

NEW WORLDS SCIENCE FICTION

No. 70

VOLUME 24

2/-



NEW WORLDS

PROFILES

John

Wyndham

London



"For All The Night" in this issue is the first of four new novelettes by John Wyndham, written with a rather different approach to his usual style. They are so close to reality that they could almost be true. In his usual forthright manner he says : "Sometimes, when dumb-hero and female-type stooge are battling against improbability on Arcturus VI, I find myself asking whether their journey—all those light-years of it—was really necessary. Sometimes, too, when I read the more erudite and advanced science fiction, I have paused to wonder whether anybody but the author really knows what the hell is going on, and why. And sometimes I reflect that the most read and reprinted stories are those of H. G. Wells ; and it comes to me that the real reason for these many reprintings is that they are stories that can be understood by everyone.

"My own preference has been, and remains, for what I call the 'threshold-of-possibility' story. Many of the higher flights of fancy are fine, but still I find the most satisfactory to read (and those I would most like to write) are the kind which the reader finishes, saying to himself : 'Well, there's no reason why it shouldn't happen like that one day.'

"That is what these Troon stories try to be : speculations not too far from the brink of possibility. I hope you enjoy them. But remember this is an experiment in flouting the current convention of advanced specialised science fiction story-telling. Both Editor Carnell and myself will appreciate your bouquets and brickbats when the final story has been published."

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Phases of S-f (2)

Not long after last month's editorial had been printed but before copies had actually been on sale, an extremely interesting news item reached me which had a direct bearing on the subject I had written about—whether the successful launching of the space satellites had had any marked effect on the sales of science fiction magazines or not. This was in the nature of a long article published in the American *Publishers' Weekly* entitled "Science Fiction and the Space Era" in which the writer, Arthur Hale, had conducted an investigation into whether the preliminaries of space travel had in fact interested the general American public in stories of space, or whether the scientific facts were of greater significance than the speculative possibilities.

Mr. Hale's findings, after discussions with various publishers of science fiction pocketbooks and visits to a number of bookshops and news-stands were interesting and produced some statistics which should at least be of assistance to the American book trade.

In general it seems that there has been an overall increase in the sales of existing science fiction pocketbook titles in America following the launching of the Russian sputniks and most publishers predict increased initial print orders for their future titles—but none of them expect to increase the number of titles they have already planned to put on the market during 1958. The sales of factual books, however, especially on the subject of satellites, has jumped tremendously. Another interesting point is that the general bookstores in New York who handle a wide range of fiction have found a heavy demand for science fiction novels whereas the specialised s-f stores handling little or no general fiction have found a big fall-off in demand from their regular clients.

This latter point brings out the apparent fact that science has caught up too closely with fiction and many of the regular s-f readers have temporarily lost interest. On the other hand it could mean that s-f titles have been easier to buy elsewhere and the regular reader has not been forced to hunt around for copies of his favourite reading material. The fact remains that sales *have* risen.

"Will the new readers of the first outlets continue as permanent followers of the category? Is the fall-off in the

second merely due to a temporary recess in fiction reading by the aficionados?" asks Mr. Hale. "The publishers of paperbacks can't answer these questions about the emerging s-f market now, but to a man they foresee a gradual, long-range increase in readers that will be interested in the problems of politics, economics and sociology of a new age. The coming of the sputniks and the conquests that are to follow seem to signal to most editors a category of books that could gradually achieve a significance of major fiction within this special framework of space and time."

Mr. Hale's investigation was centred entirely on the paperback market where the average sale per title is considerably higher than that of the individual magazine issue and seems to clearly point out that new readers are being attracted to the imaginative avenues the future may possibly hold. Where does the specialised s-f magazine fit into this pattern? Will some of these extra sales spill over into the magazine market which has for so long pioneered s-f?

You have to remember that there is a wide difference between the appeal of the novel and that of the short story. In the novel the mechanics of the plot are not so exacting and the author has far greater room for movement of both characters and locale—in the greater length he can develop his theme slowly but at length using the subtleties of the written language to their best advantage; whereas in the short story the author is limited in his word-length and must place action and characterisation above all else.

The tendency therefore appears to be for more readers of s-f pocketbooks than for magazines, and this assumption was borne out by another survey made in New York immediately following the 1956 World Convention there, on which occasion delegates were handed a questionnaire designed to discover *who* were the readers of s-f, and what they read. The result showed that on an average the same people bought *all* the magazines published—there were no different classes of readership for differing magazines—but that the proportion of sales for pocketbooks was higher than the magazine sales.

Just how this summary will apply to British publishing in the future will remain to be seen.

John Carnell

The Troon family are going to intrigue you during forthcoming months as John Wyndham unfolds the stories of eight generations of space-minded men in a setting which may well parallel the real history of spaceflight. The first novelette herewith is complete in itself, but forms an integral part of the whole of the novel.

FOR ALL THE NIGHT

By John Wyndham

THE SPACE STATION, A.D. 1994

Ticker Troon emerged from his final interview filled with an emulsion of astonishment, elation, respect, and conviction that he needed refreshment.

The interview had begun formally, as he had expected. Announced by the clerk, he had marched in smartly, and come to attention before the wide desk. The old boy behind it had turned out to be a considerably older boy than he had been prepared for, but his type was authentic. Lean, he was, with a handsome, slightly weathered, aristocratic face, carefully trimmed hair that was quite white, and rows of ribbons on his left breast.

He had raised his eyes from a clipful of forms to inspect his visitor carefully, and even at that point Ticker had begun to have a suspicion that the interview was not going to be entirely routine, for the old boy—or, to identify him more fully, Air Marshal Sir Godfrey Wilde—did not employ simply

that keen-eyed air of summing one's man up at leisure and appearing incompletely satisfied, which had been the drill at lower grades of interview. He was really looking at Ticker as a person, and somewhat oddly, too. Still looking, he nodded slowly to himself, two or three times.

"Troon," he said, reflectively. "Flight-Lieutenant George Montgomery Troon. Very probably known in some circles, I suspect, as Ticker Troon?"

Ticker had been startled.

"Er—yes, sir."

The old boy smiled a little. "The young are seldom very original. G. M. Troom—G.M.T.—hence, deviously, Ticker."

He had gone on regarding Ticker steadily, with a length of inspection that passed the bounds of custom, and of comfort. Ticker grew embarrassed, and had to resist the temptation to shift uneasily. The old boy became aware of the awkwardness. His face relaxed into a smile that was friendly, and reassuring.

"Forgive me, my boy. I was fifty years away," he said.

He glanced down at the forms. Ticker recognised some of them. His whole life history was there. Troon, G. M., aged twenty-four, single, C. of E. Parentage . . . education . . . service details . . . medical report . . . C.O.'s report . . . security report, no doubt . . . probably a private-life report . . . notes on friends, and so on, and so on . . . Quite a bundle of stuff, altogether. The old boy evidently thought so, too, for he pushed it all aside with a touch of impatience, waved his hand at an easy chair, and slid over a silver cigarette-box.

"Sit down there, my boy," he invited.

"Thank you, sir," Ticker had said. And he had taken the offered cigarette, doing his best to give an impression of ease.

"Tell me," said the old boy, in a friendly tone, "what made you apply for transfer from Air to Space?"

It was an expected, standard question, to which there was a standard answer, but it was not put in the standard way, and, with the man's eye thoughtfully upon him, Ticker decided against giving the standard reply. He frowned, a little uncertainly.

"It isn't easy to explain, sir. In fact, I'm not honestly sure that I know. It—well, it isn't exactly that I *had* to do it. But there is a kind of inevitable feeling about it—as if it were a thing I was bound to do, sooner or later. My natural next step . . ."

"Next step," repeated the Air Marshal. "Not your crowning ambition, then? Next step towards what?"

"I don't really know, sir. Outwards, I think. There's a sort of sense I can't explain . . . a kind of urge onwards and outwards. It is not a sudden idea, sir. It seems always to have been there, at the back of my mind. I'm afraid it all sounds a bit vague . . ." He let himself trail off, inadequately.

But the old boy did not seem to find it inadequate. He gave a couple of his slow nods, and leant back in his chair. For a few moments he gazed up at the cornice of the ceiling, seeming to search his memory. Presently, he said :

" . . . for all the night
I heard their thin gnat-voices cry
Star to faint star across the sky."

He brought his gaze down to Ticker's surprised face.

"That mean anything to you?" he asked.

Hesitantly, Ticker said :

"I think so, sir. Where does it come from?"

"I was told it was Rupert Brooke—though I've never found the context. But the man I first heard it from was your grandfather."

"My—my grandfather, sir?" Ticker stared.

"Yes. The other George Montgomery Troon—and does it surprise you to know that he was Ticker Troon, too? Grandfather!" He shook his head, ruefully. "It always seems to be a word for old fellows like me. But Ticker—well, he never had the chance. He was dead, you know, before he was your age."

"Yes, sir. Did you know him well?"

"I did indeed. We were in the same squadron when it happened. You look amazingly like him. I was expecting you, of course; nevertheless, it gave me quite a shock when you came in." The Air Marshal had paused at that, somewhat lengthily. Then he went on : "He had that feeling, too. He flew because that was as far *outwards* as we could get in those days—as far as most of us ever expected to get. But not Ticker. I can remember even now the way he used to look up at the night sky, at the moon and the stars, and talk about them as if it were a foregone conclusion that we'd be going out there someday—and sadly, too, because he knew that he'd never be going out there himself. We used to think it comic-strip stuff in those days, but he'd smile off the ragging and the arguments as if he just *knew*." There had been

another long pause then before he added : " God, I'm sorry old Ticker can't know about this. If there's one thing that'd make him as pleased as Punch, it'd be to know that his grandson wants to go ' out there. ' "

" Thank you, sir. It's good to know that," Ticker had told him. And then, feeling that the ball had been passed to him, he added : " He was killed over Germany, wasn't he, sir ? "

" Berlin. August, 1944," said the Air Marshal. " A big op. His aircraft blew up." He sighed, reminiscently. " When we got back, I went to see his wife, your grandmother. She was a lovely girl, a sweet girl. She took it hard. She went away somewhere, and I lost touch with her. She is still alive ? "

" Very much so, sir. She married again in, I think, 1949."

" I'm glad of that. Poor girl. They were only married a week before he was killed, you know."

" Only a week, sir. I didn't know it was as short as that."

" It was. So your father, and consequently yourself, may be said to exist at all, only by a very narrow margin. They had married a little earlier than they intended. Perhaps Ticker had a premonition : most of us did, though some of us were wrong."

There was another pause which lasted until the Air Marshal roused himself from his thoughts to say :

" You have stated here that you are single."

" Yes, sir," agreed Ticker.

He became abruptly conscious of the special licence in his pocket, and all but looked down to see if it were protruding.

" That was a condition of application, of course," said the old man. " Are you, in fact, unmarried ? "

" Yes, sir," Ticker said again, with an uneasy feeling that the pocket might have become transparent.

" And you have no brother ? "

" No, sir."

The Air Marshal remarked, consideringly :

" The stated purpose of this qualification is at variance with my experience. I have never found in war that the married officer is less redoubtable than the single man : rather the other way, in fact. One is led to suspect, therefore, that the matter of pensions and subsequent responsibilities is allowed inappropriate weight. Would you say that it is a good principle that our fittest young men should not infre-

quently be dissuaded from procreation while the less fit retain the liberty to breed like rabbits?"

"Er—no, sir," Ticker said, wonderingly.

"Good," said the Air Marshal. "I am very glad to hear it."

He maintained such a steady regard that Ticker was all but impelled to confess the presence of the licence; Prudence, however, still kept a finger-tip hold on him. When the old boy had spoken again, it was to turn the interview on to more conventional lines.

"You understand the need for top security in this work?" he inquired.

Ticker felt easier.

"Security has been very much stressed all along, sir."

"But you don't know why?"

"I've been given no details, sir."

"Nevertheless, as an intelligent young man you must have formed some ideas."

"Well, sir, from what I have heard and read about experimental space missiles, I should think the time can't be far off now when we shall start to build some kind of space-station—possibly a manned satellite. Would it be something of that sort?"

"It would indeed, my boy—though your deductions are not quite up to date, I'm glad to say. The space-station already exists—in parts. And some of the parts are already up there. Your job will be to help in the assembly."

Ticker's eyes widened, lit up with enthusiasm.

"I say, sir, that's wonderful. I'd no idea . . . I thought we were rather behind in this sort of thing. Assembling the first space-station . . . !" He trailed off, incoherently.

"I did not say it was the first," the old man reminded him.
"In fact, there *may* be others."

Ticker looked shocked. The Air Marshal amplified :

"It doesn't do to take things for granted. After all, we know that the Americans, and the other Fellows, too, have been working hard on it—and our resources are nothing like theirs."

Ticker stared.

"I thought we'd be working *with* the Americans, sir."

"So we ought to be. We're certainly not working against them, but it just so happens that our people remember *their*

love of public announcements at politically happy moments ; and *they* remember certain leaks in our security system. Result : we go our different ways—with a great waste of time and energy in duplication of work. On the other hand, it will allow us to stand on our own feet in space—if that expression may be permitted—instead of being taken along as poor relations. That might one day turn out to have its advantages”

“I suppose so, sir. And the Other Fellows . . . ?”

“Oh, they’re at work on it, all right. They were known to be working on an unmanned satellite forty years ago when the Americans stole their thunder by making the first public announcement on satellites. One would guess they were thought to be ahead then ; hence the announcement. But just how far they’ve got now is a matter on which this Department would like a lot more information than it has.

“Now, as to yourself : first of all there’ll be conditioning and training . . . ”

Ticker’s thoughts were far too chaotic for him to give proper attention to the details that followed. He was looking beyond the walls of the sunlit office and already seeing the fire-pointed blackness of space. In imagination he could feel himself floating in the void. In a—abruptly he became aware that the Air Marshal had ceased to talk, and was looking at him as if after a question. He tried to pull himself together.

“I’m awfully sorry, sir. I didn’t quite follow . . . ”

“I can see I’m wasting my time now,” the old man had said, but without rancour. Indeed, he had smiled. “I’ve seen that look before. I think you’ll do. But perhaps one day you’ll be good enough to explain to me why a Troon is habitually thrown into a form of hypnotic trance at the thought of space.” He rose. Ticker jumped up, quickly. “Remember the security—this is *top* secret. The kind of thing you would not let even your wife guess—if, of course, you were so fortunate as to have one. You appreciate that ?”

“I do, sir.”

“Goodbye, then—er—Ticker. And good luck.”

Ticker had thanked him in a not quite steady voice.

Afterwards, in the first convenient saloon-bar, with a whisky in front of him, he pulled the special marriage-licence out of his pocket, and considered it again. He wished now that he had not been so carried away ; that he had listened with more

care to what the old boy had been telling him. Something about a conditioning course of twelve weeks, and studying the space-station, both in plan and mock-up. And something about a bit of leave, too. Could that be right? After all, if they had some of the sections up there already, wouldn't they be about finished by the time he was trained and ready to go? He was momentarily alarmed—until his common-sense asserted itself: you couldn't just throw the pieces of a space-station up into the sky and let them come together. Every part must be ferried there, laboriously, monotonously, very, very expensively, and in quite small bits at a time. It would be far and away the most costly structure ever built. There would have to be heaven knew how many journeys up there before they had enough even to start on the assembly. Thinking of only that aspect of the problem caused him to swing gloomily to the other extreme—why, it was more likely to take years and years before it could be fully assembled and in working order . . .

He dredged around in his mind for what the old boy had said about spells of duty: four weeks on, four weeks off—though that was hypothetical at present, and might need modification in the light of experience. All the same, the intention sounded generous enough, not bad at all . . .

He returned his attention to the marriage-licence in his hand. There could be no doubt that from an official point of view, no such document should exist—on the other hand, if an Air Marshal chose to reveal clearly what he thought of the ban . . . With such eminence on his side, even though unofficially . . .

Well, why delay? He'd got the job . . .

He folded the paper carefully, and restored it to his pocket. Then he strode purposefully to the telephone-box . . .

Ticker standing in the mess-room of the hulk, and gazing out of the window, took his breakfast gloomily.

The hulk, as it had become known, even on official memos, was the one habitable spot in thousands of miles of nothing. It was the local office of works, and also the hostel for the men serving their tour of duty. Down its shadow-side, windows ran almost the full length, giving a view of the assembly area. The few ports to sunward were kept shuttered. On the outer sunside of the hull was mounted a ring of parabolic reflectors, none more than a foot across, and all precisely

angled. When the eye of the sun shone full in the centre of the ring they were inactive, but it never did for long, and a variation of a degree or two would bring one or other of the reflectors into focus, collecting intense heat. Presently, a small, invisible explosion of steam would correct the error by its recoil, and slowly the hulk would swing a little until another reflector came into focus, and give another correction. It went on all the time save for the brief 'nights' in the Earth shadow, so that the view from the leeward windows never altered : it was always the space-station assembly.

Ticker broke a roll, still warm from the oven operated by a larger reflector on the sunside. He left the larger part of it hanging in the air while he buttered the lesser. He munched absent-mindedly, and took a jet of hot coffee. Then he relinquished the plastic coffee-bottle and let it float while he reached back the rest of the roll before it could waft further. All these actions he performed without conscious thought. They had quickly ceased to be novelties and become part of the natural background conditions to one's tour of duty—so customary that it was, rather, a propensity to poise things conveniently in mid-air when one was at home on leave that had to be checked.

Munching his roll, Ticker continued to regard the view with distaste. However enthusiastic one might be about the project as a whole, a sense of ennui and impatience to be away inevitably set in during the last few days of a spell. It had been so on the verge of his five previous leaves, and this time, for special reasons, it was more pronounced.

Outside, the curve of the Earth made a backdrop to half the windows' span, though there was no telling which continent faced him at the moment. Cloud hid the surface and diffused the light as it did most of the time, so that he seemed to be looking, not at a world, but at a segment of a huge pearl resting in a bed of utter blackness. As a foreground, there was the familiar jumble of work in progress.

The main framework of the station had already been welded together, a wheel-like cage of lattice girders, one hundred and forty feet in diameter, and twenty-four feet thick. It sparkled in the unobstructed sunlight with a harsh silver glitter that was trying to the eyes. A few panels of the plating were already fixed, and small, bulbous-looking figures in space-suits were manoeuvring more sheets of metal into positions

within the framework. The littered, chaotic impression of the whole scene was enhanced by the web of lines which criss-crossed it. Safety-lines and mooring lines ran in every direction. There were a dozen or more from the hulk to the main assembly, and no single component, section, or instrument was without a tether to fasten it to some other. None of the lines was taut ; if one became so, it remained like that for no more than a second or two. Most of them were continually moving in loops, like lazy snakes ; others just hung, with barely perceptible motion. Every now and then one of the workers on the framework would pause as a case or an item of the structure as yet unused came nuzzling gently at the girders. He would give it a slight shove, and it would drift away again, its cable coiling in slow-motion behind it.

A large cylinder, part of the atmosphere regeneration plant, swam into Ticker's view, on its way from the hulk to the assembly. The space-suited man who was ferrying it over had hooked himself to it, and was directing their mutual slow-progress by occasional, carefully aimed blasts from a wide-mouthed pistol. He and his charge were floating free in space but for his thin life-line undulating back to the hulk. There was no sense whatever that all this was taking place as they hurtled round the Earth at a speed of thousands of miles per hour. One was no more aware of it than one was of the pace at which the Earth hurtles round the sun.

Ticker paused in his eating to appreciate the skill of the pistol user ; it looked easy, but everyone who had ever tried it knew that it was a great deal easier to set oneself and the load spinning giddily all ways over. That did not happen so often now that the really ham-handed had been weeded out, but a little misjudgement could start it in a moment. He grunted approval, and went on eating, and reflecting . . .

Four days now, four more days, and he would be back home again . . . And how many spells before it would be finished ? he wondered. They were holding a sweep on that, with quite a nice prize. The schedules drawn up in comfortable offices back on Earth had gone to pieces at once. In real experience of the conditions, progress with the earlier stages had been a great deal slower than the estimates had reckoned. Tricks, techniques, and devices had to be evolved to meet difficulties that the most careful consideration had overlooked. There had also been two bad holdups ; one,

because someone in logistics had made a crass error in the order of despatch, the other on account of a parcel of girders that had never arrived, and was now presumably circling the Earth as a lonely satellite on its own account—if it had not shot away into space.

Working in weightless conditions had also been more troublesome than they had expected. It was true that objects of great bulk and solidity could be shifted by a touch, so that mechanical handling was unnecessary ; but, on the other hand, there was always the ‘equal and opposite reaction’ to be considered and dealt with. One was forever seeking anchorage and purchase before any force whatever could be applied. The lifetime habit of depending on one’s weight was only slightly less than an instinct ; the mind went on assuming that weight, just as it went on trying to think in terms of ‘up and down’ until it had been called to order innumerable times.

Ticker left off watching the guided drift of the cylinder, and took a final jet of coffee. He looked at the clock. Still half an hour to go before the shift changed ; twenty minutes before he need start getting into his space-suit and testing it. He lit a cigarette, and because there was nothing else to do, found himself moodily contemplating the scene outside, once more. The cigarette was half finished when the ship’s speaker system grated, and announced :

“ Mr. Troon please call at the radio cabin. Radio message for Mr. Troon, please.”

Ticker stared at the nearest speaker for an apprehensive moment, and then ground out the remains of his cigarette against the metal wall. With a clicking and scraping of magnetic soles he made his way out of the mess-room. In the passage, he disregarded the rules, and sent himself scudding along with a shove. He caught the radio-cabin’s door handle and grounded his feet in one complicated movement. The radio operator looked up.

“ Quick work, Ticker. Here you are.” He handed over a folded piece of paper.

Ticker took it in a hand that irritated him by shaking slightly. The message was brief. It said simply :

“ *Happy birthday from Laura and Michael!*”

He stood staring at it for some seconds, and then wiped his hand across his forehead. The radio man looked at him thoughtfully.

"Funny things happen in space," he remarked. "Must be quite six months since you last had a birthday. Many happy returns, all the same."

"Er—ah—yes—thanks," said Ticker vaguely, and pulled himself out of the cabin.

Outside, he stood reading the short message again.

Michael, they had decided, if it were a boy; Anna, for a girl. But early, by at least a fortnight. Still, what did that matter?—except that he had hoped to be on hand. The important thing was 'happy birthday,' which meant 'both doing well.'

He became untranced suddenly, and pushed back into the radio-cabin. The dressing-bell for the next shift went while he was scribbling his reply. A few moments later he was whizzing down the passage, headed for the suit-store.

When Ticker's turn came, he stepped to the edge of the open airlock, clipped the eye of his short lead round the guide-line, and then with a two-legged push-off against the side of the hulk, sent himself shooting out along the line towards the assembly. Practice had given all of them a pride in their ability to deal dexterously with the conditions; a quick twist, something like that of a falling cat, brought his feet round to act as buffers at the end of his journey. He unhooked from the guide line, and hooked on to a local life-line, obeying the outside worker's Rule Number One—that he should never for a moment work unattached. Then he pushed across to the far side of the frame where assembly was going on. One of the workers there saw him coming, and turned his head towards him so that his tight-beam radio sounded in Ticker's helmet louder than the all-round reception.

"All yours," he said. "And welcome to it. This plate's a bastard."

Ticker came up to him. They exchanged lines.

"Be seeing you," said the other, and gave a yank on the line which took him back the way Ticker had come. Ticker shook his new safety-line to send it looping out of his way, and turned to give his consideration to the plate that was a bastard.

The new shift adjusted their general intercom radios to low power so that they could converse comfortably between themselves. They noticed the progress made since their last spell, compared it with the plan, identified the sections at hand, and started in.

Ticker looked his plate over, and then twisted it so that the markings lined up. It was no bastard after all, and slipped quite easily into place. He was not surprised. One got tired, and not infrequently a little stupid, by the end of a shift.

With the plate fixed, he paused, looking out at Earth with his eyeshield raised so that he saw it fully, in all its brilliance—a great shimmering globe that filled half the sky. Quite extensive patches here and there were free of cloud now, and through them there was blue; the sea, perhaps—and then again perhaps not, for whenever one saw the surface it looked blue, just as the blackness of space seen from the Earth in daylight looked blue.

Somewhere over there, on that great shining ball, he now had a son. The idea came to him as a marvel. He could picture Laura smiling as she held the baby to her. He smiled to himself, and then chuckled. He had smuggled himself a family in spite of the regulations, and if they did find out now—he shrugged. And anyway, he had a well-grounded suspicion that he was not the only family man among his supposedly celibate companions. He did not under-estimate the Security boys; he simply thought it likely that others besides the Air Marshal found a blind eye convenient. In just four days more—A nudge at his back interrupted him. He turned to find another plate that someone had pushed along for his attention. Gripping a girder between his knees for anchorage, he started to twist it into position.

Half an hour later a tight-beam radio voice from the hulk overrode their local conversation.

"Unidentified object coming up," it announced, and gave a constellation bearing. The working party's heads turned towards Aries. The great stars flaring there against the multitudinous speckling of the rest looked no different from usual.

"Not a dispatch, you mean?" someone asked.

"Can't be. We've had none notified."

"Meteor?" someone else suggested, with a trace of uneasiness.

"We don't think so. There's been a slight change of course since radar picked it up a couple of hours ago. That seems to rule out meteors."

"Can't you get the telescope on it?"

"Only for a glimpse. Damned hulk's hunting too much, we're trying to steady her up."

"Could it be that parcel of girders, do you think? The lot that went astray. Couldn't it be that its homing gear has just got the range of us?"

"Might be, I suppose," admitted the voice from the hulk. "It's certainly got a line straight on us now. If it *is*, the proximity gear should stop it and hold it about a couple of miles off, and you'll need to send somebody out with a line to make it fast. Plenty of time to see about that later. We'll keep you informed, once we can get this damned tub steady enough to keep the glass on it."

His wave cut off, and the assembly party, after vainly scanning the Aries region again, turned back to their work. Nearly an hour passed before the voice from the hulk spoke once more.

"Hullo there, Assembly!" it said, and without waiting for acknowledgement, went on: "There's something damned funny about that thing in Aries. It certainly isn't the girder package. We don't know what it is."

"Well, what's it *look* like?" inquired one of the working party, patiently.

"It's—er—well, it's like a large circle, with three smaller circles set at thirds round the perimeter."

"You don't say!"

"Well, that's what we see, damn it! The thing's head on to us. The circles may be mile-long cylinders, for all we can tell."

Again the helmeted heads of the working party turned towards Aries.

"Can't see anything. Is it blasting?"

"There's no sign of blast. It looks as if it's free-falling at us. Just a minute—" He broke off. Five minutes passed before he came in again. This time his tone was more serious.

"We radioed a description to base, asking for info. and identification. Their reply is just in. It reads: 'No repeat no dispatch you since Number 377K four days ago stop Design of object as described not repeat not known here stop Pentagon states not repeat not known them stop consider possible craft-missile hostile stop treat as hostile taking all precautions end.'

For some moments no one spoke. The helmets of the working party turned as they looked at one another in astonishment.

"Hostile! For God's sake! Why, every bloody thing out here's hostile," somebody said.

"Precautions!" said another voice. "What precautions?" Ticker inquired:

"Have we any interception missiles?"

"No," said the voice from the hulk. "They're scheduled, but they are away down the fitting-out list yet."

"Hostile?" murmured another voice. "But who?"

"Who do you think? Who'd rather we didn't have a station out here?"

"But 'hostile,'" the man said again. "It would be an act of war—to attack us, I mean."

"Act of nothing," said the second man. "Who even knows we're up here, except the Department; and now, apparently, the Other Fellows. Say we were attacked, and blown up—what'd happen? Sweet damn all. Nothing but hush from both sides. Not even denials . . . just hush."

"Everybody seems to be taking a lot for granted, considering that nobody even knows what the thing is," someone pointed out.

That, Ticker admitted, was true enough, but somewhat legalistic, for it was difficult to believe that anything could happen to be travelling this particular section of space by sheer accident, and if it were not accidental, then it followed that the intention of any visiting object that did not originate with their Department must be either observatory or hostile.

He turned his head again, surveying the myriad suns that flared in the blackness. The first comment had been right; it was *all* hostile. For a moment he felt that hostility all about him more keenly than at any time since he had first forced himself to push out of the hulk's airlock into nothingness. His memory of that sensation had been dulled, but now, abruptly, he was the intruder again, the presumptuous creature thrusting out of his natural element; precariously self-launched among a wrack of perils. Odd, he thought, in a kind of parenthesis, that it should need the suspicion of human hostility to reawaken the sense of the greater hostility constantly about them.

He became conscious that the others were still talking. Someone had inquired about the object's speed. The hulk was replying:

"Difficult to estimate more than roughly, head on, but doesn't seem to be high, relative to our own. Certainly unlikely to be more than two hundred miles an hour difference, we judge—could well be less. You ought to be able to see it soon. It's starting to catch the earthlight."

There was no sign of it in the Aries sector yet. Somebody said :

"Should we get back aboard, Skip ?"

"No point in it . . . It wouldn't help at all if that thing *does* have a homer set on the hulk."

"True," agreed someone, and sang gently : " 'Dere's no hidin' place out here.' "

They went on working, casting occasional glances into the blackness. Ten minutes later two men exclaimed simultaneously; they had caught one small, brief flare among the stardust.

"Starboard jet correcting course," said the voice from the hulk. "That settles one thing. It's live, and it *is* homing on us. Swinging now. It'll recorrect in a moment."

They watched intently. Presently, nearly all of them caught a glimpse of the little jet of flame that steadied the object's swing. A man swore :

"God damn it ! And us here, like sitting pigeons. One little guided missile to meet it. That's all that's needed. Pity one of the Department's great brains didn't allow for that, isn't it ?"

"What about an oxygen tube ?" someone suggested. "Fix up one of the dispatch homers on it, and let it jet itself along till they meet."

"Good idea—if we had a day or so to fix the homer," agreed another.

Presently the object caught more of the earthlight, and they were able to keep its location marked, though not yet able to distinguish its shape. A consultation went on between the leader of the working party and the commander of the hulk. It was decided not to take the party inboard. If the thing were indeed a missile and set to explode on contact or at close proximity, then the situation would be equally hopeless wherever one was ; but should it on the other hand, fail to explode on contact and simply cause impact damage to the hulk, it might be useful to have the party outside, ready to give what help it could.

On that decision, the men in space-suits started to push themselves off, and drift through the web of girders towards the hulkward side of the assembly. There they exchanged their local safety-lines for others attached to the hulk, and were ready to pull themselves across, if necessary.

They waited in an uneasy group, a surrealist cluster of grotesque figures anchored to the framework at eccentric angles by their magnetic soles while they watched the on-coming object, the 'craft-missile' grow slowly larger.

Soon they could distinguish the outline described ; three small circles set about a larger. It was from the small circles that a correcting puff of flame came now and then.

"It's my guess, from the general look of the thing, and its slow speed," the hulk Commander's voice said, dispassionately, "that it's half-missile, half-mine ; a kind of hunting mine. I'd guess, too, by the way it is aligned on us that it is a contact type. Might be chemical, or nuclear—probably chemical ; if it were nuclear a proximity fuse would be good enough. Besides, a nuclear explosion would be detectable from Earth. With a chemical explosion out here you'd want all the concentration of force you can get—hence contact."

No one seemed disposed to question the Commander's deductions. There could be no doubt that it was aligned on them. The swinging was so slight that they could see no more than the head-on view.

"Estimated relative speed about one hundred and twenty miles an hour," added the Commander.

Slow, Ticker thought, very slow—probably to keep manoeuvrability in case of evasive action by its target. There was nothing one could do but stand there, and wait for it.

"E.T.A. now five minutes," the voice from the hulk told them, calmly.

They waited.

Ticker found a new understanding of the stringent security regulations. Hitherto, he had taken it for granted that their purpose was to preserve the lead. Clearly, once it should be known that any nation had a space-station under construction, those who had it only in the drawing-board stage would press on, and the pace would grow warmer. The best way to avoid that was secrecy, and if necessary to show astonishment that any such device was being seriously contemplated. That had

seemed reasonable ; there was nothing to be gained by creating a situation where construction would have to be rushed, and possibly a lot might be lost by it. The thought of an attack on the station before it was even finished had never occurred to him.

But if this were indeed a missile, and if it should get the hulk, nobody would survive. And if the Department were to be stung into denouncing the aggression ? Well, the Other Fellows would just shrug and deny. ‘What, us ! Why, we never even knew it existed. Obviously an accident,’ they would say. ‘An accident which has now been followed by a vicious and despicable slander in an effort to cover up those responsible.’

“Three minutes,” said the Commander.

Ticker took his eyes from the ‘craft-missile’ and looked about him. His gaze loitered on the moon, a clear, sharp coin, recently risen from behind the blue pearl of Earth. Scarred but serene, it hung on the sky ; a silver medal, still waiting to be won. The next leap.

First there had been this little hop of ten thousand miles to make a stepping-stone for the leap of two hundred and twenty-four thousand miles, more or less—and then not in his time, but someday, there would be still greater leaps beyond. For him, for now, the moon would be enough.

“The moon,” murmured Ticker. “The moon on the one hand, the dawn on the other : the moon is my sister, the dawn is my brother.”

Suddenly he was swept with a shaking anger. A fury against stupidity and littleness, against narrow, scheming minds that were ready to wreck the greatest adventure of all, as a political move. What would happen now if their work were destroyed ? The cost had been in proportion to the ambition. If all this were lost, would the government be willing, could they even afford, to make a new allocation, and start again ? Might it not be that, with such an example, all the rival nations would content themselves with arrangements to blow any other attempted space-stations out of existence ? Would that be the end of the great adventure—to be kept earth-bound by stalemate and futility . . . ?

“Two minutes,” said the voice.

Ticker looked at the missile again. It was swinging a little more now, enough to give glimpses of length, instead of a flat diagram of circles. He watched it curiously. There was

no doubt that the roving action was increasing. Correction and re-correction were stronger and more frequent.

"What's happening to the bastard?" a voice asked. "Kind of losing its touch, isn't it?"

They stared at it in horrid fascination, watching the yawing motion grow wider while the correcting jets spat more fiercely and rapidly. Soon it was swinging so much that they were getting broadside views of it—a fat, droplet-shaped body, buttressed by three smaller droplet shapes which housed its driving tubes. The small correcting tubes, so busily employed at this moment, branched laterally in radial clumps from the main-tube nacelles. Its method of working was obvious. Once the homing device had found a line on the target, the main tubes would fire to give directional impetus. Then, either to keep down to manoeuvrable speed, or simply to economise, they would cut out, leaving it to coast lazily to the target while the homer kept it on course by correcting touches from the side tubes. Less obvious, was what had got into it now, and was causing it to bear down on them in a wildly drunken wobble.

"Why the devil should it go nuts and start 'hunting' at this stage?" muttered the leader of the working party.

"That's *it*," said the Commander from the hulk, with a sudden hopeful note in his voice. "It *has* gone nuts; all bewitched and bewildered. It's the masses, don't you see? The mass of the hulk is about the same as that of the assembly and parts now. The thing is approaching on a line where they are both equidistant. Its computors are foozled: they can't decide which to go for. It would be bloody funny if it weren't serious. If it can't decide in another few seconds at that speed it'll overshoot any possibility of correcting in time."

They kept on watching the thing tensely. It had, in fact, already lost a little speed, for it was now yawing so widely that the steering tubes' attempts to correct the swing were having some braking effect. For half a minute there was silence. Then someone breathed out, noisily.

"He's right, by God! It *is* going to miss," he said.

Other held breaths were released, and the earphones sounded a huge, composite sigh of relief. It was no longer possible to doubt that the missile would pass right between the hulk and the assembly.

In a final desperate effort to steady up, the port tubes fired a salvo that spun it right round on its own axis as it hurtled along.

"Bloody thing's started waltzing now," observed a voice.

Still wobbling wildly it careered on, in a flaring soundless rush. Closer it reeled, and closer, until it was whirling madly past, between them and the hulk.

Ticker did not see what happened next. There was a sudden violent shock which banged his head against the inside of his helmet, and turned everything into dancing lights. For a few seconds he was dazed. Then it came to him that he was no longer holding on to the framework of the assembly. He groped, and found nothing. With an effort, he opened his eyes, and forced them into focus. The first thing they showed him was the hulk and the half-built space-station dwindling rapidly in the distance.

Ticker kicked wildly, and managed to turn himself round, but it took him several moments to grasp what had happened. He found that he was floating in space in company with a collection of minor parts of the assembly and two other space-suited men, while, close by, the missile, now encumbered with a tangle of lines, was still firing its steering tubes while it cavorted and spun in an imbecilic fashion. By degrees he perceived that the missile had in its passage managed to entangle itself in a dozen or more tethers and safety-lines, and torn them away, together with whatever happened to be attached to them.

He closed his eyes for a moment. His head throbbed. He fancied that it was bleeding on the right side. He hoped the cut was small; if there was much blood it might float around loose in his helmet and get into his eyes. Suddenly the Commander's voice in the phone said :

"Quiet everyone." It paused, and went on : "Hullo, hullo there ! Calling you three with the missile. Are you all right ? Are you all right ?"

Ticker ran his tongue over his lips, and swallowed.

"Hullo, Skipper. Ticker here. I'm all right, Skip."

"You don't sound so all right, Ticker."

"Bit muzzy. Knocked my head on my helmet. Better in a minute."

"What about the other two ?"

A groggy voice broke in :

"Nobby here, Skipper. I'm all right, too—I think. Been sick as a dog—not funny at all. Don't know about the other. Who is it?"

"Must be Dobbin. Hullo there, Dobbin! Are you all right?"

There was no reply.

"It was a hell of a jerk, Skipper," said the groggy voice.

"How's your air?"

Ticker looked at the dials.

"Normal supply, and reserve intact," he said.

"My reserve isn't registering. Fractured, maybe, but I've got nearly four hours," said Nobby.

"Better cut loose, and make your way back by hand tubes," said the Commander. "You right away, Nobby. Ticker, you've got more air. Can you reach Dobbin? If you can, link him on to you, and bring him back with you. Think you can?"

"Shouldn't be difficult, I think."

"Look, Skip—" Nobby began.

"That's an order, Nobby," the Commander told him briefly.

Kicking himself over, Ticker was able to see one of the space-suited figures fumbling at its belt. Presently the safety-line floated free, though the figure still kept along in company. It drew the pistol-like hand-tube from the holster, and held it in front with both hands, kicking a little as it manoeuvred to get the hulk dead behind it in the tube's mirror-sights. Then the tube flared, and the figure holding it dropped away, slowly at first, then with increasing speed.

"Be seeing you, Ticker," said its voice. "Bacon and eggs?"

"Done both sides, mind," Ticker told him.

He drew his own tube. When he had the second space-suited figure in the mirror, he gave the briefest possible touch on the trigger to set himself drifting towards it. A few moments later he reported:

"I'm afraid old Dobbin's through, Skip. It was quick, though. Bloody great rip in the left leg of his suit. Damn bad luck. Shall I bring him back?"

The Commander hesitated a moment.

"No, Ticker," he decided. "It'd just mean an additional hazard for you. Dobbin wouldn't want that. No, cast off

his line and let him go, poor chap. Take his reserve air bottle, though—and his tube too. It'll help you to catch up on Nobby."

There was a brief silence, then :

"That's funny," Ticker murmured.

"What's funny?" demanded the Commander.

"Just a minute, Skip."

"What is it, Ticker?"

"The lines have tightened, Skipper. A minute ago, we and the odd bits were all in a clump, with the missile acting daft alongside. Now it's steadied up, seems to be pulling away. Hell, this is confusing—you aren't where you ought to be, either. The—oh, I get it. The thing's turning ; swinging us round after it . . . I'm letting old Dobbin go now . . ." There was a pause. "He's drifting off on a different line, away from me. The thing must be making a wide turn, I think. Difficult to tell just what it is doing ; it's giving lots of little bursts as it steadies up. I don't care much for this, Skipper. All the towed bits, including me, have swung together in a jumble."

"Better cast off now, and shove yourself clear."

"Just a minute, Skip. I want to see—" His voice tailed away. "Yes, yes, she is. She's pulling, pulling steadily round . . ."

Ticker was hanging out at the end of his lifeline, watching the constellations wheel slowly, and twisting slowly himself, which made it the more confusing.

The random element introduced into the missile by the conflict of purpose had been sorted out. It was co-ordinated again, and its change of direction was steady, smooth, and purposeful. It was, in fact, back on the job. Its radar had searched for, and found, the target it had missed in its temporary derangement, and was bringing it round to bear once more. Somewhere inside the fat metal droplet there were relays ready to go in once it was steady in the aim ; a brief burst on the main tube would send it back to the attack . . .

"My God!" exclaimed Ticker, and began to haul himself hand over hand along his safety-line, shoving aside the trailing flotsam of assembly items as he went, and making for the missile itself.

"What's that about? Haven't you cast off yet?" inquired the Commander.

Ticker did not reply. He had come close to the missile, swung a little out from it by the continuing turn, but able to reach it. Presently he could touch it, and brought round a leg to kick himself clear of the steering-tubes. He pulled himself forward on the length of line remaining, and caught hold of the member which joined one of the nacelles to the main body. It was round all three of these members that the lines had tangled as the missile had swept past the assembly, and he tied his safety-line short to a loop in the tangle that looked as if it would hold.

"What the devil are you doing, Ticker?" asked the Commander.

"I'm aboard the missile, Skipper," Ticker told him.

"For heaven's sake!—You mean you're *on* the damned thing? Look, I told you to cast off. Do I have to make it an order?"

"I hope you won't, Skipper, because I rather think that if you did, and if I obeyed it, I'd very likely have nowhere to go."

"What do you mean by that?"

"Well, it looks to me as if this thing is in the process of getting round to have another go at you."

"Is it, by hell! You sure of that, Ticker?"

"'Fraid so. Don't see what else it can be doing. It's certainly making a steady arc, and if that's it's game, this seems to be as good a place as any."

"Wouldn't be my choice. What do you mean?"

"Well, if I'd stayed where I was I'd be fried when it fires its main tubes. And if I cast off now and it does go for you, I stand to die slowly in a spacesuit. Not nice, at all. Whereas this way I get a free ride home. If it misses you, I can roll off: if it doesn't, well, it'll be the same for all of us . . ."

"That's a lot more logical than agreeable. What's it doing now?"

"Still coming round. You lie to port as we go. About twenty degrees more to swing yet. You should be able to observe easily."

"We've got you on the radar, all right, but we can't bring the glass to bear so far to sunward."

"I see. Try to keep you informed," said Ticker.

He worked forward on the metal body. There was enough iron in it to give some traction for his magnetic soles. "Turn

still gradual, but steady," he reported. "This thing has a number of knobs and protuberances and so on round the nose," he added. "Five major and several minor. God knows what they are. One or more must be radar."

"With limited range, obviously," said the Commander. "Must be, or it would go off chasing the moon, or the Earth, instead of us. That looks as if they must know our distance and the plane of our orbit pretty accurately, damn them. Given that, it wouldn't be too difficult to make it sure to find us sooner or later. If you can sort out which is the radar, it might be helpful to have a good bash at it."

"Trouble is they aren't like anything I've ever seen," complained Ticker. "It'd be just too bad if the one I bashed turned out to be a fuse."

"Take your time, and make sure. How's she bearing now?"

"Nearly on. Three or four degrees more."

He slid back a bit to a position where he could brace himself on a nacelle member. The intermittent vibration from the starboard tubes ceased, and a new tremor ran through the missile as the port tubes fired to check her.

"She's round now," he told the Commander. "Lined up on you, and steadyng."

He waited tensely, gripping with arms and knees as best he could. The main tubes spurted briefly. He felt the missile surge forward. There was a jerk as the lines to the flotsam tightened, and checked it. The tubes fired again. The missile and its tow jerked to and fro on their loose coupling, but only one of the lines parted, to let a girder section spin off into space on its own. The rest joggled, and the lines looped about until presently the whole conglomeration was in motion on the new line, headed now for the distant hulk, but at a speed somewhat below that of the missile's former attack.

"On our way now, Skip," Ticker reported. "I'll get forward again, and try to see about that radar."

On the nose once more, he tried shielding the protruberances in turn with his gloved hands. There was no apparent effect; certainly no tendency to deviate from the course. He slackened off the life-line a little, and hung over the front to shield as many as possible at once with his body, also without noticeable result. Again he examined the projections. One of them looked as if it might be a small solar-energy cell, but the rest were unidentifiable. He was sure only that some of

them must be relaying information to the controls. He sat back astride the nose of the missile and feeling the need of a cigarette as he had seldom felt it before.

"Got me beat," he admitted. "I just don't know, Skip. Almost any of them might be any damned thing."

He turned his attention to the spangled blackness about him. The hulk and the assembly, lying dead ahead, were shining more brightly than anything but the sun itself.

"One thing, Skipper," he said. "It won't be like the other try. The turn's brought it round so that you and the assembly are almost in line from here."

"There must be some way of disabling, or disarming the brute. Don't any of those projections unscrew?"

"A couple of them look as if they ought to, but I've no spanners, and I lost the grips when I was snatched off."

Moving forward again, he braced himself as well as he could, and tried to unscrew a graspable portion with his gloved hands. It was a waste of effort. He gave up, and gazed ahead while he recovered his breath. The missile was steady on its course, with barely a tremor of correction to be felt. Distance was difficult to judge, but he guessed that he could not be much more than twenty miles from the hulk. Not many minutes . . .

Ticker became aware of sweat trickling down his forehead, and stinging in the corners of his eyes. He shook his head, and worked his eyebrows to try to get rid of the drops. Presently he slithered clumsily back to the member connecting the port nacelle. He sat on it, lashing himself there as best he could with the life-line. He pressed back on the main body, bracing his feet against the nacelle itself. He drew the two-hand-tubes, his own and Dobbin's. He checked their power settings, and then held them on either side of him, their wide mouths pointing outwards, their butts firmly grounded against the metal casing at his back. Like that, he waited.

"Ticker. Bale out now," said the Commander.

"I told you, Skip. I'm not for dying slowly in a space-suit."

The hulk, and the assembly beyond it, seemed to be rushing towards him now. His spine was prickling, partly with sweat, partly with the knowledge of the explosive just behind it. He found himself becoming more conscious of it, crawlingly aware of the vast tearing power held in a thin shell, waiting

for the impact that would release it. The sweat ran out of every pore, soaking his clothes.

He sat with his head turned to the right, watching the hulk grow bigger and nearer from eyes that stung with salt. 'Not too soon,' he told himself. 'It mustn't be too soon.' But it mustn't be too late, either. He was aware of the Commander's voice in the phone again, but he took no notice of it. Would one mile distance do?—Or would that not be soon enough? No, it should give him just time enough at the rate he was going. He would make it one mile as near as he could judge . . . He went on watching, both hands clenched on the tube grips . . .

Must be a couple of miles now . . .

He set his teeth, and pulled both triggers right back for a moment . . . The hulk seemed to slide to the left as the missile kicked over more sharply than he had expected. The thing keeled for a moment, like a dancer caught off balance. Then the steering tubes fired a correcting blast. The nose swung back on to the target, and then beyond it. The tubes on the near side fired to correct the overswing: at the same moment Ticker pulled both triggers back, and held them there. With the combined blast reinforcing her new back-swing, the missile leapt sideways and swung broadside to her course at the same time. The constellations whirled round Ticker's head. He looked wildly round for the hulk, and found it back over his left shoulder—and not much more than half a mile away. He prayed that there was not time enough for a correction . . .

An air missile, with air to grip, and fins to grip it, might have managed a quick correction; but in space, where every movement is a delicate matter of thrust and counter-thrust, time, too, is a highly important factor: oscillation cannot be killed at a stroke, lost equilibrium cannot be regained in a moment . . .

The angle of diversion needed to get back on course grew more acute every second. Ticker knew suddenly that the thing could not do it. Only the main drive could have exerted enough force to jump it back in time to hit—and experience showed that the main drive liked to be steady in the aim before it fired.

But the side-tubes tried. Ticker braced himself where he sat while the heavens reeled as the missile spun. Then the hulk rushed past in a blur, fifty yards away . . .

"Done it by God ! Bloody good show, Ticker !" said a voice.

"Quiet there !" snapped the Commander. "Ticker, that was magnificent. Now come off it. Bale out quick."

Ticker, still held by his line, relaxed, feeling all in. The missile, still swinging from side to side, scudded on with him into space.

"Ticker, do you hear me ? Bale out !" repeated the Commander.

Ticker said wearily :

"I hear you, Skip. But there won't be enough power left in these tubes to get me back to you."

"Never mind. Use what there is as a brake. We'll fetch you in. But get clear of it now !"

There was a pause. Ticker's tired voice said :

"Sorry, Skip. But we don't know what this bastard's going to do next do we ?"

"For heaven's sake, man . . ."

"Sorry, Skip. Mutiny, I'm afraid."

Ticker rested as he was, with his eyes closed. The sight of the constellations swooping to the missile's swings was making him feel sick. He was tired out, his head ached badly, he was soaked through with sweat, it was an effort to think. He sat as he was until he became aware that the pull on the line that held him in place had changed, and become constant. He opened his eyes, and found himself looking full at the moon.

It was sliding slowly leftwards, and the great curve of the Earth was rising on his right.

"She's going about again," he said drearily. "I wonder if these bastards ever run out of fuel ?"

Looking down, he found that he was still gripping the hand-tubes. He let them go, and float on their safety-cords while his gloved hands fumbled at the knot of the line which held him. He managed to slacken it off, and dragged himself back on to the main body again. The thing was fairly steady once more, with the starboard tubes firing now and then to turn it; there could be little doubt that it was in the process of coming round for yet another attack. He pulled himself forward on to the nose again, and sat astride of it, holding on to the projecting knobs.

Perched there, and summoning up his strength, he looked about him. Under his left foot lay the pearl-like Earth, with the night-shadow beginning to creep across her. The sun blazed high to his right. Up to the left the pallid moon lay in a bed of jet scattered with diamond dust.

Lower to his left, but sliding slowly round towards the front, floated the hulk and the glittering spiderwork of girders that would one day be the space-station.

Once more he turned his eyes down to the great globe creeping past his left foot. He watched it steadily for some moments ; then he lifted his right hand, and turned the air supply up a little.

“ Skipper ?” he inquired.

“ Receiving you, Ticker,” acknowledged the Commander. “ We’ve just managed to get the glass on you. What the hell do you think you’re doing ?”

“ I’m going to have a shot at disabling the thing, Skip. I think the line is to have a bash at this short, thick rod-thing in front of me. Can you see it ?”

“ Yes. I can see it. Might be anything. You’re satisfied it’s part of the radar gear ?”

“ Obvious, Skipper.”

“ Ticker, you’re lying. Leave it alone.”

“ Might be able to dent it a bit. Enough to mess it up.”

“ Ticker—”

“ I know what I’m doing, Skip. Here goes.”

Ticker hooked his toes under two of the projections, and gripped with his knees, for the best possible purchase. He took up the hand-tubes, one in each hand, and slammed away at the short, thick rod with all his might. Presently he paused, panting.

“ No damned weight. Like hitting with matchsticks,” he complained. “ Not a mark on it.”

He turned the air on a little more, and screwed up his eyes to squeeze the sweat out of them. The missile was still coming round in its big curve. Twenty degrees more would bring it on to the line of attack again.

“ Going to try another of them this time,” he said, lifting the tubes once more.

Through the telescope the Commander watched him start to belabour one of the more slender projections : from the right, from the left, from the right, from the . . .

There was a flash so brilliant that it stung his eyes.

That was all : a vivid, silent flash, shining for its brief moment as brightly as the sun . . .

Then, where it had been, the glass showed nothing but empty darkness, with small, uncaring stars, thousands of light-years beyond . . .

The Air Marshal spread the message on his desk, and studied it for several long, thoughtful moments.

His mind went back to the night fifty years ago when the other Ticker had not come back. The same job for grandson as for grandfather. Only it had been easier the first time, with a war on, and the news half-expected. He felt old. He *was* old. Too old, perhaps. If they had not changed the regulations he would have been on the shelf ten years ago at his age . . .

Still, here he was. And he'd tell her himself. Tell this poor girl—just as he had told the other one, long ago. So piteously little he could tell her . . . Lost on a secret mission . . . So cruelly blank . . .

She would know later on, of course—when Security considered it safe. Oh, yes, she should know. He'd see to that. He would throw all his weight there . . . For sheer cold courage . . . Nothing less than a V.C. . . . Nothing less . . .

He looked back at the security report for the previous day.

"Subject dispatched radio to Troon. Message : 'Happy birthday from Laura and Michael.' (N.B.—Presumed code reference to subject's birth of child, male, on previous evening. Supporting this ; (a) Troon's birthday 8th May ; (b) his radio reply : 'I love you both.')

The Air Marshal sighed, and shook his head.

"But at least she has the boy," he murmured. "And she knows he knew about the boy . . . I'm glad he did . . . The old Ticker never even knew there was to be a child . . .

"I hope they meet up there . . . Ought to get on well together . . ."

John Wyndham

Donald Malcolm's stories are steadily improving with each one we publish and we have every hope that he will make quite a name for himself in the science fiction field as he matures. This month's story is quite complex in its thought-patterns—he has evolved a very interesting futuristic idea for a background.

THE HOUSE OF LIGHTS

By Donald Malcolm

It is never pleasant to watch a man die. Not even when he was dying one hundred and fifteen light years away on an alien planet circling an alien star and a permutation of little coloured lights coldly informed about the manner of his dying.

The board in front of the four men, three Emmies and an Operator, held a hundred small lights grouped in five lines of twenty. At present it was entirely dead except for a group of evil-looking dull indigos and violets glowing steadily in the short end of the spectrum. They were associated with death. At such times as this, ordinary, emotional human beings—the Emmies, as they were derisively called by the Operators—became too empathetic to give their undivided attention to the job in hand. Agents' deaths at the hands of the aliens was seldom pleasant.

During his one year's service, Tal Roston, an Operator, had watched perhaps forty Agents die. And he hadn't been within ninety light years of any of the victims. The deaths of the Agents, no matter how violent, never had any effect on the members of the Special Corps of Operators, who were low-grade empaths. Their emotions had been short-circuited so

that the execution of their duties was never clouded by emotional thinking or action. Cramm, another Operator, had nick-named him "The Jonah of the Boards."

Cory, the small, rotund Director of Stellar Espionage's nerve centre on the secret asteroid, ran a hand through his sparse, sandy hair. "This one won't last long," he observed in his slow, deliberate voice, coughing drily. "Soon, these damned aliens will be killing off our Agents faster than we can produce them."

He glanced at Security Chief Pearson, Monitor Bennett and the Operator in turn.

"You're right," Pearson concurred, taking him up, his hard, ruthless face grim. He turned on Cory and exclaimed hotly, "If you would let me run things the way *I* want to, we'd trap the spy who's tipping them off. then our Agents would have a fighting chance!"

The Director waved a hand and retorted tiredly, "You can push people only so far before you find yourself holding a load of trouble. We'll discuss this in my office."

"Now look here, Director—" Pearson began angrily, his face flushed.

"In my office, if you please, Colonel Pearson!" Cory's tone, suddenly firm, brooked no argument. Pearson's thin mouth clamped and his fists clenched, but he wisely refrained from further comment. Cory was not a man to be trifled with ; his slow voice was very deceptive. The two men walked away in awkward silence and Bennett moved off to another board.

With a graceful ripple, Roston's board changed like the curtain effect observed in terrestrial aurorae. The indigos and the violets brightened momentarily, then faded, to be replaced by the complete range of fourteen blues. The greens took over. Peace, happiness and well-being poured into the Operator's cold eyes and washed into his brain through the medium of the little lights. But, like seeds falling on rocky ground, the emotions found no succour and were lost in the wilderness of a tampered mind.

Keeping his eyes on the board, Roston pressed a button at his right hand. Even as the Monitor came back to his side from the Alpha Tauri board, recalled by his ear buzzer, the greens began to fade like wilting leaves. It was all over in seconds ; the blues, the dull, malevolent indigos, the funeral

violets, then blankness. The two monitors bulbs winked out. The EEG ceased recording. Another Agent was dead.

Roston slid out of his booth which lay seventh from the central well, and waited while Bennett checked the board out. Bennett was a big, uncomfortable looking man with a strong, intelligent face that wore a faint, perpetual expression of disgust. Operators, cold as fish, were not liked, they were tolerated as a necessary evil. His hands gave Roston the impression of being lonely, lacking something solid to hold on to. Bennett's job was to see that everything ran smoothly among the almost robotic Operators. For an Emmie, he did it surprisingly well.

Roston's grey-blue eyes wandered casually over the board. The information tag read : Beta Tauri : B8 ; 115 : C, (M). Star : type : distance in light years : planet : Agent, (male). His mind filled in the details unthinkingly.

The bulbs, which he had dubbed the hundred eyes of Argus, each had an allotted place in a very special spectrum. The emotional spectrum of a human mind, composed of minute electrical emissions from the brain, acting as the mind's mirror, and electronically translated into terms of light and colour behind the mysterious board. The complete gamut of human emotion, every shade, every nuance, could be represented by a permutation of those bulbs.

All the booths in the house of lights, as the nerve centre was known to all personnel, were semi-circular in shape, with opaque walls. A slightly inclined panel ran round the booth. On this were the monitor bulbs. Immediately below the board, in front of the Operator's couch, an EEG device was situated. The Agents' brain rhythms were electronically registered and automatically relayed to the processing departments of the great computers buried deep in the asteroid.

Here, electro-psychiatrists kept an eye on the EEGs. Agents trained from birth for espionage, lived on a razor's edge of sanity and it was the job of the psychs to infer from the EEGs if and when an Agent was likely to crack up. Data was fed into one of the computers that gave an extrapolated assessment of the case. If he or she was in danger and could be rescued, the pick-up was arranged and a replacement sent in.

The board itself had been constructed on the basis of a discovery made in 1959. A British female psychologist, Dr. McIntyre, had shown that the entire spectrum of human

emotions could be expressed by varying wavelengths and manifested as light and colour. The brain's tiny electrical emanations could be measured and after many years of arduous and exhaustive tests and experiments, she was at last able to produce a table showing the corresponding emotion for a certain wavelength of colour. Each emotional pattern was absolutely unique, as finger-prints are, but the differences varied only a small percentage among the many test subjects.

The board checked out, Bennett jerked his head and they moved off. Roston would be rested until another Agent was sent out to Beta Tauri III. One of the boards they were passing was registering strongly in the yellows and oranges. The sexual emotions emitted in these ranges.

Cramm, the beefy Operator of Booth 62, was drooling with all the 3 per cent psuedo-emotion left to him for medical reasons. "Boy, what a time *he* must be having!"

Roston halted quietly, but so abruptly that Bennett went on a couple of paces. Among the Operators, there were no such emotions as hate or dislike; it literally wasn't in them. Stellar Espionage couldn't afford to have emotional upheavals in the ranks. The job was too important for that. He gripped Cramm by the shoulder and whirled him round.

The German sneered to cover his surprise, "Lost another one, eh, Roston?"

He regretted it immediately. Roston's thin, but hard and knotty knuckles described a coldly calculated arc and exploded on a scientifically selected spot on Cramm's round face.

Bennett didn't panic, a reaction that might have been excused in an Emmie. Calmly, one of his big hands chopped Roston at the base of the skull, caught him, and slid him gently to the floor. He pressed his wrist communicator button and spoke quietly into the tiny mike, surveying with distaste the pair of sleeping beauties at his feet. "Level Nine. Booth sixty-two. Relief Operator required at once. Booth fifty-seven, kaput. Two stretchers. Understood?" Bennett was so mean with words that it had taken him all his time to answer, "I do" at his wedding. A tinny, metallic voice acknowledged his message.

In the Director's office, the atmosphere was quite pleasant again since both Cory and Pearson had admitted to being partially at fault for the scene in Level Nine.

Bennett had just left after reporting the trouble between Roston and Cramm. The Director flicked a switch and ordered, "Cut in Roston's room on the screen, please."

Presently, they were looking down at the still unconscious Operator, whose head lolled, letting the mouth gape. The small tele-eye they were using was situated above the door, facing the cot. They saw a lean man, about six feet tall, with whipcord muscles that belied his sparseness. His face was by far the most arresting part of him. High cheek bones were made more prominent by the hollow, almost sunken cheeks. Thin lips gashed his face under a predatory nose, like an eagle's beak. Roston's eyes, they knew, were a cold, flat, grey-blue. Intelligence was there, but there was no emotion. A ragged scar zig-zagged drunkenly along his right cheek bone. Black stubble did duty for hair.

Pearson accepted a cigarette from the other, lit up for both of them, and nodded towards the Operator's image. "What do you want done with him?"

The Director coughed drily. "Let him lie there for the time being. I'll have to think about it."

Exhaling, the Security Chief asked, watching the smoke writhing into the air vents, "Does this mean that he's automatically finished as an Operator?"

"No; we'll have to give him the empath tests, first. I can't understand it. Why did he act the way he did? Before he could become an Operator, Roston underwent the usual short-circuiting surgery to prevent just such a happening as this. Obviously, he and Cramm don't exactly love each other, but Roston isn't supposed to act *emotionally* . . . of course, he may have hit Cramm coldly, the way one boxer hits another." He coughed again.

"I'll obtain a fuller report from Bennett," Pearson suggested. "That might shed some light on things."

"Good—do that," Cory agreed. "Now, about this spy business—have you any ideas any suspects?"

Indicating the inert Operator with his cigarette, Pearson answered, "Him, for one. And Cramm." He fished out a neat notebook and read off three other names. "Kiolsky, Gomez, and Jones. I've narrowed the list down to these five by diligent observation and weeding out," he went on, putting the notebook away and handing the list over to Cory. "That's the personal details of the suspects. Their backgrounds don't tally just as exactly with their own accounts as we would like

them to. Some actions are a bit odd, to say the least." He ground his stub out.

"Take Cramm, for instance. It's been reported that he spends a lot of time in what my man calls a trance of some sort. What does that mean?" He was asking himself more than Cory.

The Director coughed and mulled over the list. "Umm," he commented at length. "Two on Level Nine, the others spread throughout the remaining eleven levels."

Tapping ash off his cigarette, he looked shrewdly at Pearson. "Do you think it's a nest?"

The big man shook his head decisively and lit up another cigarette. "No," he negated Cory's question. "I'm at a loss to understand how *one* spy can operate in an organisation as tight as this, let alone *five*." He stubbed the cigarette out in sudden irritation and leaned forward. "The point that keeps me awake during sleep periods is this; how does this spy obtain his information—that suggests someone in a high position, with access to everything—and, more puzzling, how does he *communicate* what he picks up?"

He spread his hands in a gesture of bafflement. "Any type of radio transmission would be detected instantly. Any unidentified ship approaching within ten thousand miles of the asteroid would be vaporised. We've held snap checks, off-duty searches, done everything but put micro-cameras in the toilet rolls, all to no avail. Where does that leave us?"

The Director rose, dialled the combination of his private safe, pressed his left thumb on the plate, opened the door, deposited the list and locked the safe again. He glanced over his shoulder. "I must confess I do not know."

Pearson broke the ensuing silence to say, "He's awake." Then he continued, "An old flame of Roston's is an Agent and she's on the asteroid, awaiting an assignment. Back on Earth, something more than friendship arose between them, but, circumstances being what they were, it came to nothing. Now, she's slated for the Beta Tauri III job. If we confront Roston with her and her assignment, his reactions ought to be worth noting. Perhaps we'll panic him into some stupid move. Is it worth a try?"

Cory nodded and amended, "I'm not so sure about the panic part. Anyway . . . here's another trick you can try." He unfolded his plan.

Roston, lying awake, clasped his hands behind his head and started thinking about how he had got into this nightmare in the first place.

The expansion to the stars had begun at the middle of the twenty-first century with the invention of the interstellar drive. The Solar System had exploded like a great seed, sending spores of human life across the light years. Alpha Centauri, Sirius, Procyon, Altair, Vega, ever onwards, ever outwards, the star ships went. Denebola, Castor, Aldebaran. Then the ships reached Regulus and Achernar, Alpha Arietis and Beta Ursae Majoris, all about seventy light-years out.

Friendly relations were established with the races found to inhabit many of the planets orbiting these distant suns. The Solar System ships had gone out as explorers, not as invaders and that was in their favour. The business of exploration was immensely costly and, by the Treaty of Alpha Arietis in 2064, the Stellar Federation was formed, one of its purposes being to explore further into the Galaxy on a co-ordinated basis.

Preparations went apace for the next jump to the outlying stars. The next suns to be explored in a multiple thrust were Mizar, Mirach, Epsilon Scorpii, Algol and Beta Tauri, all between 80 and 115 light-years distant. The great ships lifted out of their satellite orbits and winked into hyperspace. None of them was ever seen again.

This rocked the infant Federation right down to its tiniest moon, to its most menial inhabitant. What had caused *all* the ships to disappear, not just one or two, as might reasonably be expected in a large scale operation? More ships, this time with more than token armament, were dispatched. They all disappeared without trace. Even hyper-radio contact ceased in all cases without warning and no hint of trouble was ever broadcast back to base.

The Federation was forced to one conclusion. They were englobed in a great sphere of space, measuring some 150 light-years across, by someone—or *something*—that wasn't wasting time on shaking hands. The missing vessels were proof enough of that. Stellar Espionage was quickly formed. Knowledge concerning the identity of the incoming race and the location of its home star was top priority.

Espionage saw the McIntyre's discovery about human emotions could help them to turn out the perfect Agent,

without clumsy radio equipment or any other type of contact to give the game away. The problem of how to use the idea was solved when the micro-electronics branch produced a tiny instrument like a hyper-radio that would transmit the emanations across the light-years in almost zero time.

The instruments were surgically implanted, but a new snag arose. Such was the accuracy and definition of detectors, that the metal parts, tiny as they were, acted as a beacon. It had to be assumed that the aliens would also be able to detect the parts. Nothing could be left to chance ; the stakes were too big for that. Apart from this, the principle worked in practice.

Then the idea was conceived of implanting the hyper-radio instruments at birth, using bone, so that, to all intents and purposes, the minute growth was part of the natural bone structure. Thus was born the Special Corps of Agents, trained for a lifetime for one job—the detection of the aliens' home world. For the good of the Federation as a whole, some newly-born infants were denied the birthright of determining their own future when they were of age to do so.

However, during the experiments with the Agents, it had become increasingly clear that normal, emotional human beings were too empathetic to be suitable for the tasks of monitoring the boards. Some of the computer set tests, simulating the possible fates of Agents who fell into enemy hands, were rather grim. If there was a Special Corps of Agents, why not a Special Corps of Operators ?

Military expediency saw to it that the Corps was formed, entirely on a volunteer basis, and there was no shortage of men. A candidate had to agree to the short-circuiting of his entire range of emotions ; in effect, to become little more than a human machine, almost incapable of feeling. Medical considerations had decreed that a small percentage of emotion had to be retained. Mostly, these were the sexual emotions. There was a good reason for this. These emotions were directly geared to the instinctive reproduction urge of human beings and it had been found exceedingly difficult to restore them after they had been taken away. Test cases deprived of their sexual emotions displayed severe symptoms of physical and psychological breakdown. Nature could be tampered with only so far.

When the Operators were forcibly retired at the age of twenty-six their minds were washed and provided with a complete set of memories to account for the time spent as Opera-

tors, and their emotional circuits were restored in full. The Corps consisted entirely of Earthmen ; only they were physically capable of surviving the restoration surgery.

A set of wavelengths on the boards was known as the information group. When this group glowed, the Operator knew that it was time to have the Agent picked up by a ship waiting in hyperspace. This was made possible by the almost instantaneous transmission of hyper-radio messages. The Agents never carried out communication of any description.

The house of lights, Stellar Espionage's nerve centre, was built on an asteroid in the belt beyond Mars. Circular, it was completely underground. Each of its twelve levels represented a sector of space, with sixty-four Operators on each level.

Roston's train of thought was suddenly interrupted by a strange icy coolness settling over his mind. He knew he would have to undergo his empath tests at any time, without knowing he was being tested. He knew with conviction that he would win through and still be an Operator. Again, he experienced the icy coolness, accompanied by a momentary, but insistent pressure. He found he could think more clearly than ever before.

He raised his head as the door of the room opened and someone entered. "Carol ! What are you doing *here*?" he asked in a baffled voice.

She sat down with cool poise and regarded him. He attempted to rise on one elbow, but the effort was too much for him and he sank back on the pillow with a grimace. That Bennett packed a mean punch.

"I'm here to do a job as an Agent," she answered in the detached manner that he remembered as an integral part of her character. She had never been approachable. He didn't grasp the significance of her remark and asked her to explain.

As she replied, his eyes wandered from her short blonde curls framing her aloof face, over her firmly moulded figure, displayed to advantage by her one-piece coverall. His blood raced a little, then the pseudo-emotion passed. His index was 3.76% and most of that figure seemed to become active when Carol appeared. His head cleared.

"Where is this job ?" he enquired suspiciously, aware that something was not quite right with the situation.

"Beta Tauri III." Her voice was cool.

"*Beta Tauri?*" he echoed harshly, his face contorted, "but that's *my* board." He stared at her keenly as his mind turned over the position. To say the least, Carol's sudden arrival was very strange. He wondered what lay behind those blue ice-chips of eyes.

"Tal," she murmured gently, leaning forward so that her perfume flirted with his senses. "I am an Agent. Since I was born twenty-one years ago, my life has been dedicated to the Service. I will do the job I have been trained to do." She straightened her shoulders. Roston relaxed and watched her through narrowed eyes. For some reason or other, she was laying it on thickly.

"If you are allowed to return to duty—and that is in the balance in view of your recent behaviour—you will monitor your board as if I were a total stranger. Low-grade empaths have no emotions, remember?"

He started to ask how she had known about his fight with Cramm, but she cut in smoothly as she rose gracefully, "By the time you are out of here, my emotional pattern will be keyed to the board and I shall be on my way to Beta Tauri III."

Roston hadn't the necessary chemistry to react fully to the picture of unattainable loveliness that she represented.

"Goodbye, Tal," she said, walking to the door. She hesitated, then murmured again, "Goodbye." Then she was gone, leaving behind a decidedly puzzled Roston.

The wall grill crackled into life. "Operator Tal Roston. Report to Director Cory at once, please." The "please" was strictly superfluous. Roston shrugged himself out of bed and put his clothes on. The door of the room would be automatically unlocked from Cory's office. Outside, a tight-lipped Bennett motioned him along a corridor. Roston glanced at the Emmie and grinned inwardly at the barely concealed look of dislike hovering on his strong face. But Emmie hostility never affected the Operators.

They were passing a half-open door when voices raised in argument came to their ears.

"... incredible! There may be an alien spy on the asteroid, but I'm not the one!"

Roston frowned and pushed Bennett's hand off his arm.

It was Carol's voice, quavering with an edge of fear and uncertainty.

"You lie! We have indisputable proof!" Pearson, Security. Big. Hard. Ruthless. He loved his job.

Carol started to protest, but the sound of a sharp blow cut her off.

"Silence ! Take her below !"

Roston waited until Carol, whimpering, had been dragged away out of the room, then he thumped the unsuspecting Monitor in the solar plexus and administered a *coup de grace* to the chin. Rather poetic justice, Roston thought, hauling the inert body into the vacated room. He closed the door, crossed the room, and left it by the other door. He had no difficulty in following Carol and her captors. The short corridor led to a flight of stairs that went downwards.

The icy coolness and the pressure thrust into his mind again. Cautiously, he stole down the stairs and along another short corridor. Crossing it at right angles was another corridor. The lights were very low. He heard footsteps approaching. He flattened himself against the wall. The Emmie came round the corner, saw him, and opened his mouth to yell. Roston pounced on him and blocked off the warning with a fist. This was becoming a habit, he thought, pushing the latest victim close to the wall where, Roston hoped, he might escape notice.

He peered into the other corridor. At the end, was a door, half open. Muffled noises came from the almost dark room. The Operator crept down the corridor, keeping as close to the wall as possible. Finally, from a vantage point in the shadows, he was able to see into the room. It didn't take much imagination to deduce what kind of room it was ; an interrogation chamber. This asteroid certainly had *everything* !

All was dark except for a dim light at one end. Gagged and bound in a chair was Carol. *The icy coolness ; the pressure.* Vague figures began to torture the girl. She couldn't scream. Her eyes pleaded in torment. Roston turned to leave. A hand slipped the gag from her mouth. She screamed, horribly.

He didn't even falter. He turned and climbed the stairs resolutely, entered the room and halted in surprise. Cory, Bennett, looking a bit bruised, and two technicians with a small portable electronic apparatus, were there. The Director was sweating visibly. Roston frowned. Before he could speak, Cory, his eyes narrowed, his distaste barely hidden, asked, "What are you ? What in God's name *are* you ?"

"Meaning what ?"

"You've just passed your empath tests, Roston. We had a beam on you." He gestured to the apparatus. "Your

reaction to all you saw was exactly nil. *Zero!*" He said the last word unbelievably. All Operators usually registered about 2 to 4% psuedo-emotion. Some even topped five. They were then retired. Again, Cory asked, not really expecting an answer, "What are you, Roston?"

Roston stared squarely at him. "I'm an Operator."

He smiled. That smile made Cory glad that he would soon have his forty-five minute memory wash, as would Carol and the other participants in the tests.

"Does this mean," Roston enquired, rubbing his scarred cheek absently, "that there is no spy on the asteroid?"

"There's a spy, all right," the Director replied, wiping his brow, "but it's a harder job to find out who the spy is. To ensure the absolute validity of the tests, no one, not even Carol, knew that the accusation was untrue. We still have to find our spy."

He wiped his brow again and hurried off for his memory wash. One credit for every memory wash he had had would make him a millionaire. He was a worried man.

Roston sat in front of his board. The information tag now read D (F). Out of the corner of his eye, he could see Bennett watching him. Roston grinned an emotionless, unhuman grimace and the Monitor averted his head quickly.

Confidence flowed round him like a shield and the pressure in his mind was becoming more frequent and insistent. Roston felt as if secret doors were being opened, mysterious compartments being cleaned out, the very cells of his brain changing. He had a definite awareness of his own body, of each individual molecule, of the Operators around him, of the materials of the booth. Something was happening to his mind and he was unafraid.

At the same time, a vague feeling of annoyance and uneasiness was troubling him on and off. The source was apparently located somewhere to his right.

Carol was doing nothing of importance at present. Three greens were very bright and four others were a bit duller. This representation of well-being was offset by fully eight of the information reds glowing faintly with incipient promise. He would have to watch them closely. Agents had to be fished out quickly. That was the tricky part of the whole scheme.

It was an odd thing that information reds were invariably followed up by the death group. Roston had noticed this some time back. It was as if the aliens had some way of

knowing and were merely playing a brutal game of cat and mouse with the Federation Agents. That seemed to substantiate the suspicion of a spy. Even as the thought passed through his mind, the pressure intensified, then flickered away, like an insect shying from a swiping hand. He was left with the impression of imagining footsteps in an empty room above his head which stopped even as he thought of them. Frightening, especially as he *knew* with certainty that the room *was* empty. Information reds were beginning to brighten and three more cut in. Carol was obviously on the point of receiving important information. Roston buzzed for Bennett and the Monitor hurried over, a wary look on his face. Inspecting the board, he activated his wrist communicator.

"Bennett here; Level Nine. Booth 57. Looks important." Over his shoulder, he said to Roston, "They're monitoring this in Cory's office. This could be the break we've been waiting for all these years. I've never seen so many reds before . . . there's another one! Twelve. Look, they could set the place on fire!"

The pressure descended on Roston again and he reeled slightly. Bennett enquired sharply, "Are you all right, Roston?" He gripped the Operator's shoulder to steady him.

"Yes, yes!" the Operator answered shortly.

The pressure again. Another red cut in and Roston's face, suffused in the light, was like the Devil's. Suddenly, something seemed to snap inside his head and the pressure ceased abruptly.

" . . . calm. Keep calm. *Polaris.* I wish his eyes didn't bore into me so much. *Polaris* . . . must get out . . . "

"What? What did you say, Bennett?"

The Monitor stared at him quizzically, then at the board. "I didn't say anything. You sure you're all right? Hey! Watch the board!" He was prepared in case Roston had any notion of repeating his belligerence of before.

A border line green—excitement—and three pale blues—fear, were glowing and the full range of reds were displayed, like an auroral phenomenon.

"Polaris! It's Polaris! Tell them!" Roston ordered, as things became clear. His voice was fierce and urgent. "Tell them!" he commanded again, as Bennett rounded on him for an explanation. That voice. *It had been Carol's!* But she was one hundred and fifteen light-years away. Bewildered, he concentrated again.

"... going to make it. Hope they have alerted the ship . . ." The voice was inside his head, inside his *mind*. He had no time to dwell on the implications. This time, there was no mistaking the probe. It was near, very near. Slowly, he let his mind creep out, like a cat.

Bennett. The Federation fleet was on the way to Polaris. The big man was acutely puzzled by the abrupt change of events.

Operator 58. Startled at the odd feeling in his head.

The probe withdrew.

Sweat filmed his brow and his stomach was in a vice that threatened to squeeze him in half. The source was *near*.

59 and 60. Steady rise and fall of general thoughts. He felt like an angler, using his mind for a hook. Was he the bait? What would he catch—providing *it* didn't catch him first?

61. Sleeping in his bunk. He was dreaming.

Operator 62.

A blinding flash exploded in his mind and the pressure began to build up as Cramm's mind battered its way in. Sweat drenched him and vaguely he knew that Bennett was shouting at him. No human agony was ever so excruciating. He felt as if the interior of a star was being poured into him. His brain was being picked apart, neurone by neurone.

He was being submerged by the alien mind. Instinctively, desperately, he lashed out and the alien's mind recoiled. Something drove him on and he rushed blindly into the other's mind. The two minds locked. His censor was brushed aside and the nightmares of his sub-conscious were released. Old fears, half-buried and forgotten, were dredged up and thrown at him with terrifying reality. By contrast, his attack was raw energy. Roston resisted and gained the upper hand. Cramm weakened, but Roston didn't let up. Cramm surged back. But he had shot his bolt. He was little more than a mindless idiot. Roston sagged in his seat as Bennett, his mouth open, watched Cramm roll to the floor, a limp rag.

Roston ignored Bennett and somehow found the strength to send his mind out to Beta Tauri III. Gently, he contacted Carol's mind. The two meshed perfectly; they became as one with intimate immediacy. Here was the human relationship supreme. He could almost feel her jump as he projected, "*Carol. It's all right. The ships are on the way to Polaris. Just think back at me.*"

Her mental voice was a symphony of golden, liquid beauty. He saw how great was the sacrifice demanded of the Agents. The true personality was submerged in a veneer of coldness. Almost a death in the midst of life.

"*I'm on the way to the rendezvous, Tal. What's happening to you? I don't understand.*"

"*Neither do I. Just get back here safely.*"

The long time of waiting was over. The Stellar fleet had suddenly appeared, a ring of death, in the skies of the aliens' home planet. The aliens didn't intend to give up quickly. A bloody battle had ensued and reinforcements hypering in from other alien planets had turned the whole Polaris sector into a battle ground. The Federation had its first hot interstellar war on its hands and victory was imperative if the Federation was not to be strangled at birth. The prize could be the wealth of all the galactic suns. For many years to come, exploration was over. Conquest was now thrust upon the Federation and they meant to make a thorough job of it.

Cory, Bennett, Roston and a few other scientists, were gathered in the Director's office. Roston was trying to answer and parry their questions.

"I don't know how I became telepathic. That's for *you* to find out. Maybe being a zero empath had something to do with it. Cramm's probing was maybe a contributory factor, too."

He glanced at another man. "Yes, Cramm was undoubtedly an alien. I doubt if they're all telepathic. It looks as if we're going to have a Special Corps of Telepaths, now. What will happen to him, by the way?"

"He's been handed over to our neuro-surgeons and other specialists," Cory answered. "They'll see if they can patch him up and he may give us an insight into the alien psychology. He'll be our first prisoner of war."

Just then, the door opened and Carol came in. The questions ceased. Every male eye was upon her.

"Carol." Roston went to her.

Cory was thinking admiringly, "*What a lucky man he'll be when he gets his full emotions back.*"

Tal grinned at him. "Yes, won't I?" he smiled.

LOW GRAVITY

A new writer to our pages presents some extremely interesting data on the subject of low gravity and points out some of the pitfalls most science fiction writers fall into when placing their action on the Moon.

By D. J. Francis

The mechanics of free-fall have been so frequently discussed in recent years that very few modern science fiction writers repeat the mistakes of the pioneers in this field, mistakes that are no longer even a source of humour. Yet the closely related mechanics of low gravity seem to have been left to private enterprise, with the same results that free-fall once provided. With the first lunar landings already in sight, it might be useful to examine the low-G problem with this particular region in mind.

We are all familiar with the spectacular long-jumps and high-jumps and weight-lifting feats of fictional explorers, almost all of whom seem to shed mass as well as weight as soon as the tail-fins touch the Promised Land. Sixty-foot wide ravines are taken in their stride, and they casually pick up four-hundred pound (Earth weight) boulders and carry or throw them at hostile aliens, and leap twenty feet into mid-space, surprised and delighted by their new-found prowess. However, Nature will not suspend her laws to save our faces, so we had perhaps better establish a more realistic tradition before the first disgruntled explorers return with factual experiences that are predictable on present knowledge.

To begin with, there will be some odd friction effects between boot soles and the lunar surface. The force pressing

a man's feet down will be only one-sixth normal, but his mass will be unchanged. So for accelerating his mass horizontally, he will have only one-sixth the force such surfaces would give on Earth. In other words, his effective coefficient of friction would be only one-sixth normal. The values for good tyres on well-laid tarmacadam are usually given as point nine to point nine five, whilst those for tyres on ice vary between point one and point one five. So a man in rubber-soled boots with a good tread would find rough lunar granite as slippery as terrestrial ice.

If he tried a long-jump, the result would be a backwards-slipping foot and a very mediocre forward movement. On landing again he would be as badly off, and would most likely sit down—gently, of course—and slide on his seat for a foot or two. A running long-jump of spectacular size should be possible, as the necessary horizontal speed could then be built up gradually, but the danger would be greater than in trying such stunts on a terrestrial glacier devoid of snow covering.

There would be compensations, of course. A man would be able to stand on as steep a slope as such surfaces would allow on Earth, as the component of his weight tending to make him slide down would be reduced to one-sixth, as well as his friction. He could also walk up or downhill reasonably safely, provided he made no attempt to change speed or direction. If he did, the rock would turn back at once to ice.

If spiked boots were worn, the position would be improved, unless their user happened to be on dead-smooth rock, or on thick dust which would lack the cohesive power of snow.

For many reasons, including the danger of going down in thick pockets of dust, the first lunar explorers would be best equipped with skis, and well trained on the arctic glaciers before setting off. Fast downhill glides would be impossible no doubt to their disappointment, but in all other ways conditions would be similar.

Vehicles would suffer from the same reduced grip as the men, and the same solution might be found—sledges, either towed, or propelled by mechanical ski-sticks. And when the never-to-be-forgotten moment at last arrives, the pilot of the ship coming in to land had better be trained at landing on ice.

Now suppose we leave friction and examine the mammoth weight-lifting—or rather mass-shifting—abilities that are common to all low-G worlds? A man on the moon, we often

are told, could lift a three hundred pound "weight" as easily as a fifty pound one here. He could no doubt stand with it on his shoulder as easily, but he'd have some difficulty in getting it there. Imagine him with a three-hundred pound piece of equipment on the ground at his feet. When he bends and tugs upwards, it feels at first immovable ; after all, he'll be on the small side, and three hundred pounds of mass will be resisting his attempt to accelerate it, as well as fifty pounds of weight. Then he finds it rising slowly, and, encouraged, continues to pull as hard as he can, naturally reacting as if it were only weight that was opposing him. By the time it reaches the level of his shoulder he will have given it quite a reasonable speed. That's when the fun will start in earnest. Instead of dropping on to his waiting shoulder as he ceases to lift, it will continue upwards rapidly. Clinging to it, no doubt in alarm lest it take off altogether, the bewildered weight-lifter would probably go up with it. A few feet up the two would stop and drift back down again. If he kept his feet on landing on the "icy" ground, the source of his troubles would come inexorably down past him, and bend him double as he now tried to save it from a destructive collision with luna firma. Then he'd have to start again.

After executing a series of convergent oscillations in this fashion, the object would ultimately reach its intended position on his shoulder, and he would set off to carry it somewhere. Now he would feel as if someone were holding on to it behind his back, and to spectators would look as if he were towing an invisible sledge. Once in motion he would be free to straighten himself and walk easily under his fifty-pound weight burden but his earlier up and down troubles would return in a new disguise as soon as he tried to stop or turn. Skidding and scrabbling at the dust, he would have to fight his gremlin-haunted burden over and again, and even if disaster did not overtake him en route it would be an experience he would not care to repeat.

A recurrent form of this weight-lifting phenomenon would be everyone's lot when descending or ascending a ladder, the favourite means of access to the space-ship's air-lock in fiction. To climb down under low gravity may feel like climbing down an underwater ladder. We let our muscles relax, and gravity takes us down to the next step sufficiently fast to satisfy most of us when under normal gravity. On the Moon, it will

possibly seem an irritatingly slow process, with a push from the arms needed at each step. Going up, there would be a repetition of the underwater effect, the climber tending to accelerate to such a speed that at the top he cannot stop. Clinging on with his hands, he may find his legs and body rising until he reaches a hand-stand on the topmost rung ; a dangerous stunt when he is possibly two hundred feet from the ground !

Stilt-walking might be found a possible alternative form of pedestrianism to skiing, as the very slow initial stages of a fall would give even a complete tyro to the art plenty of time to correct his balance. Fitted with spiked feet and a guard against too deep a penetration into dust, they would have many advantages. Amongst those at once apparent would be the raised eye-level, compensating for the high degree of curvature of a small planetary body, and also their use would eliminate dangerous jumping across crevasses. However, it is more than likely that they would need as much experience as does their use on the Earth, for physiological reasons that will have widespread effects on the rest of the lunar pioneers' activities.

A man standing on the lunar surface would be conscious of the very low gravity throughout his body, and from past experience of the sensation would adapt himself to expect the usual phenomena of falling. The subject would feel exactly as if he were on a platform that was falling beneath him, bearing him with it, and perhaps his only surprise would be that the stars were not streaming upwards all round the horizon. If he jumped a small distance vertically down, the time it would take and his gentle landing would seem only what was to be expected. He would feel as if he and the ground beneath were falling at almost exactly the same speed, and that he had only caught up after falling a considerable distance. Similarly on jumping upwards, his abnormal rise would not surprise him ; after all, he had only thrust off from a rapidly-falling body.

This sense of perpetual fall would be a possible source of danger, as well as of discomfort. The small increase in its intensity when a real fall began would delay the essential reaction until perhaps too late. It is for this reason that stilt-walking will probably be found impracticable, unless advantage is taken of the low weight by using stilts on both arms and legs. The stability problem would then be absent, and

by adopting a galloping action their user could get along quite rapidly. It would be interesting to watch, especially when he tried to stop, braking by bringing his feet forward between his arms and running along with his back downwards, feet leading.

Much as I dislike to find myself disagreeing with Bob Heinlein, when a pressurised lunar colony is established I very much doubt if we will find it possible to fly by using flapping wings attached to our arms. Try holding one twelfth of your weight on each hand at arms length for a minute; and these are the muscles we develop and use constantly for lifting objects. To flap and rise, try wagging your arms up and down with—say—twelve or fourteen pounds on each hand. But again plain weight is not the only problem. To execute any manoeuvre, the full inertia of our normal mass would have to be overcome, needing either a very long distance or muscles like a gorilla. The same trouble would arise even in free-fall.

Finally, can we adapt to fractional weight? Can men concentrate on exacting tasks, digest food, and sleep properly in what feels like a lift hurtling down a bottomless shaft hour after hour and day after day? Long before the task of facing lunar conditions arrives we will know the answers to those questions; but what if they can not? A manned artificial satellite can use centrifugal force as an effective substitute, as also can a space-ship, but a base on the Moon which had to consist of a giant merry-go-round in permanent motion would be rather a plain hint from nature to stay where she put us.

Those are a few of the possible freak conditions that explorers of the Moon may encounter; no doubt there are many more that can be predicted, and should be, if science-fiction is not to appear to future generations as just folk-lore in disguise. We are said to be losing our sense of wonder. Let's come back to reality for a while and forget the galactic Empires and psi-factors, and live up to the name we have adopted. There are plenty of wonders to be extracted yet from the simplest of the sciences.

D. J. Francis

Robert Silverberg is one of the few fulltime professional science fiction writers in the world. Consequently his output is correspondingly higher than most of his contemporaries. It is not surprising, therefore, that he is appearing more frequently in our pages—however, he does write good fiction and switches from one theme to another so easily that it is not surprising he was quoted as the most promising American writer of 1956.

THE MACAULEY CIRCUIT

By Robert Silverberg

Gentlemen, I intend to be completely honest with you, completely unevasive. I destroyed Macauley's diagram, and I have never denied it. Of course I did it, and for strongly-motivated, very substantial reasons.

My big mistake was in not thinking the thing through. When Macauley first brought me the circuit, I didn't pay much attention to it—certainly not as much as its importance warranted. That was a mistake, but I couldn't help myself. I was too busy playing nursemaid to old Kolfmann to stop and think what the Macauley circuit really meant.

If Kolfmann hadn't shown up just when he did, I would have been able to make a careful study of the innovation. I would have quickly grasped all of its implications, and I would have put the diagram in the incinerator and Macauley right after it. That is not to Macauley's discredit, you understand. He's a nice, clever boy, and one of the finest minds in our whole research department. He just can't help being too clever for his own good.

He came in while I was outlining my graph for the Beethoven Seventh which we were going to do the following week. I was adding some ultrasonics that would have delighted old Ludwig—not that he would have heard them, of course, but he would have *felt* them—and I was very pleased with my interpretation. Unlike some synthesizer-interpreters, I don't believe in actually changing the score.

I'm convinced that Beethoven knew what he was doing, and it would have been quite insane to attempt to patch up his symphony. I was simply *strengthening* it by adding the ultrasonics. They wouldn't change the actual notes in the least, but there'd be that feeling in the air which is the great artistic triumph of synthesizing.

So I was working on my graph, and making splendid progress. When Macauley came in I was engaged in changing the frequencies for the second movement, which is the difficult one. You see, the movement is solemn but not *too* solemn. Just so, Macauley had a sheaf of papers in his hand, and I knew immediately that he'd hit on something important. As a rule no one interrupts an Interpreter for something trivial.

"I've developed a new circuit, sir," he said. "It's based on the imperfect Kennedy Circuit of the year twenty-two thousand sixty-one."

I remembered Kennedy. He had been a brilliant boy, rather like Macauley in most respects. He had worked out a circuit which would have made the task of synthesizing a symphony as easy as playing a harmonica. But it hadn't quite worked. Something in the process had fouled up the ultrasonics and what came out had been hellish to hear. We never found out how to straighten things out. Kennedy disappeared about a year later and was never heard from again. All the young technicians had acquired the habit of tinkering with his circuit for diversion, hoping they'd stumble on the secret. And now Macauley had apparently succeeded.

I looked at his diagram, and then directly at him. He was standing there calmly enough with a blank expression on his handsome, intelligent face, waiting for me to quiz him.

"Am I right in assuming that this circuit controls the interpretative aspects of music?" I asked.

He nodded. "Exactly right, sir. You can set the synthesizer for whatever esthetic you have in mind, and it'll faithfully follow your instruction. You merely have to establish the

esthetic co-ordinates—the work of a moment—and the synthesizer will handle the rest of the interpretation for you. But that's not exactly the goal of my circuit, sir," he said, tactfully, as if to hide from me the fact that he was telling me I had missed his point. "With minor modifications—"

He didn't get a chance to tell me, because at that precise moment Kolfmann came dashing into my studio. You see I never lock my doors. For one thing no one would dare disturb me without good and sufficient cause, and for another my analyst had pointed out that working behind locked doors had a bad effect on my sensibilities.

I always work with my door unlocked, and that's how Kolfmann got in. And his arrival at just that moment saved Macauley's life, for if he had gone on to tell me what was on the tip of his tongue I would have regrettably incinerated him and his circuit without an instant's hesitation.

Kolfmann was a famous name to music lovers everywhere. He was perhaps eighty now—possibly ninety, if he had a good gerontologist—and he had been a brilliant concert pianist many years before. Those of us who knew something about pre-synthesizer musical history linked his name with that of Paganini, and regarded him almost with awe.

But the man I saw now was a tall, terribly gaunt old spectre in ragged clothes who burst unannounced into my studio and headed straight for the synthesizer, which covered the entire north wall with its gleaming, complicated bulk.

He had a wrench in his hand heavier than a crow-bar, and he was about to destroy a million credits' worth of cybernetics when Macauley effortlessly intercepted him and took the instrument away from him. I was so flabbergasted I could only stand behind my desk and stare.

Macauley brought him over to me and I looked at him as if he were a mass murderer in the flesh.

"You poor, misguided fool," I said. "What's the idea? You can get a long prison sentence for wrecking a cyber—or didn't you know that?"

"My life is ended anyway," he said in a thick, deep, despairing voice. "It ended when your machines started desecrating music."

He took off his battered cap and ran his thin fingers through his hair. He hadn't shaved for several days, and his face was speckled with stiff-looking white stubble.

"My name is Gregor Kolfmann," he said. "I'm sure you haven't heard of me."

I had, of course, but decided to pretend otherwise. "Kolfmann, the pianist?" I asked.

My admiration was not lost on him. He nodded, pleased despite everything. "Yes, Kolfmann, the *former* pianist. You and your machine have taken away my life."

Suddenly all the hate which any normal person feels for a cyber-wrecker evaporated, and I felt guilty and very humble before this truly great old man. As he continued to speak, I realised that I, as a musical artist, had a responsibility to him. I still think that what I did was wise—and entirely justified.

"Even after synthesizing became the dominant method of presenting music," he went on, "I continued my concert career. There were always a few discerning people who would rather see a man play a piano than watch a technician feed a tape through a machine. But I couldn't compete with the machines."

He sighed. "After a while anyone who went to live concerts was looked upon as a reactionary, and I stopped getting bookings. I turned to teaching as a means of livelihood. But no one wanted to take piano lessons. A few have studied with me for antiquarian reasons, but they are not artists. They are just curiosity-seekers. They have no artistic drive. You and your machines have much to answer for!"

I looked at Macauley's circuit and then at Kolfmann. I put away my graph for the Beethoven, partly because all the excitement had made it impossible for me to get anywhere with it and partly because I knew it would only make things worse if Kolfmann actually saw what Macauley had done.

Macauley was still standing expectantly before my desk, waiting to explain his circuit to me. I knew it was important. But I felt deeply indebted to old Kolfmann, and I decided to take care of him before I let Macauley do any more talking.

"Come back later," I told him. "I'd like to discuss the implications of this innovation—as soon as I'm through talking to Mr. Kolfmann."

"Yes, sir," Macauley said, like the obedient puppet a technician becomes when he is confronted by an unbending superior. As soon as the door closed behind him, I gathered

up the papers he had left and stacked them in a neat pile on my desk. I didn't want Kolffmann to see them for one moment, even though I knew they wouldn't mean anything to him except as symbols of the machine he hated.

As soon as we were alone I gestured Kolffmann to a plush pneumochair, into which he settled with the distaste for excess comfort which had been so characteristic of his generation. I saw my duty plainly. I must make things better for the old man.

"We'd be glad to have you come to work for us, Mr. Kolffmann," I said smiling. "A man of your great brilliance—"

He was up and out of that chair in a second, his eyes blazing. "Work for you? I'd sooner see you dead and your machines crumbling? Your scientists have dealt a death blow to art, and now you're trying to bribe me!"

"I was just trying to help you," I said, soothingly. "Since, in a manner of speaking, we've interfered with your livelihood, I consider it my duty to make amends in any way I can."

He said nothing, but stared at me coldly, with the anger of half a century burning uncompromisingly in him.

"Look," I said. "Let me show you what a great musical instrument the synthesizer actually is."

I rummaged in my cabinet and withdrew the tape of the Hohenstein Viola Concerto which we had performed in '69. It was a rigorous twelve-tone work and it was probably the most demanding, unplayable piece of music ever written.

It was, of course, no harder for the synthesizer to counterfeit than the notes of a Strauss waltz. But a human violist would have needed three hands and a prehensile nose to convey more than a tiny sampling of Hohenstein's musical thought. I activated the playback of the synthesizer and fed the tape in.

The music burst forth in a magnificent opening stanza, and Kolffmann watched the machine suspiciously. The pseudo-viola danced up and down the tone-row while the old pianist struggled painfully to place the work.

"Hohenstein?" he finally asked, his voice tremulous with awe.

I saw that a conflict was raging within him. For more years than he cared to remember he had hated us with a burning hate because we had made his art obsolete. And here I was showing him a use for the synthesizer which more than justified its

existence. It was synthesizing a work impossible for a man or woman to play. He was unable to reconcile the paradox in his mind, and the struggle to do so hurt. He got up uneasily and started for the door.

"Where are you going?" I asked.

"Away for here," he said. "You are a devil."

He tottered weakly through the door, and I let him go. The old man was badly confused. But I had a trick or two up my cybernetic sleeve to settle at least some of his problems and salvage him for the world of music. For, whatever else you say or think about me—particularly after this Macauley business—you can't deny that my deepest allegiance is to music.

For the rest of the day I stopped work on my Beethoven Seventh, and put away Macauley's diagram, and called in a couple of competent technicians and told them what I was planning. Our first line of inquiry, I decided, would be to find out who Kolfmann's piano teacher had been. We had the reference books out in a flash, and found the man without much difficulty. His name was Kellerman, and he had died nearly sixty years before. Here luck was with us. Central was able to locate and supply us with an old tape of the International Music Congress held at Stockholm in 2187.

At that meeting Kellerman had spoken briefly on *The Development of the Pedal Technique*. His discussion had been extremely boring, but it wasn't the subject matter which interested us. We split his speech up into phonemes, analyzed, rearranged, evaluated, and finally went to the synthesizer and began feeding in tapes.

What we got back was a new speech in Kellerman's voice—or reasonable facsimile thereof. Certainly it would be good enough to fool Kolfmann, who hadn't heard his old teacher's voice for more than half a century. When we had everything ready I sent for the old musician and a couple of hours later they brought him in, looking even more dispirited and more worn.

"Why do you bother me?" he asked. "Why do you not let me die in peace?"

I ignored his questions. "Listen to this, Mr. Kolfmann," I said. I flipped on the playback, and the voice of Kellerman came out of the speaker.

“Hello, Gregor,” it said. Kolfmann was profoundly startled. I took advantage of the prearranged pause in the recording to ask him if he recognised the voice. He nodded, his lips white. I could see that he was frightened and suspicious and I hoped that the whole plan wouldn’t backfire.

“Gregor, one of the things I tried most earnestly to teach you—and you were my most attentive pupil—was that you must always be flexible. Techniques constantly change, even though great art remains unchanged. But you did not take my advice.”

Kolfmann was starting to realise what we had done. His pallor was ghastly now.

“Gregor, the piano is an outmoded instrument. But there is a newer, and a greater instrument available to you. Why do you deny greatness? The wonderful new synthesizer can do all that the piano could do—and more. It is a tremendous step forward—”

“All right,” Kolfmann said. His eyes were gleaming strangely. “Turn that machine off.”

I reached over and flipped off the playback.

“You are very clever,” he told me. “I take it you used your synthesizer to prepare this little speech for me.”

I nodded.

“Well, you have been highly successful—in your silly, theatrical way,” he said. He paused and shook his head. “And I—I have been even more foolish than you. I have stubbornly resisted when I should have joined forces with you. Instead of hating you, I should have been the first to learn how to create music with a new and untried instrument.”

Such was the measure of his greatness! He could with complete honesty and complete humility admit error and rechart his entire career.

“It’s not too late to learn,” I said. “We could teach you.”

Kolfmann looked at me steadily for an instant, and I felt a shiver go through me. But my elation knew no bounds. I had won a great battle for music, and I had won it with ridiculous ease.

He went away for a full month to master the technique of the synthesizer. I gave him my best men, the technicians I had been grooming to take over in my place when age forced my retirement. In the meantime I completed my Beethoven,

and the performance was a most gratifying success. And then I got back to Macauley and his circuit.

Once again circumstances conspired to keep me from fully realising just how serious a threat the circuit had posed. I did manage to grasp that it could be refined to eliminate almost completely the human element in musical interpretation. But I had ceased to concern myself with laboratory work for so long a period that I no longer adhered to my old habit of studying any sort of diagram and mentally tinkering with it and juggling it to see if some greater use could not be made of it.

While I was examining the circuit one disturbing thought did occur to me, however. Since anyone would be able to create a musical interpretation, and artistry would no longer be an operative factor I might very well find myself out of a job. I was worrying about that when Kolffmann came in with some tapes. He looked twenty years younger. His face was no longer haggard and despairing and there was a triumphant sparkle in his eyes.

"I will say it again," he told me, placing the tapes on my desk. "I have been a fool. I have wasted my life. Instead of tapping away at a silly little instrument I might have created a new music with this machine. Look. I began with Chopin. Put this on."

I slipped the tape into the synthesizer and the F Minor Fantasia came rolling into the room. I had heard that majestic drum roll a thousand times, but never with such glorious overtones.

"This machine is the noblest instrument I have ever played," he said.

I looked at the graph he had drawn up for the piece, in his painstaking, crabbed handwriting. The ultrasonics were literally incredible. In just a few weeks he had mastered subtleties it had taken me fifteen years to learn. He had discovered what skillfully-chosen ultrasonics, beyond the range of human hearing—but not beyond perception—could do. He had discovered how to expand the horizons of music to a point that would have been inconceivable to the pre-synthesizer composers, with their crude instruments and faulty knowledge of sonics.

The Chopin almost made me cry. It wasn't so much the actual notes which Chopin had written, and which I had heard so many times before. It was more the unheard notes the

synthesizer was striking in the ultrasonic range. The old man had chosen his ultrasonics with the skill of a craftsman—no, with the hand of a genius. I saw Kolfmann in the middle of the room, standing proudly while the piano rang out—a glorious tapestry of sound.

He handed me another tape and I put it on. It was the Bach Tocata and Fugue in D Minor, and as the sound of a super-organ mingled with the soaring supersonics the unearthly splendour of the composition almost took my breath away. And Kolfmann stood there entranced.

I looked at him and tried without success to relate him to the seedy old man who had attempted to wreck the synthesizer a few short weeks before.

As the Bach drew to its close I thought of the Macauley circuit, again, and of the whole beehive of blank-faced technicians striving to perfect the synthesizer by eliminating the one imperfect element : Man. And I woke up.

My first decision was to suppress the Macauley circuit until after Kolfmann's death, which could not be long delayed. I made this decision out of sheer kindness. Kolfmann, after all these years, was having a moment of supreme triumph. If I let him know that no matter how magnificent his achievement became the new circuit could do it better, he would never survive the blow.

He fed the third tape in himself. It was the Mozart Requiem Mass, and I was astonished by the inspired brilliance which had enabled him to master the difficult technique of synthesizing voices. Still, with the Macauley circuit, the machine could handle all such details by itself.

As Mozart's sublime music swelled and rose, I took out the diagram Macauley had given me, and stared at it grimly. At that moment I reached my final decision. I would pigeonhole it until the old man died. Then I would reveal it to the world and, having made my own future meaningless, would sink into peaceful obscurity with at least the assurance that Kolfmann had died happy.

It was sheer kindheartedness, gentlemen. There was nothing malicious or reactionary about it. I didn't intend to stop the progress of cybernetics—at least, not at that point.

No. I didn't make my last shattering discovery until I got a better look at what Macauley had done. Quite possibly he didn't even realise it himself, but I could be pretty shrewd

about such things. Mentally, I added a wire or two here, altered a contact there, and suddenly the full truth dawned on me.

Macauley had assured me that a synthesizer hooked up with the new circuit wouldn't need a human being to provide an esthetic guide to its interpretation of music. Up to now, the synthesizer could imitate the pitch of any sound in or out of nature. But we had to control the volume, the timbre, and all the other factors which make up interpretation of music. With Macauley's innovation the synthesizer could handle every one of those factors.

But also, I now realised, it could *create its own music*—from scratch, and with no human help. Not only the conductor but the composer would become obsolete. The synthesizer would be able to function independently of any human being. And art gives dignity and purpose and direction to human life.

That was when I ripped up Macauley's diagram and heaved the paperweight directly at the synthesizer, cutting off the Mozart in the middle of a high C. Kolfmann turned around in horror, but I was the one who was really horrified.

I know. Macauley has redrawn his diagram and I haven't stopped the wheels of science. I feel pretty futile about it all. But before you label me reactionary and send me to prison, consider this :

Art is a major, determining function of intelligent beings. When once you've created a machine capable of composing original music, capable of an artistic act, you've created an intelligent being. And one that's a great deal stronger and smarter than we are. We've synthesized our successor.

Gentlemen, we are all obsolete.

Robert Silverberg

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By J. G. Ballard

"Guess again," Sheringham said.

Maxted clipped on the headphones, carefully settled them over his ears. He concentrated as the disc began to spin, trying to catch some echo of identity.

The sound was a rapid metallic rustling, like iron filings splashing through a funnel. It ran for ten seconds, repeated itself a dozen times, then ended abruptly in a string of blips.

"Well?" Sheringham asked. "What is it?"

Maxted pulled off his headphones, rubbed one of his ears. He had been listening to the records for hours and his ears felt bruised and numb.

"Could be anything. An ice-cube melting?"

Sheringham shook his head, his little beard wagging. Maxted shrugged. "A couple of galaxies colliding?"

"No. Sound waves don't travel through space. I'll give you a clue. It's one of those *proverbial* sounds." He seemed to be enjoying the catechism.

Maxted lit a cigarette, threw the match onto the laboratory bench. The head melted a tiny pool of wax, froze and left a shallow black scar. He watched it pleasurabley, conscious of Sheringham fidgetting beside him.

He pumped his brains for an obscene simile. "What about a fly—"

"Time's up," Sheringham cut in. "*A pin dropping.*" He took the 3-inch disc off the player, angled it into its sleeve.

"In actual fall, that is, not impact. We used a fifty-foot shaft and eight microphones. I thought you'd get that one."

He reached for the last record, a 12-inch LP, but Maxted stood up before he got it to the turntable. Through the french windows he could see the patio, a table, glasses and decanter gleaming in the darkness. Sheringham and his infantile games suddenly irritated him ; he felt impatient with himself for tolerating the man so long.

"Let's get some air," he said brusquely, shouldering past one of the amplifier rigs. "My ears feel like gongs."

"By all means," Sheringham agreed promptly. He placed the record carefully on the turntable and switched off the player. "I want to save this one until later, anyway."

They went out into the warm evening air. Sheringham turned on the japanese lanterns and they stretched back in the wicker chairs under the open sky.

"I hope you weren't too bored," Sheringham said as he handled the decanter. "Microsonics is a fascinating hobby, but I'm afraid I may have let it become an obsession."

Maxted grunted non-committally. "Some of the records are interesting," he admitted. "They have a sort of crazy novelty value, like blown-up photographs of moths' faces and razor blades. Despite what you claim, though, I can't believe microsonics will ever become a scientific tool. It's just an elaborate laboratory toy."

Sheringham shook his head. "You're completely wrong, of course. Remember the cell division series I played first of all? Amplified 100,000 times animal cell division sounds like a lot of girders and steel sheets being ripped apart—how did

you put it ?—a car smash in slow motion. On the other hand, plant cell division is an electronic poem, all soft chords and bubbling tones. Now there you have a perfect illustration of how microsonics can reveal the distinction between the animal and plant kingdoms."

"Seems a damned roundabout way of doing it," Maxted commented, helping himself to soda. "You might as well calculate the speed of your car from the apparent motion of the stars. Possible, but it's easier to look at the speedometer."

Sheringham nodded, watching Maxted closely across the table. His interest in the conversation appeared to have exhausted itself, and the two men sat silently with their glasses. Strangely, the hostility between them, of so many years' standing, now became less veiled, the contrast of personality, manner and physique more pronounced. Maxted, a tall fleshy man with a coarse handsome face, lounged back almost horizontally in his chair, thinking about Susan Sheringham. She was at the Turnbull's party, and but for the fact that it was no longer discreet of him to be seen at the Turnbull's—for the all-too-familiar reason—he would have passed the evening with her, rather than with her grotesque little husband.

He surveyed Sheringham with as much detachment as he could muster, wondering whether this prim unattractive man, with his pedantry and in-bred academic humour, had any redeeming qualities whatever. None, certainly, at a casual glance, though it required some courage and pride to have invited him round that evening. His motives, however, would be typically eccentric.

The pretext, Maxted reflected, had been slight enough—Sheringham, professor of biochemistry at the university, maintained a lavish home laboratory ; Maxted, a run-down athlete with a bad degree, acted as torpedo-man for a company manufacturing electron microscopes ; a visit, Sheringham had suggested over the phone, might be to the profit of both.

Of course, nothing of this had in fact been mentioned. But nor, as yet, had he referred to Susan, the real subject of the evening's charade. Maxted speculated upon the possible routes Sheringham might take toward the inevitable confrontation scene; not for him the nervous circular pacing, the well-thumbed photostat, or the thug at the shoulder. There was a vicious adolescent streak running through Sheringham—

Maxted broke out of his reverie abruptly. The air in the patio had become suddenly cooler, almost as if a powerful refrigerating unit had been switched on. A rash of goose-flesh raced up his thighs and down the back of his neck, and he reached forward and finished what was left of his whisky.

"Cold out here," he commented.

Sheringham glanced at his watch. "Is it?" he said. There was a hint of indecision in his voice; for a moment he seemed to be waiting for a signal. Then he pulled himself together and, with an odd half-smile, said: "Time for the last record."

"What do you mean?" Maxted asked.

"Don't move," Sheringham said. He stood up. "I'll put it on." He pointed to a loudspeaker screwed to the wall above Maxted's head, grinned and ducked out.

Shivering uncomfortably, Maxted peered up into the silent evening sky, hoping that the vertical current of cold air that had sliced down into the patio would soon dissipate itself.

A low noise crackled from the speaker, multiplied by a circle of other speakers which he noticed for the first time had been slung among the trellis-work around the patio.

Shaking his head sadly at Sheringham's antics, he decided to help himself to more whisky. As he stretched across the table he swayed and rolled back uncontrollably into his chair. His stomach seemed to be full of mercury, ice-cold and enormously heavy. He pushed himself forward again, trying to reach the glass, and knocked it across the table. His brain began to fade, and he leaned his elbows helplessly on the glass edge of the table and felt his head fall onto his wrists.

When he looked up again Sheringham was standing in front of him, smiling sympathetically.

"Not too good, eh?" he said.

Breathing with difficulty, Maxted managed to lean back. He tried to speak to Sheringham, but he could no longer remember any words. His heart switchbacked, and he grimaced at the pain.

"Don't worry," Sheringham assured him. "The fibrillation is only a side effect. Disconcerting, perhaps, but it will soon pass."

He strolled leisurely around the patio, scrutinizing Maxted from several angles. Evidently satisfied, he sat down on the table. He picked up the siphon and swirled the contents about. "Chromium cyanate. Inhibits the coenzyme system controlling the body's fluid balances, floods hydroxyl ions into

the bloodstream. In brief, you drown. Really drown, that is, not merely suffocate as you would if you were immersed in an external bath. However, I mustn't distract you."

He inclined his head at the speakers. Being fed into the patio was a curiously muffled spongy noise, like elastic waves lapping in a latex sea. The rhythms were huge and ungainly, overlayed by the deep leaden wheezing of a gigantic bellows. Barely audible at first, the sounds rose until they filled the patio and shut out the few traffic noises along the highway.

"Fantastic, isn't it?" Sheringham said. Twirling the siphon by its neck he stepped over Maxted's legs and adjusted the tone control under one of the speaker boxes. He looked blithe and spruce, almost ten years younger. "These are 30-second repeats, 400 microtones, amplification one thousand. I admit I've edited the track a little, but it's still remarkable how repulsive a beautiful sound can become. You'll never guess what this was."

Maxted stirred sluggishly. The lake of mercury in his stomach was as cold and bottomless as an oceanic trench, and his arms and legs had become enormous, like the bloated appendages of a drowned giant. He could just see Sheringham bobbing about in front of him, and hear the slow beating of the sea in the distance. Nearer now, it pounded with a dull insistent rhythm, the great waves ballooning and bursting like bubbles in a lava sea.

"I'll tell you, Maxted, it took me a year to get that recording," Sheringham was saying. He straddled Maxted, gesturing with the siphon. "A year. Do you know how ugly a year can be?" For a moment he paused, then tore himself from the memory. "Last Saturday, just after midnight, you and Susan were lying back in this same chair. You know, Maxted, there are audio-probes everywhere here. Slim as pencils, with a six-inch focus. I had four in that headrest alone." He added, as a footnote: "The wind is your own breathing, fairly heavy at the time, if I remember; your interlocked pulses produced the thunder effect."

Maxted drifted in a wash of sound.

Some while later Sheringham's face filled his eyes, beard wagging, mouth working wildly.

"Maxted! You've only two more guesses, so for God's sake concentrate," he shouted irritably, his voice almost lost

among the thunder rolling from the sea. "Come on, man, what is it? Maxted!" he bellowed. He leapt for the nearest loudspeaker and drove up the volume. The sound boomed out of the patio, reverberating into the night.

Maxted had almost gone now, his fading identity a small featureless island nearly eroded by the waves beating across it.

Sheringham knelt down and shouted into his ear.

"Maxted, can you hear the sea? Do you know where you're drowning?"

A succession of gigantic flaccid waves, each more lumbering and enveloping than the last, rode down upon them.

"In a kiss!" Sheringham screamed. "A kiss!"

The island slipped and slid away into the molten shelf of the sea.

J. G. Ballard

THE LITERARY LINE-UP

James White returns to our pages next month with the lead novelette entitled "Tableau." This is the story of a war memorial erected to commemorate the conflict between an alien galactic race and the humans of Earth. The memorial itself is a strange one—the story centred around it even stranger, and told in White's own inimitable style.

There is also the breathtaking climax to Eric Frank Russell's serial "Wasp" which needs no further introduction, plus the usual wide range of short stories—and once again we shall be introducing a new author from whom we shall be hearing a lot more in the near future: John W. Ashton with "Companion."

Story ratings for No. 66 were :

- | | | |
|-----------------------------------|-------|-------------------|
| 1. Critical Threshold | - - - | Robert Silverberg |
| 2. Threshold Of Eternity (Part 1) | - | John Brunner |
| 3. Conquest Deferred | - - - | Lan Wright |
| 4. A Sense Of Value | - - - | D. M. Parks |
| 5. Swap Shop | - - - | Bertram Chandler |
| 6. The Ice Mass Cometh | - - | Brian W. Aldiss |

W A S P

As James Mowry, Terran secret agent on the Sirian planet of Jaimec, increases his undercover activities as a secret society with a membership of one, so his chances of remaining undiscovered decrease. At some place and at some time the "wasp" has to come into the open—even if only for a brief moment.

By Eric Frank Russell

Part Two of Three Parts

FOREWORD

Terra is at war with the Sirian Combine. The former enjoys many technological advantages but the latter is far stronger in men and material, outweighing the Terrans by twelve to one. To counter and contain this superiority the Terrans adopt various devices one of which is the wasp system.

James Mowry, 26, small and slightly built, is selected from the Terran card-index bank as a suitable wasp. He had been

born in Masham, capital city of Diracta, the Sirian home planet and speaks fluent Sirian with a Mashambi accent.

He is taken before William Wolf, a director of Terran Strategic Forces, who explains that the idea of a Terran masquerading as a Sirian is so ludicrous that the average Sirian would be most unlikely to give it serious consideration. Therefore a disguised Terran would be protected by this mental block in the enemy's minds—though he would always be in danger from the Kaitempi, the Sirian Secret Police, who are notoriously tough and cunning.

After training at a special school Mowry is dropped upon Jaimec, one of the outer planets of the Sirian Empire. A little plastic surgery, a purple coloured skin and the cultivation of a bow-legged walk have combined to make him enough like a native Sirian to pass muster. Supplies are dropped with him and hidden in a cave in a forest.

Starting in Pertane, capital city of Jaimec, he commences the systematic undermining of authority by creating an illusion that there exists an active opposition to the dictatorial Sirian government. In various public places he plants large numbers of threatening notices attributed to a mythical organisation called Dirac Angestun Gesept or the Sirian Freedom Party.

He then transfers attention to the large and important town of Radine. While on his way there he comes across a Major Sallana whom he identifies as an officer of the dreaded Kaitempi. Mowry kills Sallana, makes off with his papers and Kaitempi card, notifies the authorities that Sallana was officially executed by Dirac Angestun Gesept.

After decorating Radine with printed threats Mowry returns to Pertane and uses Sallana's gun as bait with which to find an underworld character with no loyalty and no scruples. The bait is taken by an individual whom he shadows to the Cafe Susun, a low dive in the slummy quarter of Pertane.

Entering, he makes contact with Butin Arhava, tells him that he is willing to pay for a number of murders at the rate of twenty thousand Sirian guilders per corpse. Greedy but unnerved, Arhava disclaims that this sort of work is in his line but says he has friends who might be interested.

Mowry gives him four days in which to find these friends and discuss the matter with them. He leaves the Cafe Susun promising to be back at the end of that time and at the same hour.

V

In the early morning Mowry went to another and different agency, rented a dynocar under the name of Morfid Patyh with an address in Radine. He couldn't risk using the same agency twice in succession ; it was highly likely that already the police had visited the first one and asked pointed questions. There they'd recognise him as the subject of official investigation, detain him on some pretext while they used the telephone.

He drove out of the town carefully, with circumspection, not wanting to draw the attention of any patrol-cars lurking around. Eventually he reached the tree with the abnormal branch formation and the mock-tombstone beneath it. For a few minutes he stopped nearby pretending to tinker with the dynamo until the road became completely clear of traffic in both directions. Then swiftly he drove the car over the grass verge and in between the trees for as far as he could get it.

After that he went back on foot and satisfied himself that it could not be seen from the road. With his feet he scuffed the grass and thus concealed the tyre-tracks entering the forest. That done, he headed for the distant cave, moving as fast as he could make it.

He got there in the late afternoon. When still deep among the trees and eight hundred yards from his destination the ornamental ring on the middle finger of his left hand started tingling. The sensation grew progressively stronger as he neared. This caused him to make a straight and confident approach with no preliminary skirmishing around. The ring would not have tingled if Container-22 had ceased to radiate and that would happen only on the breaking of its beam by the invasion of the cave by something man-sized.

Yes, if accidentally or otherwise the enemy had found the hidden dump and made a trap of it, the quarry would have faded away with a half-mile running start. And they'd have been left to sit on their butts and wait for he who never arrives.

Upon the fall of darkness he rolled Container-5 out the cave's mouth, upended it on the tiny beach. It was now a tall silver-grey cylinder pointed at the stars. From its side he unclipped a small handle, stuck it into a hole in the slight blister near the base, wound vigorously. Something inside began to murmur a smooth and steady *zuum-zuum*.

He now took the top off the cylinder, having to stand on tiptoe to get at it. Then he sat on a nearby rock and waited.

After the cylinder had warmed up it emitted a sharp click and the *zuum-zuum* struck a deeper note. He knew that it was now shouting into space, using soundless words far stronger and more penetrating than those of any spoken language.

Whirrup-dzzt-pam ! Whirrup-dzzt-pam !

"Jaimec calling ! Jaimec calling !"

Now he could do nothing more save bide his time in patience. The call was not being directed straight to Terra which was much too far away to permit a conversation with brief time-lags. It was being squirted at a spatial listening-post and field headquarters near enough to be on or perhaps actually within the rim of the Sirian Empire. He did not know its precise location and, as Wolf had remarked, what he didn't know he couldn't tell.

A prompt response was unlikely. Out there in the dark they'd be listening for a hundred calls on a hundred frequencies and be held on some of them while messages passed to and fro. He'd have to wait his turn.

Nearly three hours crawled by while the cylinder stood on the pebble beach and gave forth its scarcely hearable *zuum-zuum*. Then suddenly a tiny red eye glowed bright and winked steadily near its top.

Again he strained on tiptoe, cursing his shortness, felt into the cylinder's open top and took out what looked exactly like an ordinary telephone. Holding it to his ear, he said into the mouthpiece, "JM on Jaimec."

It was a few minutes before the response came back in the shape of a voice that sounded as though speaking through a load of gravel. But it was a Terran voice speaking the welcome-sounding Terran language. It said, "Ready to tape your report. Fire away."

Mowry tried to sit down while he talked but found the connecting cord too short. So he had to stand. In this position he recited as fast as he could. *The Tale of a Wasp* by Samuel Sucker, he thought wryly. He gave it in full detail and again had to wait quite a while for the come-back.

Then the voice rasped, "Good! You're doing fine!"

"Am I? Can't see any signs of it so far. I've been plastering paper all over the planet and nothing is happening."

"Plenty is happening," contradicted the voice. It came through with a rhythmic variation in amplitude as it fooled Sirian detection devices by switching through a chain of

differently positioned transmitters. "You just can't see the full picture from where you are standing."

"How about giving me a glimpse?"

"The pot is coming slowly but surely to the boil. Their fleets are being widely dispersed, there are vast troop movements from their overcrowded home-system to the outer planets of their empire. They're gradually being chivvied into a fix. They can't hold what they've got without spreading all over it. The wider they spread the thinner they get. The thinner they get the easier it is to bite lumps out of them. Hold it a bit while I check your planet." He went off, came back after a time. "Yes, position there is that they daren't take any strength away from Jaimec no matter how greatly needed elsewhere. In fact they may yet have to add to it at the expense of Diracta. You're the cause of that."

"Sweet of you to say so," said Mowry. A thought struck him and he said eagerly, "Hey, who gave you that information?"

"Monitoring and Decoding Service. They dig a lot out of enemy broadcasts."

"Oh." He felt disappointed, having hoped for news of a Terran Intelligence agent somewhere on Jaimec. But of course even if there was one they wouldn't tell him. They'd lie about it. They'd give him no information that Kaitempi persuasion might force out of him. "How about this Kaitempi card and embossing machine? Do I leave them here to be collected or do I keep them for myself?"

"Stand by and I'll find out." The voice went away for more than an hour, returned with, "Sorry about the delay. Distant takes time in any terms. You can keep that stuff and use it as you think best. T.I. got a card recently. An agent bought one for them."

"Bought one?" He waggled his eyebrows in surprise

"Yes — with his life. What did yours cost?"

"Major Sallana's life, as I told you."

"Tsk-tsk! those cards come mighty dear." There was a pause, then, "Closing down. Best of luck!"

Thanks!"

From yet another container he took several packets and small parcels, distributed them about his person, put others into a canvas shoulder-bag of the kind favoured by the Sirian peasantry. Impatience prevented him from waiting for the full

light of day. Being now more familiar with the forest he felt sure he could fumble his way through it even in the dark. The going would be tougher, the journey would take longer, but he could not resist the urge to get back to the car as soon as possible.

Before leaving his last act was to press the hidden button on Container-22 which had ceased to radiate the moment he'd entered the cave and remained dead ever since. After a one-minute delay it would again set up the invisible barrier that could not be passed without betrayal.

He got out the cave fast, the parcels heavy around him, and had made thirty yards into the trees when his finger-ring started its tingling. Slowly he moved on, feeling his way from time to time. The tingling gradually weakened with distance, faded out after eight hundred yards.

From then on he consulted his luminous compass at least a hundred times. It led back to the road at a point half a mile from the car, a pardonable margin of error in a twenty-mile journey two-thirds of which had been covered in darkness. At two hours after dawn he arrived with tired eyes and aching feet, clambered thankfully into the car, edged it unseen from the forest and purred along the highway to the dump called home.

The day of the appointment kicked off with a highly significant start. Over the radio and video, through the public address system and in all the newspapers the government came out with the same announcement. Mowry heard the miserably muffled bellowings of a loudspeaker two streets away, the shrill cries of newsvendors. He bought a paper, read it over his breakfast.

"Under the War Emergency Powers Act, by order of the Jaimec Ministry of Defence : All organisations, societies, parties and other corporate bodies will be registered at the Central Bureau of Records, Pertane, not later than the twentieth of this month. Secretaries will state in full the objects and purposes of their respective organisations, societies, parties or other corporate bodies, give the address of habitual meeting places and provide a complete list of members."

"Under the War Emergency Powers Act, by order of the Jaimec Ministry of Defence : After the twentieth of this month any organisation, society, party or other corporate body will

be deemed an illegal movement if not registered in accordance with the above order. Membership of an illegal movement or the giving of aid and comfort to any member of an illegal movement will constitute a treacherous offence punishable by death."

So at last they'd made a countermove. *Dirac Angestun Gesept* must kneel at the confessional or at the strangling-post. By a simple, easy legislative trick they'd got D.A.G. where they wanted it, coming and going. It was a kill-or-cure tactic full of psychological menace and well calculated to scare all the weaklings right out of D.A.G.'s ranks.

Weaklings are blabs.

They talk. They betray their fellows, one by one, right through the chain of command to the top. They represent the rot that spreads through a system and brings it to total collapse. In theory, anyway.

Mowry read it again, grinning to himself and enjoying every word. The government was going to have a tough time enticing informers from the D.A.G. Fat lot of talking can be done by a membership completely unaware of its status. There are no traitors in a phantom army.

For instance, Butin Arhava was a fully paid up member in good standing—and didn't know it. Nobody had bothered to tell him. The Kaitempi could trap him and draw out his bowels very, very slowly without gaining one worthwhile word about the Sirian Freedom Party.

Around mid-day Mowry looked in at the Central Bureau of Records. Sure enough a queue stretched from the door to the counter where a couple of disdainful officials were dishing out forms. The line slowly edged forward, composed of secretaries or other officers of trade guilds, *zith*-drinking societies, video fan clubs and every other conceivable kind of organisation. The skinny oldster moping in the rear was Area Supervisor of the Pan-Sirian Association of Lizard Watchers. The podgy specimen one step ahead of him represented the Pertane Model Rocket Builders Club. There wasn't one in the entire string who looked capable of spitting in a Spakum eye much less overthrowing his own government.

Joining the queue, Mowry said conversationally to Skinny, "Nuisance this, isn't it?"

"Yar. Only the statue of Jaime knows why it is considered necessary."

" Maybe they're trying to round up people with special talents," Mowry offered. " Radio experts, photographers and folk like those. They can use all sorts of technicians in war-time."

" They could have said so in plain words," opined Skinny impatiently. " They could have published a list of them and ordered them to report in."

" Yar, that's right."

" My group watches lizards. Of what special use is a lizard-watcher, *hi?*"

" I can't imagine. Why watch lizards, anyway?"

" Have *you* ever watched them?"

" No," admitted Mowry, without shame.

" Then you don't know the fascination of it."

Podgy turned round and said with a superior air, " My group builds model rockets."

" Kid stuff," defined Skinny.

" That's what you think. I'll have you know every member is a potential rocket-engineer and in time of war a rocket-engineer is a valuable—"

" Move up," said Skinny, nudging him. They shuffled forward, stopped. Skinny said to Mowry, " What's your crowd do?"

" We etch glass."

" Well, that's a high form of art. I have seen some very attractive examples of it myself. They were luxury articles though. A bit beyond the common purse." He let go a loud sniff. " What good are glass-etchers for winning battles?"

" You guess," Mowry invited.

" Now take rockets," put in Podgy. " The rocket is essential to space-war and—"

" Move up," ordered Skinny again.

They reached the stack of forms, were each given one off the top. The group dispersed, going their various ways while a long line of later comers edged toward the counter. Mowry went to the main post office, sat at a vacant table, filled up the form carefully and neatly. He got some satisfaction out of doing it with a government pen and government ink.

Title of organisation : *Dirac Angestun Gesept*

Purpose of organisation : *Destruction of present government and termination of war against Terra.*

Customary meeting place : *Wherever Kaitempi can't find us.*

Names and addresses of elected officers : *You'll find out when it's too late.*

Attach hereto complete list of members : *Nar.*

Signature : *Jaime Shallapurta.*

That last touch would get someone hopping mad. It was a calculated insult to the much revered Statue of Jaime. Loosely translated it meant James Stoneybottom.

He bought an envelope, was about to mail it back to the Bureau when it occurred to him to hot it up still more. Forthwith he took the form to his room shoved it into the embossing machine and impressed it with the Kaitempi cartouche. Then he posted it.

This performance pleased him immensely. A month ago it would have been too childish to bother with and the recipients would have dismissed it as the work of someone feeble-minded, but today the circumstances were vastly different. The powers-that-be had revealed themselves as annoyed if not frightened. They were in poor mood to relish a raspberry. With moderate luck the sardonic registration-form would boost their anger and that would be all to the good because a mind filled with fury cannot think in cool, logical manner.

When one is fighting a paper-war one uses paper-war tactics that in the long run can be just as lethal as high explosive. And the tactics are not limited in scope by use of one material. The said material is very variable in form. Paper can convey a private warning, a public threat, secret temptation, open defiance wall-bills, window-stickers, leaflets dropped by the thousand from the roof-tops, cards left on seats or slipped into pockets and purses. . . money.

Yes, money.

With paper money he could buy a lot of the deeds needed to back up the words. With paper money he could persuade the Sirian foe to kick himself good and hard in the pants and thereby save the Terrans a tedious chore.

At the proper hour he set out for the Cafe Susun

Not having yet received the D.A.G.'s thumb-on-nose registration the Jaimecan authorities were still able to think in a calculating and menacing way. Their countermoves had not been confined to that morning's new law. They had taken matters further by concocting a dangerous technique, namely, that of the snap-search.

It almost caught Mowry at the first grab. He did not congratulate himself on his escape, realising that to avoid one trap might be merely to fall into another. The risk was great, the trick being of such a type that none could tell when or where the next blow would fall.

He was heading for his rendezvous when suddenly a line of uniformed police extended itself across the street. A second line simultaneously did likewise four hundred yards farther on. From the dumbfounded mob trapped between the lines appeared a number of plain clothes members of the Kaitempi. These at once commenced a swift and expert search of everyone thus halted in the street. Meanwhile both lines of police kept their full attention inward, watching to see that nobody ducked into a doorway and bolted through a house to escape the mass-frisk.

Thanking his lucky stars that he was outside the trap and being ignored, Mowry faded into the background as inconspicuously as possible and beat it home fast. In his room he burned all documents relating to Shir Agavan, crumpled the ashes into fine dust. That identity was now dead for ever and ever, amen. It would never be used again.

From one of his packages he took a new set of papers swearing before all and sundry that he was Krag Wulkin, special correspondent of a leading news agency, with a home address on Diracta. In some ways it was better camouflage than the former one. It lent added plausibility to his Mashambi accent. Moreover a complete check on it would involve wasting a month referring back to the Sirian home planet.

Luckily no more traps opened in his path before he reached the Cafe Susun. He went in, found Arhava and two others seated at the far table where they were half-concealed in dim light and could keep watch on the door.

"You're late," greeted Arhava. "We thought you weren't coming."

"I got delayed by a police raid on the street. The cops looked surly. You fellows just robbed a bank or something?"

"No, we haven't." Arhava made a casual gesture toward his companions. "Meet Gurd and Skriva."

Mowry acknowledged them with a curt nod, looked them over. They were much alike, obviously brothers. Flat-faced, hard-eyed with pinned-back ears that came up to sharp points. Each looked capable of selling the other into slavery provided there was no comeback with a knife.

"We haven't heard *your* name," said Gurd, speaking between long, narrow teeth.

"You aren't going to, either," responded Mowry. Gurd bristled. "Why not?"

"Because you don't really care what my name is," Mowry told him. "If the thing atop your neck has a steady tick it's a matter of a total indifference to you *who* gives you a load of guilders."

"Yar, that's right," chipped in Skriva, his eyes glittering. "Money is money regardless of who hands it over. Shut up, Gurd."

"I only wanted to know," mumbled Gurd, subdued.

Arhava took over with the mouth-watering eagerness of one on the make. "I've given these boys your proposition. They're interested." He turned to them. "Aren't you?"

"Yar," said Skriva. He concentrated attention upon Mowry. "You want someone in his box. That right?"

"I want someone stone cold and I don't give a hoot whether or not he is boxed."

"We can tend to that." He fixed his toughest expression which told all and sundry that he'd kilt him a b'ar when he wuz only three. Then he said, "For fifty thousand."

Emitting a deep sigh, Mowry stood up, ambled toward the door. "Live long!"

"Come back!" Skriva shot to his feet, waved urgently. Arhava had the appalled look of someone suddenly cut out of a rich uncle's will. Gurd sucked his teeth with visible agitation.

Pausing at the door, Mowry held it open. "You stupes ready to talk sense?"

"Sure," pleaded Skriva. "I was only joking. Come back and sit down."

"Bring us four *ziths*," said Mowry to the attendant who was blearing behind the counter. He returned to the table, resumed his seat. "No more bad jokes. I don't appreciate them."

"Forget it," advised Skriva. "We've got a couple of questions for you."

"You may voice them," agreed Mowry. He accepted a mug of *zith* from the attendant, paid him, took a swig, eyed Skriva with becoming lordliness.

Skriva said, "Who d'you want us to slap down? And how do we know we're going to get our money?"

"For the first, the victim is Colonel Hage-Ridarte." He scribbled rapidly on a piece of paper, gave it to the other. "That is his address."

"I see." Skriva stared at the slip, went on, "And the money?"

"I'll pay you five thousand right now as an act of faith, fifteen thousand when the job is done." He stopped, gave the three of them the cold, forbidding eye. "I don't take your word for the doing. It's got to be squawked on the news-channels before I part with another one-tenth guilder."

"You trust us a lot, don't you?" said Skriva, scowling.

"No more than I have to."

"Same applies on this side."

"Look," Mowry urged, "we've *got* to play ball with each other whether we like it or not. Here's how. I've got a list. If you do the first job for me and I renege you're not going to do the others, are you?"

"No."

"What's more, you'll take it out of my hide first chance you get, won't you?"

"You can bet on that," assured Gurd.

"Similarly, if you pull a fast one on me you will cut off the flow of money, big money. You'll deprive yourselves of far more than the Kaitempi would pay for betraying me and a dozen others. I'm outbidding the Kaitempi by a large margin, see? Don't you fellows *want* to get rich?"

"I hate the idea of it," said Skriva. "Let's see that five thousand."

Mowry slipped him the package under the table. The three checked it in their laps. After a while Skriva looked up, his face slightly flushed.

"We're sold. Who is this Hage-Ridarte *soko*?"

"Just a brasshat who has lived too long."

That was a half-truth. Hage-Ridarte was listed in the city directory as officer commanding an outfit of space marines. But his name had been appended to an authoritative letter in Pigface's files. The tone of the letter had been that of a boss to an underling. Hage-Ridarte was an officially disguised occupant of the Kaitempi top bracket and therefore would make a most satisfactory corpse.

"Why d'you want him out of the way?" demanded Gurd, still sullen and suspicious.

Before Mowry could reply, Skriva said fiercely, "I told you before to shut up. I'll handle this. Can't you button your trap even for twenty thousand?"

"We haven't got it yet," persisted Gurd.

"You will get it," Mowry soothed. "And more, lots more. The day the news of Hage-Ridarte's death is given in the papers or on the radio I'll be here at the same time in the evening complete with fifteen thousand guilders and the next name. If by any chance I'm held up and can't make it, I'll be here at the same time the following evening."

"You'd better be!" informed Gurd, glowering.

Arhava had a question of his own. "What's my percentage for introducing the boys?"

"I don't know." Mowry turned to Skriva. "How much do you intend to give him?"

"Who? — me?" Skriva was taken aback.

"Yes, you. The gentleman thirsts for a rakeoff. You don't expect me to pay him, do you? Think I'm made of money?"

"Somebody had better fork out," declared Arhava, making the mistake of his life. "Or—"

Skriva shoved scowling features up against him and breathed over his face. "Or what?"

"Nothing," said Arhava, nervously leaning away. "Nothing at all."

"That's better," Skriva approved in grating tones. "That's a whole lot better. Just sit around and be a good boy, Butin, and we'll feed you crumbs from our table. Get fidgety and you'll soon find yourself in no condition to eat them. In fact you won't be able to swallow. It's tough when a fellow can't swallow. You wouldn't like that, would you, Butin?"

Saying nothing, Arhava sat still. His complexion was slightly mottled.

Repeating the face-shoving act, Skriva shouted, "I just asked you a civil question. I said you wouldn't like it, would you?"

"No," admitted Arhava, tilting back his chair to get away from the face.

Mowry decided the time had come to leave this happy scene. He said to Skriva, "Don't get tough ideas about *me* —if you want to stay in business."

With that, he went. He did not worry about the possibility of any of them following him. They wouldn't dare, being too afraid of offending the best customer they'd had since crime came to Pertane.

It was a good thing that he'd refused a cut to Arhava and left them to fight it out between themselves. The reaction had been revealing. A mob, even a small mob, is only as strong as its weakest link. Anyone capable of ratting to the Kaitempi could blow the whole bunch sky-high. It was important to discover a prospective squealer before it was too late and, if one existed, to be warned accordingly. In this respect Butin Arhava hadn't shown up so good.

"Somebody had better fork out or—"

The testing-time would come soon after he'd paid over fifteen thousand guilders for a job well done and those concerned divided the loot. Well, if the situation seemed to justify it, that's when he'd give the Gurd-Skriva brothers the next name—that of Butin Arhava. He felt no compunctions about this decision, no qualms of conscience. So far as he was involved, all Sirians were enemies, any one of them being no more or less a foe than any other.

He continued homeward, deep in thought and not looking where he was going while he settled this matter in his mind. He had just reached the final conclusion that Arhava's throat would have to be slit sooner or later when a heavy hand clamped on his shoulder and a voice rasped in his ear.

"Lift them up, Dreamy, and let's see what you've got in your pockets. Come on, you're not deaf, lift 'em I said!"

With a sense of sudden shock he raised his arms, felt fingers start prying into his clothes. Nearby forty or fifty equally surprised walkers were holding the same pose. A line of phlegmatic police stood across the street a hundred yards away. In the opposite direction a second line looked on with the same indifference. Yet again the random trap had sprung.

VI

A flood of superfast thoughts raced through his startled brain as he stood with arms extended above his head. Thank heavens he'd got rid of that money ; they'd have been unpleasantly inquisitive about so large a sum being carried in one lump. If they were looking for Shir Agavan they were dead

out of luck. In any case, he wasn't going to let them take him in, even for questioning. Not if he could help it. Most people who survived a Kaitempi interrogation did so as physical wrecks. It would be better at the last resort to break this searcher's neck and run like blazes.

"If the cops shoot me down it'll be a quicker and easier end. When Terra gets no more signals from me, Wolf will choose my successor and feed the poor sap the same—"

"Hi?" The Kaitempi agent broke his train of thought by holding Mowry's wallet open and gazing with surprise at Pigface's card reposing therein. The tough expression faded from his heavy features as if wiped away with a cloth. "One of us? An officer?" He took a closer look at the other. "But I do not recognise you."

"You wouldn't," informed Mowry, showing just the right degree of arrogance. "I arrived only today from H.Q. on Diracta." He pulled a face. "And this is the reception I get."

"It cannot be helped," apologised the agent. "The revolutionary movement must be suppressed at all costs and it's as big a menace here as on any other planet. You know how things are on Diracta—well, they're not one whit better on Jaimec."

"It won't last," Mowry responded, speaking with authority. "On Diracta we expect to make a complete clean-up in the near future. After that you won't have much trouble here. The movement will collapse from sheer lack of leadership. When you cut off the head, the body dies."

"I hope you're right. The Spakum war is enough without an army of traitors sniping in the rear." He closed the wallet, gave it back. His other hand held the Krag Wulkin documents at which he had not yet looked. Waiting for Mowry to pocket the wallet, he returned the remaining material and said jocularly, "Here are your false papers."

"Nothing is false that has been officially issued," said Mowry, frowning disapproval.

"No, I suppose not. I hadn't thought of it in that light." The agent backed off, anxious to end the talk. "Sorry to have troubled you. I suggest you call at local headquarters as soon as possible and have them circulate your photo so that you'll be known to us. Otherwise you may be stopped and searched repeatedly."

"I'll do that," promised Mowry, unable to imagine anything he'd less intention of doing.

"You'll excuse me—I must tend to these others." So saying, the agent attracted the attention of the nearest police, pointed to Mowry. Then he made for a sour-faced civilian who was standing nearby waiting to be searched. Reluctantly the civilian lifted his arms and permitted the agent to dip into his pockets.

Mowry walked toward the line of police which opened and let him pass through. At such moments, he thought, one is supposed to be cool, calm and collected, radiating supreme self-confidence in all directions. He wasn't like that at all. On the contrary he was weak in the knees and had a vague feeling of sickness in the stomach. He had to force himself to continue steadily onward with what appeared to be absolute nonchalance.

He made six hundred yards, reached the next corner before some warning instinct made him look back. Police were still blocking the road but beyond them four of the Kaitempi had clustered together in conversation. One of them, the agent who had released him, pointed his way. The other three shot a glance in the same direction, resumed talking with vehement gestures. There followed what appeared to be ten seconds of heated argument before they reached a decision.

"Stop him!"

The nearest police turned round startled, their eyes seeking a fleeing quarry. Mowry's legs became filled with an almost irresistible urge to get going twenty to the dozen. He forced them by an effort of will to maintain their steady pace.

There were a lot of people in the street, some merely hanging around and gaping at the trap, others walking the same way as himself. Most of the latter wanted no part of what was going on higher up the road and considered it expedient to amble someplace else. Mowry kept with them, showing no great hurry. That baffled the police; for a few valuable seconds they stayed put, hands on weapons, while they sought in vain for visible evidence of guilt.

It provided sufficient delay to enable him to get round the corner and out of sight. At that point the shouting Kaitempi realised that the police were stalled. They lost patience, broke into a furious sprint. Half a dozen clumping cops

immediately raced with them, still without knowing who was being chased or why.

Overtaking a youth who was sauntering dozily along, Mowry gave him an urgent shove in the back. "Quick!—they're after you! The Kaitempi!"

"I've done nothing. I—"

"How long will it take to convince them of that? *Run*, you fool!"

The other used up a few moments gaping sceptically before he heard the oncoming rush of heavy feet, the raucous shouts of pursuers nearing the corner. He lost colour, tore down the road at velocity that paid tribute to his innocence. He'd have overtaken and passed a bolting jackrabbit with no trouble at all.

Unhurriedly entering an adjacent shop, Mowry threw a swift look around to see what it sold, said casually, "I wish ten of those small cakes with the toasted-nut tops and—"

The arm of the law thundered round the corner fifty strong. The hunt roared past the shop, its leaders baying with triumph as they spotted the distant figure of he who had done nothing. Mowry stared at the window in dumb amazement. The corpulent Sirian behind the counter eyed the window with sad resignation.

"Whatever is happening?" asked Mowry.

"They're after someone," diagnosed Fatty. He sighed, rubbed his protruding belly. "Always they are after someone. What a world! What a war!"

"Makes you tired, *hi*?"

"Aie, yar! Every day, every minute there is something. Last night, according to the news-channels, they destroyed the main Spakum space-fleet for the tenth time. Today they are pursuing the remnants of what is said to have been destroyed. For months we have been making triumphant retreats before a demoralised enemy who is advancing in utter disorder." He made a sweeping motion with a podgy hand. It indicated disgust. "I am fat, as you can see. That makes me an idiot. You wish—?"

"Ten of those small cakes with the toasted-nut—" "

A belated cop pounded past the window. He was two hundred yards behind the pack and breathless but plain stubborn. As he thudded along he let go a couple of shots into the air just for the heck of it.

" See what I mean ?" said Fatso. " You wish— ?"

" Ten of those small cakes with the toasted-nut tops. I also wish to order a special celebration-cake to be supplied five days hence. Perhaps you can show me some examples or help me with suggestions, *hi* ?"

He managed to waste twenty minutes within the shop and the time was well worth the few guilders it cost. If he'd wanted he could have stayed longer. Twenty minutes, he estimated, would be just enough to permit local excitement to die down while the pursuit continued elsewhere. But the longer he extended the time the greater the risk of falling into the hands of frustrated huntsmen who'd return to comb out the area.

Within his room he flopped fully dressed on the bed and summarised the day's doings. He had escaped a trap but only by the skin of his teeth. It proved that such traps were escapable—but not for ever. What had caused them to take after him he did not know, could only guess at. Probably the intervention of an officious character who had noticed him walking through the cordon.

" Who's that you've let go ?"

" An officer, Captain."

" What d'you mean, an officer ?"

" A Kaitempi officer, Captain. I do not know him but he had a correct card. He said that he had just been drafted from Diracta."

" A card, *hi* ? Did you notice its serial number ?"

" I had no particular reason to try to remember it, Captain. It was obviously genuine. But let me see . . . yar . . . it was SXB80313. Or perhaps SXB80131. I am not sure which."

" Major Sallana's card was SXB80131. You half-witted *soko*, you may have had his killer in your hands !"

" STOP HIM ! "

Now, by virtue of the fact that he had evaded capture, plus the fact that he had failed to turn up at headquarters to gain photographic identification, they'd assume that Sallana's slayer really had been in the net. Previously they had not known where to start looking other than within the ranks of the mysteriously elusive D.A.G. But they had gained three welcome advantages. They knew the killer was in Pertane. They had a description of him. One Kaitempi agent could be relied upon to recognise him on sight.

Henceforth, in Pertane at least, the going would be tougher with the pressure-cell and the strangling-post looming ever nearer. He groaned to himself as he thought of it. He had never asked much of life and would have been quite satisfied merely to sprawl on a golden throne and be fawned upon by sycophants. To be dropped down a Sirian-dug hole, dead cold and dyed purple, was to take things too much to the opposite extreme.

But to counterbalance this dismal prospect there was something heartening—a snatch of conversation.

“The revolutionary movement . . . as big a menace here as on any other planet. You know how things are on Diracta —well, they’re not one whit better on Jaimec.”

That told him plenty; it revealed that *Dirac Angestun Gesept* was not merely a Wolf-concocted nightmare designed to disturb the sleep of Jaimecan politicos. It was empire-wide, covering more than a hundred planets, its strength or rather its pseudo-strength greatest on the home-world of Diracta, the nerve-centre and beating heart of the entire Sirian species. It was more than a hundred times greater than had appeared to him in his purely localised endeavours.

To the Sirian powers-that-be it was a major peril hacking down the back door while the Terrans were busily bashing in the front one.

Cheers! Blow the bugle, beat the drum! Other wasps were at work, separated in space but united in purpose. And in this sense he was not alone.

Somebody in the Sirian High Command—a psychologist or a cynic—worked it out that the more one chivvied the civilian population the lower sank its morale. The constant stream of new emergency orders, regulations, restrictions, the constant police and Kaitempi activity, stoppings, searchings, questionings all tended to create that dull, pessimistic resignation demonstrated by Fatty in the cake shop. An antidote was needed. The citizens had bread. They lacked the circus.

Accordingly a show was put on. The radio, video and newspapers combined to strike up the band and draw the crowds.

GREAT VICTORY IN CENTAURI SECTOR

Yesterday powerful Terran space-forces became trapped in the region of A. Centauri and a fierce battle raged as they tried

to break out. The Sirian fourth, sixth and seventh fleets, manoeuvring in masterly manner, frustrated all their efforts to get free and escape. Many casualties were inflicted upon the enemy. Precise figures are not yet available but the latest report from the area of conflict states that we have lost four battleships and one light cruiser the crews of which have all been rescued. More than seventy Terran warships have been destroyed.

And so the story went on for minutes of time and columns of print, complete with pictures of the battleship *Hashim*, the heavy cruiser *Jaimec*, some members of their crews when home on leave a year ago, Rear-Admiral Pent-Gurhana saluting a prosperous navy contractor, the Statue of Jaime casting its shadow across a carefully positioned Terran banner and—loveliest touch of all—a five centuries old photograph of a scowling, bedraggled bunch of Mongolian bandits authoritatively described as ‘Terran space-troops whom we snatched from death as their stricken ship plunged sunward.’

Mowry absorbed all this guff, found himself unable to decide whether casualty figures had been reversed or whether a fight had taken place at all. Dismissing it with a sniff of disdain, he sought through the rest of the paper without really expecting to find anything worthy of note. But there was a small item on the back page.

Colonel Huge-Ridarta, officer commanding 77 Company S.M. was found dead in his car at midnight last night. He had been shot through the head. A gunling was nearby. Suicide is not suspected and police investigations are continuing.

So the Gurd-Skriva combination worked mighty fast; they'd done the job within a few hours of taking it on. Yar, money was a wonderful thing especially when Terran engravers and presses could produce it in unlimited supply with little trouble and at small cost. Money was a formidable weapon in its own right, a paper totem that could cause losses in the enemy's ranks millions of miles behind the fighting front.

This unexpected promptitude set him a new problem. To get more such action he'd have to pay up and thereby risk falling into another trap while on the way to the rendezvous. Right now he dare not show Pigface's card in Pertane though it might prove useful elsewhere. His documents for Krag Wulkin, special correspondent, might possibly get him out

of a jam provided the trappers didn't search further, find him loaded with guilders and ask difficult questions about so suspiciously large a wad.

Within an hour the High Command solved the problem for him. They put on the circus in the form of a victory parade. To the beat and blare of a dozen bands a great column of troops, tanks, guns, mobile radar units, flame-throwers, rocket-batteries and gas-projectors, tracked recovery vehicles and other paraphenalia crawled into Pertane from the west, tramped and rumbled toward the east.

Helicopters and jetplanes swooped at low level, a small number of nimble space-scouts thundered at great altitude. Citizens assembled in their thousands, lined the streets and cheered more from habit than from genuine enthusiasm.

This, Mowry realised, was his heaven-sent opportunity. Snap-searches might continue down the side streets and in the city's tough quarters but they'd be well-nigh impossible on the east-west artery with all that military traffic passing through. If he could reach the crosstown route he could head clean out of Pertane with safety. After that he could dance around elsewhere until the time was ripe to return attention to the capital.

He paid his miserly landlord two months' rent in advance without creating more than joyful surprise. Then he checked his false identity papers. Hurriedly he packed his bag with guilders, a fresh supply of stickers, a couple of small packages and got out.

No sudden traps opened out between there and the city centre; even if they ran around like mad the police could not be everywhere at once. On the east-west road he carried his bag unnoticed, being of less significance than a grain of sand amid the great mob of spectators that had assembled. By the same token progress was difficult and slow. The route was crowded almost to the walls. Time and again he had to shove his way past the backs of an audience which had its full attention on the road.

Many of the shops he passed had boarded-up windows as evidence that they had been favoured by his propaganda. Others displayed new glass and on twenty-seven of these he slapped more stickers while a horde of potential witnesses stood on tiptoe, stared over their fellows at the military procession. One sticker he plastered on a policeman's back, the

broad, inviting stretch of black cloth proving irresistible. The cop gaped forward along with the crowd, ignored pressure behind him and got decorated from shoulder to shoulder.

Who will pay for this war?

Those who started it will pay.

With their money—and their lives.

Dirac Angestun Gesept.

After three hours of edging, pushing and some surreptitious sticker-planting he arrived at the city's outskirts. Here the tail-end of the parade was still trundling noisily along. Standing spectators had thinned out but a straggling group of goon-fanciers were walking in pace with the troops.

Around stood houses of a suburb too snooty to deserve the attentions of the police and Kaitempi. Ahead stretched the open country and the road to Radine. He carried straight on, following the rearmost troops until the procession turned leftward and headed for the great military stronghold of Khamasta. Here the accompanying civilians halted and watched them go before mooching back to Pertane. Bag in hand, Mowry continued along the Radine road. Eventually he reached a permasteel plaque standing by the roadside. It said : *Radine—33den.* He looked in both directions, found nobody in sight. Opening his bag he took out a package and buried it at the base of the plaque.

That evening he checked in at Radine's best and most expensive hotel. If the Jaimecan authorities succeeded in following his tortuous trail around Pertane they'd notice his penchant for hiding out in overcrowded, slummy areas and tend to seek him in the planet's rat-holes. With luck a high-priced hotel would be the last place in which they'd look for him if the search spread wider afield. All the same he'd have to be wary of the routine check of hotel registers which the Kaitempi made every now and again regardless.

Dumping his bag he left the room at once. Time was pressing. He hurried along the road, unworried about snap-searches which for unknown reasons were confined to the capital, and had not yet been applied to other cities. Reaching a bank of public phone booths a mile from the hotel, he made a call to Pertane. A sour voice answered while the booth's tiny screen remained blank.

"Cafe Susun."

"Skriva there?"

"Who wants him?"

"Me."

"That tells me a lot. Why've you got the scanner switched off?"

"Listen who's talking," growled Mowry, eyeing his faceless screen. "You fetch Skriva and let him cope with his own troubles. You aren't his paid secretary, are you?"

There came a loud snort, a long silence, then Skriva's voice sounded. "Who's this?"

"Give me your pic and I'll give you mine."

"I know who it is—I recognise the tones," said Skriva. He switched his scanner, his unpleasing features gradually bloomed into the screen. Mowry switched likewise. Skriva frowned at him with dark suspicion. "Thought you were going to meet us here. Why are you phoning?"

"I've been called out of town and can't get back for a piece."

"Is that so?"

"Yar, that *is* so!" snapped Mowry. "And don't get hard with me because I won't stand for it, see?" He paused to let it sink in, went on, "You got a dyno?"

"Maybe," said Skriva evasively.

"Can you leave right away?"

"Maybe."

"If you want the goods you can cut out the maybes and move fast." Mowry held his phone before the scanner, tapped it suggestively, pointed to his ears to indicate that one never knew who was listening-in these days and might perhaps have to be beaten to it. "Get onto the Radine road and look under marker 33-den. *Don't* take Arhava with you."

"Hey, when will you—"

He slammed down the phone, cutting off the other's irate query. Next he sought the local Kaitempi H.Q., the address of which had been revealed in Pigface's secret correspondence.

In short time he passed the building, keeping as far from it as possible on the other side of the street. He did not give close attention to the building itself, his gaze being concentrated above it. For the next hour he wandered around Radine with seeming aimlessness, still studying the areas above the rooftops.

Eventually satisfied he looked for the city hall, found it, repeated the process. More erratic mooching from street to street while apparently admiring the stars. Finally he returned to the hotel.

Next morning he took a small package from his bag, pocketed it, made straight for a large business block noted the previous evening. With a convincing air of self-assurance he entered the building, took the automatic elevator to the top floor. Here he found a dusty, seldom-used passage with a drop-ladder at one end.

There was nobody around. Even if somebody had come along they might not have been unduly curious. Anyway, he had all his answers ready. Pulling down the ladder he climbed it swiftly, got through the trap-door at top and onto the roof. From his package he took a tiny inductance-coil fitted with clips and attached to a long, hair-thin cable with plug-in terminals at its other end.

Climbing a short trellis mast, he counted the wires on the telephone junction at its top, checked the direction in which the seventh one ran. To this he carefully fastened the coil. Then he descended, led the cable to the roof's edge, gently paid it out until it was dangling full length into the road below. Its plug-in terminals were now swinging in the air at a point about four feet above the pavement.

Even as he looked down from the roof half a dozen pedestrians passed the hanging cable and showed no interest in it. A couple of them glanced idly upward, saw somebody above and wandered onward without remark. Nobody questions the activities of a man who clammers over roofs or disappears down grids in the street providing he does it openly and with quiet confidence.

He got down and out without mishap. Within an hour he had performed the same feat atop another building and again got away unchallenged. His next move was to purchase another typewriter, paper, envelopes, a small hand-printing set. It was still only mid-day when he returned to his room and set to work as fast as he could go. The task continued without abate all that day and most of the next day. When he had finished the hand-printer and typewriter slid silently into the lake.

The result was the placing in his case of two hundred and twenty letters for future use and the immediate mailing of another two hundred and twenty to those who had received

his first warning. The recipients, he hoped, would be far from charmed by the arrival of a second letter with a third yet to come.

Hage-Ridarte was the second.

The list is long.

Dirac Angestun Gesept.

After lunch he consulted yesterday's and today's newspapers at which he'd been too busy to look before now. The item he sought was not there : not a word about the late lamented Butin Arhava. Momentarily he wondered whether anything had gone wrong, whether the Gurd-Skriva brothers had jibbed at his choice of a victim or whether they were merely being slow on the uptake.

The general news was much as usual. Victory still loomed nearer and nearer. Casualties in the real or mythical A. Centauri battle were now officially confirmed at eleven Sirian warships, ninety-four Terran ones. That data was given a front-page spread and a double column of editorial hallelujahs.

On an inner page, in an inconspicuous corner, it was announced that Sirian forces had abandoned the twin worlds of Fedira and Fedora, the forty-seventh and forty-eighth planets of the empire, 'for strategic reasons.' It was also hinted that Gooma, the sixty-second planet, might soon be given up also, 'in order to enable us to strengthen our positions elsewhere'.

So they were admitting something that could no longer be denied, namely, that two planets had gone down the drain with a third soon to follow. Although they had not said so it was pretty certain that what they had given up the Terrans had grabbed. Mowry grinned to himself as words uttered in the cake-shop came back to his mind.

"For months we have been making triumphant retreats before a demoralised enemy advancing in utter disorder."

He went along the road, call the Cafe Susun. "Did you collect?"

"We did," said Skriva, "and the next consignment is overdue."

"I've read nothing about it."

"You wouldn't—nothing having been written."

"Well, I told you before that I pay when I've had proof. Until I get it, nothing doing. No proof, no dough."

"We've got the evidence. It's up to you to take a look at it."

Mowry thought swiftly. "Stili got the dyno handy?"
"Yar."

"Maybe you'd better meet me. Make it the ten-time hour, same road, Marker den-8."

The car arrived dead on time. Mowry stood by the marker, a dim figure in the darkness of night with only fields and trees around. The car rolled up, headlights glaring. Skriva got out, took a small sack from the trunk, opened its top and exhibited its contents in the blaze of the lights.

"God in heaven!" said Mowry, his stomach jumping.

"It's a ragged job," admitted Skriva. "He had a tough neck, the knife was blunt and Gurd was in a hurry. What's the matter? You squeamish or something?"

"I'd have liked it less messy. A bullet would have been neater."

"You're not paying for neatness. If you want it done sweet and clean and tidy say so and jack up the offer."

"I'm not complaining."

"You bet you're not. Butin's the boy who's entitled to gripe." He kicked the sack. "Aren't you, Butin?"

"Get rid of it," ordered Mowry. "It's spoiling my appetite."

Letting go a grim chuckle, Skriva tossed the sack into an adhacent ditch, put out a hand. "The money."

Giving him the package, Mowry waited in silence while the other checked the contents inside the car with the help of Gurd. They thumbed the neat stack of notes lovingly, with much licking of lips and mutual congratulations.

When they had finished Skriva chuckled again. "That was twenty thousand for nothing. We couldn't have got it easier."

"What d'you mean, for nothing?" Mowry asked.

"We'd have done it anyway, whether you'd named him or not. Butin was making ready to talk. You could see it in the slimy *soko's* eyes. What d'you say, Gurd?"

Gurd contented himself with a neck-wringing gesture.

Leaning on the car's door, Mowry said, "I've got another and different kind of job for you. Feel like taking it on?" Without waiting for response he exhibited another package. "In here are ten small gadgets. They're fitted with clips and have thin lengths of cable attached. I want these contraptions fastening to telephone lines in or near the centre of Pertane. They've got to be set in place so that they aren't visible from the street but the cables can be seen hanging down."

"But," objected Skriva, "if the cables can be seen it's only a matter of time before somebody traces them up to the gadgets. Where's the sense of hiding what is sure to be found?"

"Where's the sense of me giving you good money to do it?" Mowry riposted.

"How much?"

"Five thousand guilders apiece. That's fifty thousand for the lot."

Skriva pursed his lips in a silent whistle.

"I can check whether you've actually fixed them," Mowry went on, "so don't try kidding me, see? We're in business together. Better not kiss the partnership goodbye."

Grabbing the package, Skriva rasped, "I think you're crazy—but who am I to complain?" •

Headlights brightened, the car set up a shrill whine and rocked away. Mowry watched until it had gone from sight, then he tramped back into Radine, made for the public booths and phoned Kaitempi H.Q. He was careful to keep his scanner switched off and tried to give his voice the singsong tones of a native Jaimecan.

"Somebody's been decapitated."

"Hi?"

"There's a head in a sack near Marker 8-den on the road to Pertane."

"Who's that talking? Who—"

He cut off, leaving the voice to gargle futilely. They'd follow up the tip, no doubt of that. It was essential to his plans that authority should find the head and identify it. In this respect he was persuading the Kaitempi to help play his game and he got quite a bit of malicious satisfaction out of it. He went to his hotel, came out, mailed two hundred and twenty letters.

Butin Arhava was the third.

The list is long.

Dirac Angestun Gesept.

That done, he enjoyed an hour's stroll before bedtime, pacing the streets and as usual pondering the day's work. It would not be long, he thought, before someone became curious about hanging cables and an electrician or telephone engineer was called in to investigate. The inevitable result

would be a hurried examination of Jaimec's entire telephone system and the discovery of several more taps.

Authority would then find itself confronted with three unanswerable questions, all of them ominous : who's been listening, for how long, and how much have they learned ?

A little before the twelve-time hour he turned into the road where his high-class hideout was located, came to an abrupt halt. Outside the hotel stood a line of official cars, a fire-pump and an ambulance. A number of uniformed cops were meandering around the vehicles. Tough-looking characters in plain clothes were all over the scene.

Two of the latter appeared out of nowhere and confronted him hard-eyed.

"What's happened ?" asked Mowry, behaving like a Sunday school superintendent.

"Never mind what's happened. Show us your documents. Come on, what are you waiting for ?"

VII

Carefully Mowry slid a hand into his inner pocket. They were tense, fully alert, watching his movement and ready to react if what he produced was not paper. He drew out his identity-card, handed it over knowing that it bore the proper cachet of Diracta and the overstamp of Jaimec. Then he gave them his personal card and movement permit. Inwardly he hoped with all his heart that they would be easily convinced.

They weren't. They displayed the dogged determination of those under strict orders to make someone pay dearly for something or other. Evidently whatever had occurred was serious enough to have stirred up a hornet's nest.

"A special correspondent," said the larger of the two mouthing the words with contempt. He looked up from the identity-card. "What is special about a correspondent ?"

"I've been sent here to cover war news specifically from the Jaimec angle. I do not bother with civilian matters. Those are for ordinary reporters."

"I see." He gave Mowry a long, sharp, penetrating look. His eyes had the beady coldness of a sidewinder's. "From where do you get your news about the war ?"

"From official handouts—mostly from the Office of War Information in Pertane."

"You have no other sources?"

"Yes, of course. I keep my ears open for gossip and rumours."

"And what do you do with *that* stuff?"

"I try to draw reasonable conclusions from it, write it up and submit the script to the Board of Censorship. If they approve it, I'm lucky. If they kill it, well"—he spread his hands with an air of helplessness—"I just put up with it."

"Therefore," said the Kaitempi agent, cunningly, "you should be well-known to officials of the Office of War Information and the Board of Censorship, *hi*? They will vouch for you if requested to do so, *hi*?"

"Without a doubt," assured Mowry, praying for a break.

"Good. You will name the ones you know best and we will check with them immediately."

"What, at this time of night?"

"Why should you care what time it is? It is your neck—"

That did it. Mowry punched him on the snout, swiftly, fiercely, putting every ounce of weight behind the blow. The recipient went down good and hard and stayed down. The other fellow was no slouch. Wasting no time in dumbfoundment, he took a bow-legged but quick step forward, shoved a gun into Mowry's face.

"Raise them high, you *soko*, or I'll—"

With the speed and recklessness of one who is desperate, Mowry ducked under the gun, seized the other's extended arm, got it over his shoulder and yanked. The agent let out a thin, piercing yelp and flew through the air with the greatest of ease. His gun dropped to ground. Mowry scooped it up and started the sprint of his life.

Round the corner, along the street and into an alley. This took him by the back of his hotel and as he tore past he noted out the corner of one eye a window missing and a great ragged hole in the wall. Hurdling a pile of smashed bricks and splintered timber, he reached the alley's end, shot across the next street.

So that was it. Somehow they had smelled him out, possibly as a result of one of those infernal registration checks. They had searched his room and tried to open his bag with a metal master-key. Then had come the big bang. If the room had been crowded at the time the explosion would have enough

force to kill at least a dozen of them. It would be a blow sufficient to get their blood up for a month. If ever they laid hands on him . . .

He kept going as fast as he could make it, the gun in his grip, his ears straining for sounds of pursuit. Pretty soon the radio alarm would be going over the air, they'd close every exit from the town, blocking trains, buses, roads, everything. At all costs he must beat them to it by getting outside the cordon before it was formed—if it could be done.

Darkness was his only help, not counting his legs. He pounded through alley after alley, bolted across six streets, halted in deep shadow as he was about to jump the seventh. A car bulging with uniformed cops and plainclothes Kaitempi slid past, its windows full of faces trying to look everywhere at once.

For a short time he stood silent and unmoving in the shadow, heart thumping, chest heaving, a trickle of sweat creeping down his spine. Immediately the hunters had gone he was across the street, into the opposite alley and racing onward. Five times he paused in concealment, mentally cursing the delay, while prowls-cars snooped around.

The sixth stop was different. He lurked in the alley's corner as headlights came up the street. A mud-spattered dyno rolled into view, stopped within twenty yards of him. The next moment a solitary civilian got out, went to a nearby door and shoved a key into its lock. Mowry came out the alley like a quick-moving cat.

The door opened just as the car shot away with a shrill scream from its dynamo. Struck with surprise, the civilian wasted half a minute gaping after his vanishing property. Then he let go an oath, ran indoors and snatched up the telephone.

Luck has got to be mixed decided Mowry as he gripped the wheel. There must be good to compensate for bad, a turn for the better to balance a change for the worse. Swinging the car into a broad, well-lit avenue, he slowed it to more sedate pace.

Two overloaded patrol-cars passed him going in the opposite direction, another overtook him and rocked ahead. They weren't interested in a dirty dyno trundling home late ; they were hunting a breathless fugitive assumed to be still galloping around on two feet. He estimated that it would be no more

than another ten minutes before the radio made them change their minds. It might have been better if he had shot the car's owner and thus gained himself extra valuable minutes. But he hadn't. Too late to regret the omission now.

After seven minutes he passed the last houses of Radine and headed into open country along an unfamiliar road. At once he hit up top speed to make maximum distance while the going was good. The car howled along, headlight beams dipping and swaying the *den*-needle creeping close to its limit.

Twenty more minutes and he shot like a rocket through a long, straggling village buried deep in slumber. One mile farther on he rounded a bend, got a brief glimpse of a white pole across the road, the glitter of buttons and shine of metal helmets grouped at each end. He set his teeth, aimed straight at the middle without reducing speed by a fraction. The car hit the pole, flung the broken halves aside and raced on. Something struck five sharp blows on the back, two neat holes appeared in the rear window, a third where the windshield joined the roof.

That showed the radio-alarm had been given, that forces had been alerted over a wide area. His crashing of the road-block was a giveaway. They now knew in which direction he was fleeing and could concentrate ahead of him. Just where he was going was more than he knew himself. He'd never been on this road before, the locale was strange and he had no map to consult. Worse, he had little money and no documents of any kind. The loss of his case had deprived him of everything save what was upon his person, plus a hot car and a stolen gun.

Soon he reached a crossroad with a marker dimly visible on each corner. Braking violently, he jumped out, peered at the nearest one in the poor light of night. It said *Radine*—27 *den*. The opposite marker said *Valapan*—92 *den*. So that's where he'd been heading—to Valapan. Doubtless the police there were out in full strength, a reception committee too well prepared to permit another crash-through.

The marker on the left hand road read *Pertane*—51 *den*. He clambered back into the car, turned left. Still no signs of close pursuit were visible but that meant nothing. Somebody with radio contact and a big map would be moving cars around to head him off as reports of his position filtered in.

At the marker indicating *9 den* he found another crossroad which he recognised. The sky-glow of Pertane now shone straight ahead while on his right was the road leading to the cave in the forest. He took an added risk of interception by driving the car a couple of miles nearer Pertane before abandoning it. When they found it there they'd probably jump to the conclusion that he'd sought refuge somewhere in the big city. It would all be to the good if they wasted time and manpower scouring Pertane from end to end.

Walking back, he reached the forest and continued along its fringe. It took him two hours to arrive at the tree and the tombstone. During that period he dived into the woods eleven times and watched carloads of hunters whine past. Looked like he'd got a veritable army to chasing around in the night and that was a worthwhile result if Wolf was to be believed.

Entering the forest, he made for the cave.

At the cave he found everything intact, undisturbed. He arrived thankfully, feeling that he was as safe here as he could be anywhere upon a hostile world. It was hardly likely that the hunt would succeed in tracking him through twenty miles of virgin forest even if it occurred to them to try.

Opening a couple of containers, he undressed, put on a wide belly-belt that made him corpulent with guilders. Then he donned ill-cut, heavy clothes typical of the Sirian farmer. A couple of cheek-pads widened and rounded his face. He plucked his eyebrows into slight raggedness, trimmed his hair to comply with the current agricultural fashion.

With purple dye he gave his face the peculiar mottling of a bad complexion. The final touch was to give himself an injection alongside his right nostril ; within two hours it would create that faint orange-coloured blemish occasionally seen on Sirian features.

He was now a middle-aged, coarse looking and somewhat overfed Sirian farmer and again he had documents to match. This time he was Rathan Gusulkin, a grain-grower. His papers showed that he had emigrated from Diracta five years ago. This served to explain his Mashambi accent which was the only thing he could not successfully conceal.

Before setting out in his new role he enjoyed another real Earth-meal and four hours of much-needed sleep. When two miles from the outskirts of Pertane he buried a package

holding fifty thousand guilders at the base of the southern-most left-hand buttress of the bridge across the river. Not far from that point, beneath deep water, a typewriter lay in the mud.

From the first booth in Pertane he called the Cafe Susun. The answer was prompt, the voice strange and curt, the distant scanner not operating.

"That the Cafe Susun?" Mowry asked.

"Yar."

"Skriva there?"

A brief silence followed by, "He's somewhere around. Upstairs or out back. Who wants him?"

"His mother."

"Don't give me that!" rasped the voice. "I can tell by your—"

"What's it got to do with you?" Mowry shouted. "Is Skriva there or not?"

The voice became suddenly subdued and sounded completely out of character as it cajoled, "Hold on a piece. I'll go find him for you."

"You needn't bother. Is Gurd there?"

"No, he hasn't been in today. Hold on, I tell you. I'll go find Skriva. He's upstairs or—"

"Listen!" ordered Mowry. He stuck his tongue between his lips and blew hard.

Then he dropped the phone, scrambled out the booth and beat it at the fastest pace that would not attract attention. Nearby a bored shopkeeper lounged in his doorway and idly watched him go. So also did four people gossiping outside the shop. That meant five witnesses, five descriptions of the fellow who had just used the booth.

"Hold on!" the strange voice had urged, striving but failing to conceal its normal note of arrogant authority. It wasn't the voice of the barkeep nor the careless, slangy tones of any frequenter of the Cafe Susun. It had the characteristic bossiness of a plainclothes cop of a Kaitempi agent. Yar, hold on, Stupid, while we trace the call and pick you up.

Three hundred yards along the road he jumped a bus, looked backward, could not discern whether the shopkeeper and the gossips had noticed what he had done. The bus lumbered forward. A police car rocked past it and braked by the booth. The bus turned a corner. Mowry wondered just how close a close shave can be.

The Cafe Susun was staked, no doubt of that. The cops' prompt arrival at the booth proved it. How they had got a line on the place and what had induced them to raid it was a matter of sheer speculation. Perhaps they'd been led to it by their investigations of the bloody head in a sack.

Or perhaps Gurd and Skriva had been nabbed while tramping heavy-footed all over a roof and waving cables across a street. He could readily imagine them fixing a mock telephone tap with a thumping noisiness fit to arouse the street. On a rooftop, blinded by easy money, they were liable to make themselves as conspicuous as a pair of drunken elephants.

If they had been caught they'd talk, tough as they were. The Kaitempi would *make* them talk. When fingernails are peeled off one by one with a pair of pliers, or when intermittent voltage from a battery is applied to the corners of the eyeballs, the most granite-hard character becomes positively garrulous.

Yes, they'd talk all right—but they couldn't say much. Only a weird tale about a crackpot with a Mashambi accent and an inexhaustible supply of guilders. Not a word about *Dirac Angestun Gesept*. Not a syllable about Terran intervention on Jaimec.

But there were others who could talk and to better effect.

“ You see anyone leave this booth just now ? ”

“ Yar. A fat yokel. Seemed in a hurry.”

“ Where'd he go ? ”

“ Down the road. Got on a 42 bus.”

“ What did he look like ? Describe him as accurately as you can. Come on, quick about it ! ”

“ Medium height, middle-aged, round-faced, got a bad complexion. Quite a belly on him, too. Had a red *falkin* alongside his nose. Wearing a fur jacket, brown cord pants, heavy brown boots. Looked the farmer type if you get what I mean.”

“ That's enough for us. Jalek, let's get after that bus. Where's the mike—I'd better broadcast this description. We'll nail him if we move fast.”

“ He's a cunning one. Didn't take him long to smell a trap when Lathin answered his call. He blew a dirty noise and ran. Bet you the bus-jump is a blind—he's got a car parked someplace.”

“ Save your breath and catch up with that bus. Two callers have escaped us already. We'll have a lot of explaining to do if we lose a third.”

“ Yar, I know.”

Mowry got off the bus before anyone had time to overtake it. He caught another one running on a transverse route. But he did not play tag all over the city as he had done in the past. Right now things were a lot livelier, the pursuers almost certainly had a description of him and it looked like he'd got most of Jaimec on the hop.

His third change put him on an express bus heading out of town. It dropped him a mile beyond the bridge where he had hidden fifty thousand guilders for the benefit of those who, for all he knew, might not have another fifty hours to live. Once again he was heading back to the forest and the cave.

To retrace his steps to the bridge and try to unearth the money would be stupid and dangerous. Police cars would be heading this way before long. The hunt for a pot-bellied farmer would not be confined to Pertane. Anytime now they'd start probing the rural areas immediately outside the city limits. So long as daylight remained the best thing for him to do was to get out of sight and stay out until such time as he could assume yet another new guise.

Moving fast he reached the edge of the forest without being stopped and questioned. For a short time he continued to use the road, seeking shelter among the trees whenever a car approached. But traffic increased and vehicles appeared with such frequency that eventually he gave up hope of further progress before dark. He was pretty tired too, his eyelids were heavy, his feet had taken a beating.

Penetrating farther into the woods he found a comfortable, well-concealed spot, lay on a thick bed of moss and let go a sigh of satisfaction. For a while he reposed in thoughtful silence while his eyes idly surveyed small patches of sky visible through leafy gaps.

Wolf had asserted that one man could pin down an army. He wondered how large a number he'd fastened and what real good it had done, if any. The most frustrating thing about this solitary wasp-life was that he had no way of obtaining a glimpse behind the scenes, of looking into the enemy's headquarters and measuring his multiple reactions, of seeing for oneself how widespread and crippled they became.

How many precious man-hours had his presence cost the foe? Thousands, tens of thousands, millions? To what forms of war service would those man-hours have been devoted if he had not compelled the enemy to waste them in

other directions? Ah, in the answer to that hypothetical question lay the true measure of a wasp's efficiency. Gradually he gave up these unprofitable musings and drifted into sleep.

Night was upon him when he awoke refreshed and energetic. He was also less soured with events. Things could have been worse, lots worse. For example, he could have gone straight to the Cafe Susun and walked into the arms of the trappers like a prize chump. The Kaitempi wouldn't know what they had grabbed but they'd hold him on general principles and in their own effective way they'd squeeze him of every item of information he possessed. Thinking it over, he doubted his ability to hold out once they really got to work on him. About the only captives from whom the Kaitempi had extracted nothing were those who had managed to commit suicide before questioning.

As he trudged steadily through the dark toward the cave he blessed his luck, wisdom or intuition in making a phone call. Then his thoughts became occupied with Gurd and Skriva. If they had been caught, as seemed likely, it meant he'd been deprived of valuable allies and once again was strictly on his own. He'd have to find some way of replacing them and that wouldn't be easy.

But if, like himself, they had escaped the trap, how was he going to find them? The crummy cafe had been their only recognised point of contact. He didn't know where they lived and it would be foolhardy to go around asking. They didn't know his address, either. They'd want to meet him fully as much as he wanted to meet them. Both sides could waste weeks or months fumbling at random for each other in a city as big as Pertane. Somehow the problem had to be solved.

Arriving at the cave as dawn was breaking, he took off his shoes, sat on the pebble beach and soaked his aching feet in the stream. Still his mind chewed unceasingly at the question of how to find Gurd and Skriva, if they were still free. Eventually the Kaitempi would remove the stakeout from the Cafe Susun either because they were satisfied that they had exploited it to the limit, or because their patience had run out, or because of pressure of other business. It would then be possible to visit the place and find someone able to give all the information he needed. But heaven alone knew when that would be; perhaps as far off as a year next Christmas.

In new and radically changed disguise he could mooch around the neighbourhood of the cafe until he found one of its regular customers and use him as a lead to Gurd and Skriva. It would be a risky tactic, a highly dangerous one. Chances were high that, for the time being, the Cafe Susun was the focal point of Kaitempi activity over the entire district with plainclothesmen keeping watch for suspicious looking characters lounging around anywhere within a mile of the place.

After an hour's meditation he decided that there was one possibility of regaining contact with the brothers. It depended not only on them being on the loose but also having their fair share of brains and imagination. It might work. They were crude and ruthless but not stupid and a steady flow of guilders must have greatly stimulated their natural cunning.

He could leave them a message where he'd left one before, hoping they'd have the sense to think of the same thing themselves and go take a look. On the Radine road under Marker 33 *den*. If they had successfully completed their last job they had fifty thousand guilders owing to them. That should be more than enough to sharpen their wits.

That night he slept like a child, soundly and solidly, right around the clock. He spent the next morning in total idleness, had a bathe in the stream during the heat of noon. Toward evening he cropped his hair in military fashion, leaving himself with no more than a stiff bristle covering his skull. An other injection obliterated the *falkin*. He retinted himself all over, making his colour a fresher and slightly deeper purple. Dental plates filled the gaps where his wisdom teeth had been and made his face appear wider, heavier, with squarer jaw-line.

A complete change of clothing followed. The shoes he donned were of military type, the civilian suit was of expensive cut, the neck-scarf was knotted in space-marine fashion. To this ensemble he added a platinum watch-fob and a platinum wrist-bangle holding an ornamental identity-disc.

He now looked like somebody several cuts above the Sirian average. The new set of documents he pocketed confirmed this impression. They vouched for the fact that he was Colonel Krasna Halopti of the Military Intelligence Service and as such entitled to claim the assistance of all Sirian authorities anytime, anywhere.

They could execute him out of hand for masquerading as a high-ranking officer. But what matter?—they'd strangle him anyway. A man cannot die twice.

Satisfied that he now looked the part one hundred percent and that he bore little resemblance to any of his previous appearances, he sat on a container and wrote a brief letter.

"I tried to get in touch with you at the cafe and found the place full of *K-sokos*. The money had been buried in readiness for you at the base of the southernmost left-hand buttress of the Asako Bridge. If you are free, and if you are able and willing to take on more work, leave a message here saying when and where I can find you."

Leaving it unsigned, he folded it, slipped it into a damp-proof cellophane envelope. Into his pocket he dropped a small, silent automatic. The gun was of Syrian manufacture and he had a fake permit to carry it.

This new role was more daring and dangerous than the others had been, but had its compensations. A check with official records would expose and damn him in double-quick time. Against this was the average Syrian's respect for authority and reluctance to challenge it. Providing he conducted himself with enough self-assurance and sufficient arrogance even the Kaitempi might be tempted to accept him at face value.

Two hours after the fall of darkness he switched Container-22 and set forth through the forest bearing a new case larger and heavier than before. Yet again he found himself regretting the distance of his hideout from the nearest road. A twenty mile march each way was tedious and tiring. But it was a cheap price to pay for the security of his supplies.

The walk was longer this time because he did not cut straight through to the road and thumb a lift. To beg a ride in his new guise would have been sufficiently out of character to draw unwelcome attention to himself. So he followed the fringe of the forest to the point where two other roads joined on. Here, in the early morning, he waited between the trees until an express bus appeared in the distance. He stepped out onto the road, caught it and was carried into the centre of Pertane.

Within half an hour he had acquired a car. This time he did not bother to rent one; it wasn't worth the trouble for the short period he needed it. Ambling around until he found

a parked dyno that suited his purpose, he got in and drove away. Nobody ran after him yelling bloody murder. The thief had gone unobserved.

Making it out to the Radine road, he stopped, waited for the artery to clear in both directions, buried his letter under the marker. Then he returned to Pertane and put the car back where he had found it. He had been away a little over an hour and it was probable that the owner had not missed his machine, would never know that it had been borrowed.

Next, he went to the crowded main post office, took half a dozen small but heavy parcels from his case, addressed them and mailed them. Each held an airtight can containing a cheap clock-movement and a piece of paper, nothing else. The clock-movement emitted a sinister tick just loud enough to be heard if a suspicious-minded person listened closely. The paper bore a message short and to the point.

This package could have killed you.

Two different packages brought together at the right time and place could kill a hundred thousand.

End this war before we end you !

Dirac Angestun Gesept.

Paper threats that was all. But effective enough to eat still further into the enemy's war effort. They'd alarm the recipients and give their forces something more to worry about. Doubtless the military would provide a personal bodyguard for every big wheel on Jaimec and that alone would pin down a regiment.

Mail would be examined and all suspicious parcels would be taken apart in a blast-proof room. There'd be a city-wide search with radiation-detectors for the component parts of a fission-bomb. Civil defence would be alerted in readiness to cope with a mammoth explosion that might or might not take place. Anyone on the streets who walked with a secretive air and wore a slightly mad expression would be arrested and hauled in for questioning.

Yes, after three murders with the promise of more to come authority dare not dismiss D.A.G.'s threats as the idle talk of some crackpot on the loose. For safety's sake they'd have to assume that fake bombs might soon be followed by real ones and act accordingly.

As he strolled along the road he amused himself by picturing the scene when the receiver of a parcel rushed to dump it in a bucket of water while someone else frantically phoned

for the bomb squad. He was so engrossed with these thoughts that it was some time before he became conscious of a shrill whistling sound rising and falling over Pertane. He stopped, looked around, gazed at the sky, saw nothing out of the ordinary. Quite a lot of people seemed to have disappeared from the street but a few, like himself, were standing and staring around bewilderedly.

VIII

The next moment a cop shoved him in the shoulder. "Get down, you fool!"

"Down?" Mowry eyed him without understanding. "Down where? What's the matter?"

"Into the cellars," shouted the cop, making waving motions. "Don't you recognise a raid-alarm when you hear it?" Without waiting for a reply he ran forward, bawling at other people, "Get down! Get down!"

Turning, Mowry scrambled after the rest down a long, steep flight of steps and into the basement of a business block. He was surprised to find the place already crowded. Several hundred people had taken refuge without having to be told. They were standing around, or sitting on wooden benches or leaning against the wall. Upending his case, Mowry sat on it.

Nearby an irate oldster looked him over with rheumy gaze and said, "A raid-alarm. What d'you think of that?"

"Nothing," answered Mowry. "What's the use of thinking? There's nothing we can do about it."

"But the Spakum fleets have been destroyed," shrilled the oldster, making Mowry the focal point of an address to everyone. "They've said so time and again, on the radio and in the papers. The Spakum fleets have been wiped out. So what has set off an alarm, *hi*? What can raid us, *hi*? Tell me that!"

"Maybe it's just a practice alarm," Mowry soothed.

"Practice?" He spluttered with senile fury. "Why do we need practice and who says so? If the Spakum forces are beaten we've no need to hide. There's nothing to hide from. We don't want any practice."

"Don't pick on me," advised Mowry, bored with the other's whines. "I didn't sound the alarm."

"Some stinking idiot sounded it," persisted the oldster. "Some lying *soko* who wants us to believe the war is as good as over when it isn't. How do we know how much truth there is in what they're telling us?" He spat on the floor, doing it viciously. "A great victory in the Centauri sector—then the raid-alarm is sounded. They must think we're a lot of—"

A squat, heavily built character stepped close to him and snapped, "Shut up!"

The oldster was too absorbed in his woes to cower, too pigheaded to recognise the voice of authority. "I won't shut up. I was walking home when somebody pushed me down here just because a whistle blows and—"

The squat man opened his jacket, displayed a badge and repeated in harsher tones, "I said shut up!"

"Who d'you think you are? At my time of life I'm not going to be—"

With a swift movement the squat man whipped out a rubber truncheon, larruped the oldster over the head with all the force he could muster. The victim went down like a shot steer.

A voice at the back of the crowd shouted, "Shame!" Several others murmured, fidgeted but did nothing.

Grinning, the squat man showed what he thought of this disapproval by kicking the oldster in the face and again in the belly. Glancing up, he met Mowry's gaze and promptly challenged, "Well?"

Mowry said evenly, "Are you of the Kaitempi?"

"Yar. What's it to you?"

"Nothing. I was only curious."

"Then don't be. Keep your dirty nose out of this."

The crowd muttered and fidgeted again. Two cops came down from the street, sat on the bottom step and mopped their foreheads. They looked nervous and jumpy. The Kaitempi agent joined them, took a gun out of his pocket and nursed it in his lap. Mowry smiled at him enigmatically. The oldster still lay unconscious on the floor and breathed with bubbling sounds.

Now the silence of the city crept into the cellar. The crowd became peculiarly tense as everyone listened. After half an hour there sounded in the distance a series of hisses that started on a loud, strong note and swiftly faded into the sky.

Teneseness immediately increased with the knowledge that guided missiles weren't being expended for the fun of it. Somewhere overhead and within theoretical range must be a Spakum ship, perhaps bearing a lethal load that might drop at any moment.

Another volley of hisses. The silence returned. The cops and the agent got to their feet, edged farther into the basement and turned to watch the steps. Individual breathing could be heard, some respirating spasmodically as if finding difficulty in using their lungs. All faces betrayed an inward strain and there was an acrid smell of sweat. Mowry's only thought was that to be disintegrated in a bomb-blast from his own side was a hell of a way to die.

Ten minutes later the floor quivered. The walls vibrated. The entire building shook. From the street came the brittle crash of breaking glass as windows fell out. Still there was no other sound, no roar of a great explosion, no dull rumbling of propulsors in the stratosphere. The quietness was eerie in the extreme.

It was three hours before the same whistling on a lower note proclaimed the all-clear. The crowd hurried out, vastly relieved. They stepped over the oldster left him lying there. The two cops headed together up the street while the Kaitempi agent strode the opposite way. Mowry caught up with the agent, spoke pleasantly.

"Shock damage only. They must have dropped it a good distance away."

The other grunted.

"I wanted to speak to you but couldn't very well do so in front of all those people."

"Yar? Why not?"

For answer, Mowry produced his identity-card and his warrant, showed them to the agent.

"Colonel Halopti, Military Intelligence." Returning the card, the agent lost some of his belligerence, made an effort to be polite. "What did you want to say—something about that garrulous old fool?"

"No. He deserved all he got. You're to be commended for the way you handled him." He noted the other's look of gratification, added, "An ancient gab like him could have made the whole crowd hysterical."

"Yar, that's right. The way to control a mob is to cut out and beat up its spokesman."

"When the alarm sounded I was on my way to Kaitempi H.Q., to borrow a dependable agent," explained Mowry. "When I saw you in action I felt you'd save me the trouble. You're just the fellow I want : one who's quick on the uptake and will stand no nonsense. What's your name?"

"Sagramatholou."

"Ah, you're from the K17 system, *hi*? They all use compound names there, don't they?"

"Yar. And you're from Diracta. Halopti is a Diractan name and you've got a Mashambi accent."

Mowry laughed. "Can't hide much from each other, can we?"

"Nar." He looked Mowry over with open curiosity, asked, "What d'you want me for?"

"I hope to nab the leader of a D.A.G. cell. It's got to be done quickly and quietly. If the Kaitempi put fifty on the job and make a major operation of it they'll scare away the rest for miles around. One at a time is the best technique. As the Spakums say, 'Softly, softly, catchee monkey.'"

"Yar, that's the best way," agreed Sagramatholou.

"I'm confident that I could take this character single-handed without frightening away the others. But while I'm going in at the front he may beat it out the back. So it needs two of us." He paused to let it sink in, finished, "I want a reliable man to grab him if he bolts; you'll get full credit for the capture."

The other's eyes narrowed and gained an eager light. "I'll be glad to come along if it's all right with H.Q. I'd better phone and ask them."

"Please yourself," said Mowry with a studied carelessness he was far from feeling. "But you know what will happen for sure?"

"What d'you think?"

"They'll take you off it and give me an officer of equivalent rank." Mowry made a disparaging gesture. "Although I shouldn't say it, being a colonel myself, I'd rather have a tough, experienced man of my own choice."

The other swelled his chest. "You may have something. There are officers and officers."

"Precisely! Well, are you in this with me or not?"

"Do you accept full responsibility if my superiors gripe about it?"

"Of course."

"That's good enough for me. When do we start?"

"At once."

"All right," said Sagramatholou, making up his mind.

"I'm on duty another three hours anyway."

"Good! You got a civilian-type dyno?"

"All our dynos are ordinary looking ones—they have to be."

"Mine bears military insignia," lied Mowry. "We'd better use yours."

The other accepted this statement without question. He was completely hooked by his own eagerness to get credit for an important capture. Being what they were, the Kaitempi suffered from their own peculiar form of cupidity; the prospect of finding another victim for the strangling-post was something difficult to resist.

Reaching the car-park around the corner, Sagramatholou took his seat behind the wheel of a big black dyno. Tossing his case into the back, Mowry got in beside him. The car snored onto the street.

"Where to?"

"South end, back of the Rida Engine Plant. I'll show you from there."

Theatrically the agent made a chopping motion with one hand as he said, "This D.A.G. business is sending us crazy. High time we put an end to it. How did you get a lead on them?"

"We picked it up on Diracta. One of them fell into our hands and talked."

"In great pain?" suggested Sagramatholou, chuckling.

"Yar."

"That's the way to handle them." He turned a corner, let go another chuckle. "They all blab when the suffering gets too cruel to endure. After which they die just the same."

"Yar," repeated Mowry with becoming gusto.

"We snatched a dozen from a cafe in the Laskin quarter," informed Sagramatholou. "They're talking, too. But they aren't talking sense—yet. They've admitted every crime in the calendar except membership of D.A.G. About that organisation they know nothing, so they say."

"What took you to the cafe?"

"Somebody got his stupid head knocked off. He was a regular frequenter of the joint. We identified him after a lot of trouble, traced him back and grabbed a bunch of his ever-loving friends. About six of them have confessed to the killing."

"Six?" Mowry frowned.

"Yar. They did it at six different times, in six different places, for six different reasons. The dirty *sokos* are lying to make us ease up. But we'll get the truth out of them yet."

"Sounds like a mere hoodlum squabble to me. Where's the political angle, if any?"

"I don't know. The higher-ups keep things to themselves. They say they know for a fact that it was a D.A.G. execution and therefore whoever did it is a D.A.G. killer."

"Maybe somebody tipped them," offered Mowry.

"Maybe somebody did. And he could be a liar too." He let go a snort of disgust. "This war is enough without traitors and liars making things worse. We're being run ragged, see? It can't go on for ever."

"Any luck with the snap-searches?"

"There was at first. Then the luck petered out because everyone became wary. We've stopped making them for ten days. The lull will give the dodgers a sense of false security. When they're ripe for the taking, we'll take them."

"That's a good idea. One has to use one's wits these days, *hi?*"

"Yar."

"Here we are. Turn left and then first right."

The car shot past the rear of the engine plant, entered a narrow, rutted road, switched into another little better than a lane. All around was an unsavoury, semi-deserted area full of old buildings, vacant lots and garbage dumps. They stopped, got out.

Gazing about him, the Kaitemi agent remarked, "A typical vermin-run. A couple of years ago we smoked a gang of god-worshippers out of an old warehouse in this district."

Mowry put on a look of revulsion. "You mean a bunch infected with Terran religion?"

"Yar, true believers. When the noose tightened their praying tongues stuck out and went black the same as any sinner's." He laughed at the recollection of it, glanced at the other. "Where now?"

"Along this alley."

Mowry led the way into the alley which was long, dirty and had a dead end. They reached the twelve-foot wall that blocked further progress. There was nobody in sight, nothing could be heard save a distant hum of traffic and the nearer squeak of a hanging sign, old and rusty.

Pointing to the door set in the wall, Mowry said, "This is the bolt-hole. It will take me two or three minutes to get round the front and go in. After that you can expect anything." He tried the door. It refused to budge. "Locked."

"Better unlock it so he can make a clear run," suggested Sagramatholou. "If he finds himself balked he's liable to try to shoot it out with you and I'll be in no position to take part. These *sokos* can become dangerous when desperate." He felt in a pocket, produced a bunch of master-keys. Grinning, he added, "The easiest way is to let him rush straight into my arms."

With that, he faced the door, turning his back on Mowry while he meddled with the lock. Mowry looked along the alley. Still nobody in sight.

Taking out his gun, he said in calm, unhurried tones, "You kicked the old geezer when he was down."

"Sure did," enthused the agent, still trying the lock. "I hope he dies slowly, the half-witted—" His voice broke off as the incongruity of Mowry's remark sank into his mind. He turned round, one hand braced upon the door, and looked straight into the gun's muzzle. "What's this? What are you—"

The gun gave a *phut* no louder than that of an air-pistol. Sagramatholou remained standing, a blue hole in his forehead. His mouth hung open in an idiotic gape. Then his knees gave way and he plunged forward face first.

Pocketing the gun, Mowry bent over the body. Working fast, he searched it, replaced the wallet after a swift look through it but confiscated the official badge. Hastening out the alley, he got into the car, drove it down town to within short distance of a used car lot.

Walking the rest of the way he looked over the big assembly of badly beaten-up dynos. A thin, hard-faced Sirian immediately sidled up to him, his crafty eyes noting the well-cut suit, the platinum fob and wrist-band. This, obviously, was harvest time.

"Lucky you!" announced the Sirian, greasily. "You have found the best place on Jaimeç for a genuine bargain. Every car a real sacrifice. There's a war on, prices are going to jump and you just can't go wrong. Now take a look at this beauty right here. A gift, a positive gift. It's a—"

"I've got eyes," said Mowry.

"Yar, sure. I'm pointing out—"

"I've got a mind of my own," Mowry informed. "And I wouldn't drive around in any of these relics unless I was in a hurry to be struck dead."

"But—"

"Like everyone else, I know there's a war on. Before long it's going to be mighty tough getting bits and pieces. I'm interested in something I can strip down for parts." He pointed. "That one, for instance. How much?"

"She's a good runner," expostulated the salesman, donning a look of horror. "Purrs along like brand new. Got current plates—"

"I can see it's got current plates."

". . . and is good and solid from front to back. I'm giving it away, just *giving* it."

"How much?"

"Nine-ninety," said the other, again eyeing the suit and the platinum.

"Robbery," said Mowry.

They haggled for half an hour at the end of which Mowry got it for eight-twenty. He paid and drove it away. It creaked, groaned and lurched in manner that showed he'd still been soaked for at least two hundred, but he wasn't resentful about that.

On a lot littered with scrap-iron a mile away, with nobody watching, he parked the car, smashed its windshield and lamps, removed its wheels and number plates, took all detachable parts from the motor and effectively converted the machine into what any passer-by could see was an abandoned wreck. He walked off, returned in short time with the dead agent's car, loaded the loose parts into it.

Half an hour later he slung the wheels and other items into the river. With them went Sagramatholou's plates. He drove away bearing the plates taken from the wreck; the exchange had cost him eight-twenty in counterfeit money and was cheap at the price. A police patrol or another Kaitempi car could

now follow him for miles without spotting the number for which undoubtedly they'd be seeking.

Assured of no more snap-searches for the time being he idled around town until the sky went dark. Dumping the car in an underground garage, he bought a paper and perused it during a meal.

According to this news-sheet a lone Terran destroyer—described as 'a cowardly sneak-raider'—had managed to make a desperate dash through formidable space defences and drop one bomb upon the great national armaments complex at Shugruma. Little damage had been done. The invader had been blown apart soon afterward.

The story had been written up to give the impression that a sly dog had got in a harmless bite and been shot for its pains. He wondered how many readers believed it. Shugruma was more than three hundred miles away—yet Pertane had shuddered to the shock-waves of the distant explosion. If that was anything to go by, the target area must now be represented by a crater a couple of miles in diameter.

The second page stated that forty-eight members of the traitorous Sirian Freedom Party had been seized by forces of law and order and would be dealt with appropriately. No details offered, no names given, no charges stated.

This was normal among a species with a secret judicial system, on worlds where any suspect could be snatched from the street and never seen again. There were no judges and juries holding public trials anywhere within the Sirian Empire. If lucky, the arrested one eventually was released, physically enfeebled, without apology or compensation. If out of luck, his next of kin did not so much as receive a jar containing his ashes.

The forty-eight were doomed, whoever they were or whoever they were thought to be. Alternatively, the whole yarn could be an officially concocted lie. The powers-that-be were quite capable of venting their fury on half a dozen common crooks and, for public consumption, defining them as D.A.G. members while multiplying their number by eight. Authority is maintained and wars fought by propaganda, a cover-word for cynical perversion of the facts.

One of the back pages devoted a few lines to the modest statement that Sirian forces had now been withdrawn from the planet Gooma 'so that they can be deployed more effec-

tively in the actual area of combat.' This implied that Gooma was far outside the area of combat, a transparent piece of nonsense to any reader capable of independent thought. But ninety percent of the readership could not endure the awful strain of thinking ; they were content to look and listen and swallow whatever guff got dished out.

Far and away the most significant item was the leader-writer's contribution. This was a pompous sermon based on the thesis that total war should end only in total victory which could and must be gained only by total effort. There was no room for political division within the Sirian ranks. Everyone without exception must be solidly behind the leadership in its determination to fight the war to a successful conclusion. Doubters and waverers, dodgers and complainers, the lazy and the shiftless were as much traitors to the cause as any spy or saboteur. They should be dealt with swiftly, once and for all. They should be slaughtered without mercy.

Clearly it was a yelp of agony although *Dirac Angestun Gesept* was not mentioned in plain words. Since in time of war all such lectures were officially inspired, it was reasonable to assume that the brasshats were experiencing acute pains in the buttocks. In effect they were shouting out loud that a wasp could sting. Perhaps some of them had received little parcels that ticked and did not approve of this switch from the general to the personal.

Now that night had fallen Mowry luggered his case to his room. He made the approach warily. Any hideout could become a trap at any time, without warning. Apart from the possibility of the police or Kaitempi lying in wait after having go. a line on him, there was also the chance of encountering a landlord who'd become curious about the use of the room by another and more prosperous looking character. True, the landlord was a tightmouth typical of slumdom but even he would curry favour with the Kaitempi if he thought it necessary to save his own neck. The landlord was not to be trusted. On a hostile world nobody was to be trusted.

The building wasn't watched, the room was not staked. He managed to sneak in unobserved. Everything proved to be exactly as he had left it, showing that nobody yet had found reason to come nosing around. Thankfully he sprawled on the bed and gave his feet a rest while he considered the situation. It was evident that as far as possible he would have to enter and leave the room only during hours of darkness. The alternative was to seek another hideout, preferably

in a better-class area more in keeping with his present character. He didn't want to start another time-wasting search for a rat-hole unless he was driven to it.

The following day he regretted the destruction of his first case and all its contents in Radine. This loss piled up the work, made it tedious and boring. But it had to be done. As a result he spent all morning in the public library compiling a list of names and addresses to replace the previous one. Then with plain paper, envelopes and a small hand-printer he used another two days preparing a stack of letters. It was a relief when they were finished and mailed.

Sagramatholou was the fourth.

The list is long.

Dirac Angestun Gesept.

Thus he had killed several birds with one stone. He had avenged the oldster, a motive that gave him a good deal of satisfaction. He had struck another blow at the Kaitempi. He'd acquired a car not traceable through renting agencies or usual sales channels. Finally he had given authority further proof of D.A.G.'s willingness to kill, maim or otherwise muscle its way to power.

To boost this situation he mailed at the same time another six parcels. Outwardly these were identical with the former ones. They emitted the same subdued tick. There the resemblance ended. At periods varying between six and twenty hours after sending, or at any moment that someone tried pry them open, they were due to go off with a bang sufficiently forceful to plaster a body against the wall.

On the fourth day after his return to the room he slipped out unseen, collected the car and visited Marker 33-den on the Radine road. Several patrol cars passed him on the way but none betrayed the slightest interest in him. Reaching the marker, he dug at its base, found his own cellophane envelope now containing a small card. All it said was: *Asako 19-1713.*

The trick had come off.

Forthwith he drove back to the first booth he could find, switched off its scanner and called the number. A strange voice answered while the visiscreen remained blank. Evidently there was similar caution at the other end.

"19-1713," it said.

"Gurd or Skriva there?" asked Mowry.

"Wait," ordered the voice.

"One moment and no more," retorted Mowry. "After that—goodbye!"

The only answer was a grunt. Mowry hung on, watching the road, ready to drop the phone and beat it immediately his intuition told him to get away fast. The college had told him times without number never to disregard the strange, indefinable smell of an ambush. There must be something in it seeing he was still alive and fancy free.

He was nearing the point of taking alarm when Skriva's voice came through and growled, "Who's that?"

"Your benefactor."

"Oh, you. I'm not getting your pic."

"I'm not getting yours, either. What's the matter—are you windy?"

"This is no place to talk," said Skriva. "We'd better meet. Where are you?"

A swift series of thoughts flashed through Mowry's mind. *Where are you?* Was Skriva allowing himself to be used as bait? If he'd been caught and given a preliminary taste of rough treatment it was just the sort of crafty trick the Kaitempi would play. They'd get Skriva's full co-operation after showing him the consequences of refusal.

On the other hand it wasn't likely in such circumstances that Skriva would bother asking for his location. The Kaitempi would know it already, having traced the call. Moreover they'd want the conversation prolonging as much as possible to hold Mowry there. Skriva was trying to cut it short. Yes, the betting was against a trap.

"You struck dumb?" shouted Skriva, impatient and suspicious.

That settled the matter from Mowry's viewpoint and he replied, "I was thinking. How about meeting me where you left your phone number?"

"That's as good as anywhere."

"By yourself," warned Mowry. "Nobody else with you excepting Gurd. Nobody following and nobody hanging around."

"Who's windy now?" said Skriva. "I'm coming right away."

Driving back to the marker, Mowry parked his car on the verge and waited. Twenty minutes afterward Skriva's dyno rolled up, parked behind. Skriva got out, approached him, halted in mid-step, scowled uncertainly, slid a hand into a pocket and looked hurriedly up and down the road. There were no other cars in sight.

Mowry grinned at him. "What's eating you? Got a guilty conscience or something?"

Coming closer, Skriva eyed him with slight incredulity, then commented, "So it *is* you. What have you been doing to yourself?" Without waiting for a reply he walked around the bonnet, climbed in, took the other seat. "You don't look the same. It was hard to recognise you."

"That's the idea. A change for the better wouldn't do you any harm, either. Make it harder for the cops to get you."

"Maybe." Skriva was silent a moment, then, "They got Gurd."

Mowry sat up. "How? When was this?"

"The damn fool came down from a roof straight into the arms of two of them. Not satisfied with that he gave them some lip and went for his gun."

"If he'd behaved like he'd every right to be up there he could have talked his way out of it."

"Gurd couldn't talk his way out of an old sack," opined Skriva. "He's not made like that. I spend a lot of time keeping him out of trouble."

"How come you weren't collared too?"

"I was on another roof halfway down the street. They didn't see me. It was all over before I could get down to help Gurd."

"What happened to him?"

"What you'd expect. The cops were already beating him over the head before he got his hand in his pocket. Last I saw of him was when they flung him into the wagon."

"Tough luck!" sympathised Mowry. He meditated a while, asked, "And what happened at the Cafe Susun?"

"Don't know exactly. Gurd and I weren't there at the time and a fellow tipped us to stay clear. All I know is that the Kaitempi rushed the place twenty strong, grabbed everyone in sight and staked it. I've not shown my face near there since. Some *soko* must have talked too much."

"Butin Arhava, for instance?"

"How could he?" scoffed Skriva. "Gurd took his head off before he'd a chance to blab."

"Maybe he talked *after* Gurd had tended to him," Mowry suggested. "Sort of lost his head about it."

Skriva narrowed his eyes. "What d'you mean?"

"Oh, forget it. Did you collect that roll from the bridge?"

"Yar."

"Want any more—or are you now too rich to care?"

Studying him calculatingly, Skriva asked, "How much money have you got altogether?"

"Enough to pay for all the jobs I want done."

"That tells me nothing."

"It isn't intended to," Mowry assured. "What's on your mind?"

"I like money."

"That fact is more than apparent," said Mowry.

"I'm really fond of it," Skriva went on, as if speaking in parables.

"Who isn't?"

"Yar, who isn't? Gurd loves it too. Most everybody does." Skriva stopped, added, "In fact the chump who doesn't love it is either daft or dead."

"If you're leading up to something, say so," Mowry urged. "Cut out the song and dance act. We've not got all day."

"I know a fellow who loves money."

"So what?"

"He's a jailer," said Skriva pointedly.

Twisting sidewise in his seat, Mowry eyed him carefully. "Let's get down to brass tacks. What's he willing to do and how much does he want?"

"He says Gurd's in a cell along with a couple of old pals of ours. So far none of them have been put through the mill though they'll be worked over sooner or later. Fellows in clink usually are given plenty of time to think over what's coming to them and let their imaginations operate. It helps them break down quicker."

"That's the usual technique," Mowry agreed. "Let them become nervous wrecks before making them physical wrecks."

"Yar, the stinking *sokos*." Skriva spat out the window before he continued, "Whenever a prisoner's number comes up the Kaitempi call at the jail, present an official demand for him and take him to their H.Q. for treatment. Sometimes they bring him back several days later, by which time he's a cripple. Sometimes they don't return him at all. In the latter event they file a death warrant to keep the prison records straight."

"Go on."

"This fellow who loves money will give me the number and location of Gurd's cell. Also the timing of Kaitempi visits and full details of the routine they follow. Finally he'll

provide a copy of the official form used for demanding release." He let that sink in, finished, "He wants a hundred thousand."

Mowry pursed his lips in a silent whistle. "You think we should try to get Gurd out?"

"Yar."

"Didn't know you were so fond of him."

"He could stay there and rot for all I care," said Skriva. "He's paying the price of his own stupidity. Why should I worry about him, *hi*?"

"All right, let him stay and rot. We'll save a hundred thousand that way."

"Yar," Skriva approved. "But—"

"But what?"

"I could use the dope and the two with him. So could you if you've more work in mind. Furthermore, if Gurd's kept in he'll talk. They'll make him talk—and he knows too much. But if he escapes they won't be able to force him to say anything. And what's a hundred thousand to you?"

"Too much to throw away on a glib story," Mowry told him bluntly. "Prize fool I'd be to hand you a huge wad just because you say Gurd's in the clink."

Skriva's face darkened with anger. "You don't believe me, *hi*?"

"I've got to be shown," said Mowry, undisturbed.

"Maybe you'd like a specially conducted tour through the jail and have Gurd pointed out to you?"

"The sarcasm is wasted. You seem to forget that while Gurd may be able to put the finger on you for fifty or more major crimes, he can do nothing whatsoever about me. He can talk himself black in the face without saying anything worth a hoot as far as I am concerned. No, when I spend money it'll be *my* money and it'll be spent for *my* reasons, not yours."

"So you won't splurge a guilder on Gurd?" demanded Skriva, still thunderous.

"I don't say that. What I do say is that I won't throw money away for nothing. But I'm willing to pay for full value received."

"Meaning what?"

"Tell this greedy screw that we'll give him twenty thousand for a genuine Kaitempi requisition-form—*after* he has handed it over. Also that we'll pay him a further eighty thousand *after* Gurd and his two companions have got away."

A mixture of expressions crossed Skriva's unlovely features, surprise, gratification, doubt and puzzlement. "What if he refuses to play on these terms?"

"He stays poor."

"Well, what if he agrees but refuses to believe I can find the money? How am I going to convince him?"

"Don't bother to try," Mowry advised. "He has to speculate in order to accumulate, same as everyone else. If he won't do it let him remain content with grinding poverty."

"Maybe he'd rather stay poor than take the risk."

"He won't. He's running no real risk and he knows it. There's only one chance he could take and he'll avoid it like the plague."

"Such as?"

"Suppose we arrive to make the rescue and are jumped on before we can open our mouths or show the requisition-form, what will it prove? It'll show that this fellow fooled you for the sake of the reward. The Kaitempi will pay him five thousand apiece for laying the trap and tipping them off. He'll make an easy and legal ten thousand on top of the twenty thousand we've already paid him. Correct?"

"Yar," said Skriva, uneasily.

"But he'll lose the eighty thousand yet to come. The difference is plenty big enough to ensure his absolute loyalty up to the moment he gets it in his hot little hands."

"Yar," repeated Skriva, brightening considerably.

"After that—zunk!" said Mowry. "Immediately he's got his claws on the lot we'd better run like hell."

"Hell?" Skriva stared at him. "That's a *Spakum* curse-word."

Mowry sweated a bit as he replied offhandedly, "Sure it is. One picks up all sorts of bad language in wartime, especially on Diracta."

"Ah, yes, on Diracta," echoed Skriva, mollified. He got out the car. "I'll go see this jailer. We'll have to move fast. Phone me this time tomorrow, *hi?*"

"All right."

Mowry remained where he was until the other's dyno had gone from sight. Then he jockeyed his own off the verge and drove into Pertane.

To be concluded

To be published by Dennis Dobson Ltd. later this year.



Peterborough,
Northants.

Dear Ed,

Here is the JCH opinion on the February issue.

"Requiem For A Harvey"—lovely ! Tubb can still create real people, and these are 100 per cent alive characters in a real s-f situation. What more can you want ? I found the story completely adult, the sort of basic situation that one finds in the well-written tv half hour. (Not that I mean that this could be done in tv). There was a force and economy about it all—I *believed* it.

"The Unwanted"—I read this one in its rough and in the final. A good one, but not one of Dan's best. and it bears signs of the trimming and altering that it went through before it landed on your desk. (Dan Morgan is a personal friend of mine). A far cry from his "Uninhibited" standard ; I think that he will be able to repeat that performance, you know. He has some first rate big s-f concepts which are waiting on the straight yarn he is on now.

"The Unreluctant Tread." Beautiful ! Bulmer has never written better. It has the same driving adult quality of the Tubb piece. Once more, I believed every word of it.

"The 40th of December." Not bad ; wish I had thought of it myself, but how far behind Bulmer and Tubb (and Dan) Presslie is with this one. It reads like an old, off-colour McIntosh. Whereas the Bulmer and the Tubb *take* you along, here, you find yourself helping the author out. Do I make myself clear ?

"Threshold of Eternity"—I felt that, despite all John's great ingenuity and technical skill, the Van Vogtian mask was wearing a bit thin and uncomfortable towards the end. John Brunner *really* likes dealing with genuine people in genuine human circumstances. We do not doubt that he

knows his s-f tricks, and performs them very well, but has this serial, for all its competence, been anything more than that? The Brunner I remember is the one who wrote "Two by Two," the one about the alien artist, "Number of My Days," and some more of those stories which were as real as the Tubb and the Bulmer stories in the current issue.

John Hynam.

*Oakland 21,
California.*

Dear Mr. Carnell,

The January issue was another hit. I don't see how you keep doing it. Every current issue surpasses the preceding one.

I haven't seen a decent story in any of our publications for the last two months, but I can depend on *New Worlds* to satisfy my space-adventurous mind.

So to my preference : (1) Threshold of Eternity, (2) Never Trust a Robot, (3) Next Stop the Moon, (4) The Long Ellipse, (5) The Pit My Parish. As far as I am concerned they should all be rated first.

The article on Interplanetary Navigation was very interesting—always something new to remember and file away.

Regarding your editorial changes—I hate to see them come. The set-up is perfect, especially your covers; I never could understand abstract art—too confusing.

Yes, the fan over here is strong for readers' letters and departments and the internal story illustration, which I always was against—waste of space. One of the first things I liked about your publication was there were none of these silly things.

Anyway—keep it up!

W. C. Brandt.

*Berkeley 7,
California, U.S.A.*

Dear John,

A couple of points on your editorial in *New Worlds* No. 66. The very minor one first—a germicide will not necessarily kill a fly. It takes an insecticide. DDT is an insecticide.

Second point. To quote : "He is taller, is living longer, thinks faster and is more imaginative." I would postulate

that to think faster and be more imaginative would require greater intelligence. Okay? So studies have shown that the average IQ is decreasing. See Darwin's *The Next Million Years*, and I think some of the same material may be in R. C. Cook's *Human Fertility—The Modern Dilemma*. Both of these, I believe, are available in British editions. It is a fact that the less intelligent in a civilised group are reproducing faster than the more intelligent and I believe that intelligence is an inherited characteristic, so it is not unreasonable to find average intelligence decreasing.

This is going to cause a lot of trouble in administration as our civilisation becomes more complex. Probably be too many people to be able to turn around, anyway.

J. Ben Stark.

Continued on page 126

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London, W. 13.

Dear John,

I must say that I greet your new venture (*Science Fiction Adventures*) with mixed feelings. It seems to me that, just when science fiction needs a new cheap-priced pulp to drag in another generation of readers, you are turning out yet another digest-sized magazine at two shillings. The best of luck, of course, but it seems the wrong thing to me.

The sort of reader I've got in mind is the apprentice just left school, the student without a lot of money to spare, the teenage girl who is not jive-crazed, and may be just the material we want. These might welcome a magazine priced at 1/- or 1/9 which contained good stories, and to get them you could sacrifice even-edges, interior art-work and other appearance makers. Such a magazine could spare space for a really live letter column, a thing which is badly needed in British science fiction today, for such a column makes people feel that they belong—the same thing that makes them join jazz clubs. (*How is Postmortem developing now that we have opened it up to the general reader?—Ed.*).

That's how it appears to me. Many fans will agree with me about the letter column, you'll find.

L. Sandfield.

*Bournemouth,
Hants.*

Dear Mr. Carnell,

My congratulations on the recent cutting out of interior illustrations.

I read in the latest issue that you are about to change the type of cover—a splendid idea, since many potential science fiction readers must be put off by lurid covers. Would not the logical step be to have a purely symbolic cover, or perhaps a crest, *New Worlds*, and a list of contents?

R. A. Rolls

*Hetton-la-Hole,
Co. Durham.*

Dear Mr. Carnell,

I am writing to you regarding a story in the February issue—Dan Morgan's "The Unwanted."

First I had better explain that I am a "new" but interested reader of science fiction and whereas "old" readers may have passed over the point which puzzles me, it started me pondering almost immediately.

In the story, the crew of the *Endeavour* travelled among the stars for five years at speeds faster than light, yet when they returned to Earth five hundred years had passed. Surely if they travelled for five years, no matter at what speed, only five years in time would have passed on Earth. On the other hand if five hundred years had passed on Earth the travellers would be five hundred years old !

Continued on page 128

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Perhaps yourself or the author find the answer obvious or can be explained scientifically, but for myself I am at a loss for an explanation.

Owen McArdle.

(Professor Albert Einstein postulated that a body travelling at a velocity approaching that of the speed of light—186,000 miles per second—would contract in length and its mass eventually become infinite when the light-barrier was passed. Given these circumstances, the personnel of a spaceship would therefore be moving at a slower Time rate than ourselves, and in theory, while only a few years of their Time would have gone by a far greater period of our Time would have passed on Earth.

At the moment there are very heated scientific arguments going on concerning this possibility, and similar to the exponents of the Moon Theory, the protagonists are divided into two sharply defined groups.—Ed.).

*Anacapri,
Napoli, Italy.*

Dear John,

Thanks for the new *New Worlds* which reached my new address in record time. A very nice issue. I'm still trying to put my finger on what it is that makes your stories different from the US variety, but it still evades precise identification.

I think perhaps that it is your policy of people in science fiction futures, not just science fiction stories.

Harry Harrison.

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