent; he was still dressed as a local business man. Then if Stobart knew this fellow, perhaps Stobart or one of his men was following,

and already near at hand. Perhaps—that thought sent his flesh cold—Stobart was using, him, Tyne, as bait, expecting him to pass on Stobart's tale to the enemy. Stobart, at a rough calculation, was as callous as any three Rosks put together, even allowing two of them to be Ap II Dowl and Budo Budda.

His mind totally confused, Tyne paused.

At a barked command, one of Budda's henchmen began to rip at Tyne's clothes.

"All right," Tyne said. One look at Budda, crouching eagerly with tongue between teeth, decided him. "This is what Stobart said."

While they stood over him, he told them everything, concealing only the fact that he had been personally involved in the affair on Luna. As he talked, Budda translated briskly into Roskian.

On one point in particular the War-Colonel was persistent.

"Stobart told you Mumford had to meet one of our contacts in Padang town, you say?"

"That's right."

"Mumford did not have to go to our base here?"

"I can only tell you what Stobart told me. Why don't you go and pick up Stobart?"

"Stobart is not so easily caught as you, Todpuddle. There is a native saying of ours that little fish are caught but big fish die natural deaths."

"Stuff your native sayings. What are you going to do to me?"

Budda did not answer. Going over to a cupboard, he opened it and pulled out a simple-looking gadget that evidently functioned as a radio phone. Something in his manner of speaking into it suggested to Tyne that he was addressing a superior, presumably at Sumatra Base. Interestedly, Tyne sat up on the table; nobody knocked him flat again. The interrogation was over.

Replacing the instrument, Budda began shouting orders to the other Rosks.

Tyne slid his feet down onto the floor and stood up. His clothes were still wet, and clung to him. The cords that secured his hands behind his back seemed to grow tighter by the minute.

"Are we going home now?" he asked.

"You are going to your eternal home," Budda said. "You have served your function usefully, Mr. Todpuddle, and I am

grateful. Now we all go to capture Mumford in a big hurry, leaving the lady of our party, Miss Benda Ittai, to sew you in a sack and hurl you in the blue water. It is an ancient Alpha form of burial. Farewell !”

“ You can’t leave me like this—” Tyne shouted. But the others were already hurrying up the companionway. He turned to face the Rosk woman.

He already knew she was beautiful. That was something he had noted instinctively on entering, although his mind had been on other things. Now he saw how determined she looked. Benda Ittai was small but wiry, very graceful despite her strange clothes, and she carried a knife—an Indonesian blade, Tyne noted.

She came towards him warily, clattering brusquely in her native tongue.

“ Don’t waste your breath, Mata Hari,” Tyne advised. “ I can’t savvy a word of it.”

He could hear the others climbing down into the sub ; they’d be packed in there like kippers in a can, he thought. When they had gone, he could rush this little thug, knock her over, and get free.

But the little thing knew her onions. Bringing out an old sail from a locker, she spread it on the deck. Moving swiftly, she got Tyne in a sort of Judo hold and flung him down on top of the sail. Before he knew what was happening, he was rolled into its folds. Struggling was useless. He lay still, panting, to listen. Benda Ittai was sewing him in—very rapidly, with an automatic needle. Right then, he really grew frightened.

When she had rendered him quite harmless, she went up on deck. In a minute, she was back, tying him round the middle with rope and thus dragging him, bump by bump, up the narrow stair well. The stiff canvas protected him from the harder knocks. When he reached deck level, Tyne began yelling for mercy. His voice was hopelessly muffled.

He was pulled across the deck to the rail.

Sweating, kicking feebly, he felt himself being lowered over the side. This is it, Leslie, he told himself in furious despair. He was swinging free. Then he felt the blessed hardness of a boat beneath him. The girl had put him into what seemed to be a rowing boat.

Tyne was still half-swooning with relief, when the girl landed beside him. The boat rocked gently, then shot away from the

ketch. So it had a motor : but the motor was completely silent.

A momentary, irrelevant insight into the way the Rosks got away with so much came to him. The average Sumatran is a very poor man. His horizon is of necessity bounded by economic need. The concept of world loyalty is not beyond him, but the chance to sell a fishing boat, or a knife, or a ketch, at a staggering profit is something which cannot be foregone.

To a considerable extent, the Rosks had found themselves on neutral ground. Power politics is a hobby the poor cannot afford. Absolute poverty, like absolute power, corrupts absolutely.

"I can help you in some way, Todpuddle," Benda Ittai said, resting her hand on the sail imprisoning Tyne.

By now, the situation was so much beyond Tyne, and to hear her speak English was so reassuring, that he could only think to mumble through his sheet, "My name's Tyne Leslie."

"The others of my party do not know I speak Earthian," she said. "I have learnt it secretly from your telecasts."

"There must be quite a bit about you they don't know," he said. "Let me out of this portable tomb ! You really had me frightened back there, believe me."

She cut away at the canvas with her sharp knife. She would only make a hole for his face, so that he lolled in the bows like a mummy, staring at her.

Benda Ittai was as nervous as a courting mole.

"Don't look at me as if I am a traitor to my race," she said uneasily. "It is not so."

"That was not quite what I was thinking," he replied, grinning involuntarily. "But how do you come into the picture ? What are you to do with Murray ?"

"Never mind me. Never mind anything ! All this business is too big for you. Just be content I do not let you drown. It is enough for one day."

The sea was still lake-calm. The mist still hung patchily about. Benda was steering by compass, and in a minute a small island, crowned with the inevitable palms, waded out of the blankness towards them. The girl cut the engine, letting them drift in towards a strip of beach lying between two arms of vegetation.

"I shall leave you here and you can take your chance," she said. "When Budo Budda returns to the boat, I tell him my

duty is performed. Here the water is shallow enough. I will cut your binding and you will wade ashore. No doubt that a passing boat will soon see you."

"Look," he said desperately, as she severed the cocoon of sail, "I'm very grateful to you for saving my life, but please, *please*, what is all this about?"

"I tell you the business is too large for you. With that, please be content."

"Benda, that sort of talk implies I'm too small for the business. That's bad for my complexes. You must tell me what's happening. How can this information Murray has be so vital that everyone is willing to commit murder to get it?"

She made him climb overboard before she would loosen his wrists, in case he pounced on her. He stood waist-deep in water. She tossed the knife to him. As he stooped to retrieve it, glittering like a fish under water, she called, "Your Murray carries what you would name a microfilm. On this film is a complete record of the imminent invasion of Earth by an Alpha fleet of ships. Our ship which arrived here five of your years ago is not what you think it is ; your people were misled. It is only a forward, reconnaissance weapon, designed to make a preliminary survey for those who are now coming to invade. Against the slaughter to come, you or I, whatever we feel, can do nothing. Already it is really too late. Good-bye !"

Tyne stood in the sea helplessly, watching till she vanished into the golden mist.

IV

The solar system progressed towards the unassailable summer star, Vega. The Earth-Moon system wobbled round the sun, host and parasite eternally hand-in-hand. The planet spun on its rocky, unimaginable axis. The oceans swilled forever uneasily in their shallow beds. Tides of multifarious life twitched across the continents. On a small island, a man sat and hacked at the casing of a coconut.

His watch told him that it was 4.20, local time. It would be dark in three hours. If the heat mist held till sunset, his chances of being picked up today were negligible.

Tyne stood up, still chewing the last morsel of coconut flesh, and flung the empty case into the water. In a few minutes, it drifted ashore again. He fumed at his own helplessness.

Without the sun, he could not even tell in which direction Sumatra lay. There, wherever it was, the fate of man was being decided. If World Government could get hold of that precious spool of microfilm, counter measures could effectively be taken. Stobart had spoken vaguely of 'information'; did he know the true value of what Murray was carrying? It seemed possible that Tyne was the only man in the world who knew just what tremendous stakes were in the balance.

Or did Murray know?

Murray had killed his friend and would betray his kind. What sort of a man was he?

"If ever I get my hands on him . . ." Tyne said.

He was determined that he would no longer be a pawn in the big game. As soon as possible, he would take the initiative. Unknown forces had hitherto carried him round, much as the revolving equator did; from now on, he would move for himself.

Accordingly, he made a tour of the island on which he had been marooned. It was not much more than ten acres in extent, probably an outlying member of the Mentawai group. On its far side, overlooking a tumbled mass of rock which extended far into the sea, was a ruined fortification. Possibly it dated from the Java-Sumatra troubles of the mid-twentieth century.

The fortification consisted of two rooms. In the inner one, a table rotted and an iron chest rusted. Inside the chest lay a broken lantern, a spade and a pick. Mildewed shelving lined one wall of the place.

For the next few hours, Tyne was busy building his own defences. He was not going to be caught helpless again.

As he worked, his brain ran feverishly over what the alien girl had told him. He was simultaneously appalled at the naivety of Earth in accepting as the simple truth the tale the Rosks had spun on arrival, and at the mendacity of Alpha II in thus taking advantage of man's generous impulses. Yet it was difficult to see how either side could have behaved differently. Earth had no reason to believe the Rosk ship was other than what it claimed to be. And if the Rosks were truly set on invasion, then from a military point of view their preliminary survey of Earth's physical and mental climate was indeed a sound one.

Exasperation saturated Tyne, as it so frequently had done in the old days round the U.N.C.'s shiny council tables. For

these damnable oppositions, it seemed useless to blame the persons involved ; rather, one had to curse the forces that made them what they were.

After he had been working for an hour, a light breeze rose ; the mist cleared, the sun shone. Low clouds in the horizon marked the direction of Sumatra. Tyne's clothes dried off, his mescahale lighter functioned again. He built himself a bonfire, lit it, and worked by its flickering radiance when the sun went down.

At last, his work completed, he flung himself down on the sand, overlooking the beach where Benda Ittai had left him. The lights of one or two atomic freighters showed in the distance, taking no notice of his beacon. He slept.

When he woke, it was to cold and cramp. A chill wind blew. The time was only 9.40. Low over the sea, a segment of moon rose, cool and superb. And a fishing boat was heading towards the island.

Tyne was going to be rescued ! At the sight of the reassuringly familiar shape of a local boat, he realised how much he had dreaded seeing Budo Budda's ketch instead. At once he was jubilant.

"Here ! Here I am ! Help !" he called in Malayan, jumping up and flinging fresh wood onto his fire. The fishing boat moved rapidly, and was already near enough for the hiss of its progress over the water to be heard.

The boat carried a dim light halfway up its mast. Three men sat in it. One of them cried out in answer as they collapsed the single sail. The boat nosed in, bumping against the sand.

On his way down to meet them, Tyne paused. These men were muffled like Arabs. And one of them—that was a weapon in his hand ! Alarm seized him. He turned to run.

"Stand still, Tyne Leslie !"

Reluctantly, he stopped and turned. Of the two who had jumped from the boat, one had flung back his hood. In the moonlight, his shock of white hair was dazzling, like a cloud round his head. It was War Colonel Budo Budda. He was aiming his gun up the beach at Tyne.

They were not twenty yards apart, Budda and his fellow Rosk standing by the lapping sea, Tyne up the narrow beach, near the fringe of trees. It was a lovely night, so quiet you could hear your own flesh crawl.

“Is good of you to light a signal to guide us,” Budda said. “We grew tired of searching little islands for you.”

At the words, Tyne realised that their finding him was no accident. His heart sank still further as he realised that there was only one source from which they could have learnt he was still alive. Without thinking, he blurted out, “Where is Benda Ittai?”

Budda laughed. It sounded like a cough.

“We have her safe. She is a fool, but a dangerous one. She is a traitor. We long suspected it, and set a trap to catch her. We did not leave her alone on the boat with you, as we declared we would; secretly, a man was hidden to watch her. When she returned alone, having left you here, he confronted her and overpowered her.”

Whatever they had done to her, she had evidently not revealed where she had left him. That girl was a good one, Rosk or no Rosk. Tyne thought with compunction of her returning to the ketch, only to be jumped on. He remembered her nervousness; the memory seemed to come back to him like a fresh wind.

“You’re too bloody clever, Budda!” he shouted. “You’ll die of it one day.”

“But not today,” Budda said. “Come down here, Tyne. I want to know what the Ittai woman told you.”

So that was why they did not shoot him outright! They needed to find out if Benda had passed on anything they did not know.

Without answering, he turned and ran up the beach, pelting for the trees. At once he heard the sound of firing; the unmistakeable high-pitched hiss of the Roskian service gun, a big .88 with semi-self-propelled slugs. Then he was among the trees and the undergrowth, black, hunched, reassuring, in the dark.

He began immediately to double over to the left, on a course that would bring him rapidly back to the sea without leaving the shelter of the trees. As he dodged along, he looked frequently over his shoulder. Budda and companion were momentarily nonplussed; after the poor performance Tyne had made earlier in their hands, they probably had not expected him to show initiative. After holding a brief conflagration, they took a torch from the boat and commenced up the beach at a trot, calling his name.

By this time, Tyne had worked round to their flank. He crouched on a low cliff directly overlooking boat and beach. Groping in the undergrowth, he found three hefty stones.

At that moment, the two Rosks were running to the top of the beach. Tyne held his breath. They yelled together, their torch went spinning, they crashed into the trap he had prepared earlier on. To guard against eventualities, Tyne had used the spade he discovered to dig a deep trench in the sand across the path anyone heading inland would take. Covered with the rotted shelving from the old fortification, which in its turn was covered lightly with sand, it made a perfect trap. As the Rosks stepped on the concealed boards, they pitched through into the trench. Owing to the steep lie of the beach at this point, an avalanche of fine sand immediately poured in upon them.

Tyne's advantage could be only temporary, a matter of seconds at best.

As the Rosk in the boat stood up to see what the trouble was, Tyne flung the first stone at him. The man was clearly outlined against bright water, and only a few yards away. The stone struck his arm. He turned, raising a .88. A chunk of rock the size of a man's foot caught him in the stomach.

Almost as he doubled up, Tyne was down the sandy cliff and on top of him. He sprang like a leopard, knocking the Rosk flat. A clout over the head with another stone laid him out cold. Tyne pitched him unceremoniously out onto the wet sand, jumped out himself, and pushed the boat savagely out to sea. Flinging himself after it he climbed aboard and hoisted the sail. A bullet from the shore shattered the lamp on the mast. Tyne felt oil and glass spatter his flesh. He laughed.

Turning he saw two figures, black against the sand, climb out of his trap and run to the water. They fired again. The big bullets whined out to sea as Tyne dropped flat.

Rosks could swim like sharks. In their first year on Earth, before the trouble began, they had entered the Olympic Games and won all the aquatic events with ease. No doubt they could swim as fast as a fishing boat moving in a light breeze.

Fumbling into the bottom of the boat, Tyne's steel left hand found the gun dropped by the Rosk he had overpowered. He grabbed it with a whispered word of thanks.

Budda and his companion were wading out, still firing and clutching their torch. They made perfect targets. Steadying his aim over the side of the boat, Tyne drew a bead on the War-

Colonel. The wind was taking the sail now, making the boat dip as it left the lee of the island. He tried to synchronise his firing with the motion, ignoring a hissing missile that slashed through a plank not a foot from his face.

It was funny to be trying to kill someone on such a grand night . . . Now !

The Rosk weapon was superb. Recoil was non-existent. Across the level waters, not so many yards from the boat, Budda croaked once like a frog and pitched forward into the sea, carrying the torch with him.

"My God !" Tyne said. He said it again and again, as his boat gathered speed, dragging him over the moon-smeared waves. After the shock of killing came the exultation of it ; he was almost frightened by the savage delight of his new mood. He could do anything. He could save the world.

The exultation quenched itself as he wondered where Budo Budda was now ; whether anything of the Rosk survived apart from the body peering fixedly down into dark water. Then Tyne deliberately turned to face more practical matters.

Midnight was an hour and a half away. Time slid away from him like the wake of the boat. Murray had to be found before the Rosks reached him—unless he had been found already. Obviously, the first thing to be done on reaching the mainland was for Tyne to report all he knew to Stobart, or to someone in authority. To think to continue a lone hunt for Murray was foolish : yet Tyne found himself longing to do just that, to confront the monster, to . . .

Yes, he wanted to kill the big, laconic space captain. Even—and it was shrinkingly he recognised the urge in himself—he wanted to feel that terrible exhilaration of killing for its own sake.

But another side of his nature merely wanted to solve the puzzle of Murray's disappearance and all that hung upon it. Merely ! Tyne fumed to think he had been unconscious during those vital seconds in Area 101, of which Murray had given one account, Stobart another. The truth might lie in either or neither of them, and the truth might never be revealed. Truth was a primal force, almost like gravity ; like gravity, it was always there, yet some people never even realised its presence.

Pocketing the .88 gun, Tyne steadied the high, stiff, tiller. One of his earliest memories, half embedded in the silt of forgetting, was of himself in his pram and certainly not more

than three years old. He was throwing a toy out of his pram. The toy fell to the ground. Every time he threw it, the fool thing went *down*. He tried with other toys, with his shoes, his hat, his blankets. They all went down. He still remembered the disappointment of it. Even today, he still hated that lack of choice.

Truth had the same inevitability about it ; he just had to go on throwing facts overboard and it would eventually reveal itself to him. This time it was worth persevering : the future of Earth hung upon it.

At that moment, it seemed to him almost an abstract problem. He knew he should be hating the Rosks, the five thousand of them here, the millions of them mustering back on Alpha II. Yet the hate did not work ; could that be merely because he knew one of them to be both brave and beautiful ?

He switched his attention to sailing. The sail was cumbersome, the boat did not handle readily. It would probably, Tyne reflected, take him longer to get back from the island to Sumatra than the scout ships took from Sumatra to Luna. Progress was a fever from which many parts of the world were immune ; a thousand centuries on, and paddy fields would still be cultivated by hand. For a race set on attaining their blessings in the life to come, material innovation may be a complete irrelevance. Tyne, consequently, was going where the wind blew.

But he was lucky. A South East monsoon wind had him. In half an hour, the coast was in sight. In another hour, Tyne was steering in under the dark cliffs, looking for a place to scramble ashore. On a small, rocky promontory, two native huts sagged under their load of thatch ; a yellow light burned in one of them. Running the boat ashore on sand and stones, Tyne climbed out and made for the dwellings.

Among the trees stood a small kampong. It smelt good : smoky and sweet. Tyne found an old man, smoking the last half-inch of a cheroot in the moonlight, who would lead him to a road. As they walked, Tyne learnt with relief that he was no more than a dozen miles south of Padang.

"Not an hour's walking from here," the old man said, "is a telephone in which you may speak to certain people at the capital. If you say to them to send a fast car, a fast car will come."

"Thanks for the suggestion. I'll certainly do as you say. Whereabouts is this phone ? In a house or a shop ?"

“ No, the telephone is in the new sea water works, where sea water is turned into food.”

Tyne recognised this description ; the old man was referring to the plankton plant at Semapang. He thanked him gratefully when they reached the road, asking him to accept the fishing boat as a present. Much delighted with this, the native in return produced some food wrapped in a palm leaf, which he insisted Tyne should have. Tyne thanked him and set off with a good heart. The folded leaf contained boiled rice, pleasantly spiced and with a few shreds of asswabi added. Tyne ate ravenously as he walked. Though the road was no more than a track, every rut in it lay clearly exposed in the moonlight. On either side stood the jungle, still as an English wood, forbidding as an English summer.

Fifty minutes passed before he gained the first sight of the plankton plant. By then, Tyne was feeling less fresh than he had done. The moon was inclined to hide behind accumulating cloud. Leaning against a tree, he paused to rest and consider. Thunder grumbled like thought above the treetops.

Mina, when Tyne questioned her in the Roxy, had said that Murray was coming here, to the plankton plant. The spy patrol captain could have only one reason for visiting this place. The plant was completely automated ; at the most, it was peopled only by an odd engineer during the day and a guard at night. Murray must have chosen the spot as a hideout until he could make contact with his Rosk agent. On the face of it, it seemed a remote and unlikely spot to choose : but that in itself might be a good reason for choosing it.

Tyne's mind was made up. In his pocket was the Roskian .88 gun. He would hunt down Murray himself ; if he was here, he would find him. There was a personal score to be settled with Murray. After that would be time enough to phone Stobart of the U.N.C.

Through the enamelled outlines of the trees, the bulk of the plankton plant loomed. It looked, in the wan moonlight, like an iceberg. And like an iceberg, much of its bulk lay below water, for it stood on the edge of the sea, its rear facing onto land, its massive front thrusting out into the Indian Ocean.

Every day, millions of tons of sea water were sucked into its great vats, to be regurgitated later, robbed of their plankton content. These minute organisms were filtered into tanks of nutrient solution, fed and fattened, before being passed over to

the synthesising processes, which turned them into compressed foodstuffs, highly nourishing if barely palatable. Such plants, established at intervals round the shores of the Indian Ocean and the China Seas, had done much to alleviate the semi-famine conditions hitherto prevailing in the more populous areas of the tropics.

Tyne approached the place cautiously.

Though he had never been here before, he found it all familiar, thanks to the publicity it enjoyed. He knew that the plant was almost impossible to break into. Where, then, would a hunted man hide? One answer seemed most likely: on the seaward facade.

There, numerous arches and buttresses over the submarine mouth of the plant would afford shelter from the elements—and from all but a personal, on-the-spot search.

Now Tyne was going to make that search.

He slid round a deserted car park. Clouds drifted over the moon; he was happy to take advantage of them. At the end of the park was a high wall. Over the wall was a narrow passage, and then the main building, rising sheer. Carrying an empty oil drum across to the wall, Tyne stood on it, crouched, jumped upwards. Clawing desperately, he pulled himself on top of the wall. He crouched and listened. Nothing. Only the murmur of the sea, the stammering call of a night bird.

The impossibility of getting onto the building now dawned on him. The white walls rose a hundred and fifty feet above him, stretching away unbrokenly on either side, and punctuated only by a dark streak some yards away. Keeping his head down, Tyne wormed along the top of the wall; the dark streak resolved itself into a steel ladder, starting some fourteen feet above the ground and going right up to the roof.

Tyne, getting opposite to it, stood up on the wall and jumped forward, across the passage below. Seizing the rungs with both hands, he got a foothold. His steel hand was nearly wrenched from its socket with the sudden exertion; he clung there motionless until the pain in his arm had subsided. The darkness grew thicker and thicker while he waited. Thunder rumbled overhead. Then he began the upward climb.

Even as he started, the rain began. Tyne heard it swishing through the jungle towards him. Next moment, it hit him as if trying to squash him against the wall. He wondered grimly

how long it was since he had last been completely dry, and continued to climb.

Once on the roof, he squatted and peered about him, trying to see through the wet darkness. Raincloud now obscured the moon. To his right, he saw tall ventilation stacks and heard the rain drumming against them. He was cursing, half-aloud. He was cursing the whole universe, suns and moons and planets but especially planets, for harbouring freak phenomena like life and weather.

Advancing on hands and knees, he made for the seaward side. One last ridge to crawl up, one last ridge to slither perilously down, and he crouched on the top of the facade of the building. Below him were the arches and cavities in which he expected to find Murray. Below that, irritable now, lay the sea.

He could dimly see it, needled unceasingly by the downpour, sucking and slumping against the plant. Immediately below him was a patch of relatively calm water. This lay inside the plankton mesh, a vast perforated screen which ensured that nothing larger than a small shrimp would be sucked into the plant's internal processes. On the other side of the mesh, spray fountained.

In the noise about him, Tyne had lost the need for concealment. He stood up now and shouted, cupping his hands round his mouth.

"Murray!"

The cry was washed away at once into the gutters of soundlessness. He did not shout again.

With water streaming down his face, Tyne dropped onto hands and knees, to begin a crawl along the leading parapet, looking for another inspection ladder that would enable him to get down the facade.

He found one. Grinning to himself with satisfaction, he swung his legs over the edge of the drop. As he took his first foothold, a shot rang out.

Tyne froze. He crouched with his head against the streaming concrete, body tensed against pain. It was impossible to tell where the shot had come from, from above or from below. For the space of ten unendurable seconds, he lay rigid. Then he slithered down the ladder as fast as he could go, heedless of the pain in his good hand and wrist. The wind buffeted him as he went.

No more shots sounded. But in the dark, someone was trailing him.

Tyne climbed off the ladder onto a narrow catwalk. Here was shelter. The architects responsible for the elaborate artificiality of this seaward facade had arched off this layer of it with a row of small, blind tunnels. If Murray was anywhere in the vicinity, the chances were that he would be here. As Tyne entered the first arch, a startled seabird clattered past his face, squawking. He stood quite still until his heart stopped jumping.

Then he began to move from one arch to the next, fumbling, looking for Murray. It was a nerve-wracking business. Underfoot, a slippery mess of bird droppings made the going doubly perilous.

He had reached the third arch along when a watery moon slid through for a moment. Glancing back over his shoulder, Tyne saw a figure climbing down the steps he had just left. Man or Rosk? And if man: was it Murray? Acting hurriedly but indecisively, Tyne swung round to face his pursuer. His foot slid across the slippery concrete, went over the edge.

Before he could save himself, Tyne had fallen from the catwalk. For an instant, his ten fingers, five steel, five painfully flesh, scraped safety; then he was dropping freely, plunging down towards the sea.

Dark water slammed up to meet him. He hit it shoulder first and went under. As he came up gasping, he saw he was inside the plankton mesh.

Someone seemed to be calling from a long way off. The rain beat down like a solid thing, raising splashes from the sea, so that the surface was impossible to define. Tyne choked down water as he swam for the wall.

Then over all the rest of the noise came a new one. It was low and continuous, the roar of a superhumanly angry bull. Tyne felt his legs caught, his progress halted, as if the sound itself had hold of him. He was being drawn underwater. Fighting, shouting, he realised what was happening. The plant's subterranean intake gates had opened. He was inside the screen. He was going to be turned into plankton juice.

Somewhere below him, sluices swung wide. The man was dragged under, over and over, swept into the throat of the great plant, helpless as a leaf in a storm. The last shreds of light and air were torn from his world.

To be concluded

This is Clifford Reed's first story to appear in New Worlds although he has now had several published in our companion Science Fantasy. He also heads our "Profile" page this month, in case you would like to know more about him. Meanwhile, here is an extremely versatile robot story considerably different to the accepted theme of robotics.

MORGAN'S GALATEA

By CLIFFORD C. REED

There are some sentimentalists who would argue that Angela Bradshaw, (Angela Phipps that was), is largely responsible for Morgan going off his head. But Father Paul will not allow that. By his reckoning, Morgan brought it on himself. He will concede that Angela contributed to what happened ; that she, so to say, triggered off the reaction in Morgan's mind, but he insists that, in the last analysis, it is Morgan himself who is responsible for his own state.

It wouldn't be any good asking Morgan. He's living in a world of his own, and he's happy in it.

Not that many people know he's mad. Only five, and they won't talk.

Not even Johnson, the head of Universal Robots, who lost the best designer in the world when Morgan left. Lost him for good, because Morgan won't touch robots now. Johnson doesn't blame him for that. When a man has achieved perfection, you don't suggest he tries again. What artist would listen to you if you did? Would Pygmalion, after Galatea first spoke?

That's how it is with Morgan. He's made the perfect robot, and he's satisfied. It's not like the ones he designed for Universal, the ones that made him famous. Those are functional tools, and nothing more than that. He's not ashamed of them. They're honest jobs. He'll draw royalties on them to his dying day, and his heirs after him, but they're not his masterpiece. He's not interested in them.

He was interested once. When he was building dreams around Angela Phipps, and what it would be like to be married to her. She was tall, and blonde, and she made him think of a Greek goddess. At that, he wasn't so far out. She looks even more like one nowadays, very beautiful, very detached, and with no warmth in her laughter. That was probably how she looked the day he asked her to marry him and she refused him.

"A funny little man," I've heard her call him.

If he'd taken to the bottle it wouldn't have been surprising. He was a sensitive type—too much so. He'd never layered himself with a protective crust. He'd been too intent on the flame inside his mind, trying always to express it. That, of course, was what made him so valuable to Universal. Unfortunately for him, the work he did there wasn't what he wanted to be doing. What he wanted to give the world was beauty. The world, through Universal, thwarted him by insisting on utility.

Angela's amusement, destroying the one dream which he felt must come true, which was to make up for everything else, cut him deeper than he could take.

He didn't say anything. Not to anyone. Instead, he did the worst thing he could have done. He brooded. And the longer he did that, the stronger the idea grew. Until, in his sick mind, (only he didn't know it was sick), he could see that the root of all the world's troubles lay with women. Because of their dishonesty. And that the only hope of curing this was to show women up for what they were. For him to show them up. Because he was the only man in the world who couldn't ever again be deceived by any woman.

The fact that he could entertain this idea proved that he'd gone past the safety mark. But, seeing that he never revealed the way his mind was working, no one suspected the state he was in. It was only afterwards, when Fr. Paul read his notes, that the picture became clear.

After Morgan had created his perfect woman, and the five people who to-day know the whole story had met her.

Reading those notes, it's fascinating to trace out how his crazy mind had worked. For example, a normal artist with such a project, would certainly have started by experimenting with his materials. He'd probably have finished up deciding that the whole idea was impossible. Morgan, being as he was, never bothered to wonder whether it was possible. To him that was merely a technical detail. Which he would work out when the time came. The first thing, as he saw it, was to find his model.

Angela Phipps, remember, was statuesque and blonde. Morgan went looking for a slim brunette. That way he reproved the image of Angela Phipps that was in his mind. Angela Phipps was also respectable; very respectable. So Morgan went looking for his model in court.

Elderton is only a small town, but it's not far from the city. The court there is kept busy, but the women who pass through its mesh don't have to be beautiful to qualify. Mostly, they're not. Nevertheless, Morgan didn't let that discourage him. He drove over every morning, found a place near the dock, and sat through the day. Week after week. It didn't enter his mind that he wasn't likely to find her, that the odds against him were phenomenal. This was where his crazy logic pointed, and that was all there was to it.

After he had been going for about three months, he found her.

"Maria Gordinski," the clerk called.

Morgan turned his head. As he had done a thousand times, only to turn back again, and wait for the next case. This time, however, he did not turn back.

Hair : dark, rich, and flowing. Face : the face he had dreamed of, except his dream face was serene where this one was resentful. Body : underneath the dress the muscles rippled the material sleekly. There was only one last question—the voice ?

"Your name ?"

"Maria Gordinski." Deep not fast, with a slight accent that was not an absolute disqualification.

Physically, she was perfect. But, if there was nothing behind the facade, if there was no life, no spirit, she would not do. For his purpose, a chocolate box exterior was not enough.

"Address ?"

"Where I am standing." The tone was as insolent as the words. The court stiffened.

Inside himself, the artist smiled. He *had* found her !

"No address. Occupation ?"

"Call girl. Or, must I have an address for that ?"

The police escort looked shocked. The clerk looked shocked. The Magistrate looked like a frozen lizard.

A policeman gave evidence. The prisoner gave her story. The magistrate gave his verdict.

"I haven't got it," the prisoner flung back. "Like I told you. I get off the train. I am looking for a room. I get pinched. I drop my bag with my money in it."

"Trying to escape," the magistrate reminded her.

The prisoner shrugged.

"If you cannot pay the fine," the magistrate declared, "you will have an address. For the next thirty days."

"And that's justice !" Maria Gordinski observed.

The man sitting next to Morgan nudged the artist. "They ought to give her half an hour to find the dough." He grinned.

Morgan did not answer. His eyes followed the prisoner. When she disappeared he smiled to himself. Her being without money was to his advantage. She would be only too glad to accept his proposal.

Enquiries led him to the right office. He identified himself, was heard with respect, paid the girl's fine. Everything went smoothly.

In Morgan's car, driving away from the city, the woman looked at him without gratitude. "Why can't I stay in town ?" she demanded. "I can come out every day."

He did not tell her that it was because he did not trust her not to come, should she find something more to her taste. Instead, "Don't you want the money ?" he asked. "It's more than you'll get anywhere else."

"The money's good," she agreed. She stared out of the car at the countryside around Elderton. "So is the scenery," she said. "Except you can't live on scenery." She turned back to him. "These rooms you say I can have in your house—?"

"They're nice rooms," Morgan said.

"It could be. Only, do I share them ? Is that why the money is good ?"

Deliberately Morgan pulled in to the side of the road. Faced her. "We'll get that clear now," he said. "You do not share them. I want that understood. There is only one thing between us, and that is business."

Maria Gordinski nodded. "If that is how you want it." She looked at him speculatively, her amusement hardly concealed. "You are going to tell your neighbours that is how it is?" she asked impertinently.

"They will not be interested," he retorted. He paid no attention to her chuckle, but let in the clutch, and drove on.

All was going very well, he told himself.

In the late afternoon, however, he tapped on the door of her bedroom. He was frowning.

"Well?" she asked.

"Mrs. Peters, my housekeeper—" he said. "She's left."

Maria Gordinski grinned. "You did not tell her that I was your sister?"

"No!"

The girl leaned against the jamb of the door. "You would not listen to me," she pointed out. She nodded. "It is a good thing for you that I can cook," she said.

Morgan followed her downstairs into the kitchen. "Tomorrow," he began apologetically, "I will find someone."

She looked at him ironically. "The trouble with you is you've got a nice mind," she commented. She looked round her with calm assurance. "Go and sit down somewhere," she instructed. "While I take care of what your Mrs. Peters was too respectable to finish."

He lingered. "Tomorrow—"

"Not tomorrow," Maria said. "Nor the next day. Nor any day while I am here." She looked at him without emotion. "It will be more comfortable for you with your neighbours if I stay in town like I said."

"You will not leave," Morgan declared. "Have you forgotten my work? That is more important than what these others think."

She did not argue. She turned her attention back to the kitchen, and Morgan, finding himself dismissed, wandered away into the sitting room.

He came down early next morning, but she had already risen.

"Breakfast is ready," she told him.

He sat down cheerfully. "After that," he said, "we can begin."

Maria brought two plates from the oven, sat down herself. "After that," she answered, "I have the house to clean. Then, there are things to be bought. I have made a list for you."

"That will take the whole morning!" Morgan protested.

"There is the afternoon," Maria said.

They fell in a routine. In the mornings he obeyed her orders. In the afternoons she obeyed his. Elderton observed, commented, and deduced; savouring the scandal on its doorstep. Morgan, after he had failed to find a successor to Mrs. Peters, appeared not to be interested in the town's attitude. Until, on one of Maria Gordinski's errands, he bumped into Fr. Paul on the street.

"It does not surprise me that people are talking," the priest told him. "It would surprise me very much if they did not." He smiled wistfully. "Indeed, I would regard it as a miracle."

"There is no truth in it," Morgan swore.

Fr. Paul shrugged. "That is the last thing that gossip needs. It is sufficient that you have brought her to live in your house."

"As a model," Morgan pointed out.

"'Model'" Fr. Paul reminded him, "is a word which has come to mean other things also." He looked at the artist. "You will either have to marry her, or send her away."

Morgan's face set. "I will do neither," he answered. "I want nothing to do with women."

A surprised Fr. Paul, staring after him, shook his head. Either his ears were playing him false, or Morgan was overdoing the artistic approach. The man, he told himself, would be growing a beard next.

Maria found it equally puzzling when Morgan reported the incident. "Like your Father Paul," she commented, "I also do not understand." She rose, and went to where a mirror hung on the wall. "No," she said after a moment, "I do not understand."

"It is not important," Morgan assured her. "Did the stuff come?" he asked.

She nodded. "Three cases. They put them in your workshop. Also, the electricians have finished."

"Good!" Morgan stood up. "Come on," he said.

She did not move. "You do not need me now," she said.

Morgan frowned. "Of course I need you," he snapped.

She shook her head. "You have finished your model."

"I have finished *one* model," he corrected. "That is only the beginning."

"Of me," Maria retorted, "that is enough. I am satisfied with that. One!" She scowled at him. "I am not wholesale for you to turn out like a factory. Sitting this way! Sitting that way!" She flounced in illustration. "Lying down! Like the statues people put in their windows. No! One is enough."

Morgan controlled his impatience. That was the worst of people with any trace of foreign blood. They became emotional on the least excuse.

"I am not making a statue," he explained reasonably.

She looked back without any less resentment. "Then what?" she demanded. "Is it a lie all this? Is it something else that you want, but you are afraid to say it?"

He caught her wrist. She twisted, but was powerless against his angry grip. "You will not talk like that," he rasped.

"I *will* talk," she retorted. "You will not stop me. Even if you break my arm. As you are doing now."

He released her slowly. His face was pale. "I have not explained," he said, "because you would not believe me."

She rubbed her wrist as she watched him. "You do not have to explain," she muttered. "Because there is nothing more. Now it is finished, and I do not stay any longer."

"There is more," Morgan answered earnestly. "This is only the beginning. The arrangement we made, the business agreement—if you stay, I will pay you well." The hand he stretched out towards her quivered. "You will be rich," he promised.

Maria stared.

"If you agree to stay," Morgan urged, "if you help me in this, I will pay you whatever you ask."

Her eyes narrowed. Morgan, watching her intently, smiled at this sign. "Five thousand pounds," he tempted.

She was still.

"You will be rich," he repeated.

"What is it you want me to do?" she asked. "There are some things, even for five thousand pounds—"

"No," he denied. "There is nothing you would not do for that."

She shivered. She licked her lips. "No!" she burst out. "Not unless you tell me."

"I will tell you this," he conceded. "There is no harm to anyone in this. Only good. Only—the truth." Maria's

forehead wrinkled. "Even *you* will recognise that when it is finished."

"When *what* is finished?" she persisted. "For that money, you want something big. Maybe too big."

"There is no need for you to know," he repeated.

"Then—" Maria swallowed. "Then I will not stay." She moved away from him. "I will get my case now. When I come back you will pay me what is right up to to-day."

"You do not want to be rich?" he asked.

"I want to be rich," Maria agreed. "But I do not do this unless I know what it is." She went out.

He smiled, waiting. She would come back. Or, she would stay in her room until he came up to persuade her. That was a woman's way. Only, here was one man who could not be cheated.

He heard her heels coming down the stairs, and turned. She had on the dress in which he had first seen her. She put down her case at the door. "Maybe, if you go over to her," she said, "your Mrs. Peters will come back. Or you can eat out to-night, and tomorrow someone will be found. If she comes, the vegetables are already prepared." She nodded. "If you call my money half a week?" she suggested.

"You're going?"

She said nothing. Only waited.

"You'd turn down five thousand pounds. You're obstinate enough for that."

"I am not obstinate," she denied. "I do not want to refuse. I say to myself I am crazy to do this. But I do not go into a thing blind. I have still caution enough not to do that."

He had been wrong, he realised. He had gone about it the wrong way. He should not have tried to dazzle her. That had showed her how necessary she was to him. She was turning that against him, and there was nothing he could do about it. Except make sure that she realised that she would not get a penny if she played him false.

"Very well, then," he capitulated. "I will tell you. But, if you repeat what you know, before I say that it is time, you will get nothing."

"I shall not speak," she said.

He nodded. "I am making a robot," he said.

"Like me?" She smiled.

"In appearance. Yes. In appearance only." He moved to the window, stood looking out. "The difference between this robot and all others is that no one, without being told, will suspect that it is a robot and not a living person."

"From how far off?" she asked intelligently.

Morgan swung round. "As we are now," he declared. "In the same room." His voice dropped. "And not only that," he said. "Not only by looking, by touching. But—speaking to it. As you would speak to me."

She gasped. "You mean—?"

"That if you did not know you would believe it was a person like yourself." Morgan's eyes shone brightly, revealing his excitement, revealing the relief in letting out the secret he had kept bottled up so long.

The girl slid down on to the nearest chair. "Can you do that?" she wondered.

"I shall do that. With your assistance."

She shook her head. "To make a thing like that!" she breathed. She smiled. "Like me," she whispered.

"There is more," he told her. Now that he had started he must continue. So that she should realise how important the work was. "There is character," he said slowly.

"I do not understand" Maria confessed.

"No." His voice was sombre. "No, you would not understand. No woman would. They only understand what they believe is to their advantage. But—men will understand. When they see what they believe is a woman, but who is honest and kind, and true. Who is what men dream women are, until they learn otherwise. That is what I shall do.

I shall show them what women should be, so that, afterwards, comparing them, no woman will ever deceive them again."

She had listened with bewilderment. But now she came to her feet, breathing deeply, agitated and troubled. "No!" she cried.

He came close, his eyes holding hers. There was pain in his face, she saw, but there was purpose also. He nodded at her. "Yes," Morgan answered. "That shocks you. To find that there is one man whom you cannot deceive. Who knows you for what you are, a representative of your sex. Whom you, personally, will betray for money. As no man would ever do."

She trembled, staring at him, not knowing what to say.

"It frightens you that I should know this," he went on. "It frightens you, that when I have finished, all men will see, and will know. So that, afterwards, no woman will ever have again that power they have misused so long."

"It—it is madness," Maria whispered.

"Yes. You would say that. But it is not madness. It is necessary if the world is to be saved." His voice was urgent. He spoke fast. His hands gripped her above the elbows. "You will not speak of madness. Not again. Ever. Because what I say is true." He smiled suddenly. "I am not impatient. I do not expect you to understand yet. As you will understand when I have finished this work, and the world is healed. But, until then, you will not fight against this task. You will not speak of it to anyone. You will not say that it is madness. Because you know that you do not understand, and because of the money I will give you when it is finished."

He stood back. "I have told you what you said you must know."

Slowly she nodded.

He smiled again. "Now you see why you must stay," he said gently. "Because I need you. And because of the money."

She looked at him for a long time. Then—"I will stay," she told him.

He lifted his hand, and touched her shoulder. "That is what you should say," he breathed. He bent forward, looking into her face. "Remember," he said, "to earn that money you must be faithful. You must not fight against what I am doing."

"No," she replied. "I will not fight against you." She backed towards the door. "I will put my bag in my room again," she said.

He stood aside. "Afterwards," he said, "I will teach you more of what we have to do."

He watched her go up the stairs. He was aware of exaltation. He had been able to turn defeat into victory. Because she was a woman he had been able to buy her. As he could never have bought a man. It was a good omen for the future.

He grew more pleased as the weeks passed. She was intelligent. Better still, she was reliable. He could tell her what she must do, and could be confident that she would follow his instructions. She did not plague him with objections

and criticisms. He was able to concentrate on the many problems he had to overcome. He was able to solve them.

There was flesh to be imitated, seemingly living flesh, with blood coursing in it. There were the myriad nerves and muscles under that flesh to be articulated. There was breathing to be stimulated, and sound. Speech sounds, laughter, and sorrow ; all the emotions.

A year went by.

Maria Gordinski rose from the chair in which she sat in her bedroom, and went over to the mirror. "Is this me?" she asked. She saw the lips move, heard the words. She noted how she was conscious of the precise muscles which responded to the voicing of her question ; how automatically she assessed the tone values her ears received. Instinctively now her brain did these things. As it had been doing for so long. "Is this me ? Or, is it ' that '?"

She leaned her face against the cold glass. "Are you still Maria Gordinski," she questioned, "or what are you ? What have you become ? Are you still a woman, or have you become a doll ? An empty mindless thing. A mad dream. That has taken hold of someone, and killed him, and will break you also. If you do not go before it is too late."

She stood, leaning against the wall, her cheek on the mirror, her arms stretched out, palms to the wall. "Where is Maria Gordinski ?" she sighed. "Where has she gone ? I am not her. Not any more."

The tears moistened the glass where her face pressed against it. Slowly she straightened. "It is time for me to go," she said.

She heard the front door open, and close, and she shivered. "I did not go yesterday," she whispered. "It would have been better for me if I had. Or before that. At the beginning, when he first told me. That was when I should have gone. Now it is too late."

She heard him coming up the stairs, heard his tap on the door.

"May I come in ?" Morgan's voice asked.

The handle turned, and he stood in the opening, looking at her.

"Tears," he said. "Why tears ? To-day is not for tears." He came towards her. "To-day we are finished. We have done our work. And to-night, after dinner, people will be here to see what we have done."

"People?" Maria Gordinski asked.

"Father Paul," Morgan told her. He took both her hands. "Mr. Shiptoe, the manager of the bank. Johnson of Universal. Professor Staples. Responsible people."

"Men," Maria commented.

"Of course." Morgan looked at her in surprise. "Sometimes," he confessed, "I forget that you are a woman."

"I have seen that," she said.

If there was a note in her voice he did not observe it. "You should have been a man," he said.

"For all the good I do," she retorted, "I might as well have been." She brushed past him. "These very responsible friends of yours—do they eat here?" she asked.

He followed her. "I did not mean to offend you," he apologised. "You do not deserve that. You have been very loyal." He took her arm confidentially. "I will tell you a secret," he said. "This is how I have planned it."

She listened, her head turned slightly so he should not see her face. When he had finished speaking she nodded.

After dinner she vanished. Morgan, all preparations made, with nothing to occupy him, paced up and down. Until he heard the cars pull up outside. He went quickly out into the hall, and opened the front door.

"Father Paul. Come in. Mr. Johnson; Professor; Mr. Shiptoe. Thank you all for coming, gentlemen."

He brought them into the sitting room, the lean, dark banker, Shiptoe; the florid, beaming Professor; the burly Johnson, presiding genius of Universal Robots; the silent, courteous Fr. Paul. He found them seats. He himself remained standing, smiling at them, savouring this moment.

"Don't keep us in suspense," Professor Staples boomed. "Now that you've got us here, what is it all about?"

"On the phone," Johnson said, "you said it was in *our* line?"

Morgan nodded.

The banker's interest quickened. He sat up. "*That* sounds interesting," he offered. "Very interesting."

Morgan drifted towards the door. "First," he murmured, "there is someone you must meet."

He was gone before they could protest.

"The woman—!" Staples scowled.

Johnson shrugged. "She's his business," he countered. "Saving your presence, Father."

Morgan was coming back. They heard his voice, caught the note of controlled excitement in it. "Do not be shy," he said.

The woman came into the room with him. The men rose, awkwardly, faintly resentful. Only the priest appeared unmoved, watching the artist. Morgan introduced his guests. Calmly she acknowledged them, sat down, smilingly at ease. In the silence each man resumed his place. Waited.

"It is not what you think," Morgan said. "You are in for a surprise, gentlemen."

"You mean—you've been married all the time?" the Professor barked.

"Not that," Morgan answered.

"Then what is it?" Staples growled. "Don't play about, man."

"Why not ask Johnson?" Morgan countered.

The big man looked back at his host, shook his head. "I'm not with you," he denied.

"You asked whether it was in your line," Morgan reminded him. Deliberately he looked across at the woman, looked back at Johnson.

The burly man stiffened. His eyes had followed Morgan's. He seemed to crouch in his chair. "You're playing, Morgan," he taxed.

Morgan shook his head.

Johnson rose. He moved towards the woman, slowly, suspiciously, incredulous and angry. She looked at him, composed, serene. He halted. "If this is a joke!" he rasped.

"It's no joke," Morgan assured him. He chuckled exuberantly. "Feel her," he told Johnson. "Examine her. See if *you* could be sure she wasn't what she seems to be." He waved to the others. "You too," he said. "Satisfy yourselves. This is why I asked you to come here to-night."

Only Fr. Paul remained seated. Morgan did not press him. It was enough for the others to be convinced. He stood, watching the three men, his eyes shining, his fingers drumming on the chair before him. He was not conscious of the priest's eyes watching him.

"Well?" he challenged.

They turned to face him. He stood triumphant. "Well?" he said again.

"It's genius," Johnson answered. He grinned, and shook his head.

"It's clever," Professor Staples conceded.

Shiptoe's hand moved from his pocket to his tie, went back to his pocket. "You must have a special purpose in mind," he argued. He looked at Morgan shrewdly. "I take it we are to hear what that purpose is."

"A cleaning purpose," Morgan replied.

Fr. Paul's face changed, became more concerned, became severe. "I think you should explain that," he said.

"You, of all of us," Morgan answered, "will understand what I have done, why I have done this. Because this is what the world needs. A woman who is incapable of lies. What a woman should be. Not a deceiver. But an example for all women to follow."

There was pity in the priest's face now. But there was no hesitation in his voice. "You are not God, my son," he warned. "A woman such as you conceive would not be human. A woman, or a man, incapable of deceit, would help no one."

"No !" Morgan cried. "You can't say that."

"I must say that," Fr. Paul answered. He rose, and came to Morgan, put his hand on him. "What you have made is not real. It can never be real. It is a dream. But it is not based on truth, so it will not capture men's hearts."

Morgan flung his hand away. "You do not *see*," he choked. He swung round to face Johnson. "You !" he said. "You will listen." He grabbed Johnson's arm, dragged him to the woman he had created. "Look at her," he commanded. "As you looked, all of you, when she came in." He shook the big man. "Do as I tell you," he commanded fiercely. "Imagine you did not know that she was not a living person. Imagine she was the woman you believed her to be. Speak to her as though she were that woman, and you were alone with her."

Johnson glared, tore his arm free. "What do you think I am," he snapped.

"Do what he says," Fr. Paul put in. Shocked, Johnson wheeled to face the priest, to protest. "You are his neighbour," Fr. Paul silenced him. "Do it as though it were true what he says."

Under this compulsion the big man was silent. He looked at the others, at the red face of the professor, the dark face of

Shiptoe. Each wore the same uneasy expression. Troubled, his eyes came back to the priest.

"It will not go outside this room," Fr. Paul promised.

Reluctantly Johnson edged towards the woman. She smiled.

"Miss Gordinski?" he muttered.

"Yes, Mr. Johnson?"

"Miss Gordinski." He fumbled at his collar, looked away, met Fr. Paul's eye, returned to his task. "Miss Gordinski. Maria? There is something I have to say."

"Yes."

He forced himself to go closer. His voice dropped. Not because it was more intimate. But because, instinctively, he was unwilling for the others to hear. "If we were alone," he muttered, "if *you* were alone in this house, and I called—would you let me in?"

"If you wished to come in, I would let you in."

He licked his lips. "Maria, if, when I was in, I did not wish to leave, would you let me stay?"

"If you wished to stay, I would want that also."

He stopped.

"Go on, my son," Fr. Paul whispered.

"If I said I loved you, Maria, what then?"

They waited for the answer.

"That is what a woman is for, Mr. Johnson. To love, and be loved."

"Enough!" Professor Staples exploded. He shook his head. "You did that well, Johnson. Good questions. Well put. Questions only a *real* woman could handle. Not a machine."

He stood up. "I've seen all *I* want," he announced. He glared at the artist. "Now are you convinced?" he challenged. "No matter how good it looks, it's still only a dummy." He ignored Fr. Paul's restraining hand. "It was crazy from the beginning," he said.

Morgan, wide-eyed, quivered with each clubbing sentence. He sagged, staring at their faces. "You—you don't see it?" he pleaded. "What it means? Not those questions. The way he put them. Twisting. Unfair." His voice tailed away.

"A doctor," the banker muttered.

"How long has he been like this?" Johnson wondered. He took an uncertain step forward. "Morgan? Shall we get the doctor?"

"Don't ask *him*," Staples snorted. "It's obvious enough he's not responsible. If he doesn't pull himself together—!" He turned away. "Unless he's gone too far already."

There was movement at the door. They looked. From the woman who stood in the doorway to the woman who sat watching them with a serene expression. Looked back at the one who was, feature by feature, identical with the first. Except that the one in the doorway was not serene, was not detached. They shifted, eyeing her defensively.

"He's mad," Professor Staples flung at her.

"He is not mad," Maria said. "Only, he has been hurt. To-night. And before to-night also." She moved forward to where Morgan crouched in a chair, kneeled down, and took his hand in hers. Stroking it. Until he turned his head.

"It failed," Morgan whispered. "They say it isn't true. They don't believe me." He clutched her arm. "Can you make them believe?" he begged.

Very gently she smiled. "You showed them the wrong one," she said. "You showed them her. You did not show them me."

He stared at her.

"You tired, foolish one," she chided. "So anxious that you could not wait until I came. So tired you let her take my place, and did not know it was not me."

Professor Staples opened his mouth. Swiftly Johnson caught his arm. Shiptoe drove a vicious elbow at his ribs. Staples was silent.

"Ask them now," she said. "Ask them now if I am not a woman." She lifted a hand to his cheek. "How could you think that you had failed?" she said.

He drew his hand across his forehead. "Did I do that?" he asked. He shook his head. "That was a foolish thing to do."

"It does not matter now," she soothed. "For now I am here, and they have seen me."

"Yes," he said. "You are here." He looked up sharply at Fr. Paul. "You do see her?" he questioned.

"We see," Fr. Paul confirmed. He came to the seated man. "Tell me," he asked, "now that she is here, and we have seen her, what is to happen to the other?"

"She will not want to stay," Maria answered swiftly. She took Morgan's hands once more. "You will not keep her here against her wish. Is that not so?"

He smiled. He shook his head.

She looked across at Johnson. "Will you take her?" she asked. "In your car. To where she should go."

Without hesitation Johnson put his hand on the robot's arm. "Will you wait in my car, Miss Gordinski?" he invited.

They moved together, the towering Johnson, and the beautiful machine. Out of the room. Out of the house.

For one grateful moment Maria closed her eyes.

"My son," Fr. Paul said.

"Yes," Morgan answered.

"What you have shown us to-night. The real woman. Whom we acknowledge gratefully. There is still one thing necessary to complete what you have done. So that those who would decry it, who would soil it in ignorance, may not be tempted."

"Yes?" Morgan said eagerly.

"Will you marry this woman?" Fr. Paul demanded.

Maria Gordinski was still.

"I?" Morgan faltered. "I had not thought of that," he said. "Not for *me*." He looked down at Maria. "Would that be right?" he asked.

She remained kneeling, looking up at him. Shiptoe's fists were clenched tight. Even Professor Staples was still.

Then—"It would be right," she answered.

She did not see the dark-faced banker smile. All her attention was for Morgan.

"I will speak to the bishop to-night," the priest told them. "To-morrow you will come to the church, and you will be married. With these as witnesses. And only these." His eyes held Morgan's. "That is how it must be," he warned. "Because this is not something to be shouted from the house-tops. But as leaven, working secretly. Will you promise that?"

"I will promise," Morgan agreed.

The front door oped for the departing visitors, and closed again. A moment later the cars outside started. After that there was silence.

"I did not pay her what I promised," a stricken Morgan remembered suddenly. He stood up. "I must not cheat her," he said.

"In the morning," she told him. She rose also. "In the morning you can send it to her."

"With a letter," Morgan stipulated. "I must write a letter to go with her money."

"In the morning," she repeated. "Now you are tired. You will go to bed, and I will bring you something warm, and you will sleep."

He looked at her. There was a touch of wonder in his face. "That is how she was," he said. "Always telling me what I must do."

"That is how it will be always," Maria agreed. She moved towards the door. "Come," she said.

"There is one thing," Morgan delayed. He did not look at her. "That one," he said. "With us it was business. Always. Never anything else." He looked at her now, smiling sweetly, and Maria, seeing this smile, trembled. "Will it be like that now?" he asked.

She moved from the door, coming to him, swiftly. She, too, was smiling. Not as the model smiled. Not as the face in his dream had smiled. But so that he moved as swift as she, and caught her as she came. To hold him. To lift her face to him.

"Between us," she promised, "there will never be business. Only this."

Clifford C. Reed

Now On Sale

THE FOURTH ISSUE OF **SCIENCE FICTION ADVENTURES**

Short novels by John Victor Petersen and
Harry Harrison

Plus short stories

Price 2/-

Now that Harry Harrison is domiciled in Europe we find it easier to obtain stories from him—in fact he has a great liking for the British type of science fiction and it may be that this fact is slightly influencing his natural writing style. The following story, however, would read well in any language—even Martian!

TRAINEE FOR MARS

By HARRY HARRISON

Mars was a dusty, frigid hell. Bone dry and blood red. They trudged single file through the ankle-deep sand and in a monotonous duet cursed the nameless engineer who had designed the faulty reconditioners in their pressure suits. The bug hadn't shown during testing of the new suits. It appeared only after they had been using them steadily for a few weeks. The water-absorbers became overloaded and broke down. The Martian atmosphere stood at -60° centigrade. Inside the suits, they tried to blink the unevaporated sweat from their eyes and slowly cooked in the high humidity.

Morley shook his head viciously to dislodge an itching droplet from his nose. At the same moment, something rust-coloured and furry darted across his path. It was the first Martian life they had seen. Instead of scientific curiosity, he felt only anger. A sudden kick sent the animal flying high into the air.

The suddenness of the movement threw him off balance. He fell sideways slowly, dragging his rubberized suit along an upright rock fragment of sharp obsidian.

Tony Bannerman heard the other man's hoarse shout in his earphones and whirled. Morley was down, thrashing on the sand with both hands pressed against the ragged tear in the suit leg. Moisture-laden air was pouring out in a steaming jet that turned instantly to scintillating ice crystals. Tony jumped over to him, trying to close the tear with his own ineffectual gloves. Their faceplates close, he could see the look of terror on Morley's face—as well as the blue tinge of cyanosis.

"Help me—help me !"

The words were shouted so loud they rasped the tiny helmet earphones. But there was no help. They had taken no emergency patches with them. All the patches were in the ship at least a quarter of a mile away. Before he could get there and back Morley would be dead.

Tony straightened up slowly and sighed. Just the two of them in the ship, there was no one else on Mars who could help. Morley saw the look in Tony's eyes and stopped struggling.

"No hope at all, Tony—I'm dead ?"

"Just as soon as all the oxygen is gone ; thirty seconds at the most. There's nothing I can do."

Morley grated the shortest, vilest word he knew and pressed the red EMERGENCY button set into his glove above the wrist. The ground opened up next to him in the same instant, sand sifting down around the edges of the gap. Tony stepped back as two men in white pressure suits came up out of the hole. They had red crosses on the fronts of their helmets and carried a stretcher. They rolled Morley onto it and were gone back into the opening in an instant.

Tony stood looking sourly at the hole for about a minute, waiting until Morley's suit was pushed back through the opening. Then the sand-covered trapdoor closed and the desert was unbroken once more.

The dummy in the suit weighed as much as Morley and its plastic features even resembled him a bit. Some wag had painted black X's on the eyes. *Very funny*, Tony thought, as he struggled to get the clumsy thing onto his back. On the way back the now-quiet Martian animal was lying in his path. He kicked it aside and it rained a fine shower of springs and gears.

The too-small sun was touching the peaks of the sawtooth red mountains when he reached the ship. Too late for a

burial today—it would have to wait until morning. Leaving the thing in the airlock, he stamped into the cabin and peeled off his dripping pressure suit.

It was dark by that time and the things they had called the night-owls began clicking and scratching against the hull of the ship. They had never managed to catch sight of the night-owls ; that made the sound doubly annoying. Tony clattered the pans noisily to drown the sound of them out while he prepared the hot evening rations. When the meal was finished and the dishes cleared away, he began to feel the loneliness for the first time. Even the chew of tobacco didn't help ; tonight it only reminded him of the humidior of green Havana cigars waiting for him back on Earth.

His single kick upset the slim legs of the mess table, sending metal dishes, pans and silverware flying in every direction. They made a satisfactory noise and he exacted even greater pleasure by leaving the mess just that way and going to bed.

They had been so close this time, if only Morley had kept his eyes open ! He forced the thought out of his mind and went to sleep.

In the morning he buried Morley. Then, grimly and carefully, passed the remaining two days until blast off time. Most of the geological samples were in and the air sampling and radiation recording meters were fully automatic.

On the final day he removed the recording tapes from the instruments and carried the instruments away from the ship where they couldn't be caught in the take off blast. Next to the instruments he piled all the extra supplies, machinery and unneeded equipment. Shuffling through the rusty sand for the last time, he gave Morley's grave an ironical salute as he passed. There was nothing to do in the ship and not as much as a pamphlet left to read. Tony passed the two remaining hours on his bunk counting the rivets in the ceiling.

A sharp click from the control clock broke the silence and behind the thick partition he could hear the engines begin the warm-up cycle. At the same time, the padded arms slipped across his bunk, pinning him down securely. He watched the panel slip back in the wall next to him and the hypo arm slide through. Moving erratically like a snake as its metal fingers sought him out. They touched his ankle and the serpent's tooth of the needle snapped free. The last thing he saw was the needle slipping into his vein, then the drug blacked him out.

As soon as he was under, a hatch opened in the rear bulkhead and two orderlies brought in a stretcher. They wore no suits nor masks and the blue sky of earth was visible behind them.

Coming to was the same as it always had been. The gentle glow from the stimulants that brought him up out of it, the first sight of the white ceiling of the operating room on earth.

Only this time the ceiling wasn't visible, it was obscured by the red face and thundercloud brow of Colonel Stegham. Tony tried to remember if you saluted while in bed, then decided that the best thing to do was lie quietly.

"Damn it, Bannerman," the colonel growled, "welcome back on Earth. And why did you bother coming back? With Morley dead the expedition has to be counted a failure—and that means not one completely successful expedition to date."

"The team in number two, sir, how did they do . . . ?" Tony tried to sound cheerful.

"Terrible. If anything, worse than your team. Both dead on the second day after landing. A meteor puncture in their oxygen tank and they were too busy discovering a new flora to bother looking at any meters.

"Anyway, that's not why I'm here. Get on some clothes and come into my office."

He slammed out and Tony scrambled off the bed, ignoring the touch of dizziness from the drugs. When colonels speak, lieutenants hurry to obey.

Colonel Stegham was scowling out of his window when Tony came in. He returned the salute and proved that he had a shard of humanity left in his military soul by offering Tony one of his cigars. Only when they had both lit up did he wave Tony's attention to the field outside the window.

"Do you see that? Know what it is?"

"Yes, sir, the Mars rocket."

"It's *going* to be the Mars rocket. Right now, it's only a half-completed hull. The motors and instruments are being assembled in plants all over the country. Working on a crash basis the earliest estimate of completion is six months from now.

"The ship will be ready—only we aren't going to have any men to go in her. At the present rate of washout there won't be a single man qualified. Yourself included."

Tony shifted uncomfortably under his gaze as the colonel continued.

"This training programme has always been my baby. I dreamed it up and kept after the Pentagon until it was adapted. We knew we could build a ship that would get to Mars and back, operated by automatic controls that would fly her under any degree of gravity or free fall. But we needed men who could walk out on the surface of the planet and explore it—or the whole thing would be so much wasted effort.

"The ship and the automatic pilot could be tested under simulated flight condition, and the bugs worked out. It was my suggestion, which was adopted, that the men who are to go in the ship should be shaken down in the same way. Two pressure chambers were built, simulated trainers that duplicated Mars in every detail we could imagine. We have been running two-men teams through these chambers for eighteen months now, trying to shake down and train them to man the *real* ship out there.

"I'm not going to tell you how many men we started with, or how many have been casualties because of the necessary realism of the chambers. I'll tell you this much though—we haven't had *one successful simulated expedition* in all that time. And every man who has broken down or "died," like your partner Morley, has been eliminated.

"There are only *four* possible men left, yourself included. If we don't get one successful two-man team out of you four, the entire programme is a washout."

Tony sat frozen, the dead cigar between his fingers. He knew that the pressure had been on for some months now, that Colonel Stegham had been growling around like a gut-shot bear. The colonel's voice cut through his thoughts.

"Psych division has been after me for what they think is a basic weakness of the programme. Their feeling is that because it *is* a training programme the men always have it in the back of their minds that it's not real. They can always be pulled out of a tight hole. Like Morley was, at the last moment. After the results we have had I am beginning to agree with Psych.

"There are four men left and I am going to run one more exercise for each two-man group. This final exercise will be a full dress rehearsal—this time we're playing for keeps."

"I don't understand, Colonel . . ."

"It's simple." Stegham accented his words with a bang of his fist on the desk. "We're not going to help or pull anyone out no matter how much they need it. This is battle training with live ammunition. We're going to throw everything at you that we can think of—and you are going to have to take it. If you tear your suit this time, you're going to die in the Martian vacuum just a few feet from all the air in the world."

His voice softened just a bit when he dismissed Tony.

"I wish there was some other way to do it, but we have no choice now. We have to get a crew for that ship within the next few months and this is the only way to be sure."

Tony had a three-day pass. He was drunk the first day, hungover sick the second—and boiling mad on the third. Every man on the project was a volunteer, but this was carrying the thing too far. He could get out any time he wanted. Though he knew what he would look like then. There was only one thing to do, go along with the whole stupid idea. He would do what they wanted and go through with it. And when he had finished the exercise, he looked forward to hitting the colonel right on the end of his big nose.

He joined his partner, Hal Mendoza, when he went for his medical. They had met casually at the training lectures before the simulated training began. They shook hands reservedly now, each eyeing the other with a view to future possibilities. It took two men to make a team and either one could be the cause of death for the other.

Mendoza was almost the physical opposite of Tony, tall and wiry, while Tony had the squat, solid look of a young bull. Tony's relaxed, almost casual manner, was matched by the other man's seemingly tense nerves. Hal chain-smoked and his eyes were never still.

Tony pushed away his momentary worry with an effort. Hal would have to be good to get this far in the programme. He would probably calm down once the exercise was under way.

The medic took Tony next and began the detailed examination.

"What's this?" the medical officer asked Tony as he probed with a swab at his cheek.

"Ouch," Tony said. "Razor cut, my hand slipped while I was shaving."

The doctor scowled and painted on antiseptic, then slapped on a square of gauze.

"Watch all skin openings," he warned. "They make ideal entry routes for bacteria. Never know what you might find on Mars."

Tony started a protest, then let it die in his throat. What was the use of explaining that the real trip—if and when it ever came off—would take 260 days. Any cuts would easily heal in that time, even in frozen sleep.

As always after the medical, they climbed into their flight suits and walked over to the testing building. On the way, Tony stopped at the barracks and dug out his chess set and a well-thumbed deck of cards. The access door was open in the thick wall of Building Two and they stepped through into the dummy Mars ship. After the medics had strapped them to the bunks the simulated frozen sleep shots put them under.

Coming to was accompanied by the usual nausea and weakness. No realism spared. On a sudden impulse Tony staggered to the latrine mirror and blinked at his red-eyed, smooth-shaven reflection. He tore the bandage off his cheek and his fingers touched the open cut with the still congealed drop of blood at the bottom. A relaxed sigh slipped out. He had the recurrent bad dream that some day one of those training trips would *really* be a flight to Mars. Logic told him that the army would never forego the pleasure and publicity of a big send-off yet the doubt, like all illogical ones, persisted. At the beginning of each training flight, he had to abolish it again.

The nausea came back with a swoop and he forced it down. This was one exercise where he couldn't waste time. The ship had to be checked. Hal was sitting up on his bunk waving a limp hand. Tony waved back.

At that moment, the emergency communication speaker crackled into life. At first, there was just the rustle of activity in the control office, then the training officer's voice cut through the background noise.

"Lieutenant Bannerman—you awake yet?"

Tony fumbled the mike out of its clip and reported. "Here, sir."

"Just a second, Tony," the officer said. He mumbled to someone at one side of the mike, then came back on. "There's been some trouble with one of the bleeder valves in the chamber; the pressure is above Mars norm. Hold the exercise until we pump her back down."

"Yes, sir," Tony said, then killed the mike so he and Hal could groan about the so-called efficiency of the training squad. It was only a few minutes before the speaker came back to life.

"Okay, pressure on the button. Carry on as before."

Tony made an obscene gesture at the unseen man behind the voice and walked over to the single port. He cranked at the handle that moved the crash shield out of the way.

"Well, at least it's a quiet one," he said after the ruddy light had streamed in. Hal came up and looked over his shoulder.

"Praise Stegham for that," he said. "The last one, where I lost my partner, was wind all the time. From the shape of those dunes it looks like the atmosphere never moves at all."

They stared glumly at the familiar red landscape and dark sky for a long moment, then Tony turned to the controls while Hal cracked out the atmosphere suits.

"Over here—*quick* !"

Hal didn't have to be called twice, he was at the board in a single jump. He followed Tony's pointing finger.

"The water meter—it shows the tank's only about half full."

They fought off the plate that gave access to the tank compartment. When they laid it aside a small trickle of rusty water ran across the deck at their feet. Tony crawled in with a flashlight and moved it up and down the tubular tanks. His muffled voice echoed inside the small compartment.

"Damn Stegham and his tricks—another 'shock of landing' failure. Connecting pipe split and the water that leaked out has soaked down into the insulating layer ; we'll never get it out without tearing the ship apart. Hand me the goo, I'll plug the leak until we can repair it."

"It's going to be an awfully dry month," Hal muttered while he checked the rest of the control board.

The first few days were like every other trip. They planted the flag and unloaded the equipment. The observing and recording instruments were set up by the third day, so they unshipped the theodolite and started their maps. By the fourth day they were ready to begin their sample collecting.

It was just at this point that they really became aware of the dust.

Tony chewed an unusually gritty mouthful of rations, cursing under his breath because there was only a mouthful of water to wash it down with. He swallowed it painfully, then looked around the control chamber.

"Have you noticed how dusty it is?" he asked.

"How could you *not* notice it? I have so much of it inside my clothes I feel like I'm living on an ant hill."

Hal stopped scratching just long enough to take a bite of food.

They both looked around and it hit them for the first time *just* how much dust was in the ship. A red coating on everything, in their food and in their hair. The constant scratch of grit underfoot.

"It must come in on our suits," Tony said. "We'll have to clean them off better before coming inside."

It was a good idea—the only trouble was that it didn't work. The red dust was as fine as talcum powder and no amount of beating could dislodge it; it just drifted around in a fine haze. They tried to forget the dust, just treating it as one more nuisance Stegham's technicians had dreamed up. This worked for awhile, until the eighth day when they couldn't close the outer door of the air lock. They had just returned from a sample-collecting trip. The air lock barely held the two of them plus the bags of rock samples. Taking turns, they beat the dust off each other as well as they could, then Hall threw the cycling switch. The outer door started to close, then stopped. They could feel the increased hum of the door motor through their shoes, then it cut out and the red trouble light flashed on.

"Dust!" Tony said. "That damned red dust is in the works."

The inspection plate came off easily and they saw the exposed gear train. The red dust had merged into a destructive mud with the grease. Finding the trouble was easier than repairing it. They had only a few basic tools in their suit pouches. The big tool box and all the solvent that would have made fast work of the job were inside the ship. But they couldn't be reached until the door was fixed. And the door couldn't be fixed without tools. It was a paradox situation that seemed very unfunny.

It took them only a second to realize the spot they were in—and almost two hours to clean the gears as best they could and force the door shut. When the inner port finally opened, both their oxygen tanks read EMPTY, and they were operating on the emergency reserve.

As soon as Hal opened his helmet, he dropped on his bunk. Tony thought he was unconscious until he saw that the other

man's eyes were open and staring at the ceiling. He cracked open the single flask of medicinal brandy and forced Hal to take some. Then he had a double swallow himself and tried to ignore the fact that his partner's hands were trembling violently. He busied himself making a better repair of the door mechanism. By the time he had finished, Hal was off the bunk and starting to prepare their evening meal.

Outside of the dust, it was a routine exercise—at first. Surveying and sampling most of the day, then a few leisure hours before retiring. Hal was a good partner and the best chess player Tony had teamed with to date. Tony soon found out that what he thought was nervousness was nervous energy. Hal was only happy when he was doing something. He threw himself into the day's work and had enough enthusiasm and energy left over to smash the yawning Tony over the chess-board. The two men were quite opposite types and made good teammates.

Everything looked good—except for the dust. It was everywhere, and slowly getting into everything. It annoyed Tony, but he stolidly did not let it bother him deeply. Hal was the one that suffered most. It scratched and itched him, setting his temper on edge. He began to have trouble sleeping.

And the creeping dust was slowly working its way into every single item of equipment. The machinery was starting to wear as fast as their nerves. The constant presence of the itching dust, together with the acute water shortage was maddening. They were always thirsty and had only the minimum amount of water to last until blast off. With proper rationing, it would barely be enough.

They quarreled over the ration on the thirteenth day and almost came to blows. For two days after that they didn't talk. Tony noticed that Hal always kept one of the sampling hammers in his pocket ; in turn, he took to carrying one of the dinner knives.

Something had to crack. It turned out to be Hal.

It must have been the lack of sleep that finally got to him. He had always been a light sleeper, now the tension and the dust were too much. Tony could hear him scratching and turning each night when he forced himself to sleep. He wasn't sleeping too well himself, but at least he managed to get a bit. From the black hollows under Hal's bloodshot eyes it didn't look like Hal was getting any.

On the eighteenth day he cracked. They were just getting into their suits when he started shaking. Not just his hands, but all over. He just stood there shaking until Tony got him to the bunk and gave him the rest of the brandy. When the attack was over he refused to go outside.

"I won't . . . *I can't*!" He almost screamed the words. "The suits won't last much longer, they'll fail while we're out there . . . *I won't* last any longer . . . we have to go back . . ."

Tony tried to reason with him. "We can't do that, you know this is a full scale exercise. We can't get out until the twenty-eight days are up. That's only ten more days—you can hold out until then. That's the minimum figure the army decided on for a stay on Mars—it's built into all the plans and machinery. Be glad we don't have to wait an entire Martian year each time until the planets get back into conjunction. With deep sleep and atomic drive that's the one trouble that won't be faced."

"Stop talking and trying to kid me along," Hal shouted. "I don't give a flying frog what happens to the first expedition. I'm washing myself out and this final exercise will go right with me. I'm not going crazy from lack of sleep just because some brass-hat thinks super-realism is the answer. If they refuse to stop the exercise when I call, it will be *murder*."

He was out of his bunk before Tony could say anything and scratching at the control board. The EMERGENCY button was there as always, but they didn't know if it was connected this time. Or even if it were connected, if anyone would answer. Hal pushed it and kept pushing it. They both looked at the speaker, holding their breaths.

"The dirty rotten . . . they're not going to answer the call." Hal barely breathed the words.

Then the speaker rasped to life and the cold voice of Colonel Stegham filled the tiny room.

"You know the conditions of this exercise—so your reasons for calling had better be pretty good. What are they?"

Hal grabbed the microphone, half-complaining, half-pleading—the words poured out in a torrent. As soon as he started, Tony knew it would not be any good. He knew just how Stegham would react to the complaints. While Hal was still pleading the speaker cut him off.

"That's enough. Your explanation doesn't warrant any change in the original plan. You are on your own and you're going to have to stay that way. I'm cutting this connection

permanently ; don't attempt to contact me again until the exercise is over."

The click of the opening circuit was as final as death.

Hall sat dazed, tears on his cheeks. It wasn't until he stood up that Tony realized they were tears of anger. With a single pull, Hal yanked the mike loose and heaved it through the speaker grill.

"Wait until this is over, Colonel, and I can get your pudgy neck between my hands." He whirled towards Tony. "Get out the medical kit, I'll show that idiot he's not the only one who can play boyscout with his damned exercises."

There were four morphine styrettes in the kit ; he grabbed one out, broke the seal and jabbed it against his arm. Tony didn't try to stop him, in fact, he agreed with him completely. In a few minutes, Hal was slumped over the table, snoring deeply. Tony picked him up and dropped him onto his bunk.

Hal slept almost twenty hours and when he woke up some of the madness and exhaustion was gone from his eyes. Neither of them mentioned what had happened. Hal marked the days remaining on the bulkhead and carefully rationed the remaining morphine. He was getting about one night's sleep in three, but it seemed to be enough.

They had four days left to blast off when Tony found the first Martian life. It was something about the size of a cat that crouched in the lee of the ship. He called to Hal who came over and looked at it.

"That's a beauty," he said, "but nowhere near as good as the one I had on my second trip. I found this ropy thing that oozed a kind of glue. Contrary to regulations—frankly I was curious as hell—I dissected the thing. It was a beauty, all wheels and springs and gears, Stegham's technicians do a good job. I really got chewed out for opening the thing, though. Why don't we just leave this one where it is?"

For a moment Tony almost agreed—then changed his mind.

"That's probably just what they want—so let's finish the game their way. I'll watch it, you get one of the empty ration cartons."

Hal reluctantly agreed and climbed into the ship. The outer door swung slowly and ground into place. Disturbed by the vibration, the thing darted out towards Tony. He gasped and stepped back before he remembered it was only a robot.

"Those technicians really have wonderful imaginations," he mumbled.

The thing started to run by him and he put his foot on some of its legs to hold it. There were plenty of legs ; it was like a small-bodied spider surrounded by a thousand unarticulated legs. They moved in undulating waves like a milliped and dragged the mishapen body across the sand. Tony's boot crunched on the legs, tearing some off. The rest held.

Being careful to keep his hand away from the churning legs, he bent over and picked up a dismembered limb. It was hard and covered with spines on the bottom side. A milky fluid was dripping from the torn end.

"Realism," he said to himself, "those technicians sure believe in realism."

And then the thought hit him. A horribly impossible thought that froze the breath in his throat. The thoughts whirled round and round and he knew they were wrong because they were so incredible. Yet he had to find out, even if it meant ruining their mechanical toy.

Keeping his foot carefully on the thing's legs, he slipped the sharpened table knife out of his pouch and bent over. With a single, swift motion he stabbed.

"What the devil are you doing?" Hal asked, coming up behind him. Tony couldn't answer and he couldn't move. Hal walked around him and looked down at the thing on the ground.

It took him a second to understand, then he screamed.

"*It's alive !* It's bleeding and there are no gears inside. It can't be alive—if it is we're not on earth at all—*We're on Mars !*" He began to run, then fell down, screaming.

Tony thought and acted at the same time. He knew he only had one chance. If he missed they'd both be dead. Hal would kill them both in his madness. Balling his fist, he let swing hard as he could at the spot just under the other man's breast-plate. There ~~was~~ just the thin fabric of the suit there and that spot was right over the big nerve ganglion of the solar plexus. The thud of the blow hurt his hand—but Hal collapsed slowly to the ground. Putting his hands under the other's arms, he dragged him into the ship.

Hal started to come to after he had stripped him and laid him on the bunk. It was impossible to hold him down with one hand and press the freeze cycling button at the same time. He

concentrated on holding Hal's one leg still and pushed the button. The crazed man had time to hit Tony three times before the needle lanced home. He dropped back with a sigh and Tony got groggily to his feet. The manual actuator on the frozen sleep had been provided for any medical emergency so the patient could survive until the doctors could work on him back at base. It had proven its value.

Then the same unreasoning terror hit him.

If the beast were real—Mars was real.

This was no "training exercise"—this was it. That sky outside wasn't a painted atmosphere, it was the real atmosphere of Mars. He was alone as no man had ever been alone before. On a planet millions of miles from his world.

He was shouting as he dogged home the outer air lock door, an animal-like howl of a lost beast. He had only enough control then to get to his bunk and throw the switch above it. The hypodermic was made of good steel so it went right through the fabric of his pressure suit. He was just reaching for the hypo arm to break it off when he dropped off into the blackness.

This time, he was slow to open his eyes. He was afraid he would see the riveted hull of the ship above his head. It was the white ceiling of the hospital, though, and he let the captive air out of his lungs. When he turned his head he saw Colonel Stegham sitting by the bed.

"Did we make it?" Tony asked. It was more of a statement than a question.

"You made it, Tony. Both of you made it. Hal is awake here in the other bed."

There was something different about the colonel's voice and it took Tony an instant to recognize it. It was the first time he had ever heard the colonel talk with any emotion other than anger.

"The first trip to Mars. You can imagine what the papers are saying about it. More important, Tech says the specimens and meter reading you brought back are invaluable. When did you find out it wasn't an exercise?"

"The twenty-fourth day. We found some kind of Martian animal. I suppose we were pretty stupid not to have tumbled before that."

Tony's voice had an edge of bitterness.

"Not really. Every part of your training was designed to keep you from finding out. We were never certain if we would have to send the men without their knowledge, but there was always that possibility. Psych was sure the disorientation and separation from Earth would cause a breakdown. I could never agree with them."

"They were right," Tony said, trying to keep the memory of fear out of his voice.

"We know they were right, though I fought them at the time. Psych won the fight and we programmed the whole trip over on their say-so. I doubt if you appreciate it, but we went to a tremendous amount of work to convince you two that you were still in the training programme."

"Sorry to put you to all that trouble," Hal said. The colonel flushed a little. Not at the words but at the loosely-reined bitterness that rode behind them. He went on as if he hadn't heard.

"Those two conversations you had over the emergency phone were, of course, taped and the playback concealed in the ship. Psych scripted them on the basis of fitting any need, apparently they worked. The second one was supposed to be the final touch of realism, in case you should start being doubtful. Then we used a variation of deep freeze that suspends about ninety-nine per cent of the body processes ; it hasn't been revealed or published yet. This along with anti-coagulents in the razor cut on Tony's chin covered the fact that so much time had passed."

"What about the ship," Hal asked. "We saw it—it was only half-completed."

"Dummy," the colonel said. "Put there for the public's benefit and all foreign intelligence services. Real one had been finished and tested weeks earlier. Getting the crew was the difficult part. What I said about no team finishing a practice exercise was true. You two men had the best records and were our best bets."

"We'll never have to do it this way again, though. Psych says that the next crews won't have that trouble ; they'll be reinforced by the psychological fact that someone else was there before them. They won't be facing the complete unknown."

The colonel sat chewing his lip for a moment, then forced out the words he had been trying to say since Tony and Hal had regained consciousness.

"I want you to understand . . . both of you . . . that I would rather have gone myself than pull that kind of thing on you. I know how you must feel. Like we pulled some kind of a . . ."

"Interplanetary practical joke," Tony said. He didn't smile when he said it.

"Yes, something like that," the colonel rushed on. "I guess it was a lousy trick—but don't you see, we had to? You two were the only ones left, every other man had washed out. It had to be you two, and we had to do it the safest way.

"And only myself and three other men know what was done; what really happened on the trip. No one else will ever know about it, I can guarantee you that."

Hal's voice was quiet, but cut through the still room like a sharp knife.

"You can be sure, colonel, that we won't be telling anybody about it."

When Colonel Stegham left, he kept his head down because he couldn't bring himself to see the look in the eyes of the first two explorers of Mars.

Harry Harrison

Back Issues

For readers and collectors who are missing any of the previous issues we can still supply the following copies but stocks are very limited

Nos. 35, 36, 39; 45 to 47; 51 to 74

2/- post free

NOVA PUBLICATIONS LTD.

Maclaren House, 131 Great Suffolk Street, London, S.E.1

If American plans go according to schedule there is every possibility that the gap between Earth and Moon will be bridged by unmanned rockets in September. But getting rockets 'up there' is only part of the problem. Let us see what the latest progress is on the various interplanetary fronts . . .

OUTWARD BOUND

3. Shots At The Moon

By Kenneth Johns

The success of the sputniks boosted American attacks on space far more than any statement by Arthur C. Clarke or President Eisenhower. With the Americans' pride hurt as much as their sense of security, the billions of dollars now being poured into space research in an effort to restore national prestige appear to be giving them the fastest routes into space.

An incurable optimist might hope that the differences of the East and West could be resolved by spacewards competition rather than by arms race ; but the hope is slight. The billions going into space research are being spent solely for political reasons, no matter what may be the pronouncements of the scientists taking part. More space information means better missiles and anti-missiles. More jetsam in space bearing the political insignia of one power means more prestige for that

country. Paradoxically, the further out into space the two great powers can extend their machinery, directly influences their standing in the eyes of the 'neutral' and 'uncommitted' nations.

And the next great propaganda achievement is the conquest of the Moon.

Almost as a byproduct of this endeavour Man is climbing steadily to the stars. Ironical it may be, almost shaming, as though this is the best that Man can do ; but the fact remains that, however unpalatable to those with the progress of scientific achievements for the benefit of humanity at heart, we *are* on the way out into space.

The first man on the Moon may very well be calling excitedly to Earth within a few years instead of the decades once envisaged. President Eisenhower has put the cost of putting the first man on the Moon—and of bringing him home again—at two thousand million dollars. This is a far cry from the pre-war B.I.S. Cellular spaceship, which was guaranteed to do the job for a mere million pounds. Of course, all our fresh knowledge, that increases week by week, has shown us how much more difficult the task is than was thought in those pristine days . . .

Following the Vanguard publicity and fiasco, the Americans seem prepared to build a strong background of theory and experience before they try to set a man down on the Moon. Another fiasco, with the loss of human life to sharpen the tragedy, could easily halt all moon projects, since rocket research funds are mainly government money and dependent on highly fickle public feeling.

So it seems that Man will venture out to the edge of space in semi-permanent orbits whilst his obedient robots plunge outwards into the unknown, to crash on, orbit round and then land on the Moon. Many machines will be lost—already with the misfirings, and loss of Explorer II, it is clear that robots are not all that obedient—but lives, at least, in Operation Moonshot, will not be wasted.

The official American plan is to use unmanned rockets known as lunar probes. The U.S. Army will use the Jupiter C rocket developed by Wernher von Braun, already hitting the lay-field's headlines as the vehicle used to put the Explorer satellites into orbit, as their main weapon in this mid-twentieth century scientific onslaught on space. They intend to fire two

rockets to travel as near to the Moon as possible, to crash on it if their navigation is sound. Then three rockets will be fired to circle the Moon.

The U.S. Air Force is combining their Thor with the Vanguard rocket and a third stage to shoot three rockets moonwards. This U.S.A.F. Thor/Vanguard combination has already been used to test nose cones and it seems probable therefore that the U.S.A.F. is slightly in the lead of the Army.

The U.S. Navy has been given the job of developing a T.V. camera and transmitter to report back on the far side of the Moon, since there is at present little hope of recovering these rockets. A first grant of eight million dollars has already been made to start these projects.

The military mind doesn't change much with time. The U.S. Air Force's Lieut. General Putt still thinks of the Moon as an ideal missile base, and advances this as his main reason for the U.S.A. to conquer space. His reasoning is based on the fact that a knock-out nuclear attack on the U.S.A. would give an American lunar garrison two days grace before they were, in their turn, hit, and this would be time enough for them to launch retaliatory missiles to knock-out the enemy nation. Unless, of course, the enemy has his own bases on the Moon, or orbiting near-by—or unless the garrison consider that it's better to have *some* people left on Earth, even though they may not be your political colour, and decide not to fire their missiles.

Putt also declared that control of the Moon is not the ultimate means of ensuring peace . . . it is the first step towards the planets, from which the Moon can be controlled. Quite apart from the dubious logic of that remark, the whole reasoning for the wheres and whyfores of the Exploration of Space makes sour reading.

And so Mankind marches backwards to the stars.

A more sober approach to the need for reaching the Moon was given by physicist Lee Dubridge of Caltech at the Western Space Age conference at Los Angeles in March 1958. As a scientist, Dubridge could see the reason for unmanned satellites to circle the Earth and the Moon, but he expressed his concern at the many flights of fantasy connected with space travel.

There are few reasons, said Dubridge, beyond the spirit of adventure, for Man himself to travel into space. His instruments can analyse the Solar System by proxy far more con-

veniently and cheaply than can Man at first hand. He pointed out that satellites are useless as missile bases, whilst the Moon would be worse than useless. Plans to explode nuclear bombs on the Moon—the U.S.A.F. has been plugging away at this idea—should be scrapped until the natural radio-activity of the lunar surface, due partly to minerals and partly to cosmic rays, has been accurately measured. He also referred to Buck Rogers stunts and insane pseudo-military expeditions.

President Eisenhower has publicly stated—presumably on scientific promptings—that it would be easier to land unmanned rocket probes on Mars and Venus than on the Moon, whilst Professor Jan Schilt of Columbia University thinks the Martian moons are better targets than Luna for the first manned spaceship. He points out that the extra fuel needed to reach Phobos or Deimos would be more than counter-balanced by the fuel saved in floating off from the negligible gravity pull of, say, five-mile diameter Phobos. The ship would then only have to use sufficient fuel to spiral out of orbit, already 12,500 miles above Mars, and head homewards.

Amongst the multitudinous moon projects put forward by various individuals, societies and companies (and a twelve year old boy) there are many that could be effective within a year. The Aerojet-General Corp., is willing, if given thirty million dollars for the job, to use solid fuel rockets to hit the Moon. Their Aerobee M (M presumably for Moon) consists, on paper, of five solid fuel stages, the first stage being four Aerojet Seniors originally developed for the Polaris missile and intended to be fired underwater from submarines. Aerojet neatly dodge the main guidance problem by suggesting that their M be fired in the rough direction of the Moon and then be allowed to home in, either to land or to orbit, by means of built-in, instructions and sensing gadgets.

Another suggested solid fuel approach is to use the faithful Rockoon in a new guise. A 4-million cubic feet Skyhook balloon would lift a three-stage, eleven-ton assembly to thirteen miles. The four boosters of the first stage would then fire for twenty seconds, lifting the remaining stages to thirty-five miles and a speed of two and a half miles per second. Stage Two would fire for twenty seconds to boost the final stage to five miles per second at a height of fifty miles. Finally, the third stage would burn for ten seconds to give escape velocity. If aimed correctly, it would crash its payload onto the Moon's surface—all four pounds of it.

The Russian approach to moon conquest at the International Astronautical Congress at Barcelona at the end of 1957 was more mathematical. V. A. Yegorov pointed out that a moon trip was a limited orbit, three-body problem in which the effect of scatter or error at the beginning is very important. Taking orbits beyond the atmosphere as conic sections, he used a computer to demonstrate the various error effects.

A rocket fired with an initial speed, near the minimum to escape, of 6.23 miles per second, would orbit one hundred times around the Earth before shooting off moonwards. Errors of up to 164 feet per second in speed and a third of a degree in direction would still enable a rocket to hit the Moon without flight correction ; but the ideal of an orbit around the Moon and an inclined re-entry to the Earth's atmosphere—the only hope of recovery of photographs—would require in-flight corrections.

Rocket engineer K. Ehricke and physicist Gamow have published their lunar plan of attack. They reckon that five years will see a 400 lb. payload boosted by a 100 ton rocket fired into an orbit to circumnavigate the Moon. Their calculated orbit would involve an ellipse extending out to 35 times the Earth's diameter and swinging to within 2,000 miles of the Moon's surface—at a greater distance than this the acceleration due to the Moon's pull would sling the rocket out into the depths of the Solar System.

They suggest that their lunar probe should carry a magnetic field detector, a TV camera, batteries and a radio. The actual speed of the rocket over the Moon's surface would amount to only a few hundred miles an hour so fifty hours of the rockets 157 hour trip would be spent fairly close to the surface of the far side of the Moon.

To Ehricke and Gamow we also owe the idea that two such rockets be used, one loaded with a nuclear warhead. This would dive to the surface and the explosion would spray a cloud of lunar dust far out into space. Rocket number two would pass through the cloud and collect samples of the lunar surface without having to land.

In the broader interests of science, however, it is to be hoped that this experiment will never be necessary. Quite apart from the fact that there is quite enough radio-activity floating about on Earth, and more on the Moon seems ostentatious, scientists

wish to measure the amount of the radio-activity unsullied by exports from Earth.

If recovery of the rocket is feasible after it has blazed an incandescent 5,000 degree centigrade path through Earth's atmosphere, it would be worthwhile installing a camera within it. The latest designs for nose cones suggest that it will be possible to bring rockets back relatively undamaged—the intense heat of the exterior would have to be withstood for only six minutes. Then would come the problem of finding the crashed rocket and as the greater proportion of the Earth's surface is water, undersea equipment, knowledge and experience is surely going to figure high on the priority list for the conquest of space. The Americans have failed to recover rockets on several occasions and they have the advantage of knowing roughly where their missiles are going to splash.

The Americans have developed two first-class nose cone materials. One is Pyrocream, a glass-like material highly resistant to shock-heating and capable of withstanding white heat, 1350 degrees Centigrade, without melting. It can easily be cast and ground and can be rendered transparent. The other material is Astrolite, a mixture of silica fibres and plastic. On re-entry the plastic burns away on the surface exposing the silica fibres. These melt at 1700 degrees Centigrade ; but the liquid silica is extremely sticky and remains in position until it vaporises and the vapour carries part of the heat away with it. Astrolite nose cones will withstand intense heat for short periods and are light in weight. A four inch layer will completely protect an Intercontinental Ballistic Missile and weighs only a fifteenth of that of a comparable metal nose cone.

President Eisenhower, when introducing the new State document entitled "Introduction to Outer Space" said that this work is not science fiction. It is a sober, realistic presentation. Apart from his unfortunate continuance of the ridiculous use of the words 'Outer Space' in referring to the minute step from Earth to Moon, a misuse that is all too prevalent these days, the President seems also to be under a misconception as to the real stature of science fiction. It might be instructive to ask the next person who uses the words 'Outer Space' to define what he means—and to enquire where he thinks 'Inner Space' is.

In Great Britain there is a slowly growing volume of support for a move to put up a satellite, probably using our own IRBM and a cluster of Skylarks. Professor A. C. B. Lovell of Jodrell Bank's radio telescope seems to have had his appetite whetted for tracking satellites and is now warning that we may fall far behind in many scientific fields unless we launch our own satellite. This may mean that we may have to wait some little time for the British Satellite until the IRBM has been perfected, as the USAF Thor, although being put into operational use, has shown itself to be unreliable and is already obsolete.

There are many approaches and many solutions to a single problem. Therefore the many ideas being discussed, tested and discarded are not a waste of time. They illustrate the fertility of Man's imagination and demonstrate the amount of originality and co-operation in mind and practice needed to accomplish just one thing—the exploration of Space.

Kenneth Johns

THE LITERARY LINE-UP

William F. Temple returns to our pages next month with a novelette dealing with a problematical colour sense inherent in Martians. It's called "The Different Complexion" and lives up to the word 'different' too. "Dreamboat" by Bertram Chandler is also of novelette length—it is another of his plots involving the Mannschen Drive on starships, although no Time travel is involved in this story.

"Equator" comes to a climactic and dramatic conclusion—it's up there with "Wasp" for popularity already. Incidentally, Eric Russell's recent serial is being rated as the best we have published in the past four years.

Story ratings for No. 71 were :

- | | | | | |
|-------------------------|---|---|---|--------------------|
| 1. Wasp (conclusion) | - | - | - | Eric Frank Russell |
| 2. Tableau | - | - | - | James White |
| 3. Companion | - | - | - | John W. Ashton |
| 4. In The Box | - | - | - | Bertram Chandler |
| 5. Routine Observations | - | - | - | E. R. James |

This is the first appearance in New Worlds of a young and extremely promising American writer who has already made a name for himself in his own country, although he made his debut in our companion magazine Science Fantasy nearly two years ago. Mr. Ellison is at present serving with the United States Armed Forces but we have no doubt that he will continue to produce interesting science fiction as his circumstances allow.

LIFE HUTCH

By HARLAN ELLISON

Terrence slid his right hand, the one out of sight of the robot, up his side. The razoring pain of the three broken ribs caused his eyes to widen momentarily in pain.

If the eyeballs click, I'm dead, thought Terrence.

The intricate murmurings of the life hutch around him brought back the immediacy of his situation. His eyes again fastened on the medicine cabinet clamped to the wall next to the robot's duty-niche.

Cliche. So near yet so far. It could be all the way back on Antares-Base for all the good it's doing me, he thought, and a crazy laugh trembled on his lips. He caught himself just in time. *Easy! Three days is a nightmare, but cracking up will only make it end sooner.*

He flexed the fingers of his right hand. It was all he *could* move. Silently he damned the technician who had passed the robot through. Or the politician who had let inferior robots get placed in the life hutches so he could get a rake-off from the government contract. Or the repairman who hadn't

bothered checking closely his last time around. All of them ; he damned them all.

They deserved it.

He was dying.

He let his eyes close completely, let the sounds of the life hutch fade from around him. Slowly the sound of the coolants hush-hushing through the wall-pipes, the relay machines feeding without pause their messages from all over the Galaxy, the whirr of the antenna's standard turning in its socket atop the bubble, slowly they melted into silence. He had resorted to blocking himself off from reality many times during the past three days. It was either that or existing with the robot watching, and eventually he would have had to move. To move was to die. It was that simple.

He closed his ears to the whisperings of the life hutch ; he listened to the whisperings within himself.

To his mind came the sounds of war, across the gulf of space. It was all imagination, yet he could clearly detect the hiss of his scout's blaster as it poured beam after beam into the lead ship of the Kyben fleet.

His sniper-class scout had been near the face of that deadly Terran phalanx, driving like a wedge at the alien ships, converging on them in loose battle-formation. It was then it had happened.

One moment he had been heading into the middle of the battle, the left flank of the giant Kyben dreadnought turning crimson under the impact of his firepower.

The next moment he had skittered out of the formation which had slowed to let the Kyben craft come in closer, while the Earthmen decelerated to pick up manoeuvrability.

He had gone on at the old level and velocity, directly into the forward guns of a toadstool-shaped Kyben destroyer.

The first beam had burned the gun-mounts and directional equipment off the front of the ship, scorching down the aft side in a smear like oxidized chrome plate. He had managed to avoid the second beam.

His radio contact had been brief ; he was going to make it back to Antares-Base if he could. If not, the formation would be listening for his homing-beam from a life hutch on whatever planetoid he might find for a crash-landing.

Which was what he had done. The charts had said the pebble spinning there was technically 1-333, 2-A, M and S, 3-804.39*, which would have meant nothing but three-

dimensional co-ordinates, had not the small * after the data indicated a life hutch somewhere on its surface.

His distaste for being knocked out of the fighting, being forced onto one of the life hutch planetoids, had been offset only by his fear of running out of fuel before he could locate himself. Of eventually drifting off into space somewhere, to finally wind up as an artificial satellite around some minor sun.

The ship pancaked in under minimal reverse drive, bounced high and skittered along, tearing out chunks of the rear section ; but had come to rest a scant two miles from the life hutch, jammed into the rocks.

Terrence had high-leaped the two miles across the empty, airless planetoid to the hermetically-sealed bubble in the rocks. His primary wish was to set the hutch's beacon signal so his returning fleet could track him.

He had let himself into the decompression chamber, palmed the switch through his thick spacesuit glove, and finally removed his helmet as he heard the air whistle into the chamber.

He had pulled off his gloves, opened the inner door and entered the life hutch itself.

God bless you, little life hutch, Terrence had thought as he dropped the helmet and gloves. He had glanced around, noting the relay machines, picking up messages from outside, sorting them, vectoring them off in other directions. He had seen the medicine chest clamped onto the wall, the refrigerator he knew would be well-stocked if a previous tenant hadn't been there before the stockman could refill it. He had seen the all-purpose robot, immobile in its duty-niche. And the wall-chronometer, its face smashed. All of it in a second's glance.

God bless, too, the gentlemen who thought up the idea of these little rescue stations, stuck all over the place for just such emergencies as this. He had started to walk across the room.

It was at this point that the service robot, who kept the place in repair between tenants and unloaded supplies from the ships, had moved clankingly across the floor, and with one fearful smash of a steel arm thrown Terrence across the room.

The spaceman had been brought up short against the steel bulkhead, pain blossoming in his back, his side, his arms and legs. The machine's blow had instantly broken three of his ribs. He lay there for a moment, unable to move. For a few

seconds he was too stunned to breathe, and it had been that, perhaps, that had saved his life. His pain had immobilized him, and in that short space of time the robot had retreated, with a muted internal clash of gears, to its niche.

He had attempted to sit up straight, and the robot had hummed oddly and begun to move. He had stopped the movement. The robot had settled back.

Twice more had convinced him his position was as bad as he had thought.

The robot had worn down somewhere in its printed circuits. Its commands distorted so that now it was conditioned to smash, to hit, anything that moved.

He had seen the clock. He realized he should have suspected something was wrong when he saw its smashed face. Of course ! The hands had moved, the robot had smashed the clock. Terrence had moved, the robot had smashed him.

And would again, if he moved again.

But for the unnoticeable movement of his eyelids, he had not moved in three days.

He had tried moving towards the decompression lock, stopping when the robot advanced and letting it settle back, then moving again, a little nearer. But the idea died with his first movement. The agonizing pain of the crushed ribs made such manoeuvring impossible. He was frozen into position, an uncomfortable, twisted position, and he would be there till the stalemate ended, one way or the other.

He was twelve feet away from the communications panel, twelve feet away from the beacon that would guide his rescuers to him. Before he died of his wounds, before he starved to death, before the robot crushed him. It could have been twelve light-years, for all the difference it made.

What had gone wrong with the robot ? Time to think was cheap. The robot could detect movement, but thinking was still possible. Not that it could help, but it was possible.

The companies who supplied the life hutch's needs were all government contracted. Somewhere along the line someone had thrown in impure steel or calibrated the circuit-cutting machines for a less expensive job. Somewhere along the line someone had not run the robot through its paces correctly. Somewhere along the line someone had committed murder.

He opened his eyes again. Only the barest fraction of opening. Any more and the robot would sense the movement of his eyelids. That would be fatal.

He looked at the machine.

It was not, strictly speaking, a robot. It was merely a remote-controlled hunk of jointed steel, invaluable for making beds, stacking steel plating, watching culture dishes, unloading spaceships and sucking dirt from rugs. The robot body, roughly humanoid, but without what would have been a head in a human, was merely an appendage.

The real brain, a complex maze of plastic screens and printed circuits, was behind the wall. It would have been too dangerous to install those delicate parts in a heavy-duty mechanism. It was all too easy for the robot to drop itself from a loading shaft, or be hit by a meteorite, or get caught under a wrecked spaceship. So there were sensitive units in the robot appendage that "saw" and "heard" what was going on, and relayed them to the brain—behind the wall.

And somewhere along the line that brain had worn grooves too deeply into its circuits. It was now mad. Not mad in any way a human being might go mad, for there were an infinite number of ways a machine could go insane. Just mad enough to kill Terrence.

Even if I could hit the robot with something, it wouldn't stop the thing. He could perhaps throw something at the machine before it could get to him, but it would do no good. The robot brain would still be intact, and the appendage would continue to function. It was hopeless.

He stared at the massive hands of the robot. It seemed he could see his own blood on the jointed work-tool fingers of one hand. He knew it must be his imagination, but the idea persisted. He flexed the fingers of his hidden hand.

Three days had left him weak and dizzy from hunger. His head was light and his eyes burned steadily. He had been lying in his own filth till he no longer noticed the discomfort. His side ached and throbbed, the pain like a hot spear thrust into him every time he breathed.

He thanked God his spacesuit was still on, else his breathing would have brought the robot down on him. There was only one solution, and that solution was his death.

Terrence had never been a coward, nor had he been a hero. He was one of the men who fight wars because they must be

fought by someone. He was the kind of man who would allow himself to be torn from wife and home and flung into an abyss they called Space because of something else they called Loyalty and another they called Patriotism. To defend what he had been told needed defence. But it was in moments like this that a man like Terrence began to think.

Why here? Why like this? What have I done that I should finish in a filthy spacesuit on a lost rock—and not gloriously but starving or bleeding to death alone with a crazy robot? Why me? Why me? Why?

He knew there could be no answers. He expected no answers.

He was not disappointed.

When he awoke, he instinctively looked at the clock. Its shattered face looked back at him, jarring him, forcing his eyes open in after-sleep terror. The robot hummed and emitted a spark. He kept his eyes open. The humming ceased. His eyes began to burn. He knew he couldn't keep them open too long.

The burning worked its way to the front of his eyes, from the top and bottom, bringing with it tears. It felt as though someone were shoving needles into the soft orbs. The tears ran down over his cheeks.

His eyes snapped shut. The roaring grew in his ears. The robot didn't make a sound.

Could it be inoperative? Could it have worn down to immobility? Could he take the chance of experimenting?

He slid down to a more comfortable position. The robot charged forward the instant he moved. He froze in mid-movement, his heart a lump of snow. The robot stopped, confused, a scant ten inches from his outstretched foot. The machine hummed to itself, the noise of it coming both from the machine before him and from somewhere behind the wall.

He was suddenly alert.

If it had been working correctly, there would have been little or no sound from the appendage, and none whatsoever from the brain. But it was not working properly, and the sound of its thinking was distinct.

The robot rolled backward, its "eyes" still toward Terrence. The sense orbs of the machine were in the torso, giving the machine the look of a squat gargoyle of metal, squared and deadly.

The humming was growing louder, every now and then a sharp *pfffft* ! of sparks mixed with it. Terrence had a moment's horror at the thought of a short-circuit, a fire in the life hatch, and no service robot to put it out.

He listened carefully to figure out where the robot's brain was built into the wall.

Then he thought he had it. Or was it there ? It was either in the wall behind a bulkhead next to the refrigerator, or behind a bulkhead near the relay machines. The two possible housings were within a few feet of each other, but it might make a great deal of difference.

The distortion created by the steel plate in front of the brain, and the distracting background noise of the robot broadcasting it made it difficult to tell exactly which was it.

He drew a deep breath.

The ribs slid a fraction of an inch together, their broken ends grinding.

He moaned.

A high-pitched tortured moan that died quickly, but throbbed back and forth inside his head, echoing and building itself into a paean of sheer agony ! It forced his tongue out of his mouth, limp in a corner of his lips, moving slightly. The robot rolled forward. He drew his tongue in, clamped his mouth shut, cut off the scream inside his head at its high point !

The robot stopped, rolled back to its duty-niche.

Beads of sweat broke out on his body. He could feel them trickling inside his spacesuit, inside his jumper, inside the undershirt, on his skin. The pain of the ribs was suddenly heightened by an irresistible itching.

He moved an infinitesimal bit within the suit, his outer appearance giving no indication of the movement. The itching did not subside. The more he tried to make it stop, the more he thought about not thinking about it, the worse it became. His armpits, the bends of his arms, his thighs where the tight service-pants clung—suddenly too tightly—were madness. He had to scratch !

He almost started to make the movement. He stopped before he started. He knew he would never live to enjoy any relief. A laugh bubbled into his head. *God Almighty, and I always laughed at the joes who suffered with the seven-year itch, the ones who always did a little dance when they were at*

attention during inspection, the ones who could scratch and sigh contentedly. God, how I envy them.

The prickling did not stop. He twisted faintly. It got worse. He took another deep breath.

The ribs sandpapered again.

This time he fainted from the pain.

"Well, Terrence, how do you like your first look at a Kyben?"

Ernie Terrence wrinkled his forehead and ran a finger up the side of his face. He looked at his Commander and shrugged. "Fantastic things aren't they?"

"Why fantastic?" asked Commander Foley.

"Because they're just like us. Except of course the bright yellow pigmentation and the tentacle-fingers. Other than that they're identical to a human being."

The Commander opaqued the examination-casket, and drew a cigarette from a silver case, offering the Lieutenant one. He puffed it alight, staring with one eye closed against the smoke, at the younger man beside him. "More than that, I'm afraid. Their insides look like someone had taken them out, liberally mixed them with spare parts from several other species, and thrown them back in any way that fitted conveniently. For the next twenty years we'll be knocking our heads together trying to figure out how they exist."

Terrence grunted, rolling his unlit cigarette absently between two fingers. "That's the least of it."

"You're right," agreed the Commander. "For the next thousand years we'll be trying to figure out how they think, why they fight, what it takes to get along with them, what motivates them."

If they let us live that long thought Terrence.

"Why are we at war with the Kyben?" he asked the older man. "I mean really."

"Because the Kyben want to kill every human being that can realize he's a human being."

"What have they got against us?"

"Does it matter? Perhaps it's because our skin isn't bright yellow; perhaps it's because our fingers aren't silken and flexible; perhaps it's because our cities are too noisy for them. Perhaps a lot of perhaps. But it doesn't matter. Survival never matters until you have to survive."

Terrence nodded. He understood. So did the Kyben. It grinned at him and drew its blaster. It fired point-blank, crimsoning the hull of the Kyben ship.

He swerved to avoid running into his gun's own backlash. The movement of the bucket seat sliding in its tracks to keep his vision steady while manoeuvring made him dizzy.

The abyss was nearer, and he teetered, his lips whitening as they pressed together under his effort to steady himself. With a headlong gasp he fell sighing into the stomach. His long, silken fingers jointed steely humming clankingly toward the medicine chest over the plate behind the bulkhead.

The robot advanced on him grindingly. Small fine bits of metal rubbed together, ashing away into a breeze that came from nowhere as the machine raised lead boots toward his face.

Onward and onward till he had no room to move.

The light came on, bright, brighter than any star Terrence had ever seen, glowing, broiling, flickering, shining, bobbing a ball of light on the chest of the robot, who staggered, stumbled, stopped.

The robot hissed, hummed and exploded into a million flying, racing, fragments, shooting beams of light all over the abyss over which Terrence teetered. He flailed his arms back trying to escape at the last moment, before the fall.

He saved himself only by his subconscious. Even in the hell of a nightmare he was aware of the situation. He had not moaned and writhed in his delirium. He had kept motionless and silent.

He knew this was true, because he was still alive.

Only his surprised jerking, as he came back to consciousness started the monster rolling from its niche. He came fully awake and sat silent, slumped against the wall. The robot retreated.

Thin breath came through his nostrils. Another moment and he would have put an end to the past three days—three days or more now? How long had he been asleep?—of torture.

He was hungry. Lord how hungry he was. The pain in his side was worse now, a steady throbbing that made even shallow breathing tortuous. He itched maddeningly. He was uncomfortably slouched against a cold steel bulkhead, every rivet having made a burrow for itself in his skin. He wished he were dead.

He didn't wish he was dead. It was all too easy to get his wish.

If he could only disable that robot brain. A total impossibility. If he could only wear Phobos and Deimos for watchfobs.

It would take a total wrecking of the brain to do it enough damage to stop the appendage before it could roll over and smash Terrence again.

With a steel bulkhead between him and the brain, his chances of success totalled minus zero every time.

He considered which part of his body the robot would smash first. One blow of that tool-hand would kill him if it were used a second time. On top of the ribs, even a strong breath might finish him.

Perhaps he could make a break and get into the air chamber.

Worthless. (a) The robot would catch him before he had got to his feet, in his present condition. (b) Even allowing for a miracle, if he did get in there, the robot would smash the lock doors, letting in air, ruining the mechanism. (c) Even allowing for a double miracle what the hell good would it do him? His helmet and gloves were in the hutch itself, and there was no place to go on the planetoid. The ship was ruined, so no signal could be sent from there.

Doom suddenly compounded itself.

The more he thought about it, the more certain he was that soon the light would flicker out for him.

The light would flicker out.

The light would flicker . . .

The light . . .

. . . light . . . ?

His God, if he had had anything to do with it, had heard him. Terrence was by no means a religious man, but this was miracle enough to make even him a disciple. It wasn't over yet, but the answer was there—and it *was* an answer.

He began to save himself.

Slowly, achingly slowly, he moved his right hand, the hand away from the robot's sight, to his belt. On the belt hung the assorted implements a spaceman needs at any moment in his ship. A wrench, A packet of sleep-stavers. A compass. A geiger counter. A flashlight.

The last was the miracle. Miracle in a tube.

He fingered it almost reverently, then unclipped it in a moment's frenzy, still immobile to the robot's "eyes."

He held it at his side, away from his body by a fraction of an inch, pointing up over the bulge of his spacesuited leg.

If the robot looked at him, all it would see would be the motionless bulk of his leg, blocking off any movement on his part. To the machine, he was inert. Motionless.

Now he thought wildly, where is the brain?

If it is behind the relay machines, I'm still dead. If it is near the refrigerator, I'm saved. He could afford to take no chances. He would have to move.

He lifted one leg.

The robot moved toward him. The humming and sparking was distinct this time. He dropped the leg.

Behind the plates above the refrigerator!

The robot stopped, nearly at his side. Seconds had decided. The robot hummed, sparked, and returned to its niche.

Now he knew!

He pressed the button. The invisible beam of the flashlight leaped out, speared at the bulkhead above the refrigerator. He pressed the button again and again, the flat circle of light appearing, disappearing, appearing, disappearing on the faceless metal of the life hutch's wall.

The robot sparked and rolled from its niche. It looked once at Terrence. Then its rollers changed direction and the machine ground toward the refrigerator.

The steel fist swung in a vicious arc, smashing with a deafening clang at the spot where the light bubble flickered on and off.

It swung again and again. Again and again till the bulkhead had been gouged and crushed and opened, and the delicate coils and plates and wires and tubes behind it were refuse and rubble. Until the robot froze, with arm half-ready to strike again. Dead. Immobile. Brain and appendage.

Even then Terrence did not stop pressing the flashlight button. Wildly he thumbed it down and down.

Suddenly he realized it was all over.

The robot was dead. He was alive. He would be saved. He had no doubts about that. *Now he could cry.*

The medicine chest grew large through the shimmering in his eyes. The relay machines smiled at him.

God bless you, little life hutch, he thought, before he fainted

SPACE IS A PROVINCE OF BRAZIL

This is the final story in the 'Troon' series, taken from John Wyndham's new untitled novel to be published in 1959 by Michael Joseph Ltd. It concludes 200 years of family history in the conquest of space. The previous stories were: "For All The Night," (No. 70); "Idiot's Delight," (No. 72); and "The Thin Gnat-Voices," (No. 73)

By JOHN WYNDHAM

VENUS A.D. 2144

After George Troon had read the message, he pushed it across to his second-in-command. Arthur Dogget took it, considered it, and then nodded slowly.

"So it's out at last. I'd give a lot to see the Rio papers today. Apoplectic'll be an understatement for 'em," he said, with some satisfaction. "Ought to be fun. Two hundred million Brasileros all steamed up and demanding immediate action. What do you think'll happen?"

Troon shrugged.

"As far as we are concerned, no change. Even a million million wrathful Brasileros can't affect celestial mathematics. The powers that be have still got to wait for next conjunction before they can come after us. Meanwhile, I suppose the government will throw a few Ministers to the wolves, and assure everybody that retribution is well in hand."

"They're lucky they've only got six months of it to weather. What surprises me is that they managed to keep it dark so long," Arthur said. "Anyway," he added, "as far as I'm concerned, the thing that matters is that we beat 'em to it—such as it is—and that's one thing they can't undo."

"No," Troon nodded in agreement, "there's nothing they can do about that."

The two of them turned as if by common consent to look out of the window.

The prospect there was an average Venusian day. The sky was simply a luminous white mist. Visibility was that within a layer of thin cloud, changing range quite rapidly as the mist drove along in a twenty-mile-an-hour wind. Most of the time one could see the sparse, high reeds that began forty yards away from the dome. They were slightly bent, and rippled in the wind like stiff hairs. Now and then the mist cleared enough for some minutes to reveal the tall, astonishingly flexible trees that someone had named feather-tops, swinging back and forth in great arcs, two hundred yards away. The ground itself, both near and further, was covered with a matting of pale succulent tendrils, the Venusian equivalent of grass. Even at its clearest, it was not a view to inspire. Almost a monochrome study; shadowless, with only here and there a fleshy stalk showing a faint flush of pink, or a slight tinting of green to break the monotony of pallor. And over all, and all the time, there was the mist condensing; drops of water running down the etiolated stems, showers of them torn from the plants by sudden gusts of wind, endless rivulets of them trickling down the window-panes.

"It's all very well for us," Arthur remarked. "We've been financed to do what we wanted to do—make the first successful landing. Now, as far as I'm concerned, anybody can have it, and welcome."

Troon shook his head.

"We weren't financed just to make a record, Arthur—nor just to give it away again. Part of our contract is to hold on to it."

"Maybe if your Cousin Jayme could see what it's like he'd think again," Arthur suggested.

"Not Jayme," said Troon. "He knows what he's doing, always did. The trouble is that, like his old man, he has such

big ideas that you only see bits of them. No, he's satisfied, he's pleased."

Arthur Dogget looked out of the window again, and shook his head.

"If he's pleased with this, there must be a lot more to it than we can see," he said.

"I've no doubt. He and his old man are campaigners in a big way—kind of civilian field-m Marshals, and with complete confidence in themselves. The old man was never a bit impressed by the mere size of a job he took on, so he always kept his head—Jayme's the same way."

"One of the things I've never understood," Arthur said, "is how a cousin of yours, and an Aussie citizen, comes to have a Brazzie name like Jayme Gonveia?"

"Oh, that isn't too difficult. When my grandfather, Geoffrey Trunho died on the first expedition to Mars, he left three children: Anna, George, and Geoffrey, my father, who was born either posthumously, or at least after he reached Mars. My Aunt Anna subsequently married one Henrique Polycarpo Gonveia—old man Gonveia, in fact—she emigrated with him to Australia, and Jayme is their son.

"Now, Jayme's grandfather Gonveia was a friend of my grandfather's, and when my grandfather failed to return from Mars, it was this Grandpa Gonveia who did most of the agitation for a second Martian expedition. In the end he got together a group who put up half the money for it, and shamed the Brazilian government into finding the rest. And his highly speculative share in the success of the expedition there in 2101 was half of the exclusive rights to any botanical finds. To everyone's surprise, some were actually made, along the bottom of the canali rifts, and he promptly bought the other fellow out of the half-share.

"For about twenty years his experts grew, developed, and adapted the seeds and plants, and then, as a result, Grandpa Gonveia and his two sons and daughter set out to conquer the world's deserts—which they are still doing. Joao, the eldest son, took north Africa for his territory; Beatriz went to China, and my Uncle Henriques went off, as I said, to Australia.

"Anna's brother, my Uncle George, stayed in Brazil, and his son, Jorge Trunho, is a Commander in the Spaceforce there.

"My own father was sent to Australia to school, and then to Sao Paulo University. After taking his degree, he returned

to Australia, married the daughter of a ship-owner there, and was soon sent to manage his father-in-law's office in Durban. At the time of the Second African Rising, when the Africans threw out the Indians, he was accidentally killed in a riot. My mother left with me, still a small baby, went home to live in Australia where she changed our name back to its original form of Troon."

"I see—but it doesn't really explain how your cousin Jayme comes to be involved in this business. I'd have thought he'd be much too busy reclaiming deserts."

"Not while his old man is still in the chair. They're too much of a kind. After he had had a year or so of the desert-blossoming business Jayme could see a lot of will-clashing ahead, so he started putting his main interest into other things. Well, I suppose that, what with the Gonveia strain and the Troon strain together, it was more or less a natural that he should get to thinking about space. He hasn't the Troon urge to get out into space; the Gonveia strain is stronger—he only wants to operate it—and the more he looked at space, lying out here with nobody doing anything about it, the more it irked him. After a bit, he got his old man interested, too, and then other people—which is why we're here today."

"Until the Brazzies arrive to throw us, and his interests, out," Arthur put in.

Troon shook his head.

"Don't you believe it. Jayme isn't the kind that gets thrown out—nor's the old man. I'd put the old man down as the richest, as well as the most valuable, immigrant Australia ever had; and there must be a goodish part of the Gonveia family fortune sunk in this. No, take it from me, they both know what they're doing."

"I hope you're right. The Brazzy in the street must be tearing mad now he's heard about it—he's pretty proud of that 'Space is a Province of Brazil' stuff."

"True enough—even though he'd have more to be proud of if he'd done more about it. All the same, when you look at the difference the Gonveia family has made to the face of the Earth with the hundreds of thousands of square miles of deserts they've salvaged, I think they're a good bet."

"Well, I hope you're right. Things'll be a lot less sticky for us if you are," Arthur Dogget replied.

Presently, when Arthur had gone off, leaving him alone, Troon looked at the message again, and wondered how his cousin was handling things back on Earth.

His thoughts returned to a day, three years ago, when a small private aircraft, dead on its appointed time, had hovered over his house, and then put down his landing-lawn.

Out of it had emerged Jayme Gonveia, a large, active young man in a white suit, white hat, and blue silk shirt, looking rather too big to have fitted into the craft that had brought him. For a moment he had stood beside the machine, looking round George Troon's estate, noting the carefully spaced, thick-limbed Martian-derived trees that were something like spineless cacti, and the no less carefully arranged bushes of complementary kinds, examining the mesh of wiry grass beneath his feet, and the blades of wider leafed grass coming up, sparsely as yet, through it. George, as he approached, could see that, somewhat cheerlessly institutional as the calculated precision of the prospect appeared at present, Jayme was approving of it.

"Not doing badly," he had greeted George. "Five years?"

"Yes," said George. "Five years and three months now, from the bare sand."

"Water good?"

"Adequate."

Jayme nodded. "In another three years you'll be starting real trees. In twenty you'll have a landscape, and a climate. Should do nicely. We've just developed a better grass than this. Grows faster, binds better. I'll tell them to send you some seed."

They walked towards the house, across a patio, and into a large, cool room.

"I'm sorry Dorothea's away," said George. "She's gone to Rio for a couple of weeks. Dull for her here, I'm afraid."

Jayme nodded again.

"I know. They get impatient. The first stages of reclamation aren't exciting. Is she a Brazilophil?"

"No—not really," George told him. "But you know how it is. Rio is lights, music, dresses, centre of the world, and all that. It recharges her batteries. We usually go a couple of times a year. Occasionally she goes on her own. She's plenty of friends there."

"Sorry to miss her," said his cousin.

"She'll be sorry not to have seen you. Quite a time since you met," George responded.

"Nevertheless," said Jayme, "it does make it a little easier to talk confidential business."

George, in the act of approaching the drink-cupboard, turned round and looked at his cousin, with a lifted eyebrow.

"Business?" he remarked. "Since when am I supposed to have known anything about business? And what sort of business?"

"Oh, just the usual Troon sort—space," said Jayme.

George returned with bottles, glasses and syphon, and set them down carefully.

"‘Space’," he reminded his cousin. "‘Space is a Province of Brazil’."

"But it is also a kind of madness in the blood of the Troons," Jayme replied.

"Now put under restraint for all of us—except, I suppose, for Jorge Trunho."

"Suppose there were an escape-route?"

"I should be interested. Say on."

Jayme Gonveia leant back in his chair.

"I have by now," he said, "grown more than a little tired of this ‘Province of Brazil’ bluff. It is time it was called."

"Bluff?" exclaimed George.

"Bluff," Jayme repeated. "Brazil has had it easy. She's been sitting on the top of the world so long that she thinks she's there for good, as a provision of nature. She's going soft. In the chaos that followed the Northern War she worked, and worked hard, to put herself on top; and since then, there have been no challengers to keep her on her toes. She's just sat back over the matter of space, too. When she first proclaimed it a Province she reclaimed the damaged Satellites, and made three of them spaceworthy again, and she took over and improved the old British Moon Station. But since then . . . !

"Well, look at the record . . . Nothing at all until Grandpa Trunho's unlucky Mars expedition in 2094. There wouldn't have been a second expedition there unless Grandpa Gonveia and his pals had pressed for it in 2101. The third, 2105 was financed entirely by public subscription, and since then no-one has set foot on the place.

"They abandoned the smallest Satellite back in 2080. In 2115 they abandoned another, keeping only Primeira in

commission. In 2111 a newspaper and radio campaign on the neglect of space forced them into sending the first Venus expedition—and a shabby affair that was, scandalously ill-equipped ; never heard from once it had entered the Venus atmosphere, and no wonder. Ten years later they allowed a learned society to send another ship there—by subscription again. When that, too, disappeared, they just gave up. In the twenty years since then nothing further has been done, nothing at all. They've spent just enough to keep Primeira and the Moon Station habitable, so that they can hog their monopoly of space and, if necessary, threaten the rest of us from there, and that's all. What a record !”

“Far from admirable,” agreed George Troon. “And so—?”

“And so they are going to pay the usual penalty of neglect. Someone else is going to step in.”

“Meaning Jayme Gonveia ?”

“With a kind of syndicate I've got together. It's unofficial, of course. The Australian government just can't afford to know anything about it. Support for any idea of the kind would definitely be an unfriendly act towards the Brazilian people. However, we naturally had need of designers, and of the use of yards to build the ships, so that there is—well, a little more than a liaison between us and certain government departments. Nominally, however, it has to be an adventure with a rather old-world title—privateering.”

George kept the excitement that was speeding up his pulses carefully imperceptible.

“Well, well,” he said, in a tone that matched his cousin's. “Would I be astray in suspecting that there is a part for me in these plans ?”

“So perceptive of you, George. Yes, I remember you as a boy on the subject of space ; the veritable Troon obsession. As they never outgrow it, I am assuming that you still hear the ‘thin gnat-voices calling’ ?”

“I've had to muffle them, Jayme, but they are still there.”

“I thought so, George. So now let me tell you about the job,” Jayme had said.

A year later, the *Aphrodite*, with a complement of ten, including George Troon in command, had set out. She was a new kind of ship, for she had a new kind of task—Venus in one leap, with no help from Satellite or Moon Station. As

such, she was devoid of all unnecessary weight ; victualled and found only for one voyage and a few weeks more ; everything beyond bare necessities were to follow her in supply-rockets.

A supply rocket (or ' shuttle,' or ' crate ') could be built for a fraction of the cost of a manned rocket. With living-quarters, insulation, air supply, water-purifying system, and all the rest of the human needs eliminated, the payload could be over fifty per cent higher. Launching, too, was more economical ; a shuttle could be given a ground-boost, and a quick step-boost producing an acceleration several times greater than a human cargo could survive. Once launched, and locked on to its target, it would continue to travel by inertia until it should pick up the coded radio signals that would check, and take charge of it. There was no more difficulty in directing a supply-rocket to Venus than in aiming it for a Satellite, or for the moon, and no more power was needed to get it there—though it would require extra fuel for a safe landing against the planetary pull.

The questions of supplies, therefore, raised few difficulties. The problems arose over the key-ship, the manned *Aphrodite*, for she must take off under full load, sustain her crew for the voyage, and, above all, be manoeuvrable enough in atmosphere to choose her landing when she should arrive.

It was the last proviso that called for modified design. Both the previous expeditions were known to have entered the Venus atmosphere. It was after that that something fatal had befallen them, and the general opinion among spacemen was that neither had proved sufficiently manoeuvrable to pick, and, if necessary to change, its choice of, landing-place with accuracy. On a vapour-bound planet where inspection could not be visual until the last moments, that was essential.

Many years ago it had been supposed that Venus was entirely, or almost entirely, water-covered. That had later given way to the theory that the perpetual clouds were not vaporous, but were formed of dust swept up from an arid surface by constant fierce winds. Several times since then, opinions had swung this way and that between the two extremes until there was general acceptance of the view that the planet was probably waterlogged, but scarcely likely to lack land masses entirely. Radar, however, would not be able to distinguish accurately between marshland and solid ground—or even, with certainty, between either and floating weed-beds, should such exist. Infra-red would tell more, but from a comparatively low altitude.

It might well be that the true nature of the ground would be indiscernible above a few hundred feet, and it was imperative, therefore, that a ship which discovered itself to be descending upon a mudbank, or a morass, should have the ability to draw off and search for better ground. It was a problem that had not occurred with Earth landings where a ship was brought in by an alliance of radio and electronic control, nor had it arisen on Mars, with its dry surface and normally perfect visibility.

In the event, the last stage of the *Aphrodite's* journey had proved the worth of the designers' trouble. Had she not been able to cruise at moderate altitude in search of a landing-place, there would have been an end of her. The cruise gave her the opportunity to discover that the proportion of land to sea over the area she covered was extremely small, and none of it was the high, firm ground she sought.

At last, Troon decided to return to the largest island so far observed—a low-lying mass about one hundred and fifty miles long, and a hundred miles across at its widest, misted over, and sodden under continuous rain. Even then it had been difficult to find a suitable landing area ; hard to tell whether the monotonous grey-white vegetation they saw below was low-growing bushes, or densely packed tree-tops ; impossible to know what sort of ground lay beneath it. One could do no more than make a guess from the apparent configuration of the ground.

Troon had made six unsuccessful attempts to land the ship. On two of them she got as far as touching the mud, and starting to sink into it, before blasting free again. At the seventh try, however, the tripod supports had squelched through only two or three inches of mud before they found a firm bottom. Then, at last, Troon had been able to switch off, and stagger over to his bunk, past caring or wanting to know anything more about the planet he had reached.

The *Aphrodite's* landing took place two weeks ahead of conjunction. A week later they had picked up the signal of the first supply-rocket, switched on contact, and put it into a spiral. They lost it for an hour or two when it was on the other side of the planet on its first circuit, but picked it up again as it came round, and held it thereafter. It was brought in and landed successfully in a roughly surveyed area a mile or so to the south of the ship.

Of the seven that followed it in the course of the next two weeks, only Number 5 gave trouble. In the final stages of descent she developed a fault which cut out the main drive, and dropped her like a stone for two hundred feet. She split open as she hit, but luckily it had been possible to salvage most of her contents. The unloading priority had been the Dome from Number 2 rocket ; it was badly needed to get them out of the cramped cabin of the *Aphrodite*, and give them shelter from the eternal rain and drizzle into a place where there would be room to live and work, and protect the stores. Even before it was fully ready, however, there had come a message from Jayme, saying laconically :

"They're on to you, George. You have 584 days, or a little less, to get ready for them."

'They,' it quickly became clear, meant only certain official circles in Brazil, and their knowledge was severely restricted. A public admission that an expedition had not only made an unauthorised incursion into the Brazilian 'Province of space,' but had stolen a march on its nominal administrators by achieving the first successful landing on Venus, would involve not only the Space Department, but the whole government in a serious loss of face. The evident intention was to avoid publicity, if possible while counter measures were prepared, possibly in the hope that if the secret could be kept until a Brazilian expedition had been despatched at the next conjunction there might be no need of the admission at all.

Absence of publicity suited both parties for the present. So long as it lasted, no awkward representations could be made to the Australian Government, and no overt, or even covert, reprisals taken. Meanwhile, both of them employed the interlude which the laws of planetary motion imposed.

On Venus, once the essentials of the Dome were erected, the entire party busied itself with collecting, photographing, preserving, and crating specimens of Venusian air, water, soil, rock, plants, seeds, and insect-type life, working against time to get at least these preliminary, and as yet unclassified, specimens loaded aboard the emptied Number 2 supply-rocket, and despatched as soon as possible towards the now receding Earth. Only when that had been accomplished did they relax, and, turning their attention to the other shuttles, set about making the Dome into as comfortable a habitation as possible.

Back in Rio, the higher levels of the Space Force pulled schemes for Venusian expeditions out of their pigeon-holes, called in technicians, and started to get down to the task of creating a commando which must be ready, not only to reach Venus by the time of the next conjunction, but to take police action when it should arrive.

When the matter of assigning personnel arose, it was almost inevitable that Space-Commander Jorge Manoel Trunho should be among those chosen. His qualifications and records were first-class, and his family's history and tradition would have made failure to include him invidious.

In Sydney, Jayme Gonveia, through his own peculiar channels, received the news of the appointment with satisfaction. There was a place in his plans for Commander J. M. Trunho.

The satellite, Primeira, now alerted, detected Number 2 supply-rocket in the course of its return journey to Earth, and inquired whether it should intercept with a guided missile. A hurried council called in Rio was divided in its opinions. The members could not know that the object detected was simply a freighter. It *might* be the expedition returning. It was true that messages originating upon Venus were still being picked up, in an as yet unbroken code, but they *might* be dummy messages, originating from an automatic transmitter left there as a bluff. If the returning rocket were to be summarily blown to bits, and then turned out to have contained the expedition, or even a part of it, somebody would certainly give the matter publicity, and the public reaction would be bad. The government would be reviled for an act scarcely to be distinguished from murder, and the victims would very likely become heroes overnight. In the end, therefore, Primeira was instructed to make no attack, but to continue observation, and home stations were ordered to be ready to track the object as it approached the Earth. This they did, but had the misfortune to lose it somewhere over the Pacific Ocean, and no more was heard of it.

Thereafter, for more than a year, all parties had worked secretly, and without alarms.

Now that the cat was, at last, publicly out of the bag it caused political ructions in Rio, but made little practical difference. Not even to appease the wrath of the Brazilian people could the conjunction of planets be hastened. Time had been short

enough anyway, and, whatever ministers might say in speeches, preparations could only go ahead as planned.

In Sydney, Jayme Gonveia boarded a Brazil-bound aircraft in order to study reactions at their centre. It was a stage that called for careful observation and assessment, with perhaps a little influence thrown in at critical moments. His only surprise was that the breakdown of security had not come sooner. A leakage he had expected, but he had not foreseen the source of it, and hoped that by the time George Troon returned the details would have been forgotten.

For Dorothea, Mrs. George Troon, after a year of a pre-occupied husband, followed by more than a year of grass-widowhood tediously spent in the slowly regenerating wilderness that was her home, was in the habit of making periodical visits to Rio to break up the depression induced by these things. Taken by friends one night to a party which she found unamusing, she had attempted to improve it by several glasses of iced aguadente and passion-fruit, dashed with quinine and bitters. Her intention of raising her spirits had somehow gone wrong, and she had lifted, instead, the sluices of self-pity. She became woefully the neglected wife. And though in the course of lamenting this, she did not actually mention her husband's whereabouts, it became clear that she had not seen him for some little time—clear enough to catch the attention of one Agostinho Tarope, a fellow-guest who happened also to be a columnist on the *Diario do Sao Paulo*.

It occurred to Agostinho that a prolonged absence of a member of the Troon family could have interesting implications, and if his subsequent inquiries did not produce many hard facts, he collected enough indications to convince himself that it was worth taking a risk with some pointed comment. Other papers pounced upon, and inflated, his speculations. Nobody was able to produce George Troon to refute the rumours, and the row was on . . .

The Brazzy in the street was, as Arthur Dogget had suggested, tearing mad. He turned out in large numbers, carrying banners which proclaimed Space to be a Province of Brazil, and demanded action against Australian aggression. Replying to an official approach, the Australian government denied any knowledge of the matter, but undertook to look into the rumours, while pointing out that Australia was a free country of free citizens.

Political and official circles in Brazil were far from unanimous. Factions started to form. Some held the forthright chauvinist view of holding on to space at any cost, others saw it as a regrettable expense, but a strategic necessity, one group considered it a waste of money to maintain Stations and a force which could bring no return, strong complaints about the lack of enterprise in the development of space began to be heard again.

The Space-Force itself was split several ways. Those at the top, and previously in the know, were already resentful at being shaken out of a comfortable routine, and reacted with bluster to the newspaper comments on the inefficiency of the service. The youngest stratum of officers and men began to look forward to action and excitement in the defence of space. Among the men with longer service, however, there was variety of opinion. Many of those who had joined for the great adventure of exploring space only to find themselves stagnating for years in sentry duty showed a cynicism little short of subversive. Plenty of disillusioned voices could be heard asking: 'Why stop 'em? All we've done out there for a hundred years is play dog-in-the-manger—and it'll be no better if we do chuck 'em out. If there are others ready to have a shot at really doing a job out there, then let 'em, I say. And good luck to 'em.'

It was to this stratum of opinion that Jayme Gonveia was giving his most careful attention at the moment . . .

Meanwhile, the party on Venus had found its forbearance severely tested.

Once the Dome had been made comfortable, the three jet-platforms assembled and the island mapped by infra-red photography, exploration, in its wider sense, had virtually come to an end. The land was found to be monotonously low lying, with a backbone of raised ground which at its highest points barely exceeded one hundred feet. Much of the coast was hard to determine, for it shelved gradually into a tideless sea in great stretches of swamp and marsh, and the weeds growing out of the muddy water had little to distinguish them from those that covered the saturated land. Animate life on the island was restricted to insects, a few wandering crustaceans not unsimilar to spider-crabs which seldom came far from the shore, and a few lunged fish, apparently in the process of becoming amphibians. In the sea there was plenty of life, large and small, but

the coastal marshes cut off all surface approach, and the disturbance caused by the jets made it all but impossible to net specimens from hovering platforms.

Cautious descents were made in various parts of the island to take samples. Landing on the lower ground was usually out of the question, and even on the higher slopes it was risky. The platform had to hang cautiously just above the growths while one member of its crew probed with a long rod. With luck, there might be rock a few inches below the surface, and it could put down. Far more often there was a bed of dangerous mud where the probe would go feet deep into a mush made by generations of rotting plants, discovering no bottom at all. So there, too, most of the specimen taking had to be conducted with scoops wielded from the platforms.

"A fiery hell," Dogget had proclaimed, "seems a nice clean conception when you compare it with the stinking, rotting slime under the goddamned, never-ending rain in this place."

Any exploration beyond the bounds of the island was out of the question, for observation had already shown how rare land was, and the platforms were not equal to long range travel. There was, therefore, no disposition whatever to risk taking them out over the uncharted seas.

The biologists of the party had far the best of it. Poring over sections through microscopes gave them endless interest.

Once the shuttles had been unloaded there was little temptation to go outside the Dome for anything other than a specimen collecting expedition ; inside, kept dry and comfortable by a desiccating plant, there was increasing boredom for all but the four biologists. They remained happily busy and, by degrees, the rest drifted into lending them a hand, and into becoming biologists, or at least biologists' assistants themselves.

Troon observed the development with approval.

"Good," he said, "it saves me getting round to the cliché of 'They also serve—' I'd hate that, because it's not really the statement it appears to be ; more often it is an indication that the speaker is getting troubled about morale. So anything for some interest, even if it is only water bugs. Conjunction is a bit too infrequent. Five hundred and eighty-four days is a long time to be stuck on a mudbank."

"I'd doubt if the Brazzies could mount an expedition in less, anyway," Dogget said, "—or whether, if they knew what this place is like, they'd bother to send one at all."

"Oh, they would. Matter of principle. As long as we are here, space is not entirely a Province of Brazil. Besides, it may not turn out to be quite as useless as it seems to us at present."

"H'm," Arthur Dogget said, dubiously. "Anyway, it was a bit of intolerable bombast ever to claim it. Space should be there for anyone who is willing to explore and exploit it."

Troon grinned.

"Spoken like a true Briton. Just what the English said about the undiscovered world when there was the same sort of bombastic assumption over that. In the days of real Papal dictatorship, Alexander VI reckoned the whole place was his to allocate, so in an open-handed way, he gave the Portuguese the East, and the Spaniards the West. And what happened? The very next year that arrangement came unstuck, and the Portuguese enterprisingly claimed the whole of South America, and six years later Cabral took possession of Brazil for them."

"Did he, now? And what did the Pope have to say to that?"

"He wasn't in a position to say anything. That particular Spiritual Servant happened to be a Borgia, and died of a bowl of poisoned wine he had prepared for a friend. But the point is this, claiming things is rather in the Portuguese blood. Vasco da Gama claimed India for them, but they held only Goa; and, of South America, they held only Brazil—until they lost it. Now their descendants claim all space, but hold only a Satellite Station, and the Moon. Their earlier grandiose claims did not keep the British, and the Dutch, and the rest, out of undeveloped territories, and there's no good reason why the present ones should."

"H'm," said Arthur again. "Times have changed, though. We've got here. But I don't see how, even if the place were worth hanging on to, we could keep up any regular communications between Earth and this gob of mud—not with guided missiles out hunting for us each trip. I'd like to know the real plan. Sometimes I get a nasty feeling that we could be—just bait . . ."

"In a way, of course, we are," Troon admitted. "The existing situation had to be cracked open some way. I think this is a pretty good one. As the matter stands now, a lot of people in Brazil will be calling us pirates, and other, ruder things—though not all of them, by any means. But what about the rest of the world? They'll be taking a very different view

of it. I don't mind betting we are popular heroes now, in most places—and on two counts: one, that we have made a successful landing here at last ; and the other, that we've wiped the Brazzy eye. Everybody will be delighted over that—which will be the chief reason that the Brazzies are wild. What is more, it puts them in a spot.

"They have foreign relations to preserve, so they can't just drop a bomb on us, for they would then appear as the big, crude bully ; they'd earn world-wide hostile contempt, and very likely plenty at home, too. In fact, if they actually turn any kind of weapons on us at all, they'll be in for a lot of opprobrium. So it looks as if the only way they can handle it, without losing even more prestige than they have already, is to capture us, and run us as ignominiously as possible out of what they claim to be their territory—being careful, on account of public relations, to do us as little physical damage as possible.

"Very well, then. They will arrive with the intention of netting us. But we are here first. We can make preparations for that. *We* have at least as good a chance of netting *them*, if we work it right. And that's what we've got to do."

"And when we have ?" Arthur asked.

"I'm not sure. But at least we shall have hostages."

"Your cousin Jayme must have a plan for the next stage ?"

"I don't doubt it. But that is as far as he is telling, at present."

"I just hope your degree of confidence in him is justified."

"My dear Arthur, a great deal of money has been sunk in this affair—including a large part of the Gonveia family fortune. It is evident that cleverer men, with more to lose than you and I, are satisfied that Jayme knows what he's doing."

"I hope you're right—I'd just like to be able to see more of the picture, that's all."

"We shall. I'm willing to bet that the overall strategy is being taken good care of, from the little I know of it. But the local tactics are our affair, of course, and it seems to me the best thing we can do is to work out several plans to suit different circumstances. When we know more about how they are going to tackle it, and what their equipment is, we can fill in the details of the most suitable plan. At present, our information on their plans is still pretty slim, but we shall get more. In the meantime, my idea of preparing a reception for them is this . . ."

The Brazilians, being under no obligation to make their Venus-bound lift direct from Earth, had no intention of trying it. The Satellite, *Primeira*, offered them a means of starting and building up speed without the drag of gravity, and, naturally, they made use of that. Gone, therefore, even a few weeks after the first intelligence of the Troon expedition's presence on Venus, were *Primeira's* leisurely days when the only interruptions of her comfortable lethargy were the supply-shuttles and the monthly relief rockets. Orders started to pour in. Sections of the Satellite that had been closed-off and put out of commission years ago were opened up, examined, tested, repaired where necessary, and made habitable again. Quantities of supplies came up in shuttles and, presently, technicians followed them. Soon, long cylinders of a new, ballistic type, containers of air, water, stores, fuel, and the rest were arriving, to be captured, and tethered electronically about the Station. Later on, came sections of larger shuttles. Engineers in space-suits emerged from *Primeira*, and jetted themselves across the void to start assembling them. In a few months, the whole neighbourhood of the Satellite was littered with floating masses of metal, and containers of all shapes and sizes, gradually being drawn together and bolted, welded, and sealed into comprehensible shapes.

The work went on continuously in shifts, with artificial lights blazing during the brief 'nights' in the Earth's shadow, until gradually the chaos was tidied into the form of five large, new shuttles. Activity then became less spectacular while the engineers worked inside them, fitting the new hulks with their electronic circuits, linking the remote-controls to the main drive, and stabilising and correcting jets; testing, adjusting, and readjusting the gear's responses to radio signals which would be their only pilots.

While that was still going on, the ballistic cylinders were opened, and again the area was littered with space-suited men gently propelling cases of all shapes and sizes towards one or another of the shuttles, for stowage. The ballistic cylinders themselves were expendable—it would have cost more to get one safely back to Earth and recondition it than to make a new one, so that when they were emptied a charge was clamped on to them, and they were despatched to crash harmlessly among the lunar crags, where they could no longer be a hazard to navigation.

The work went well, and in spite of setbacks, it was completed a full month ahead of schedule. The area was then clear. The five fully-loaded shuttles, linked by cables, hung in a bunch, revolving about the Satellite at a range of twenty miles, and linked to her by radio beam. The Satellite itself, the intricate machine, that had grown up from the first of all the Space-Stations, kept smoothly on its orbit, with two small rocket-ships in attendance, waiting.

"They are using shuttles, as I told you," Jayme Gonveia informed Troon. "They have, however, improved on our method—presumably because had they to await the arrival of their shuttles as you did of yours, they would be in a weak position and unable to take any action against you until the shuttles should arrive. The idea they have adopted, therefore, is one of unified control whereby they and their shuttles will travel together and arrive simultaneously. The whole group is intended to handle as one ship. This means that you must be prepared to take very swift action before they have a chance to deploy . . ."

The Key ship, the *Santa Maria*, came up two weeks before the calculated starting date, and hove-to, hanging in space a mere mile or so from Primeira. She had left Earth with only five men aboard ; the rest of her full complement of twenty were awaiting her on the Satellite. With her arrival, activity broke out again. Figures emerged from Primeira's locks, some of them jetting across the gap immediately, others manoeuvring containers out of the dock-doors, and guiding them into a drift towards the ship. Once more, there began a process of testing and checking, which, with the provisioning and final fittingout, continued in shifts for a week.

Inspected and passed at last, the *Santa Maria* moved off a few miles. The cluster of the five waiting shuttles was brought closer, and broken up. Each of them was urged and juggled into approximately its proper relation to the rest.

When the last was placed, the small tug-shells and thrusters drew off, and made back to Primeira, leaving on each shuttle a party of only four space-suited men, linked together by lines, and equipped with portable jet-tubes to steady their charges and correct drift. In the centre, roughly equidistant from all five shuttles, the *Santa Maria* waited. Aboard her, Capitao Joao Camarello, and his first officer Commander Jorge Trunho, watched the tugs draw clear of the area.

"Ready, shuttles?" the Capitao asked.

A man on each shuttle acknowledged.

"Good," approved the Capitao. "Keep ready. We shall make contact with you in exactly ten minutes from . . . now."

The spacesuited men clinging to the shuttles continued to check twist and drift in their charges as well as they could.

"Two minutes to alignment," said the Capitao. "Get clear of all tubes now, and check your short safety lines. No trouble? Fine. One minute to go now . . . Thirty seconds . . . Ten seconds . . . Now!"

The Chief Electronics Officer pressed his first key.

Little jets of flame broke from the steering tubes of the shuttles. Each turned over, rolled, and twisted, swinging round to align itself with the parent ship, firing more small jets to correct and steady the over swing. Presently, all were lying in exactly the same orientation, with their main driving tubes pointed towards the gleaming crescent of the Earth.

"Phase One completed. All well?" inquired the Capitao.

One after another the men tethered to the shuttles reported. He went on :

"Positioning will take place in two minutes from—now!"

The Electronics Officer regarded the hand of the clock, pressed his second key, and turned his attention to a small screen in front of him. Outside, more little twinkling bursts came from the shuttles ; on the screen, small illuminated figures started to drift very slowly. Presently, the white figure 4 turned green, and ceased to drift.

"Number Four fixed, sir," he reported.

The Capitao glanced at the screen.

"Good. Use that as the axis."

Gradually the other figures changed the direction of their drift. One after another they, too, turned green. As the last one altered, the Officer reported.

"Formation complete, and locked, sir."

The Capitao lifted the microphone.

"Good work boys, and thank you. Commander you can take your men home now. We shall test control."

The men in spacesuits unhooked, kicked off into the void, then levelled their hand-tubes, and set themselves scudding through emptiness towards the Satellite. When they reached it, they were able to look back and see the pattern of their operation complete.

The *Santa Maria* lay relatively motionless. About her, each at a distance of more than two miles, hung the shuttles, at the angles of a huge pentagon. Invisible proximity beams linked them all, each to the *Santa Maria* in the middle, and to both of its neighbours. Occasionally one or another would show a brief twinkle of flame as the automatic gear cut in to correct the least loss of position.

Six Earth-days later, the personnel on *Primeira* collected round the stationary screen in their spinning home to watch the start. The farewells and good wishes were over, and they watched in silence. A voice aboard the *Santa Maria* came through the loudspeaker, counting the seconds, then *Capitao Camarello's* order : " Fire !"

From the main tubes of the *Santa Maria*, and from those of all the five shuttles, belched jets of flame, quickly growing fiercer. The whole formation began to move as one. The blast of the driving tubes grew whiter, and fiercer still. In a few minutes the expedition was gone and, to mark it, a new constellation hung in a bright pentagon against the jet black sky . . .

" *Of course* we keep up radio communication," Troon explained patiently, " and *of course* they'll locate us by it. This is a showdown. It's no damn good their landing in some other part of this pestiferous planet where neither of us can get at the other, is it ? The nearer to us they land, the better, because the sooner we can reach them, the better. But God knows what sort of a mess their landings going to be. We had quite enough trouble in getting just one ship down safely."

" As I understand it," said Arthur, " the whole unit works on a kind of servo system which whatever the manned key-ship does, the rest do the same. That must be so, I think ; the elaborations and complications of five men in one ship controlling five shuttles independently while that ship is descending are beyond contemplation. Therefore, the intention must be to land in the same formation they travel in—a pentagon ; though I suppose they may be able to contract, or expand, its size a bit. That being so, all their attention will have to be concentrated on the safe landing of the key-ship, and the shuttles must more or less take their chance. Those chaps certainly can't know what they're in for. You *might* bring off a trick like that fairly neatly on a dead flat prairie, but not on a mud pie. My betting is that it will be only luck

if *one* of their shuttles stays upright, and most likely that all of them will sink in the swamps."

"We can't be bothered about that," Troon told him. "What we have to concentrate on is being as close as we can to the key-ship when she comes down, and without having any of the shuttles coming down on top of us. It would help if we knew what distances they intend to keep. We'd better get on to Jayme again, and see if he has any information on the landing drill."

Excellent as Jayme's information service was, it could not help there. Any decision to expand or contract the pentagon formation must obviously, he pointed out, be left to the captain's discretion. His sources continued, however, to give reliable information on the expedition's progress, and as its e.t.a. drew near, the radar was set searching for it beyond the Venus cloud cover. The formation was first faintly detected at a great height, still moving fast, and presumably closing on a spiral. Troon promptly despatched a message announcing its approach. On its second circuit, still at a considerable distance, but travelling more slowly, it had altered direction, from which he judged that the point of origin of his message had been plotted.

"Make ready," he ordered. "They ought to be down next time."

The party checked that its weapons and supplies in waterproof covers were aboard the three jet platforms, then they climbed into their spacesuits, as the best form of protection against the never-ending rain outside, and waited, with their helmets handy.

At last the formation showed up on the screen, seen now from a different angle, travelling slowly in from the north at a mere twenty-five thousand feet. All six ships had tilted almost to the vertical, but the pentagon formation was still perfect, and now in the same plane with the surface of the ground. As they came closer, standing on their main drives they showed simply as a pattern of circular spots which drifted almost to the centre of the screen.

The party in the Dome put on its helmets, and made for the platforms, leaving a single man at the radar. He hooked up a microphone, and his voice reached them all.

"Key-ship east-north-east. Estimate five miles. Separation from servo ships, estimate one mile. Appears constant."

The platforms rose a little and skimmed out of the locks, climbing on a gentle slant.

"Don't bother about the shuttles unless the separation alters. Concentrate on the key-ship," Troon told the operator.

"Right, George. Rate of descent slow and cautious. I'd say around twelve hundred a minute. Now a little under eighteen thousand. Steady and vertical."

The platforms sped on travelling a few feet above the tops of the trees which rose out of the tangle of pallid, slimy growths that hid the ground. Presently, Troon brought his to a halt, and sent the other two out on the flanks. Hanging there with the fronds of the feathertop trees swinging across just beneath him, he switched on the outside microphone, and heard for the first time the roar of the rockets overhead. The thunder of six rocket-ships descending at once was almost unnerving. He switched off again, and the three of them stood peering anxiously into the clouds above. A few minutes seemed a long time.

"Eight thousand," said the radar man. And a little later : "Five thousand."

One could hear the noise now through the helmet, and feel the buffeting of the sound waves. A man on one of the other platforms exclaimed suddenly : "There's one of them !"

Almost at the same moment Troon's neighbour caught his arm, and pointed up. Troon looked, and saw a brilliant, diffused, reddish light with a quality of sunset, breaking through above them. He sent the platform swooping forward, out of harm's way.

The buffeting grew, until the platform was trembling with it. He could see four glows in the clouds now. The one behind, one ahead, two dimmer ones on either side, but all of them growing brighter. The platform began to sway as if the roaring billows of sound were tossing it.

"Under one thousand," said the radar man's voice.

"They're lucky—dead lucky. Quite a bit of firm ground round here," came Arthur's voice.

Troon did his best to look all ways at once. The flare behind was still the closest. He edged a little further away from it, and then kept his eyes on the one ahead ; that, he calculated, must be that of the key-ship. All three men clung fast to their holds as the platform rocked.

It became barely possible to look at the brilliance. Hanging on with one hand, he raised the other in front of his helmet and peered through slits between his gloved fingers. At two hundred feet the flames were stabbing into the ground, and the steam was rising in thickening clouds, to blot everything. A moment later, there was nothing to be seen but a dazzling white nimbus, with its centre slowly growing more intense. Troon looked quickly round again ; all about them was whitely shining steam. Then suddenly, the noise stopped ; the platform ceased to tremble ; the vivid white spots in the steam died. In the abrupt silence of his helmet Troon asked :

"Arthur, have you marked the key-ship?"

"I reckon so, George."

"You, Ted?"

"Pretty sure of her, George. I'll make certain when this steam lets up. She'll have ports. The others won't."

"Well, both of you stay where you are until you can be sure. Then find her airlock side, and close in to fifty yards."

He edged his own platform forward. The air was clearing, but it was not possible to see the ship yet. She was still hidden somewhere in the cloud of steam vapourizing from the sodden ground, but it seemed fairly certain that her landing, at any rate, had been successful, whatever might have happened to the shuttles.

Visibility gradually improved. Before long, he could see the outline of her top. Soon he could make out the upper part clearly enough to see the ports and be sure that she was the *Santa Maria*, and no unmanned shuttle. She was leaning a little, but not dangerously at present. He drove the platform forward towards the steam that still shrouded her base.

Gradually that thinned, too. He was able to see that she had indeed been lucky in her landing place, and the tripod foot on the tilt side showed no sign of sinking further. He took the platform down to a few feet above the ground, and a little closer. The ends of the ship's main driving tubes were still glowing, and the rain was vanishing into little steam puffs before it could actually touch them ; the area directly beneath her was seared clear of vegetation, and muddy water was seeping back into it, steaming gently.

Troon brought his platform down to within inches of the ground, and steered it in between two of the tripod legs.

"Let it go !" he said.

His two companions unclipped the straps of a rectangular bale sealed into a waterproof cover, and tumbled it over the side to fall in the mud with a squelch. Skilfully Troon checked the upward bounce of the platform as it lost the weight ; then he backed off, and sped away.

“ Arthur ? Ted ? Have you located the airlock yet ? ”

“ Arthur here. Yes, George. It’s facing due south. ”

“ Good. Keep it covered. I’ll be round there with you. ”

He handed control of the platform over to one of his companions, and turned a knob on his helmet, putting his headset on to one of the Brazilian Spaceforce’s intercom wavelengths. In Portuguese, he called :

“ Troon calling ! Troon calling ! Troon calling Capitao Camarello. ”

There was a short pause during which his platform approached Arthur’s, and drew up beside it, then a voice replied :

“ This is the *Santa Maria*, Spaceship of the Estados Unidos do Brasil. Capitao Joao Camarello. ”

“ Bone dias, Capitao, ” said Troon. “ And my felicitations, Senhor, upon your excellent landing. ”

“ Muito obrigado, Senhor Troon. And my congratulations to you upon your survival of the rigours of this singularly unattractive-looking planet. It is, however, my regrettable duty to inform you that, by order of the Congress of the United States of Brazil, you and your companions are under arrest, charged with violating the sovereignty of Brazilian territory. One hopes that you will recognise the situation, and accept it. ”

“ Your message is not unexpected, Senhor, ” Troon told him. “ But in return I must inform you that since the Brazilian claim to this territory rests neither on its discovery by Brazil, nor upon Brazil’s prime establishment here, it cannot be considered to have any validity. I am therefore entitled on the grounds of your unauthorised landing to require that you and your crew should put yourselves under my orders. Until I have your assurance that this will be done, I cannot grant you permission to leave your ship. ”

“ Mr. Troon, you have been informed, I do not doubt, of the strength of our expedition, so may I remind you that there are two of us to one of you—if, indeed, your party has survived the tribulations of such a detestable climate as this appears to be, intact. ”

"That is quite true, Capitao Camarello, but *we* are not caught in a metal trap. Furthermore, I ought, I think, to tell you that we have your airlock covered. And I must also warn you against an attempt to take off again, should it occur to you to look for a more hospitable landing area. There is, beneath you at this moment, a considerable bale of TNT. You cannot fire your drive without igniting it before you lift, whereupon it may do your ship considerable damage, and will certainly overturn her, thus making takeoff impossible for you. Your situation therefore, is awkward, Capitao."

After a pause, the voice replied :

"Ingenious, Mr. Troon. I will take your word for it. But at least we do not have to sit out in the rain in order to maintain our side of the impasse."

"But neither do we, Senhor. Unless I receive your capitulation very shortly, we shall simply fix a wire cable round your ship in such a position as to prevent the outer door of your airlock from opening. We shall then be able to wait indefinitely, and in somewhat more comfort than yourselves, for your decision."

Troon caught sight of Arthur Dogget signalling him from the next platform. He switched over to their usual wavelength. Arthur said :

"If he does agree—and I can't see that he's got any choice—what do we do with them, George ? Keep 'em handcuffed all the time ? After all, they're two to one, as he said. Why should he keep any agreement to surrender ?"

"All right," Troon told him. "Just you wait a bit, and see. We'll set down now to save power—but keep an eye on that door. Give it a bullet if it so much as moves."

The three platforms descended carefully, seeking spots where the matting growth was thick enough to keep them out of the mud, and waited. Troon switched back to the other wavelength, but a full hour passed before any sound could be heard on it ; and then it was another voice that spoke :

"Hallo," it said, "George Troon ?"

Troon acknowledged.

"Jorge Trunho here," said the voice.

"I was hoping to hear from you, Cousin Jorge," said Troon.

"What's the reply ?"

"A change of authority," Jorge Trunho told him. "I have now taken command of this ship. With the exception of Capitao Camarello and four other men whom we have put under arrest, we are now willing to carry out your orders."

"I am glad you appreciate that there was no sense in prolonging the situation," said Troon, and issued his instructions. As he switched over, Arthur Dogget said :

"What goes on, George? I don't like this at all. It's a whole lot too easy."

"You don't need to worry," Troon told him. "The Brazilian Spaceforce is riddled with young men who've been frustrated for years, and know they're likely to stay that way as long as Brazil has the monopoly of space. They're over-ripe for a change. All that was needed was the opportunity, and someone to organise."

Arthur considered.

"You mean—this was all fixed? You put 'em in a spot to give Trunho the chance to take over? You knew he would?"

"That was the plan, Arthur. The awkward spot made it easier for him to sway the undecided ones."

"I see. All nicely arranged in advance—and by Cousin Jayme, I suppose?"

Troon nodded.

"Under his auspices, at any rate. I told you Cousin Jayme knows what he's doing."

The slow twist on the *Santa Maria* was about to bring the sun into view, but before it could come searing through the port Arthur Dogget pushed the cover across, and fixed it. He looked round the bare, tank-like compartment in which they were confined, then he pushed himself across to his acceleration couch, fastened the straps to give some illusion of weight, and lay there frowning. At length, he said :

"What makes me kick myself—what really burns me up, is that I knew at the time it was all too damned easy—I even *said* so. God, what a mug !"

Troon shook his head.

"It *should* have been easy—it was intended to be. That part of it would have gone just the way it did even if Jorge hadn't been double-crossing. The whole thing went quite according to plan, until he pulled that fast one when we got back to the Dome. It's no good blaming ourselves for trusting Jorge. We *had* to. Ten of us couldn't have kept twenty of them under restraint indefinitely. It was a calculated risk. Jayme was gambling on Cousin Jorge's Troon blood—that his spaceward urge would be greater than his loyalty to the Brazilian Spaceforce. Well, that was a bad bet—or was it? I'm still not quite

sure. It may not have been loyalty. It could easily be that he was reckoning the chances differently. He *could* be calculating that after this shake-up the Brazzies'll really get down to doing something in space—and that he's likely to be in the forefront of whatever they do do."

"And getting a medal for turning us in for piracy won't do him any official harm either," added one of the others, bitterly.

"No," Troon agreed, "but if the thought of the charge is worrying you, I shouldn't let it. They'll have to put us on trial, of course, but luckily there's been no bloodshed, so the odds are they'll pardon us, or just give us a token penalty. After all, we did get there; and we are no longer a danger, sentiment will swing round. They'd lose a devil of a lot of public favour if they tried to keep us in jail for it."

"Well, that's something—and I reckon you're right," Arthur admitted. "Most of the worrying is going to come the way of that organizing genius, your Cousin Jayme—and whoever else puts up the money. I never did think they'd get much for all they spent to exploit that lousy planet, anyway, but whatever there is there, the Brazzies are going to get it now. Just a bit too clever for one another, your relatives."

"Maybe," admitted Troon, "but I'd not be sure yet. After all, we did ship Jayme one shuttle-load of specimens, remember. His people, working on them, will have about two years' start of any Brazzy researchers—and that's quite a lot, with old man Gonveia's botanical organisation behind it."

"All right. Your Cousin Jayme may be a marvel, commercially," Arthur conceded, "but your Cousin Jorge has certainly taken him, and all of us for a ride, strategically. And thanks to him, damn it, the Brazzies have now got the lot—our ship, our Dome and supplies, all our research work, and us. As profitable a bit of double-crossing as ever there was—with laurels and promotion for Jorge Trunho."

"Look here," put in one of the others, "the Troon family, as everyone knows, has a deserved reputation for gambling with space in a big way. Some of their gambles have come off, and some of them haven't. The first half of this one did, and the second half hasn't. Now I suggest that we agree to drop the subject. We've a long journey ahead, and chawing the subject over and over isn't going to sweeten it, or get us anywhere. Agreed?"

The journey was tedious indeed. Nothing broke it but the regular arrival of meals—covered cans floated into the com-

partment by one member of the Brazilian Spaceforce, while another guarded the door. The captives received no bearings, no progress reports, they simply waited timelessly for it to end.

At last it did. For the first time during the trip a concealed speaker broke silence with a click and a scratch.

"Secure all loose objects," it instructed twice, in Portuguese.

The crew of the *Aphrodite* stared at one another, scarcely able to believe that the imprisonment was coming to an end at last. Half an hour later the voice spoke again :

"All loose objects should have been made fast by now. Everyone to couches, and make ready. All to couches ; fasten all straps. Deceleration will begin in ten minutes from now."

Troon opened a port-cover. The slow turn gave him a view of a huge Earth crescent sliding smoothly up the black sky. He secured the cover again, and got on to his couch.

"Not an Earth landing," he said. "Must be putting in at Primeira."

"Four minutes," announced the loudspeaker.

Primeira, thought Troon, the old threshold of space. I wonder what its builders would have to say if they could see the first successful Venus expedition coming in as prisoners . . . ?

The speaker was counting now. He composed himself to wait for the thrust and the onset of weight.

One after another Troon's crew jetted themselves across from the *Santa Maria* to Primeira. Once through the airlock there, they took off their spacesuits, and waited, with a guard in charge of them. During the considerable delay they sat watching other men entering the airlock to go outside. There seemed to be a great many of them. More than an hour passed before the Capitao Camarello and his second in command, Jorge Trunho arrived, and removed their spacesuits to reveal themselves dressed in immaculate uniforms for the occasion. It was evident that the handing over of their prisoners to the Commander of the Satellite was to be a formal affair. Troon was not much impressed ; he smiled, and tried to catch his cousin's eye ; Jorge caught it stonily once, and thereafter avoided it.

Two more armed guards appeared. The party was marched to the Satellite Commander's cabin, and lined up in two ranks. After that, there appeared to be a hitch. For five minutes they waited in silence, then Camarello spoke to Trunho who went back to the door to inquire. They waited another five minutes, then the inner door of the room opened, and a voice said, in English :

"My apologies for keeping you waiting, gentlemen."

And into the cabin, dressed in an ordinary suit, stepped Jayme Gonveia.

He nodded to Troon.

"Glad to see you, George. I trust you didn't have too uncomfortable a trip."

"But how did you do it?" Troon wanted to know, later on, when they were alone together.

"Less difficult than you might think," Jayme told him. "We put parties aboard the two mothballed Satellites six months ago, and prepared them for action which we hoped would not be necessary. We infiltrated undercover groups both here and on the Moon Station. The rest was mostly a matter of suitable timing.

"I made a mistake over Jorge, though. Perhaps I did not tell him enough. If he had had a better idea of the scale he'd very likely have played straight with us. However, its only effect was to delay the next phase of the operation; we did not want an alarm raised for fear the *Santa Maria* should be diverted, and we need, her, intact.

"The radio operators were the key men in the take over. A week ago, the one here, on Primeira, put over the internal speaker system a message announcing that the Moon Garrison had mutinied, imprisoned its officers, and called upon the Primeira crew to do the same. The moon operator put over a similar message, transposing the places. Both of them put their radios temporarily out of action, for safety, but continued to announce previously concocted messages over the internal system. During this stage, small shuttle-type rockets that we had been holding at the other Satellites appeared close to Primeira, and one landed close to the Moon Station.

"Well, as you know, the Spaceforce was shot through with disaffection. Our undercover groups had worked on the men, and not found it very difficult. They were organised and ready, and were able to take over with very little trouble. Those who wouldn't join us have been transported to one of the mothball Satellites pro tem. The only thing that had gone wrong was at your end. The *Santa Maria* was on the way back here. If we made an announcement she would be diverted; in which case we should lose not only your valuable selves, but a very valuable ship. So we made no announcement. We reopened radio communications with excuses about electrical interference, and resumed routine messages as though nothing had

happened. We have been bluffing for a week while we waited for you and the *Santa Maria*—and during that time we have acquired a couple of shuttles of provisions, as well.

“But in an hour or so now, the news will be broadcast. Camarello and our cousin Jorge have gone over to join the rest of the unpersuadables on the minor Satellite where they will remain until their government sends a ship to fetch them. The exact date and time for that will depend on how long it takes to sink into the official Rio minds that Space is no longer a Province of Brazil.”

Troon thought the position over silently for some moments, then he said :

“I had no idea you were brewing anything on such a scale as this, Jayme.”

“Perhaps I should apologize to you for that, George, but it seemed wise to keep the compartments of the plan separate, as far as possible. And I think it was—it spared you the necessity of acting, and the need to watch yourself for slips.”

“But now the operation is complete, and you are all set to spring it on them that space has now become a State of Australia.”

“A State of Australia !” exclaimed Jayme. “Good God, man, do you think I want to start a war between Brazil and Australia ? Certainly not ! Space will declare itself an independent territory—if the use of the word ‘territory’ is valid in the circumstances.”

Troon stared at him.

“Independent ! For heaven’s sake, Jayme, space is—well, I mean, out here, in nothing, like this. I never—why, it’s utterly impossible, Jayme !”

Jayme Gonveia smiled gently, and shook his head.

“On the contrary, George. If you will consider the original *raison d’être* of the Satellites and the Moon Stations, I think you will see that Space, as an entity, is in an excellent position to propose terms. One day it may be in a position to do a useful trade, but until then, it can at least be the policeman of the world—and a policeman is worthy of his hire.”

George Troon continued to gaze reflectively at the floor for a full minute. When he looked up, his expression had lost its incredulity. He did not speak, but Jayme Gonveia replied as if he had.

“Yes, George,” he said. “From today, your gnat-voices are just a little closer.”

John Wyndham



Postmortem

Dear John,

While we all know that Brian W. Aldiss has a delightful sense of humour, and that his humorous stories are difficult to beat, isn't it rather dangerous to allow him to air his subtle fun in the way he does in 'Postmortem'? (*New Worlds* No. 72)

Of course, no danger will be done to established writers, but it is possible that some aspiring writers may read his letter and so be completely led astray, for they may well take it that he literally means what he says.

For instance, it may be obvious that what he must surely have meant, is that we don't want to read fiction about his ordinary Joe. We want to read about the *extra*-ordinary Joe, the man who isn't so devoid of character that he sits down and accepts everything, but who is willing to have a bash at changing the order of things. In other words the man *with* character.

I suspect that most readers will have realised that it is a leg-pull when they reach the point where it says that today's heroes are those who sweat it out. Heroes are not the ones who sit around and sweat it out; they are the ones who get out and *do* something.

If you don't have people fighting for what they want, then you have no conflict, and without conflict in fiction one can hardly develop the characters in the story, nor can there be anything of much interest to a reader.

John Boland,
London, S.W. 4

Dear Sir,

The new series of symbolic covers on *Science Fantasy* and *New Worlds* are first class. Brian Lewis makes a good job of them, although there is a similarity to Richard Powers of the U.S., but with Lewis's own individual stamp. Yet even then his style of spaceship bears a resemblance to those of Kirby and Adash in the late "Authentic Science Fiction."

R. Leslie George,
Wellington, New Zealand.

Dear Mr. Carnell,

As a reader of your magazine since its inception, I have often been struck by the fact that, while a lot of the fiction is based, partially or implicitly, on theories of knowledge and of human conduct expounded by such men as Freud, Darwin, Spengler, Toynbee, Einstein, Riemann, to mention only a few, neither your magazine (nor any other in the field that I have met) has ever published factual accounts of such theories. I was stimulated to express this view by the welcome emphasis which you have placed on the 'humanities' aspect of this literature. This emphasis symbolises the imbalance of man's knowledge today, in that he has a far greater understanding of the phenomena of the universe which he inhabits, than he has of those relating to his own individual and social actions.

Kenneth Johns' admirable articles cover wide tracts of the former field of knowledge, but the other has no voice at all in science fiction (excepting perhaps Mr. Campbell's editorials), in spite of the increasing part which it plays in science fiction literature.

What I would like to suggest is that you publish a short article each month (say 3000 to 5000 words) dealing with a specific aspect or thinker of historical, psychological scientific or sociological philosophy, theory or knowledge. I am most interested to learn your views on this subject.

R. Critchley,
Bournemouth, Hants.

Dear Mr. Carnell,

This being my first ever letter to an editor I must apologise if it proves rather rambling.

First of all a complaint! In issue No. 72 there is a profile of Brian Lewis during the course of which you say "Ed Emsch, America's leading s-f artist." Hasn't anybody at your office heard of Kelly Freas? (*See 'Editorial' this issue—Ed.*).

Now for the congratulations—your new covers are very good, especially No. 72, in fact I think that one is the best cover I have yet seen on any British s-f magazine. Lewis really seems to be 'getting with it'—to use a phrase common to my age group (I am nineteen and doing my National Service).

The standard of stories is usually very high, higher in my opinion than *Galaxy's* and your magazine runs *Astounding* a very close second as the best one in the field (with the exception

of serials). I agree with one of your readers that in "Threshold of Eternity" the van Vogt trimmings ran rather thin, and the least said about "Green Destiny" the better. The serials by American authors are usually the best—*Takeoff* springs to mind immediately as *the* best.

A quick flash-back to your artists. I am glad you dropped interiors, it would be all right if you had Freas or Van Dongen, but as it is your interiors were getting very juvenile. The best one's I can remember were by Quinn, I think, for James White's "The Conspirators."

I enjoyed your latest serial by Eric Frank Russell, but then I enjoy every Russell story.

How about some Asimov or Clifton stories. I realise the difficulty of getting stories from American authors but I am sure it would help to sell more copies of your magazine and we all want that don't we? Also, if possible, a story now and again by Theodore Sturgeon—even if it is an old one from one of his collections not published in this country. (*Watch out for a new Sturgeon short story in Science Fantasy shortly.—Ed.*)

By the way I was very sorry to read of Kornbluth's death—it will be a great loss to everybody who has read any of his stories.

To sum up, you are doing a great job with *New Worlds*, it is far and away the best British magazine, and in my opinion the second best in the world, and I sincerely hope you keep it up.

David Piper,
London, W. 10

Dear Mr. Carnell,

What an appalling cover on *New Worlds* 72, please don't do it again. Couldn't we have a little more artistic merit, and a little less photo-cum diagram. I have a science fiction magazine cover framed on the wall, but who would want to frame covers like No. 69 and 72 as paintings.

Must we have so many stories where one is supposed to be on one side of a war. I am quite unable to want either side to win, but loathe all fighters equally. I don't mind wars in stories, just the idea that one should favour either side; equally objectionable is catching criminals, where one is supposed to want them caught.

How I agree with Brian Aldiss about lack of characterisation. I often feel I would like to tell the authors to go and read books by *real* authors. Of course, one always feels one could do much better than the author. However, it seems a pity that s-f should lose its greatest advantage over the popular detective tale. As Dorothy Sayers remarked, the standard detective tale can never be literature, for if other than stock characters are used, the reader never wants the murderer caught. Only an author like Simenon can surmount this by ignoring it, which makes many of his stories too sad for the average reader. Incidentally, it always seems odd to me that people never make the correlation that they would feel equally sympathetic towards real life murderers, if they knew enough about them.

J. Curzon (Mrs.),
Marlborough, Wilts.

Dear Sir,

Congratulations ! Your *New Worlds* and *Science Fantasy* rate as the best two magazines available as far as I am concerned. The stories have always been good ; and now that you have started printing some really good covers, there is no other magazine on the local market quite so good. Concerning those covers—why not do as some magazines (in other fields) do, and sell larger reproductions of the covers for the benefit of people like myself who like such pictures to decorate their rooms. But you must tell Lewis to keep them abstract.

I see in No. 71 that Mr. Weaver rates *New Worlds* with *Astounding*. Evidently Mr. Weaver does not read editorials, or he would place *New Worlds* higher ; or *Astounding* lower ; or both. The strong point of both these magazines is the relatively small quantity of non-fiction material printed. I for one would be far happier if all non-fiction were eliminated from s-f magazines. When I want to read scientific articles, I buy one of the legion of scientific publications available, yet when I want to read fiction, I have to put up with non-fiction in the same magazine.

The type of stories you should have more of are the humorous (such as "Wasp") and the "wild talents" types. I think that "Wasp" is the best story you have ever published.

Science Fantasy, of course, gives much greater opportunity

for the humorous. Some of the black magic stories are especially good. An instance of this is "Drog"—you should do more of these. Brian Aldiss writes some very good fantasy, but some of his stuff, like most of Ray Bradbury's, is far too macabre to be good entertainment. In the words of the song "Keep it gay."

Colin Maxwell,
Morwell, Victoria, Australia.

SALES AND WANTS

3d per word. Minimum 5/- Cash with order.

FANTASTIC NOVELS: A Checklist. Compiled by Australian Don Tuck; foreword by August Derleth. Lists all the famous fantasy stories published in *Fantastic Novels* from 1940 to 1951. Printed. Invaluable to collectors. Price 2/2d. post free from Nova Publications Ltd.

EXCHANGE British Colonial and Foreign Stamps for American science fiction pocketbooks. Box G.T., Nova Publications Ltd.

ASTOUNDING U.S. editions for sale, mint. Most months May 1951 to November 1957. 2/6d each post free. State alternatives. Box 101, Nova Publications Ltd.

YOU should join the **BRITISH SCIENCE FICTION ASSOCIATION**. Write to: The Secretary, 47, Alldis Street, Great Moor, Stockport, Cheshire, for details.

EXCHANGE Clarke's *Prelude to Space* (mint) for Nos. 14 and 18 of Walter Gillings' *Fantasy Review* (1949-50). Box 102, Nova Publications Ltd.

IT'S A BINDER you want to hold those copies of *New Worlds*. In blue book-cloth, gilt lettered on spine, holds six copies. Simple to add or remove copies. Price 10/6d each, post free. Nova Publications Ltd.

SCIENCE FANTASY—a few copies only Nos. 5; 7 to 12; 14 to 17. Price 2/6d each, post free. Nova Publications Ltd.

Buried Treasure

We recently discovered in our stock-room several cartons containing early issues of NEW WORLDS. Collectors are always asking us for them but we shall only be able to supply a limited number of orders.

**Nos. 4, 6 to 20 inclusive
each 2/6 post free**

NOVA PUBLICATIONS LTD

Maclaren House, 131 Great Suffolk Street, London, S.E.1

Australasian Readers

**A SCIENCE FICTION SERVICE ON YOUR
OWN CONTINENT**

We carry :—NEW WORLDS : SCIENCE FANTASY
SCIENCE FICTION ADVENTURES
NOVA NOVELS

and other current British s-f magazines.

The largest range of back issues in Australia.

Send your Want List to :

BLUE CENTAUR BOOK COMPANY

BOX 4940 G.P.O. SYDNEY, N.S.W. AUSTRALIA

Another famous Nova Magazine



128
PAGES

2/-

Bi-Monthly

In the next Issue, No. 31

THE BONES OF SHOSUN

by KENNETH BULMER

PLUS A NEW THEODORE STURGEON STORY

And many other stories

The New Nova Magazine

SCIENCE FICTION
ADVENTURES

2/-

Bi-Monthly

2 Action Packed Adventure Novels
plus short stories
in the current issue

NOW ON SALE

NOVA PUBLICATIONS LTD.

Maclaren House, 131 Gt. Suffolk Street, London, S.E.1
