

JUNE 1965

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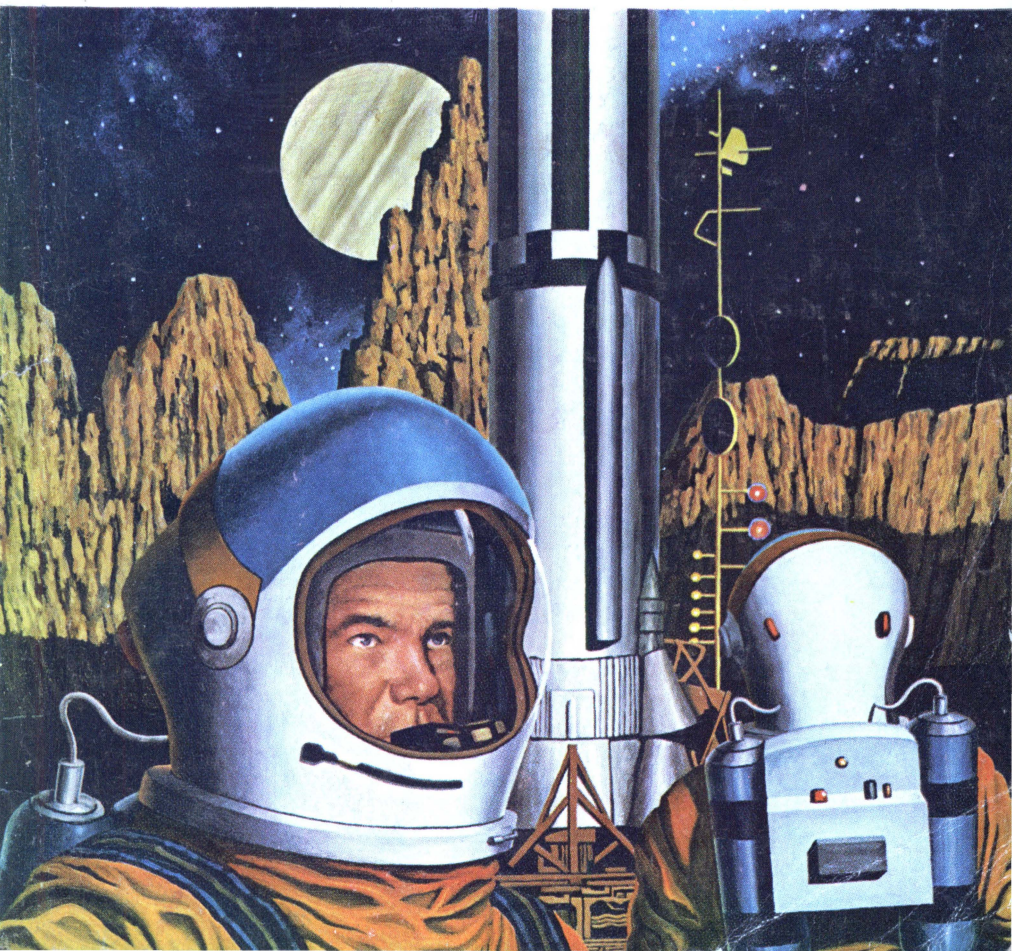
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WORLDS OF



SCIENCE FICTION

JUNE, 1965
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ISSUE 91

ALL NEW
STORIES

Frederik Pohl, Editor

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Cover by PEDERSON from SKYLARK DuQUESNE

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Out of the Idiot Box

This month's *Hue & Cry*, you'll note, contains some discussion about the parlous state of science fiction on television. What we've printed is only the visible tip of the iceberg; we've had a lot of mail on the subject. Generally speaking, the letters have run along these lines: (1) Science fiction on TV was pretty awful, but (2) pretty awful science fiction is better than no science fiction at all, so we wish we could get it back.

There is a reason video sf has been — well — not as good as it could be, let's say politely. The reason is not that everyone connected with television on the producing and packaging end is an ill-tempered halfwit; nor is it that Hollywood has never heard of science fiction; nor is it that the medium is simply unable to handle science-fiction ideas. A few months ago we spent some time in Hollywood talking with a number of producers, network representatives, writers and even actors about science-fiction-on-TV. A great many of them turned out to have a pretty good understanding of science fiction, which may not be so surprising, at that — after all, they have the likes of Bob Bloch, Ray Bradbury, Harlan Ellison, Robert Sheekley, Jerome Bixby and a good many others right there working in their own vineyards to advise them. And just the other day we spent a pleasurable afternoon with a representative of the British Broadcasting Corporation, going over plans for the BBC's new weekly 75-minute

science-fiction show, which will be on the air shortly.

For from where we sit, we have come to the conclusion that what's wrong with American science-fiction television is what's wrong with American television in general: It is the fault of the networks' competitive striving for ratings. When the pundits of Gloppy Broadcasting System sit down to contemplate the merits of a projected science-fiction program, they don't merely wonder whether or not it will be any good. Or even whether it will attract a wide audience. Or even whether it will do better than the rival programs.

Where they get into trouble is when they start to ask themselves where it fits into their strategic pattern, capitalizing on the audience from the show before and building a lazy, non-dial-switching audience for the show that follows.

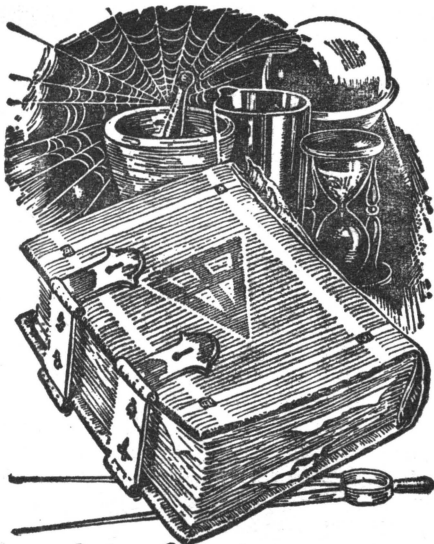
Listeners don't have much to say about it. Not even sponsors have much to say about it. And it is reaching a point where the network executives themselves don't have much to say about it.

But there's hope! We do think that a few more years may show us a brighter prospect; for by then the UHF stations should be on the air in numbers enough, and with organization enough, to give us all variety and quality.

And then we might get some truly first-rate programs in many areas — science fiction included!

— THE EDITOR

Secrets
entrusted
to a
few



The Unpublished Facts of Life

THERE are some things that cannot be generally told — *things you ought to know*. Great truths are dangerous to some — but factors for *personal power and accomplishment* in the hands of those who understand them. Behind the tales of the miracles and mysteries of the ancients, lie centuries of their secret probing into nature's laws — their amazing discoveries of *the hidden processes of man's mind*, and *the mastery of life's problems*. Once shrouded in mystery to avoid their destruction by mass fear and ignorance, these facts remain a useful heritage for the thousands of men and women who privately use them in their homes today.

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THE SKYLARKS —

When Doctor Richard Ballinger Seaton liberated the intra-atomic energy of matter he started something that he was completely unable to handle.

If the situation and condition could have been confined to Earth things would have been bad enough, what with Doctor Marc C. DuQuesne and the World Steel Corporation and other rapacious persons and organizations murderously determined to monopolize this tremendous new source of power, but it was not and could not be so confined. Seaton and M. Reynolds Crane, the multi-millionaire inventor-scientist-explorer, built a small, crude spaceship; which Dorothy Vaneman, Seaton's fiancée, christened the *Skylark*.

DuQuesne and the World Steel Corporation promptly duplicated this vessel and took to space to try to do away with Seaton and Crane and all others who could block the Corporation's attainment of monopoly. And both Seaton and DuQuesne, each in a succession of ever-larger and ever-better spaceships, visited world after populated world.

They encountered many and varied civilizations — monstrous, non-human, humanoid, near-human and strictly human civilizations. Some of these races were less intelligent than the humanity of Earth. Some were very much like us. Some — particularly the ancient, green-skinned Norlaminians of the incredi-

bly copper-rich Green or Central System — possessed vastly greater knowledge.

DuQuesne learned, but did not teach; took, but did not give. He was out for Marc C. DuQuesne first, last, and all times in between his tremendous ability was concentrated upon getting, by the use of any possible mean whatever, a monopoly of the extremely rare metal rovolon — the key to intra-atomic energy.

Seaton and Crane, on the other hand, were equally single-mindedly determined that Seaton's discovery should be devoted to the good of all humanity wherever situate, and to that of all civilizations compatible with humanity.

The Tellurians encountered a group of immaterial, disembodied minds; extremely intelligent and extraordinarily powerful patterns of pure sixth-order force. DuQuesne joined them; and the problem thus posed was a tremendous one indeed. Seaton solved it, however, by encapsulating the whole group of "pure intellectuals" in a stasis of time and launching the capsule on a voyage that should endure throughout almost all of total time and reach almost the farthest limit of space.

Having removed the greatest obstacle to progress, the Seaton-Crane party returned to Earth's solar system in their space-flying worldlet the *Skylark of Valeron* and began to bring order out of the chaos that all Earth then was.

SKYLARK

DuQUESNE

by E. E. SMITH, Ph.D.

Illustrated by MORROW

*Here's the grand conclusion of
science fiction's greatest series
—Seaton and DuQuesne against
a galaxy of unconquerable foes!*

I

S. O. S.

Appearances are deceiving. A polished chunk of metal that shines like a Christmas-tree ornament may hold—and release—energy to destroy a city. A seed is

quite another order of being to the murderous majesty of a toppling tree. A match flame can become a holocaust.

And the chain of events that can unseat the rulers of galaxies can begin in a cozy living room, before a hearth. . . .

Outwardly, the comfortable (if

somewhat splendidly furnished) living room of the home of the Richard Ballinger Seatons of Earth presented a peaceful scene. Peaceful? It was sheerly pastoral! Seaton and Dorothy, his spectacularly auburn-haired wife, sat on a davenport, holding hands. A fire of pine logs burned slowly, crackling occasionally and sending sparks against the fine bronze screen of the fireplace. Richard Ballinger Seaton Junior lay on the rug, trying doggedly, silently, and manfully, if unsuccessfully, to wriggle toward those entrancing flames.

Inwardly, however, it was very much otherwise. Dorothy's normally pleasant—as well as beautiful—face wore a veritable scowl.

The dinner they had just eaten had been over two hours late; wherefore not one single item of it had been fit to feed to a pig. Furthermore, and worse, Dick was not relaxed and was not paying any attention to her at all. He was still wound up tight; was still concentrating on the multitude of messages driving into his brain through the button in his left ear—messages of such urgency of drive that she herself could actually read them, even though she was wearing no apparatus whatever.

She reached up, twitched the button out of his ear, and tossed it onto a table. "Will you please lay off of that stuff for a minute, Dick?" she demanded. "I'm fed up to the eyeballs with this business of you killing yourself with all time work and no time sleep. You *never* had any such horrible black circles under

your eyes before and you're getting positively *scrawny*. You've got to quit it. Can't you let somebody else carry some of the load? Delegate some authority?"

"I'm delegating all I possibly can already, Red-Top." Seaton absently rubbed his ear. Until Dorothy had flipped it away, the button had been carrying to him a transcription of the taped reports of more than one hundred Planetary Observers from the planet of Norlamin, each with the I. Q. of an Einstein and the sagacity of an owl. The last report had had to do with plentiful supplies of X metal that had been turned up on a planet of Omicron Eridani, and the decision to dispatch a fleet of cargo-carrying ships to fetch them away.

But he admitted grudgingly to himself that that particular decision had already been made. His wife was a nearer problem. Paying full attention to her now, he put his arm around her and squeezed.

"Converting a whole planet practically all at once to use fourth-, fifth-, and sixth-order stuff is a job of word, believe me. It's all so new and so tough that not too many people can handle any part of it. It takes brains. And what makes it extra tough is that altogether too many people who are smart enough to learn it are crooks. Shysters—hoodlers—sticky-fingers generally. But I think we're just about over the hump. I wouldn't wonder if these Norlaminian 'Observers'—snoopers, really—from the Country of Youth will turn out to be the answer to prayer."



GN
SKYLARK DUQUESNE

"They'd better," she said, darkly. "At least, *something* had better."

"Besides, if you think I look like the wrath of God, take a good look at Mart sometime. He's having more grief than I am."

"I already have; he looks like a refugee from a concentration camp. Peggy was screaming about it this morning, and we're both going to just simply. . . ."

What the girls intended to do was not revealed, for at that moment there appeared in the air before them the projected simulacra of eight green-skinned, more-or-less-human men; the men with whom they had worked so long; the ablest thinkers of the Central System.

There was majestic Fodan, the Chief of the Five of Norlamin; there was white-bearded Orlon, the First of Astronomy; Rovol, the First of Rays; Astron, the First of Energy; Drasnik, the First of Psychology; Satrazon and Caslor, the Firsts of Chemistry and of Mechanism, respectively; and—in some ways not the least—there was that powerhouse of thought, Sacner Carfon the two thousand three hundred forty-sixth: the hairless, almost porpoise-like Chief of the Council of the watery planet Dasor. They were not present in the flesh. But their energy projections were as seemingly solid as Seaton's own tall, lean body.

"We come, Overlord of the System, upon a matter of—" the Chief of the Five began.

"Don't call me 'Overlord'. Please." Seaton broke in, with grim foreboding in his eyes, while Dorothy

stiffened rigidly in the circle of his arms. Both knew that those masters of thought could scarcely be prevailed upon to leave their own worlds even via projection. For all eight of them to come *this* far—almost halfway across the galaxy!—meant that something was very wrong indeed.

"I've told you a dozen times, not only I ain't no Overlord but I don't want to be and won't be. I *don't* like to play God—I simply have not got what it takes."

"'Coordinator', then, which is of course a far better term for all except the more primitive races," Fodan went imperturbably on. "We have told you, youth, not a dozen times, but once, which should have been sufficient, that your young and vigorous race possesses qualities that our immensely older peoples no longer have. You, as the ablest individual of your race, are uniquely qualified to serve total civilization. Thus, whenever your services become necessary, you will so serve. Your services have again become necessary. Orlon, in whose province the matter primarily lies, will explain."

Seaton nodded to himself. It was going to be bad, all right, he thought as the First of Astronomy took over.

"You, friend Richard, with some help from us, succeeded in encapsulating a group of malignant immaterial entities, including the disembodied personality of your fellow-scientist Doctor Marc C. DuQuesne, in a stasis of time. This capsule, within which no time whatever could or can elapse, was launched

into space with a linear acceleration of approximately three times ten to the twelfth centimeters per second squared. It was designed and powered to travel at that acceleration for something over one hundred thousand million Tellurian years; at the end of which time it was to have been rotated through the fourth dimension into an unknown and unknowable location in normal three-dimensional space."

"That's right," Seaton said. "And it will. It'll do just exactly that. Those pure-intellectual louses are gone for good; and so is Blackie DuQuesne."

"You err, youth," corrected the Norlaminian. "You did not allow us time sufficient to consider and to evaluate all the many factors involved. Rigid analysis and extended computation show that the probability approaches unity that the capsule of stasis will, almost certainly within one Tellurian year of its launching and highly probably in much less time, encounter celestial matter of sufficient density to volatilize its uranium power bars. This event will of course allow the stasis of time to collapse and the imprisoned immaterial entities will be liberated; in precisely the same condition as in the instant of their encapsulation."

Dorothy Seaton gasped. Even her husband showed that he was shaken. DuQuesne and the Immortals free? But—

"But it *can't!*" he fairly yelled the protest. "It'll dodge—it's built to dodge anything that dense!"

"At ordinary—or even extraordi-

nary—velocities, yes," the ancient sage agreed, unmoved. "Its speed of reaction is great, yes; a rather small fraction of a trillionth of a second. That interval of time, however, while small, is very large indeed relative to zero. Compute for yourself, please, what distance that capsule will in theory traverse during that space of time at the end of only one third of one of your years."

Seaton strode across the room and uncovered a machine that resembled somewhat a small, unpretentious desk calculator.* He picked up a helmet and thought into it briefly; then stared appalled at the figure that appeared on a tape.

"My — aunt's — cat's — kittens' — pants — buttons," he said, slowly. "It'd've been smarter, maybe, to've put 'em in orbit around a planetless sun. . . . And I don't suppose there's a Chinaman's chance of catching 'em again that same way."

"No. Those minds are competent," agreed the Norlaminian. "Only one point is clear. You must again activate the *Skylark of Valeron* and again wear its sixth-order controller, since we know of no other entity who either can wear it or should. We eight are here to confer and, on the basis of the few data now available, to plan."

Dorothy Seaton was highly averse to having the appearance of her living room ruined by office equipment. Seaton, however, was living and working under such high tension that he had to have almost instant access to the Valeron's Brain, at any time of the day or night or wherever he might be. Hence this compromise — inconspicuous machines, each direct-connected to the cubic mile of ultra-miniaturization that was the Brain. E. E. S.

Seaton scowled in concentration for two long minutes.

It was a measure of the strain that had been working on him that it took that long. As he had said, he was no God, and didn't want to be. He had not gone looking for either conquest or glory. One thing at a time . . . but that "one thing" had successively led him across a galaxy, into another dimension, through many a hard and desperate fight against some of the most keen-honed killers of a universe.

His gray eyes hardened. Of all those killers, it was Blackie DuQuesne who posed the greatest threat—to civilization, to Seaton himself, and above all to his wife, Dorothy. DuQuesne at large was deadly.

"All right," he snapped at last. "If that's all that's in the wood, I suppose that's the way it'll have to be carved."

The Norlaminian merely nodded. He, at least, had had no doubts of how Seaton would react to the challenge. Typically, once Seaton had decided speed became of the essence. "We'll start moving now," he barked. "The parameters give us up to a year—*maybe*—but from this minute we act as though DuQuesne and the Intellectuals are back in circulation *right now*. So if one of you—Rovol?—will put beams on Mart and Peg and project them over here, we'll get right at it."

And Dorothy, her face turning so white that a line of freckles stood boldly out across the bridge of her nose, picked the baby up and clasped him fiercely, protectively to her breast.

M. Reynolds ("Martin" or "Mart") Crane was tall, slender, imperturbable; his black-haired, ivory-skinned wife Margaret was tall and whistle stacked — she and Dorothy were just about of a size and a shape. In a second or two their full working projections appeared, standing in the middle of the room facing the Seatons — projections so exactly true to life and so solid-seeming as to give no indication whatever that they were not composed of fabric and of flesh and bone and blood.

Seaton stood up and half-bowed to Margaret, but wasted no time in getting down to business. "Hi, Peg — Mart. He briefed you?"

"Up to the moment, yes," Crane replied.

"You know, then, that some time in the indeterminate but not too distant future all hell is going to be out for noon. Any way I scan it, it looks to me as though, more or less shortly, we're going to be *spurlös versenkt* — sunk without a trace."

"You err, youth." Drasnik, the First of Psychology of Norlamin, spoke quite sharply, for him. "Your thinking is loose, turbid, confused; inexcusably superficial; completely . . ."

"But you know what their top man said!" Seaton snapped. "The one they called 'One' — and he wasn't kidding, either, believe me!"

"I do, youth. I know more than that, since they visited us long since. They were not exactly 'kidding' you, perhaps, but your several various interpretations of One's actual words

and actions were inconsistent with any and every aspect of the truth. Those words and actions were in all probability designed to elicit such responses and reactions as would enable him to analyze and classify your race. Having done so, the probability approaches unity that you will not again encounter him or any of his group."

"My — God!" Dorothy, drawing a tremendously deep breath, put Dick the Small back down on the rug and left him to his own devices. "That makes sense . . . I was scared simply witless."

"Maybe," Seaton admitted, "as far as One and the rest of his original gang are concerned. But there's still DuQuesne. And if Blackie DuQuesne, even as an immaterial pattern of pure sixth-order force, thinks that way about me I'm a Digger Indian."

"Ah, yes; DuQuesne. One question, please, to clarify my thinking. Can you, do you think, even with the fullest use of all the resources of your *Skylark of Valeron*, release the intact mind from any body?"

"Of course I . . . oh, I see what you mean. Just a minute; I think probably I can find out from here." He went over to his calculator-like instrument, put on a helmet, and stood motionless for a couple of minutes while the great brain of the machine made its computations. Then, wearing a sheepish grin:

"A flat bust. I not only couldn't, I didn't," he reported, cheerfully. "So One not only did the business, but he was good enough to make me know that I was doing it. What an

operator!" He sobered, thought intensely, then went on, "So they sucked us in. Played with us."

"You are now beginning to think clearly, youth," Drasnik said. "We come now, then, to lesser probabilities. DuQuesne's mind, of itself, is a mind of power."

"You can broadcast that to the all-attentive universe," Seaton said. "Question: how much stuff has he got now? We know he's got the fifth order down solid. Incarnate, he didn't know any more than that. However, mind is a pattern of sixth-order force. Knowing what we went through to get the sixth, and that we haven't got it all yet by seven thousand rows of Christmas trees, the first sub-question asks itself: Can a free mind analyze itself completely enough to work out and to handle the entire order of force in which it lies?"

"We may assume, I think, that One could have given DuQuesne full knowledge of the sixth if he felt like it. The second sub-question, then, is; did he? If those questions aren't enough to start with I can think of plenty more."

"They are enough, youth," Fodan said. "You have pointed out the crux. We will now discuss the matter. Since this first phase lies largely in your province, Drasnik, you will now take over."

The discussion mounted, and grew, and went on and on. Silently Dorothy slipped away, and the projection of force that was Margaret Crane followed her into the kitchen.

There was no need for Dorothy to prepare coffee and sandwiches for her husband, not by hand; one thought into a controller would have produced any desired amount of any desired comestibles. But she wanted something to do. Both girls knew from experience that a conference of this sort might go on for hours; and Dorothy knew that with food placed before him, Seaton would eat; without it, he would never notice the lack.

She did not, of course, prepare anything for the others.

They were not there. Their bodies were at varying distances — a few miles for Crane and his wife, an unthinkable number of parsecs for the Norlaminians and Sacner Carfon. The distance between Earth and the Green System was so unthinkably vast that there was no point in trying to express it in numbers of miles, or even parsecs. The central green sun of the cluster that held Norlamin, Osnome and Dasor was visible from Earth, all right — in Earth's hugest optical telescopes, as a tiny, 20th-magnitude point — but the light that reached Earth had been on its way for tens of thousand of years before Seaton's ancestors had turned from hunting to agriculture, had taken off their crude skins and begun to build houses, cities, machines and, ultimately, spaceships.

To all of this Dorothy and Peggy Crane were no strangers; they had been themselves in such projections countless times. If they were more than usually silent, it was not because of the astonishing quality of the meeting that was taking place

in the Seaton's living room, but because of the subject of that meeting. Both Dorothy and Peg knew Marc DuQuesne well. Both of them had experienced his cold, impersonal deadliness.

Neither wanted to come close to it again.

Back in the living room, Seaton was saying: "If One gave DuQuesne all of the sixth-order force patterns, he can be anywhere and can do practically anything. So he probably didn't. On the other hand if One didn't give him any of it DuQuesne couldn't get back here in forty lifetimes. So he probably gave him some of it. The drive and the projector, at least. Maybe as much as we have, to equalize us. Maybe One figured he owed the ape that much. Whatever the truth may be, we've got to assume that DuQuesne knows as much as we do about sixth-order forces." He paused, then corrected himself. "If we're smart we'll assume that he knows *more* than we do. So we'll have to find somebody else who knows more than we do to learn from. Question — how do we go about doing that? Not by just wandering around the galaxy at random, looking; that's one certain damn sure thing."

"It is indeed," the moderator agreed. "Sacner Carfon, you have, I think, a contribution to make at this point?"

"I have?" The Dasorian was surprised at first, but caught on quickly. "Oh — perhaps I have, at that. By using Seaton's power and that of the Brain on the Fodan-Carfon band of the sixth, it will undoubtedly



ly be possible to broadcast a thought that would affect selected mentalities wherever situate in any galaxy of this universe."

"But listen!" protested Seaton. "We don't want to *advertise* how dumb we are all over space!"

"Of course not. The thought would be very carefully built and highly selective. It would tell who we are, what we have done, and what we intend and hope to do. It would state our abilities and — by inference, and only to those we seek — our lacks; and would invite all qualified persons and entities to get in touch with us."

Seaton looked abstracted for a moment. He was thinking. The notion of sending out a beacon of thought was probably a good one — *had* to be a good one — after

all, the Norlaminians and Sacner Carfon knew what they were doing. Yet he could see complications. The Fodan-Carfon band of the sixth order was still very new and very experimental. "Can you make it selective?" he demanded. "I don't mind telling our prospective friends we need help — I don't want to holler it to our enemies."

The Dasorian's deep voice chuckled. "It cannot be made selective," he said. "The message would of necessity be on such a carrier as to be receivable by any intelligent brain. Yet it can be hedged about with such safeguards, limitations and compulsions that no one could or would pay attention to it except those who possess at least some ability, overt or latent, to handle the Fodan-Carfon band."

Seaton whistled through his teeth. "Wow! And just how are you going to clamp on such controls as *those*? I don't see how anything but magic — sheer, unadulterated, pure black magic! — could swing that load."

"Precisely. Or, rather, imprecisely. It is unfortunate that your term 'magic' is so inexcusably loose and carries so many and so deplorable connotations and implications. Shall we design and build the thought we wish to send out?"

The thought was designed and was built; and was launched into space with the inconceivable, the utterly immeasurable velocity of its order of being.

A red-haired stripper called Madlyn Mannis, strutting her stuff in Tampa in Peninsula Florida, felt it and almost got it; but, not being very strongly psychic, shrugged it off and went on about the business of removing the last sequin-bedecked trifle of her costume. And, as close to the dancer as plenteous baksheesh could arrange for, a husky, good-looking young petrochemical engineer named Charles K. van der Gleiss felt a thrill like nothing he had ever felt before — but ascribed it, naturally enough, to the fact that this was the first time he had ever seen Madlyn Mannis dance. And in Washington, D. C. one Doctor Stephanie de Marigny, a nuclear physicist, pricked up her ears, tightened the muscles of her scalp, and tried for two full minutes to think of something she *ought* to think of but couldn't.

Out past the Green System the message sped, and past the dust and the incandescent gas that had once been the noisome planet of the Fenachrone. Past worlds where amphibians roared and bellowed; past planets of methane ice where crystalline life brooded sluggishly on its destiny.

In the same infinitesimal instant it reached and passed the Rim Worlds of our galaxy; touching many minds but really affecting none. Farther and farther out, with no decrease whatever in speed, it flew; past the inconceivably tiny, inconceivably fast-moving point that housed the seven greatest, most fearsome minds that the Macrocosmic All had ever spawned — minds that, knowing all about that thought already, ignored it completely.

Immensely farther out, it flashed through the galaxy in which was the solar system of Ray-See-Nee — where, for the first time, it made solid contact with a mind in a body human to the limit of classification. Kay-Lee Barlo, confidential secretary of Department Head Bay-Lay Boyn, stiffened so suddenly that she stuttered into her microphone and had to erase three words from a tape — and in that same instant her mother at home went into deep trance.

And still farther out, in a galaxy lying almost on the universe's Arbitrary Rim, in the Realm of the Lhurdi, the message found a much larger group of receivers. While none of the practically enslaved Jelmi could do much of anything about that weirdly peculiar and inexplicab-

by guarded thought, many of them were very much interested in it; particularly Valkyrie-like Sennloy, a native of the planet Allondax and the master biologist of all known space; ancient Tammon, the greatest genius of the entire Jelma race; and newlyweds Mergon and Luloy, the Mallidaxian savants.

None of the monstrous Llurdi—not even their most monstrous “director”, Klazmon the Fifteenth — being monstrous — could receive the message in any part. And how well that was! For if those tremendously able aliens could have received that message, could have understood it and acted upon it, how vastly different the history of all humanity would have been!

II

Llurdi and Jelmi

The distance from Earth to the Realm of the Llurdi is such that it is worth while to take a moment to locate it in space.

It has been known for a long time that solar systems occur in lenticular aggregations called galaxies; each galaxy consisting of one or more thousands of millions of solar systems. And for almost as long a time, since no definite or systematic arrangement of the galaxies could be demonstrated, the terms “Universe” and “Cosmic All” were interchangeable; each meaning the absolute totality of all matter and all space in existence anywhere and everywhere.

There had been speculations, of

course, that galaxies were arranged in lenticular universes incomprehensibly vast in size, so that the term “Cosmic All” should be reserved for a plurality of universes and a hyper-space of more than three spatial dimensions.

Seaton and Crane in the *Skylark of Valeron* proved that our galaxy, the Milky Way, lies in a lenticular universe by charting every galaxy in that universe. And they suggested to the various learned societies that the two celestial aggregates should be named, respectively, the **First Galaxy** and the **First Universe**.

Many millions of parsecs distant from Tellus and its **First Galaxy**, then, out near the **Arbitrary Rim** of the **First Universe**, there lay the **Realm of the Llurdi**. This **Realm**, which had existed for over seventy thousand Tellurian years, was made up of four hundred eighty-two planets in exactly half that many solar systems.

Two planets in each populated system were necessary because the population of the **Realm** was composed of two entirely different forms of highly intelligent life. Of these two races the **Jelmi** — the subject race, living practically in vassalage — were strictly human beings and lived on strictly **Tellus-Type** worlds.

The master race, the **Llurdi**, had originated upon the harsh and hostile planet **Llurdiax** — **Llurdiaxorb Five** — with its distant, wan, almost-never-seen sun and its incessant gales of frigid, ice-laden, ammonia- and methane-impregnated, forty-pounds-to-the-square-inch air. Like mankind, they wore clothing against the rigors

of their environment. Unlike mankind, however, they wore clothes only for protection, and only when protection was actually necessary. Nor was Llurdi harsh or forbidding — to them.

It was the best of all possible worlds. They would not colonize any planet that was not as nearly as possible like the mother world of their race.

Llurdi, although they are erect, bifurcate, bi-laterally symmetrical, bi-sexual, mammalian, and have a large crania and six-digitated hands each having two opposed thumbs, are not humanoids. Nor, despite their tremendous, insensitive, unfreezable wings, are they either birds or bats. Nor flying cats, although they have huge, vertically-slitted eyes and needle-sharp canine teeth that protrude well below and above their upper and lower lips. Also, they have immensely strong and highly versatile tails; but there is nothing simian about them or in their ancestry.

The Realm was not exactly an empire. Nor was Llanzlan Klazmon the Fifteenth exactly an emperor. The title "Llanzlan" translates, as nearly as possible, into "Director"; and that was what Klazmon regarded himself as being.

It is true that what he said, went; and that if he didn't like any existing law he expunged it from all existence. But that was exactly the way things should be. How else could optimum conditions be achieved and maintained in an ever-expanding, ever-changing, ever-rising economy? He ruled, he said and thoroughly

believed, with complete reason and perfect fairness and strictly in accordance with the findings of the universe's largest and most competent computers as to what was for the best good of all.

Wherefore everyone who did not agree with him was — automatically, obviously, and unquestionably — wrong.

Llurdias, the capital city of the world Llurdi and of the Realm, had a population of just over ten million and covered more than nine hundred square miles of ground. At its geometrical center towered the mile-square, half-mile-high office-residence-palace (the Llurdan word "llanzlanate" has no Tellurian equivalent) of Llanzlan Klazmon the Fifteenth of the Realm of the Llurdi. And in that building's fifth sub-basement, in Hall Prime of Computation, Klazmon and his Board of Advisors were hard at work.

That vast room, the first receptor of all the reports of the Realm, was three-quarters full of receivers, recorders, analyzers — bewilderingly complex instrumentation of all kinds. From most of these devices tapes were issuing — tapes that, en route to semi-permanent storage, were being monitored by specialists in the hundreds of different fields of the Llurdan-Jelmi economy.

Klazmon the Fifteenth and his Board, seated at a long conference table in hard-upholstered "chairs" shaped to fit the Llurdan anatomy, were paying no attention to routine affairs.

"I have called this meeting," the

ruler said, "to decide what can be done to alleviate an intolerable situation. As you all know, we live in what could be called symbiosis with the Jelmi; who are so unstable, so illogical, so bird-brained generally that they would destroy themselves in a century were it not for our gentle but firm insistence that they conduct themselves in all matters for their own best good. This very instability of their illogical minds, however, enables them to arrive occasionally at valid conclusions from insufficient data; a thing that no logical mind can do. These conclusions — they are intuitions, really — account for practically all the advancement we Llurdi have made and explain why we have put up with the Jelmi — yes, cherished them — so long."

He paused, contemplating the justice of the arrangement he had just described. It did not occur to him that it could in anyway be described as "wrong."

He went on: "What most of you do not know is that intuitions of any large worth have become less and less frequent, decade by decade, over the last few centuries. It was twelve years ago that the Jelm Jarxon elucidated the 'Jarxon' band of the sixth order, and no worth-while intuition has been achieved since that time. Beeloy, has your more rigorous analysis revealed any new fact of interest?"

A young female stood up, preened the short fur back of her left ear with the tip of her tail, and said, "No, sir. Logic can not be applied to illogic. Statistical analysis is still

the only possible tool and it cannot be made to apply to the point in question, since it is incapable of certainty and since the genius-type mind occurs in only one out of thousands of millions of Jelmi. I found a very high probability, however — point nine nine nine plus — that the techniques set up by our ancestors are wrong. In breeding for contentment by destroying the discontented we are very probably breeding out the very characteristics we wish to encourage."

"Thank you, Beeloy. That finding was not unanticipated. Kalton, your report on Project University, please."

"Yes, sir." An old male, so old that his fur was almost white, stood up. "Four hundred males and the same number of females, the most intelligent and most capable Jelmi alive, were selected and were brought here to the Llanlanate. They were put into quarters that were Jelmt-type in every respect, even to gravity. They were given every inducement and every facility to work-study and to breed.

"First, as to work-study. They have done practically nothing except waste time. They seem to devote their every effort to what they call 'escape' by means of already-well-known constructions of the fifth and sixth orders — all of which are of course promptly negated. See for yourselves what these insanely illogical mancontents are doing and know for yourselves that, in its present form, Project University is a failure as far as producing intuitions is concerned."

Kalton picked up a fist-sized in-

strument between the thumbs of his left hand and a tri-di "tank" appeared on the table's top, in plain sight of every member of the Board. Then, as he began to finger controls, a three-dimensional scene in true color appeared in the tank; a smoothly-flowing, ever-shifting scene that moved from room to room and from place to place as the point of view traversed the vast volume of the prison.

It did not look like a prison. The apartments, of which there were as many as the Jelmi wanted, were furnished as luxuriously as the various occupants desired; with furniture and equipment every item of which had been selected by each occupant himself or herself. There were wonderful rugs and hangings; masterpieces of painting and of sculpture; triumphs of design in fireplaces and tables and chairs and couches. Each room or suite could be set up for individual control of gravity, temperature, pressure, and humidity. Any imaginable item of food or drink was available on fifteen seconds' notice at any hour of the day or night.

In the magnificent laboratories every known or conceivable piece of apparatus could be had for the asking; the memory banks of the library would furnish in seconds any item of information that had been stored in any one of them during all seventy thousand years of the Realm's existence.

And there were fully-equipped game and exercise rooms, ranging in size from tiny card-rooms up to a full-sized football field, to suit

every Jelmi need or desire for play or for exercise.

But not one of the hundreds of Jelmi observed — each one a perfect specimen physically, as was plainly revealed by the complete absence of clothing — appreciated any one of these advantages! Most of the laboratories were vacant and dark. The few scientists who were apparently at work were not doing anything that made sense. The library was not in use at all; the Jelmi who were reading anything were reading works of purely Jelmi authorship — mostly love stories, murder mysteries, and science fiction. Many Jelmi seemed to be busy but their activities were as pointless as cutting out paper dolls.

"The pale, frail, practically hairless, repulsive, incomplete, illogical, and insane animals refuse steadfastly to cooperate with us on any level."

Any Earthman so frustrated would have snarled the sentence, but the Llurd merely stated it as a fact. "You can all see for yourselves that as far as productive work is . . . but hold!"

The viewpoint stopped moving and focussed sharply on a young man and a young woman who, bending over a table, were working on two lengths of smooth yellow material that looked something like Grand Banks oilskin and something like varnished cambric. "Mergon and Luloy of planet Mallidax." Kalton said into the microphone. "What are you doing? Why are you so far away from your own laboratories?"

Mergon straightened up and glared at what he thought was the point of origin of the voice. "If it's any of

your business, funnyface, which it isn't," he said savagely, "I'm building a shortlong whatsit, and Luloy has nothing to do with it. When I get it done I'm personally going to tear your left leg off and beat you to death with the bloody end of it."

"You see?" Kalton dispassionately addressed the other members of the Board "That reaction is typical."

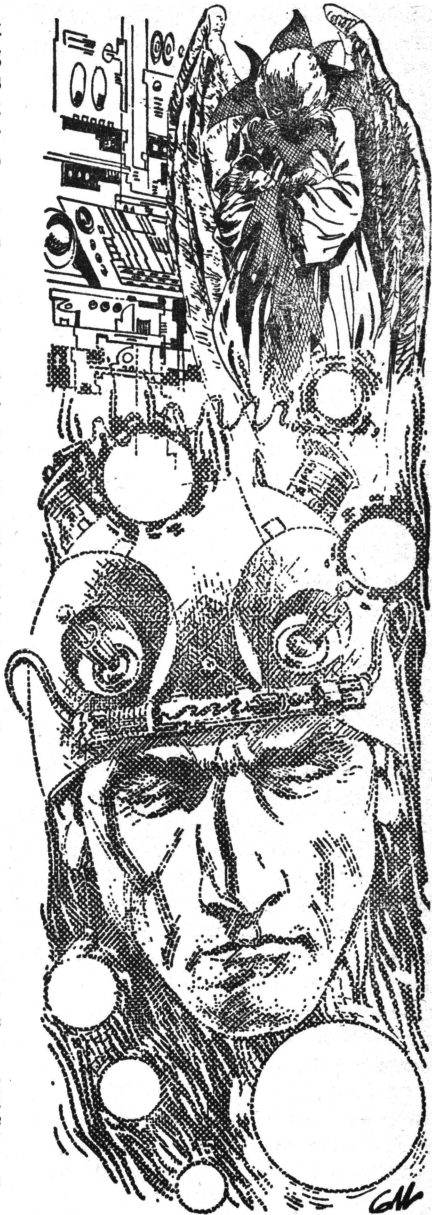
He manipulated controls and both Jelmi leaped to their feet, with all four hands pressed to their buttocks. The fact that Luloy was a woman—scarcely more than a girl, in fact—was of no consequence at all to Kalton. Even Luridan sex meant very little to the Lurdi. Jelman sex meant nothing whatever.

"Nerve-whip," Kalton explained to his fellows. He dropped his controller into his lap and the tri-di tank vanished. "Nothing serious—only slightly painful and producing only a little ecchymosis and extravasation. Neither of those two beasts, however, will be at all comfortable until they get back where they belong. Now, to continue my report:

"So much for failure to work-study. Failure-refusal to breed, while not possible of such simple and easy demonstration, is no less actual, effective, and determined. A purely emotional, non-logical, and ridiculous factor they call 'love' seems to be involved, as does their incomprehensibly exaggerated, inexplicable craving for 'liberty' or 'freedom.'"

The Llanslar said thoughtfully, "But surely, unwillingness to breed cannot possibly affect the results of artificial insemination?"

"It seems to, sir. Definitely. There



is some non-physical and non-logical, but nevertheless powerful, operator involved. My assistants and I have not been able to develop any techniques that result in any except the most ephemeral pregnancies."

"You apparently wish to comment, Velloy?" Klazmon asked.

"I certainly do!" a middle-aged female snapped, giving one tautly-outstretched wing a resounding whack with her tail. "Of course they haven't! As Prime Sociologist I said five years ago and I repeat now that no mind of the quality of those of the Jelmi here in the llanzlanate can be coerced by any such gross physical means. Kalton talks of them and thinks of them as animals—meaning lower animals. I said five years ago and still say that they are not. Their minds, while unstable and completely illogical and in many instances unsane to the point of insanity, are nevertheless minds of tremendous power. I told this Board five years ago that the only way to make that project work—to cause selected Jelmi to produce either ideas or young or both—was to give the selectees a perfect illusion of complete freedom, and I recommended that course of action. Since I could not prove my statement mathematically, my recommendation was rejected. While I still cannot prove that statement, it is still my considered opinion that it is true; and I now repeat both statement and recommendation. I will keep on repeating them at every opportunity as long as this Board wastes time by not accepting them. I remind you that you have already wasted—lost—over five years."

"Your statement becomes more probable year by year," the Llanzan admitted. "Kalton, have you anything more to say?"

"Very little. Only that, since Project University has admittedly failed, we should of course adopt—"

Kalton was silenced in mid-sentence by a terrific explosion, which was followed by a rumbling crash as half of one wall of the Hall collapsed inward.

A volume of Jelman air rushed in, enveloping a purposeful company of Jelmi in yellow coveralls and wearing gas-masks. Some of these invaders were shooting pistols; some were using or throwing knives; but all were covering and protecting eight Jelmi who were launching bombs at one great installation of sixth-order gear—the computer complex that was the very nerve center of the entire Realm.

For the Jelmi—who, as has been said, were human to the last decimal of classification—had been working on fifth- and sixth-order devices purely as a blind; their real effort had been on first-order effects so old that their use had been all but forgotten.

The Jelman plan was simple: Thirty men and thirty women would destroy the central complex of the computer system of the entire Realm. Then, if possible, the survivors of the sixty would join their fellows in taking over an already-selected Llurdan scout cruiser and taking off at max.

It was quite probable that many or even most of the attacking sixty

would die. It was distinctly possible that they all would. All sixty, however, were perfectly willing to trade their lives for that particular bank of sixth-order apparatus, in order that seven hundred forty other Jelmi could escape from Llurdiax and, before control could be re-established, be beyond their masters' reach.

Theoretically, the first phase of the operation should have been successful; the Realm's nerve-center should have been blown to unrecognizable bits. The Jelmi knew exactly what they were going to do, exactly how they were going to do it, and exactly how long it would take. They knew that they would have the advantage of complete surprise. There would be, they were sure, half a second or so of the paralysis of shock, followed by at least one second of utter confusion; which would give them plenty of time.

They were sure it would be as though, during a full-formal session of the Supreme Court, a gang of hoodlums should blast down a wall and come leaping into the courtroom with Tommy-guns ablaze and with long knives flying and stabbing and slashing. Grave, stately, and thoughtful, the justices could not possibly react fast enough to save their lives or their records or whatever else it was that the gangsters were after.

The Jelmi, however, had never seen any Llurd in emergency action; did not know or suspect how nearly instantaneous the Llurdan speed of reaction was; did not realize that a perfectly logical mind can

not be surprised by any happening, however unusual or however outrageous.

Thus:

Yelling, shooting, throwing, stabbing, slashing, the men and women of the Jelmi rushed into battle; to be met—with no paralysis and no confusion and no loss of time whatever—by buffeting wings, flailing tails, tearing teeth, and hard, highly skilled hands and fists and feet.

Many machine operators, as agile in the air as bats, met the bombs in midair and hurled them out into and along the corridor through the already-breached wall, where they exploded harmlessly. Harmlessly, that is, except for a considerable increase in the relatively unimportant structural damage already wrought.

Two knives were buried to their hilts in the huge flying muscles of the Llanzlan's chest. His left wing hung useless, its bones shattered by bullets. So did his right arm. Nevertheless, he made it at speed to his console—and the battle was over.

Beams of force lashed out, immobilizing the human beings where they stood. Curtains of force closed in, pressing the Jelmi together into a tightly packed group. An impermeable membrane of force confined all the Jelman air and whatever Llurdan atmosphere had been mixed with it.

The Llanzlan, after glancing at his own wounds and at the corps of surgeons already ministering to his more seriously wounded fellows, resumed his place at the conference table.

He said, "This meeting will re-

sume. The places of those department heads who died will be taken by their first assistants. All department heads are hereby directed to listen, to note, and to act. Since Project University has failed, it is to be closed out immediately. All Jelmi—I perceive that none of those present is dead, or even seriously wounded—will be put aboard the ship in which they intended to leave Llundax. They will be given all the supplies, apparatus, and equipment that they care to requisition and will be allowed to take off for any destination they please.”

He glanced at the captured Jelmi, imprisoned in their force-bubble of atmosphere. To them it reeked of methane and halogens, but they stood proudly and coldly listening to what he said.

He dismissed them from his mind and said. “A recess will now be taken so that those of us who are wounded may have our wounds dressed. After that we will consider in detail means of inducing the Jelmi to resume the production of breakthroughs in science.”

III

FREE (?)

Some hours later, far out in deep space, the ex-Llundax scout cruiser—now named the *Mallidax*, after the most populous Jelman planet of the Realm—bored savagely through the ether. Its crew of late revolutionaries, still dazed by the fact that they were still alive, recuperated in their various ways.

In one of the larger, more luxurious cabins Luloy of Mallidax lay prone on a three-quarter-size-bed, sobbing convulsively, uncontrollably. Her left eye was swollen shut. The left side of her face and most of her naked body bore livid black and blue bruises—bruises so brutally severe that the marks of Kalton's sense-whip punishment, incurred earlier for insubordination, were almost invisible. A dozen bandages showed white against the bronzed skin of her neck and shoulders and torso and arms and legs.

“Oh, snap out of it, Lu, please!” Mergon ordered, almost bruskiy. He was a burly youth with crew-cut straw-colored hair; and he, too, showed plenty of evidence of having been to the wars. He had even more bruises and bandages than she did. “Don't claim that you wanted to be a martyr any more than I did. And they can engrave it on a platinum plaque that I'm damned glad to get out of that fracas alive.”

Stopping her crying by main strength, the girl hauled herself up into a half-sitting position and glared at the man out of her one good eye.

“You . . . you clod!” she stormed. “It isn't that at all! And you know it as well as I do. It's just that we . . . they . . . he . . . not a single one of them so much as . . . why, we might just as well have been merely that many mosquitoes—midges—worse, exactly that many perfectly innocuous saprophytic bacilli.”

“Exactly,” he agreed, sourly, and her glare changed to a look almost of surprise. “That's precisely what we were. It's humiliating, yes. It's

devastating and it's frustrating. We tried to hit the Llurdi where it hurt, and they ignored us. Agreed. I don't like it a bit better than you do; but caterwauling and being sorry for yourself isn't going to help matters a—"

"Caterwauling! Being sorry for myself! If *that's* what you think, you can . . ."

"Stop it, Lu!" he broke in sharply, "before I have to spank your fanny to a rosy blister!"

She threw up her head in defiance; then what was almost a smile began to quirk at the corners of her battered mouth. "You can't, Merg," she said, much more quietly than she had said anything so far. "Look—it's all red, green, blue, yellow, and black already. That last panel I bounced off of was no pillow, friend."

"Llenderllon's favor, sweetheart!" Bending over, he kissed her gingerly, then drew a deep breath of relief. "You scared me like I don't know when I've been scared before," he admitted. "We need you too much—and I love you too much—to have you go off the deep end now. Especially now, when for the first time in our lives we're in position to do something."

"Such as what?" Luloy's tone was more lifeless than skeptical. "How many of our whole race are worth saving, do you think? How many Jelmi of all our worlds can be made to believe that their present way of life is anything short of perfection?"

"Very few, probably," Mergon conceded. "As of now. But—"

He paused, looking around their

surroundings. The spaceship, which had once been one of the Llurdi's best, might have a few surprises for them. It was a matter for debate whether the Llurdi might not have put concealed spy devices in the rooms. On balance, however, Mergon thought not. The Llurdi operated on grander scales than that.

He said, "Luloy, listen. We tried to fight our way to freedom by attacking the Llurdi right where it hurts, in center of their power. We lost the battle. But we have what we were fighting for, don't we? Why do you think they let us go, perfectly free?"

Luloy's eye brightened a little, but not too much. "That's plain enough. Since they couldn't make us produce either new theories or children in captivity, they're giving us what they say is complete freedom, so that we'll produce both. How stupid do they think we are? How stupid can they get? If we could have wrecked their long eyes, yes, we could have got away clean to a planet in some other galaxy, 'way out of their range; but now? If I know anything at all, it's that they'll hold a tracer beam—so weak as to be practically undetectable, of course—on us forever."

"I think you're right," Mergon said, and paused. Luloy looked at him questioningly and he went on, "I'm sure you are, but I don't think it's us they are aiming at. They're probably taking the long view—betting that, with a life-long illusion of freedom, we'll have children of our own free will."

Luloy nodded thoughtfully. "And we would," she said, definitely. "All of us would. For, after all, if we on this ship all die childless what chance is there that any other Jelmi will try it again for thousands of years? And our children would have a chance, even if we never have another."

"True. But on the other hand, how many generations will it take for things now known to be facts to degenerate into myths? To be discredited completely, in spite of the solidest records we can make as to the truth and the danger?"

Luloy started to gnaw her lip, but winced sharply and stopped the motion. "I see what you mean. Inevitable. But you don't seem very downcast about it, so you have an idea. Tell me, quick!"

"Yes, but I'm just hatching it; I haven't mentioned it even to Tammon yet, so I don't know whether it will work or not. At present a sixth-order break-through can't be hidden from even a very loose surveillance. Right?"

By now Luloy's aches and pains were forgotten. Eyes bright, she nodded. "You're so right. Do you think one can be? Possibly? How?"

"By finding a solar system somewhere whose inhabitants know so much more than we do that the emanations of their sixth-order installations continuously or regularly at work will mask those of any full-scale tests we want to make. There must be some such race, somewhere in this universe. The Llurdi charted this universe long ago—they call it U-Prime—and I requisitioned copies

of all the tapes. Second: the Llurdi are all strictly logical. Right?"

"That's right," the girl agreed. "Strictly. Insanely, almost, you might say."

"So my idea is to do something as illogical as possible. They think we'll head for a new planet of our own; either in this galaxy or one not too far away. So we won't. We'll drive at absolute max for the center of the universe, with the most sensitive feelers we have full out for very strong sixth-order emanations. En route, we'll use every iota of brain-power aboard this heap in developing some new band of the sixth, being mighty careful to use so little power that the ship's emanations will mask it. Having found the hiding-place we want, we'll tear into developing and building something, not only that the Llurdi haven't got, but a thing that by use of which we can bust Llanzlan Klazmon the Fifteenth loose from his wings and tail—and through which he can't fight back. So, being absolutely—stupidly—logical about everything, what would His Supreme Omnipotence do about it?"

Luloy thought in silence for a few seconds, then tried unsuccessfully to whistle through battered, swollen lips. "Oh, boy!" she exclaimed, delightedly. "Slug him with a thing like that—demonstrate superiority—and the battle is over. He'll concede us everything we want, full equality, independence, you name it, without a fight—without even an argument!"

Grinning, Mergon caught her arm and led her out of the room.

Throughout the great hulk of the Llurd spaceship the other battered Jelmi veterans were beginning to stir. To each of them, Mergon explained his plan and from each came the same response. "Oh, boy!"

They began at once setting up their work plans.

The first project was to find—somewhere!—a planet generating sufficient sixth-order forces to screen what they were going to do. In the great vastnesses of the Over-Universe there were many such planets. They could have chosen that which was inhabited by Norlaminian or Dasorian peoples. They could have chosen one of a score which were comparatively nearby. They, in fact, ultimately chose and set course for the third planet of a comparatively small G-type star known to its people as Tellus, or Earth.

They could have given many reasons why this particular planet had been selected.

None of these reasons would have included the receipt of the brief pulse of telepathic communication which none of them, any longer, consciously remembered.

And back on Llurdiax the Llanlan followed the progress of the fleeing ship of Jelmi rebels with calm perception.

His great bat wings were already mending, even as the scars of the late assault on his headquarters were already nearly repaired by a host of servo-mechanisms. Deaf to the noise and commotion of the repairs, heedless of the healing wounds which any human would have devoted a month

in bed to curing, the Llanlan once again summoned his department heads and issued his pronouncement:

"War, being purely destructive, is a product of unsanity. The Jelmi are, however, insane; many of them are insane. Thus, if allowed to do so, they commit warfare at unpredictable times and for incomprehensible, indefensible, and/or whimsical reasons. Nevertheless, since the techniques we have been employing have been proven ineffective and therefore wrong, they will now be changed. During the tenure of this directive no more Jelmi will be executed or castrated: in fact, a certain amount of insane thinking will not merely be tolerated but encouraged, even though it lead to the unsanity termed 'war'. It should not, however, be permitted to exceed that quantity of 'war' which would result in the destruction of, let us say, three of their own planets.

"This course will entail a risk that we, as the 'oppressors' of the Jelmi, will be attacked by them. The magnitude of this risk—the probability of such an attack—cannot be calculated with the data now available. Also, these data are rendered even less meaningful by the complete unpredictability of the actions of the group of Jelmi released from study here.

"It is therefore directed that all necessary steps be taken particularly in fifth and sixth-order devices, that no even theoretically possible attack on this planet will succeed.

"This meeting will now adjourn."

It did; and within fifteen minutes heavy construction began—construc-

tion that was to go on at a pace and on a scale and with an intensity of drive theretofore unknown throughout the Realm's long history. Whole worldlets were destroyed, scavenged for their minerals, their ores smelted in giant atomic space-borne foundries and cast and shaped into complex machines of offense and defense. Delicate networks of radiation surrounded every Jelm and Llurd world, ready to detect, trace, report and home on any artifact whatsoever which might approach them. Weapons capable of blasting moons out of orbit slipped into position in great latticework spheres of defensive emplacements.

The Llurdi were preparing for anything.

Llurdan computations were never wrong. Computers, however, even Llurdan computers, are not really smart—they can't really think. Unlike the human brain, they can not arrive at valid conclusions from insufficient data. In fact, they don't even try to. They stop working and say—in words or by printing or typing or by flashing a light or by ringing a bell—"DATA INSUFFICIENT": and then continue to do nothing until they are fed additional information.

Thus, while the Llanzlan and his mathematicians and logicians fed enough data into their machines to obtain valid conclusions, there were many facts that no Llurd then knew. And thus those conclusions, while valid, were woefully incomplete; they did not cover all of actuality by far.

For, in actuality, there had al-

ready begun a chain of events that was to render those mighty fortresses precisely as efficacious against one certain type of attack as that many cubic miles of sheerest vacuum.

IV

Llurdi and Fenachrone

The type of attack which was about to challenge the Llurdi was from a source no civilized human would have believed still existed.

If Richard Seaton, laboring at Earth's own defenses uncountable parsecs away, had been told of it, he would flatly have declared the story a lie. He ought to know, he would have said. That particular danger to the harmony of the worlds had long since been destroyed . . . and he was the man who had destroyed it!

When the noisome planet of the Fenachrone was destroyed it was taken for granted that Ravindau and his faction of the Party of Postponement of Universal Conquest, who had fled from the planet just before its destruction, were the last surviving members of their monstrous race. When they in turn were destroyed it was assumed that no Fenachrone remained alive.

That assumption was wrong. There was another faction of the Party of Postponement much larger than Ravindau's, much more secretive, and much better organized.

Its leader, one Sleemet, while an extremely able scientist, had taken lifelong pains that neither his name nor his ability should become known

to any except a select few. He was as patriotic as was any other member of his race; he believed as implicitly as did any other that the Fenachrone should and one day would rule not only this one universe, but the entire Cosmic All. However, he believed, and as firmly, that The Day should not be set until the probability of success of the project should begin to approach unity as a limit.

According to Sleemet's exceedingly rigorous analysis, the time at which success would become virtually certain would not arrive for at least three hundred Fenachronian years.

From the day of Fenor's accession to the throne Sleemet had been grimly certain that this Emperor Fenor—headstrong, basically ignorant, and inordinately prideful even for an absolute monarch of the Fenachrone—would set The Day during his own reign; centuries before its proper time.

Therefore, for over fifty years, Sleemet had been preparing for exactly the eventuality that came about, and:

Therefore, after listening to only a few phrases of the ultimatum given to Emperor Fenor by Sacner Carfon of Dasor, speaking for the Overlord Seaton and his Forces of Universal Peace, Sleemet sent out his signal, and:

Therefore, even before Ravindau's forces began to board their single vessel Sleemet's fleet of seventeen superdreadnoughts was out in deep space, blasting at full-emergency fifth-order cosmic-energy drive away from the planet so surely doomed.

Surely doomed? Yes. Knowing vastly more about the sixth order than did any other of his race, he was the only one of his race who knew anything about the Overlord of the Central System; of who and what that Overlord was and of what that Overlord had done. He, Sleemet, did not want any part of Richard Ballinger Seaton. Not then or ever.

Curse Fenor's abysmal stupidity! Since a whole new Fenachrone planet would now have to be developed, the Conquest could not be begun for more than three hundred years!

While Sleemet knew much more about the sixth order than Ravindau did, he did not have the sixth-order drive and it took him and his scientists and engineers several months to develop and to perfect it. Thus their fleet was still inside the First Galaxy when they finally changed drives and began really to travel—on a course that, since it was laid out to reach the most distant galaxies of the First Universe, would of necessity lie within two and a quarter hundreds of thousands of light-years of the galaxy in which the Realm of the Lurdi lay.

As has been intimated, the Lurdi were literal folk. When any llanzlan issued a directive he meant it literally, and it was always as literally carried out.

Thus, when Llanlzlan Klazmon ordered the construction of an installation of such a nature that "no even theoretically possible attack on this planet will succeed" he meant precisely that—and that was precisely what was built. Nor, since the Lurdi

had full command of the fourth and fifth orders, and some sixth-order apparatus as well, was the task overlong in the doing.

The entire one-hundred-six-mile circumference of Llurdias and a wide annulus outside the city proper were filled with tremendous fortresses; each of which was armed and powered against any contingency to which Computer Prime—almost half a cubic mile of miniaturization packed with the accumulated knowledges and happenings of some seventy thousand years—could assign a probability greater than point zero zero zero one.

Each of those fortresses covered five acres of ground; was low and flat. Each was built of super-hard, super-tough, super-refractory synthetic. Each had twenty-seven high-rising, lightning-rodlike spikes of the same material. Fortress-shell and spikes through closely spaced cast-in tubes; and the entire periphery of each fortress, as well as dozens of interior relief-points, went deep into constantly water-soaked, heavily salted ground. Each fortress sprouted scores of antennae—parabolic, box, flat, and straight—and scores of heavily insulated projectors of shapes to be defined only by a professional mathematician of solid geometry.

And how the Llurdan detectors could now cover space! The Jelm Mergon, long before his abortive attempt to break jail, had developed a miniaturized monitor station that could detect, amplify, and retransmit on an aimed tight beam any fifth- or sixth-order signal from and to a distance of many kiloparsecs.

Hundreds of these "mergons" were already out in deep space. Now mergons were being manufactured in lots of a thousand, and in their thousands they were being hurled outward from Llurdiax, to cover—by relays *en cascade*—not only the Llurdan galaxy and a great deal of inter-galactic space, but also a good big chunk of inter-universal space as well.

The Fenachrone fleet bored on through inter-galactic space at its distance-devouring sixth-order pace. Its fourth-, fifth-, and sixth-order detector webs fanned out far—"far" in the astronomical sense of the word—ahead of it. They were set to detect, not only the most tenuous cloud of gas, but also any manifestation whatever upon any of the known bands of any of those orders. Similar detectors reached out to an equal distance above and below and to the left of and to the right of the line of flight; so that the entire forward hemisphere was on continuous web of ultra-tenuous but ultra-sensitive detection.

And, as that fleet approached a galaxy lying well to "starboard"—the term was still in use aboard ship except for matters of record, since the direction of action of artificial gravity, whatever its actual direction, was always "down"—two sets of detectors tripped at once.

The squat and monstrous officer on watch reported this happening instantly, of course, to Sleemet himself; and of course Sleemet himself went instantly into action. He energized his flagship's immense fifth-order projector.



Those detections could have only one meaning. There was at least one solar system in that galaxy peopled by entities advanced enough to work with forces of at least the fifth order. They should be destroyed—that is, he corrected himself warily, unless they were allied with or belonged to that never-to-be-sufficiently-damned Overlord of the Central System of the First Galaxy . . . But no, at this immense distance the probability of that was vanishingly small.

They might, however, have weapons of the sixth. The fact that there were no such devices in operation at the moment did not preclude that possibility.

Very unlike the late unlamented Fenor he, First Scientist Sleemet, was not stupidly and arrogantly sure

that the Fenachrone were in fact the ablest, most intelligent, and most powerful race of beings in existence. He would investigate, of course. But he would do it cautiously.

The working projections of the Fenachrone were tight patterns of force mounted on tight beams. Thus, until they began to perform exterior work, they were virtually undetectable except by direct interception and hard-driven specific taps. Sleemet knew this to be a fact; whether the projection was on, above, or below the target planet's surface and even though that planet was so far away that it would take light hundreds of centuries to make the one-way trip.

The emanations of his vessels' sixth-order cosmic-energy drive, however, were very distinctly some-

thing else. They could not be damped out or masked and they could be detected very easily by whoever or whatever it was that was out there . . . Yes, an exploration would not change matters at all . . .

As a matter of fact, the Fenachrone's Fleet's emanations had been detected a full two seconds since.

A far-outpost mergon had picked it up and passed it along to a second, which in turn had relayed it inward to its Number Three, which finally had delivered it to Computer Prime on incredibly distant Llurdiax.

There, in Hall. Prime of Computation, a section supervisor had flicked the switch that had transferred the unusual bit of information to his immediate superior, Head Supervisor Klarton—who had at sight of it gone into a tizzy (for a Llurd) of worrying his left ear with the tip of his tail. He stared at the motionless bit of tape as though it were very apt indeed to bite him in the eye.

What to do? Should he disturb the llanzlan with this or not?

This was a nose-twitching borderline case if there ever was one. If he didn't, and it turned out to be something important, he'd get his tail singed—he'd be reduced to section supervisor. But if he did, and it didn't, he'd get exactly the same treatment . . . However, the thing, whatever it might be, was so *terrifically* far away . . .

Yes, that was it! The smart thing to do would be to watch it for a few seconds—determine exact distance,

direction of flight, velocity, and so forth—before reporting to the Big Boss. That would protect him either way.

Wherefore Sleemet had time to launch an analysynth projection along the indicated line.

He found a solar system containing two highly industrialized planets; one of which was cool, the other cold. One was peopled by those never-to-be-sufficiently-damned human beings; the other by a race of creatures even more monstrous and therefore even less entitled to exist.

He studied those planets and their inhabitants quickly but thoroughly, and the more he studied them the more derisive and contemptuous he became. They had no warships, no fortresses either above or below ground, no missiles, even! Their every effort and all their energies were devoted to affairs of *peace!*

Therefore, every detail having been recorded, including the gibberish being broadcast and tightbeamed by various communications satellites, Sleemet pulled in his analysynth and sent out a full working projection.

He had already located great stores of prepared power-uranium bars and blocks on both planets. Careless of detection now and working at his usual fantastic speed and with his usual perfect control, he built in seconds six tremendous pyramids upon each of the two doomed worlds—pyramids of now one-hundred-percent-convertible superatomic explosive. He assembled twenty-four exceedingly complex, carefully aimed forces and put them on trip. Then,

glaring balefully into an almost opaque visiplate, he reached out without looking and rammed a plunger home—and in an instant those two distant planets became two tremendous fireballs of hellishly intolerable, mostly invisible, energies.

And almost eight thousand million highly intelligent creatures—eating, sleeping, loving, fighting, reading, thinking, working, playing—died in that utterly cataclysmic rending of two entire worlds.

Practically all of them died not knowing even that they had been hurt. A few—a very few—watch officers in interplanetary spaceships observed one or the other of those frightful catastrophes in time to have an instant's warning of what was coming; but only three such officers, it became known later, had enough time to throw on their faster-than-light drives and thus outrun the ravening front of annihilation.

Cosmically, however, the thing didn't amount to much. Its duration was very short indeed. While a little of each planet's substance was volatilized, practically all of it was scarcely more than melted. When equilibrium was restored they did not shine like little suns. They scarcely glowed.

Hands quietly poised, Sleemet again paused in thought.

The fact that he had murdered almost eight billion people did not bother him at all. In fact, he did not think of the action at all, as murder or as killing or as anything else. If he had, the thought would have been

the Fenachrone equivalent of "pesticide". All space comprising the Cosmic All and every planet therein should and would belong to the Master Race; no competing race had any right whatever to live.

Should he, or should he not, explore the lines of those communications beams and destroy the other planets of this group? He should not, he decided. He would have to slow down, perhaps even change course; and it was quite possible that he was still within range of the sixth-order stuff of that self-styled Overlord. Besides, this group of queerly mixed entities would keep. After he had found a really distant Fenatype planet and had developed it, he would come back here and finish this minor chore.

But very shortly after making this decision Sleemet was given cause to know starkly that he had not investigated this civilization thoroughly enough by far; for his vessel was being assailed by forces of such incredible magnitude that his instantaneously reactive outer screen was already radiating in the high violet!

And, before he could do much more than put a hand to his construction panel, that outer screen began to show black spots of failure!

In Hall of Prime Computation, on Llurdiax, one entire panel of instrumentation went suddenly dead. The supervisor of that section flicked two testing switches, then scanned the last couple of inches of each of two tapes. Then he paused, for a moment stunned: knocked completely out of any Llurd's calm poise. Then,

licking his lips, he spoke; apparently to empty air:

"Llanzlan Klazmon, sir, Blaydaxorb Three and Blaydaxorb Five stopped reporting, simultaneously, eleven seconds ago. Orbiting pyrometers of both planets reported thermonuclear temperatures at the endpoints of their respective transmissions. End of report, sir."

The supervisor did not elaborate.

While he was appalled and terribly shocked—he had never imagined such disasters possible—it was not his job to comment or to deduce or to theorize. His business—his *only* business—was to report to a higher echelon the pertinent facts of any and all unusual events or conditions; the height of the echelon to which he reported being directly proportional to the unusualness and/or magnitude of the event or condition.

Since this event was unprecedented and of very great magnitude indeed, his report went straight to the top—thus overtaking and passing the report of Head Supervision Klaron, which was not yet ready for delivery.

Having reported the pertinent facts to the proper echelon, the section supervisor went calmly, almost unconcernedly, back to his job of supervising his section. He paid no more attention to the incident even when the Llanzlan—fully recovered now from his wounds—who had been asleep in his penthouse apartment came into the Hall from the down-flyway. (Everyone rode a force-beam up, but came down on his own wings.)

While Klazmon was not hurrying

any more than usual, his usual technique was to drop a full half mile with folded wings before beginning to put on his brakes. Hence his tremendous wings and stabilizing surfaces sent blasts of cold, dense air throughout the whole end of the Hall as he slowed down for a high-G landing in his seat at his master-control console. Fingers, thumbs, and tail-tip flashed over the banked and tiered keyboards of that console; and, all around the periphery of Llurdias, that miles-wide girdle of mighty fortresses came instantly to life.

A multi-layered umbrella of full-coverage screens flashed into being over the whole city and Klazmon, engineering his fifth-order projector, sent his simulacrum of pure force out to see what had happened in or to the solar system of Blaydaxorb.

He was now, to all intents and purposes, in two places at once.

He could see, hear, feel, taste, and smell exactly as well with one self as with the other. He was, however, thoroughly accustomed to the peculiar sensations of having a complete personality; he could block out at will any perceptions of either self. And his immaterial self had two tremendous advantages over his material one. It could traverse incredibly immense distances in no measurable time; and, no matter where it went or what it encountered, his physical self would remain entirely unaffected.

In a mere flick of time, then, Klazmon was in the solar system of Blaydaxorb. The sun itself was unchanged, but in orbits three and five,

where the two inhabited planets had been, there were two still-wildly-disturbed masses of liquids and gases.

He threw out a light, fast detector web, which located the marauding Fenachrone fleet in less than a second. Then, returning most of his attention to his console, he assembled seventeen exceedingly complex forces and hurled them, one at each vessel of the invading fleet.

Actually, Klazmon was little if any more affected than was Sleemet the Fenachrone about either that utterly frightful loss of life as such or the loss of those two planets as such. The Realm was big enough so that the total destruction of those two planets—of any two planets except of course Lurdiar itself—was unimportant to the economy of the Realm as a whole. No; what burned the llanzlan up—made it mandatory that that fleet and the entire race whose people manned it should, after thorough study, be wiped completely out—was the brazenness, the uncivilized and illogical savagery, the incredible effrontery of this completely intolerable insult to the realm of the Lurdi and to imperial Klazmon its llanzlan.

Klazmon knew of only one race who made a habit of performing such atrocities; such wanton, illogical, insane offenses against all sense and all reason: those chlorine-breathing, amoeboid monstrosities inhabiting Galaxy DW-427-LU. Those creatures, however, as far as any Lurd had ever learned, had always confined their activities to their own galaxy. If, Klazmon thought grimly to himself, those insanely murderous

amoeboids had decided to extend their operations into the Galaxy of the Lurdi, they would find such extension a very expensive one indeed.

Wherefore, hunched now over a black-filtered visiplate, with slitted eyes narrow and cat-whiskers stiffly outthrust; with both hands manipulating high-ratio vernier knobs in infinitesimal arcs; Klazmon shoveled on the coal.

V

Combat!

As has been said, the Lurdi were a literal folk. Klazmon's directive had specified ". . . that no even theoretically possible attack on this planet will succeed."

Hence that was precisely what had been built. No conceivable force or combination of forces, however applied and even at pointblank range, could crack Lurdiar's utterly impenetrable shields.

Nor was that all; for Lurdan engineers, as well as Lurdan philosophers, were thoroughly familiar with the concept that "The best defense is a powerful offense." Wherefore Lurdiar's offensive projectors were designed to smash down any theoretically possible threat originating anywhere within a distance that light would require one and three-quarters millions of Tellurian years to traverse.

Under the thrustings and the stabblings, the twistings and the tearings, the wrenchings and the bludgeonings of those frightful fields of force, seventeen sets of Fenachrone defen-

live screens—outer, intermediate, and inner—went successively upward through the visible spectrum, through the ultra-violet, and into the black of failure; baring the individual vessel's last lines of defense, the wall-shields themselves.

Then Klazmon increased the power, gouging and raving at those ultra-stubborn defenses until those defenses were just barely holding; at which point he relaxed a little, read his verniers, leaned back in his bucket seat, and took stock.

The marauding spaceships were tremendous things; cigar-shaped; flying in hollow-globe formation with one vessel—the flagship, of course—at the exact center; spaced so closely that their screens had overlapped—overlapped in such fashion that unless and until that shell of force was broken no attack could be made upon that central ship.

So far, so good. With the overwhelming superiority of ultimate-planetary over any at-all-probable mobile installations he, Llanzlan Klazmon the Fifteenth, had smashed that shell completely. He could, he was sure, destroy all those vessels as completely.

But it would not do at all to destroy even one of them without examining both it and its crew. Klazmon *had* to know the who and the what and the wherefore and the how and the why. Therefore, leaving all of his attacking beams exactly as they were, Klazmon assembled another gigantic beam—the entire output of one Llurdiaxian fortress—and hurled it against the tail-section of the flagship.

Wall-shield and tail-section vanished in a few manoseconds of time; and not only the tail-section, but also a few hundreds of yards of the flagship's prodigious length as well, became a furiously raging fireball; a sphere of violence incredible.

Klazmon drove his projection forward then, through the now unre-sisting steel wall and into the control room; where it was met by blasts of force from the hand-weapons of the Fenachrone officers.

This demonstration, however, lasted for only a second or two. Then those officers, knowing what it was that was standing there so unconcernedly, abandoned their physical assault and attacked the invading projection with the full power of the huge, black, flame-shot wells of hypnotic force that were their eyes. When the mental attack also failed they merely stood there; glaring a hatred that was actually tangible.

Klazmon immobilized each one of the officers individually with pencils of force and began to study them intensively. While much shorter and thicker and wider and immensely stronger than the Jelmi Of the Realm, they were definitely Jelmoid in every important respect . . . yes, the two races had certainly had a common ancestry, and not too far back. Also, their thinking and conduct were precisely as was to be expected of any Jelman or Jelmoid race that had been allowed to develop in its unsane and illogical way for many thousands of years without the many benefits of Llurdan control!

They would of course have thought-exchange gear; any race of their evident advancement must have . . . ah, yes; over there.

Now—which of these wights would be the admiral? That one wearing the multiplex scanner would be the pilot; that one facing the banks of dials and gages would be the prime engineer; those six panels *had* to be battle panels, so those six monsters had to be gunnery officers . . . ah!

That one there—off by himself; seated (in spite of the fact that with their short, blocky legs no Fenachrone had any need, ever, to sit) at a desk that was practically a throne; facing no gadgetry and wearing consciously an aura of power and authority—that one would be the one Klazmon wanted.

Klazmon's projection flashed up to the motionlessly straining admiral. The helmets of the "mechanical educator" snapped onto the Lurid's quietly studious head and onto the head with the contemptuously sneering face—the head of First Scientist Fleet Admiral Sleemet of the Fenachrone.

That face, however, lost its sneer instantly, for Sleemet—even more overweeningly and brutally and vaingloriously prideful now than were the lower echelons of his race—had never imagined the possibility of the existence of such a mind as this monstrous invader had.

Klazmon's mind, the product of seventy thousand years of coldly logical evolution, tore ruthlessly into the mind of the Fenachrone. It bored into and twisted at that straining

mind's hard-held blocks; it battered and shattered them; it knocked them down flat.

Then Klazmon, omnivorous scholar that he was, set about transferring to his own brain practically everything that the Fenachrone had ever learned. Klazmon learned, as Richard Seaton had learned previously, that all Fenachron having authority and responsibility were meticulous record-keepers. He learned what had happened to the civilization of the Fenachrone and to its world, and who had done it and how; he learned that each and every captain knew exactly the same and had exactly the same records as did First Scientist Fleet Admiral Sleemet himself; he learned that each vessel, alone by itself, was thoroughly capable of recreating the entire Fenachrone civilization and culture.

A few of the many other thousands of things that Klazmon learned were: That there were many Jelman and Jelmoid—human and humanoid, that is—races living in what they called the First Galaxy. That all these races were alike in destructiveness, belligerence to the point of war-lust, savagery, implacability, vengefulness, intolerance, and frightfulness generally. Not one of them (by Klazmon's light!) had any redeeming features or qualities whatever. That all these races must be destroyed if any worthwhile civilization were ever to thrive and spread.

There was no word in any language of the Realm of the Lurdi corresponding even remotely to "genocide". If there had been, Klazmon would have regarded it as an ety-

mological curiosity. All those surviving Fenachrone would have to die: no such race as that had any right whatever to live.

Before being destroyed, however, they would have to be studied with Llurdan thoroughness; and any and all worthwhile ideas and devices and other artifacts should be and would be incorporated into the Llurdan-Jelman way of life.

One vessel would be enough, however, to preserve temporarily for the purpose of study. In fact, what was left of the flagship would be enough.

The now-vanished tail-section had contained nothing new to Llurdan science, the encyclopedic records were intact, and the flagship's personnel—males and females, adults and adolescents and children and babies—were alive and well.

Wherefore sixteen sets of multiplex projectors doubled their drain of power from Llurdias' mighty defensive girdle, and all the Fenachrone aboard sixteen superdreadnoughts died in situ, wherever they happened to be, as those sixteen vessels became tiny, sunlets.

And the llanzlan issued orders:

1) The bulk of the Fenachrone flagship was to be brought in to the llanzlanate at full sixth-order drive.

2) A test section of the llanzlanate was to be converted at once to a completely authentic Fenachrone environment.

3) Every possible precaution was to be taken that no Fenachrone suffered any ill effects on the way, during transfer to their new quarters, or while in their new quarters.

Dropping the Fenachrone flagship and its personnel from his mind, Klazmon immersed himself in thought.

He had learned much. There was much more of menace than he had supposed, in many galaxies other than Galaxy DW-427-LU . . . especially that so-called First Galaxy . . . and particularly the Green System or Central System of that galaxy? The green-skinned Norlaminians—how of them? And how of that system's overlord, Seaton of Tellus? That one was, very evidently, a Jelm . . . and, even after making all due allowance for Sleemet's bias, he was of a completely uncontrolled and therefore extremely dangerous type.

And as, evidently, his was a mind of exceeding power, he could very well be a very dangerous and quite immediate threat.

The mergons must be wider-spread even than originally planned and they must be on the lookout for this Overlord Seaton. In fact, he might be worth interviewing personally. It might be well worth while, some of these years, to take some time off and go to that distant galaxy, purposely to make that Jelm Seaton's acquaintance . . .

Shrugging his shoulders and shaking both wings, Klazmon cut off his projection and called another meeting of his Board of Advisors.

He briefed them on what had happened; then went on:

"We must protect all our planets in the same way and to the same extent that this planet Llurdiax is protected now: a course of action now

necessary because of these many Jelman and Jelmoid races that have been developing for untold millenia in their unsane and illogical ways, with no semblance of or attempt at either guidance or control.

"Second: any force of any such race that attacks us will be destroyed before it or they can do us any harm.

"Third: the manufacture and distribution of mergons will continue indefinitely at the present rate.

"Fourth: No chance or casual vessel or fleet traversing any part of the vast volume of space to be covered by our mergons is to be destroyed, or even hailed, until I myself decide what action, if any, is to be taken."

So saying, the Llanzlan Klazmon dismissed his advisors. His great wings fanned idly as he contemplated what he had done. He was well pleased with it. He had, he reflected, scratching his head contentedly with the tip of his tail, provided for every possible contingency. Whatever this Jelm, or Jelmlike creature, named Seaton might be or do, he would pose no real threat to the llanzlanate.

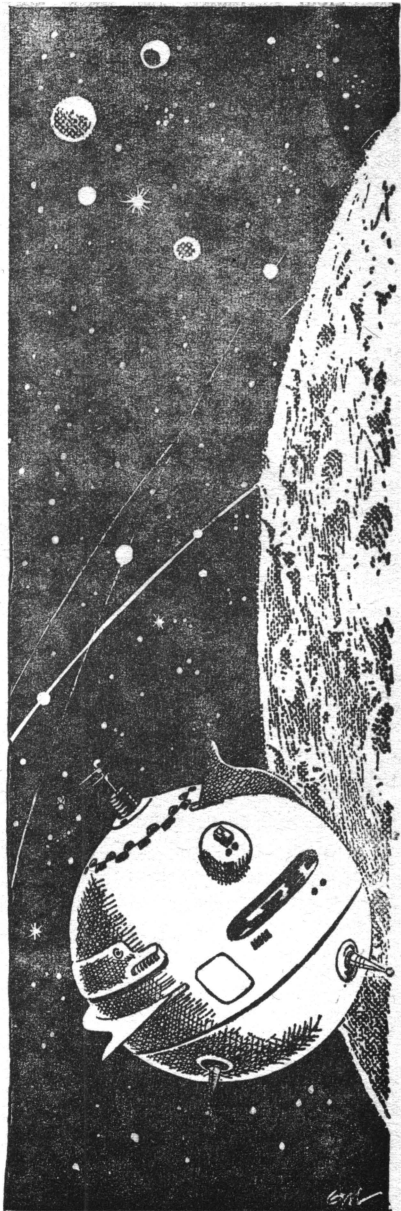
Of that Klazmon was one hundred per cent sure . . .

And wrong!

VI

Of Disembodied Intelligences

We have now seen how the ripple of thought that began with the conference between Seaton and his advisors from the Green System had spread throughout all of recorded space, and how it had affected the



lives and destinies of countless millions of persons who had never heard of him.

Yet a few threads remain to be drawn into our net. And one of these threads represents the strangest entities Seaton had encountered, ever . . . as well as the most deadly.

To understand what these entities are like, it is necessary to look back to their beginnings.

These are most remote, both in space and in time. In a solar system so distant from that of Sol as to be forever unknowable to any one of Earth, and at a time an inconceivably vast number of millenia in the past, there once existed a lusty and fertile Tellus-type planet named Marghol. Over the usual millions of years mankind evolved on Marghol and thrived as usual. And finally, also as usual and according to the scheduled fate of all created material things, the planet Marghol grew old.

Whether or not a Tellus-Type planet ordinarily becomes unfit to support human life before its sun goes nova is not surely known. Nor does it matter very much; for, long before either event occurs, the human race involved has developed a faster-than-light drive and has at its disposal dozens or hundreds of Earth-like planets upon which even subhuman life has not yet developed. The planet Marghol, however, while following the usual pattern in general, developed a specific thing that was, as far as is known, unique throughout all the reaches of total space and throughout all time up to the present.

On Marghol, during many, many millions of years of its prime, there had continued to exist a small, tightly-inbred, self-perpetuating cult of thinkers—of men and women who devoted their every effort and their total power to thought.

They themselves did not know what freak of mind or quirk of physical environment made the ultimate outcome possible; but after those many millions of years, during which the perpetually inbreeding group grew stronger and stronger mentally and weaker and weaker physically, the seven survivors of the group succeeded finally in liberating their minds—minds perfectly intact and perfectly functioning—from the gross and perishable flesh of their physical bodies.

Then, able to travel at the unmeasurable speed of thought and with all future time in which to work, they set out to learn everything there was to know. They would learn, they declared, not only all about space and time and zero and infinity and animals and people and life and death, but also anything and everything and everything else comprising or having anything to do with the totality of existence that is the Cosmic All.

This quest for knowledge has been going on, through universe after universe and through dimension after dimension, for a stretch of time that, given as a number in Tellurian years, would be a number utterly incomprehensible to the human mind. For—what perceptible or tangible difference is there, to the human mind, between a googolplex of seconds and

the same number of centuries? And, since these free minds ordinarily kept track of time only by the life-cycles of suns, the period of time during which they had already traveled and studied could have been either shorter or longer than either of the two exact figures mentioned.

Seven free minds had left the planet Marghol. They called themselves, in lieu of names, "One" to "Seven" in order of their liberation.

For a brief time—a mere cosmic eye-wink; a few hundreds of millions of years—there had been eight, since One had consented to dematerialize one applicant for immortality. The applicant Eight, however, sick and tired of eternal life, had committed suicide by smashing his sixth-order being out of existence against Richard Seaton's sixth-order screens.

Now those seven free minds, accompanied by the free mind of Immortality Candidate Doctor Marc C. DuQuesne, were flying through ultra-deep space in a time-stasis capsule. This capsule, as has been said, was designed and powered to travel almost to infinity in both space and time. But, as the Norlaminians pointed out to Seaton, his basic assumptions were invalid.

Nothing happened, however, for week after week. Then, so immensely far out in intergalactic space that even the vast bulk of a galaxy lying there would have been invisible even to Palomar's "Long Eye", the hurtling capsule struck a cloud of hydrogen gas.

That gas was, by Earthly standards, a hard vacuum; but the

capsule's velocity by that time was so immensely great that that cloud might just as well have been a mountain of solid rock. The capsule's directors tried, with all their prodigious might and speed, to avoid the obstruction, but even with fullest power they did not have time enough.

Eight multi-ton power-bars of activated uranium flared practically instantaneously into ragingly incandescent gas; into molecular, atomic, and subatomic vapor and debris. A fireball brighter than a sun glared briefly; then nothing whatever was visible where that massive structure had been.

And out of that sheer emptiness came a cold, clear thought: the thought of Doctor Marc C. DuQuesne.

"One, are you familiar enough with this region of space to estimate at all closely how long we were in that stasis of time and where we now are with reference to the First Galaxy?"

Freemind One did not exactly answer the question. "What matters it?" he asked. If the thought of an immortal and already incredibly old and incredibly knowledgeable mind can be said to show surprise, that thought did. "It should be clear, even to you of infinitesimally short life, that any length of time expressible in any finite number of definite time periods is actually but a moment. Also, the Cosmic All is vast indeed; larger by many orders of magnitude than any that the boldest of your thinkers has as yet dared to imagine.

"Whether or not space is infinite I do not know. Whether or not my

life span will be infinite I do not know. I do not as yet completely understand infinity. I do know, however, that both infinite time and infinite space are requisite for the acquisition of infinite knowledge, which is my goal; wherefore I am well content. You have no valid reason whatever for wishing to return to your Earth. Instead, you should be as eager as I am to explore and to study the as yet unknown."

"I have unfinished business there." DuQuesne's thought was icy cold. "I'm going back there whether you do or not."

"To kill beings who have at best but an instant to live? To rule an ultra-microscopic speck of cosmic dust? A speck whose fleeting existence is of but infinitesimal importance to the Great Scheme of Things? Are you still infantile enough, despite your recent transformation, to regard as valid such indefensible reasons as those?"

"They're valid enough to me. And you'd have to go back, too, I should think. Or isn't it still true that science demands the dematerialization of the whole *Skylark* party?"

"Truth is variable," One said. "Thus, while certain of our remarks were not true in the smaller aspect, each of them was designed to elicit a larger truth. They aided in the initiation of chains of events by observation of which I will be able to fit many more constituent parts of this you call the First Universe precisely into place in the Great Scheme.

"Now as to you, DuQuesne. The

probability was small that you were sufficiently advanced to become a worthy member of our group; but I decided to give you your chance and permitted Richard Seaton to do what he did. As a matter of fact I, not Seaton, did it. You have failed; and I now know that no member of your race can ever become a true Scholar. In a very few millions of your years you would not be thinking of knowledge at all, but merely of self-destruction. I erred, one-tenth of a cycle since, in admitting Freemind Eight to our study group; an entity who was then at approximately the same stage of development as you now are. I will not repeat that error. You will be rematerialized and will be allowed to do whatever you please."

The mind of DuQuesne almost gasped.

"Out here? Even if you recreate my ship I'd never get back!"

"You should and will have precisely the same chance as before of living out your normal instant of life in normal fashion. To that end I will construct for you a vessel that will be the replica of your former one except in that it will have a sixth-order drive—what your fellow-human Seaton called the 'Cosmic Energy' drive—so that you will be able to make the journey in comparatively few of your days. I will instruct you in this drive and in certain other matters that will be required to implement what I have said. I will set your vessel's controls upon your home galaxy at the correct acceleration.

"I compute . . . I construct."

And faster by far than even an electronic eye could follow, a pattern of incredibly complex stresses formed in the empty ether.

Elemental particles, combining instantaneously, built practically instantaneously upward through electrons and protons and atoms and molecules beams and weaponry up to a million tons or more of perfectly-operating superdreadnought—and at the same time built the vastly more complex structure of the two hundred pounds or so of meat and so forth that were to enclothe Freemind DuQuesne—and did the whole job in much less time than the blink of an eye.

“ . . . I instruct . . . It is done,” and all seven freeminds vanished.

And DuQuesne, seated at a thoroughly familiar controlboard and feeling normal gravity on the seat of his pants, stared at that board's instruments, for a moment stunned.

According to those instruments the ship was actually travelling at an acceleration of one hundred twenty-seven lights; its internal gravity was actually nine hundred eighty-one point zero six centimeters per second squared.

He stared around the entire room, examining minutely each familiar object. Activating a visiplat, he scanned the immense skyrover, inside and out, from stem to stern: finding that it was in fact, except for the stated improvements, an exact duplicate of the mighty ship of war he had formerly owned: which, he still thought, had been one of the most powerful battleships ever built by man.

Then, and only then, did he examine the hands resting, quiescent but instantly ready, upon the board's flat, bare table. They were big tanned, powerful hands; with long, strong, tapering, highly competent fingers. They were his hands—his own hands in every particular, clear down to the tiny scar on the side of his left index finger; where, years before, a bit of flying glass from an exploding flask had left its mark.

Shaking his head, he got up and went to his private cabin, where he strode up to a full-length mirror.

The man who stared back at him out of it was tall and powerfully built; with thick, slightly wavy hair of an intense, glossy black. The eyes, only a trifle lighter in shade, were surmounted by heavy black eyebrows growing together above his finely-chiseled aquiline beak of a nose. His saturnine face, while actually tanned, looked almost pale because of the blackness of the heavy beard always showing through, even after the closest possible shave.

“He could rematerialize me perfectly—and did,” he said aloud to himself, “and the whole ship—exactly!”

Scowling in concentration, he went into his bathroom and stepped upon the platform of his weight-and-height Fairbanks. Six feet and seven-eighths of an inch. Precisely right. Two hundred two and three-quarters pounds. Ditto.

He examined the various items of equipment and of every-day use. There was his cutthroat razor, Osnomian-made of arenak—vastly sharper than any Earthly razor

could possibly be honed and so incredibly hard that it could shave generation after generation of men with no loss whatever of edge.

Comb, brush, toothbrush, lotion — inside the drawers and out — every item was exactly as he had left it . . . clear down to the correctly-printed, peculiarly-distorted tubes of tooth-paste and of shaving cream; each of which, when he picked it up, fitted perfectly into the grip of his left hand.

"I'll . . . be . . . totally . . . damned," DuQuesne said then, aloud.

VII

DuQuesne and Klazmon

The *Skylark of Valeron* swung in orbit around the sun of Earth. She was much more of worldlet than a spaceship, being a perfect sphere over a thousand kilometers in diameter. She *had* to be big. She had to house, among other things, the one-thousand-kilometers-diameter graduated circles of declination and of right ascension required to chart the thousands of millions of galaxies making up any given universe of the Cosmic All.

She was for the most part cold and dark. Even the master-control helmets, sprouting masses and mazes of thigh-thick-bundles of hair-thin silver wire, hung inactivated in the neutral gray, featureless master-control room. The giant computer, however — the cubic mile of ultra-miniaturization that everyone called the "Brain" — was still in operation;

and in the worldlet's miles-wide chart-room, called the "tank", there still glowed the enormous lenticular aggregation of points of light that was the chart of the First Universe — each tiny point of light representing a galaxy composed of thousands of millions of solar systems.

A precisely coded thought impinged upon a receptor.

A relay clicked, whereupon a neighboring instrument, noting the passage of current through its vitals, went busily but silently to work, and an entire panel of instrumentation came to life

Switch after switch snapped home. Field after field of time-stasis collapsed. The planetoid's artificial sun resumed its shining; breezes began again to stir the leaves of trees and of shrubbery; insects resumed their flitting from bloom to once-more-scented bloom. Worms resumed their gnawings and borings beneath the green velvet carpets that were the lawns. Brooks began again to flow; gurglingly. Birds took up their caroling and chirping and twittering precisely where they had left off so long before; and three houses — there was a house now for Shiro and his bride of a month — became comfortably warm and softly, invitingly livable.

All that activity meant, of course, that the Seaton-Crane party would soon be coming aboard.

They were in fact already on the way, in *Skylark Two*; the forty-foot globe which, made originally of Osnomian arenak and the only spaceship they owned, had been "flashed

over" into ultra-refractory inoson and now served as Captain's gig, pin-nace, dinghy, lifeboat, landing craft, and so forth — whatever any of the party wanted her to do. There were many other craft aboard the *Skylark of Valeron*, of course, of various shapes and sizes; but *Two* had always been the Seatons' favorite "small boat".

As *Two* approached the *Valeron*, directly in line with one of her huge main ports, Seaton slowed down to a dawdling crawl — a mere handful of miles per second — and thought into a helmet already on his head; and the massive gates of locks — of a miles-long succession of locks through the immensely thick skin of the planetoid — opened in front of flying *Two* and closed behind her. Clearing the last gate, Seaton put on a gee and a half of deceleration and brought the little flying sphere down to a soft and easy landing in her berth in the back yard of the Seatons' house.

Eight people disembarked; five of whom were the three Seatons and Martin and Margaret Crane. (Infant Lucile Crane rode joyously on her mother's left hip.) Seventh was short, chunky, lightning-fast Shiro, whose place in these *Skylark* annals has not been small. Originally Crane's "man", he had long since become Crane's firm friend; and he was now as much of a *Skylarker* as was any of the others.

Eighth was Lotus Blossom, Shiro's small, finely wrought, San Francisco-born and western-dressed bride, whom the others had met only that

morning, just before leaving Earth. She looked like a living doll — but appearances can be so deceiving! She was in fact one of the most proficient female experts in unarmed combat then alive.

"Our house first, please, all of you," Dorothy said. "We'll eat before we do one single solitary thing else. I could eat that fabled missionary from the plains of Timbuctoo."

Margaret laughed. "Hat and gown and hymnbook too," she finished. "Me, too, Dick."

"Okay by me; I could toy with a couple of morsels myself," Seaton said, and pencils of force wafted the eight into the roomy kitchen of the house that was in almost every detail an exact duplicate of the Seatons' home on Earth. "You're the chief kitchen mechanic, Red-Top; strut your stuff."

Dorothy looked at and thought into the controller — she no longer had to wear any of the limited-control headsets to operate them — and a damask-clothed table, set for six, laden with a wide variety of food and equipped with six carved oak chairs and two high-chairs, came instantly into being in the middle of the room.

The Nisei girl jumped violently; then smiled apologetically. "Shiro told me about such things, but . . . well, maybe I'll get used to them sometimes I hope."

"Sure you will, Lotus," Seaton assured her. "It's pretty weird at first, but you get used to it fast."

"I sincerely hope so," Lotus said, and eyed the six dinner places dubiously. She had thought that she

was thoroughly American, but she wasn't quite. Traditions are strong. With an IQ that a Heidelberg student might envy, part of the crew of the most powerful vehicle man had ever seen, full, educated and trained . . . it was evident that Shiro's dainty little bride was more than a little doubtful about sitting at that table.

Until Dorothy took her by the hand and sat her down. "This is where I like my friends to sit," she announced. "Where I can see them."

A flush dyed the porcelain-like perfection of Lotus's skin. "I thank you, Mrs. —"

"Friends, remember?" Seaton broke in "Call her Dot. Now let's eat!"

Whereafter, they worked. It may be wondered, among those historians not familiar with the saga of the Skylarks, why so much consternation and trouble should come from so small an event as the probabilistic speculation of a single Norlaminian sage that one mere human body, lately cast into the energy forms of the disembodied intelligences, might soon return into the universe in a viable form.

Such historians do not, of course, know Blackie DuQuesne.

While Seaton, Crane and the others were eating their meal, across distances to be measured in gigaparsecs, countless millions of persons were in one way or another busy at work on projects central to their own central concern. Seaton and Crane were not idle. They were waiting for further information . . . and at the same time, refurbishing the inner

man with food, with rest and with pleasant company; but an hour later, after dinner, after the table and its appurtenances had vanished and the three couples were seated in the living room, more or less facing the fire, Seaton stoked up his battered black briar and Crane lighted one of his specially made cigarettes.

"Well?" Seaton demanded then. "Have you thunk up anything you think is worth two tinker's whoops in Hades?"

Crane smiled ruefully. "Not more than one, I'd say — if that many. Let's consider that thought or message that Carfon is sending out. It will be received, he says, only by persons or entities who not only know more than we do about one or more specific things, but also are friendly enough to be willing to share their knowledge with us. And to make the matter murkier, we have no idea either of what it is that we lack or of what it, whatever it is, is supposed to be able to do. Therefore Point One would be: how are they going to get in touch with us? By what you called magic?"

Seaton did not answer at first, then only nodded. "Magic" was still a much less than real concept to him. He said, "If you say so — but remember the Peruvian Indian medicine-men and the cinchona bark that just happened to be full of quinine. So, whatever you want to call it — magic or extra-sensory perception or an unknown band of the sixth or what-have-you — I'll bet my last shirt it'll be *bio*. And whoever pitches it at us will be good enough at it to *know* that they can

hit us with it, so all we have to do about that is wait for it to happen. However, what I'm mostly interested in right now is nothing that far out, but what we *know* that a reincarnated Blackie DuQuesne could and probably would do."

"Such as?"

"The first thing he'll do, for all the tea in China, will be to design and set up some gadget or gizmo or technique to kill me with. Certainly me, and probably you, and quite possibly all of us."

Dorothy and Margaret both gasped; but Crane nodded and said, "Check. I check you to your proverbial nineteen decimals. Also, and quite possibly along with that operation, an all-out attempt to reconquer Earth. He wouldn't set out to destroy Earth, at this time, at least . . . would he, do you think?"

Seaton thought for seconds, then said, "My best guess would be no. He wants to boss it, not wipe it out. However, there are a few other things that might come . . ."

"Wait up, presh!" Dorothy snapped. "Those two will hold us for a while; especially the first one. I wish to go on record at this point to the effect that I want my husband *alive*, not dead."

Seaton grinned. "You and me both, pet," he said. "I'm in favor of it. Definitely. However, as long as I stay inside the *Valeron* here he doesn't stand the chance of a snowflake in you-know-where of getting at me . . ."

How wrong Seaton was!

". . . so the second point is the one that's really of over-riding im-

portance. The rub is that we can't make even a wild guess at when he's going to get loose . . . He *could* be building his ship right now . . . so, Engineer Martin Crane, what's your thought as to defending Earth; as adequately as possible but in the shortest possible time?"

Crane inhaled — slowly — a deep lungful of smoke, exhaled it even more slowly, and stubbed out the butt. "That's a tall order, Dick," he said, finally, "but I don't think it's hopeless. Since we know DuQuesne's exact line of departure, we know at least approximately the line of his return. As a first-approximation idea we should, I think, cover that line thoroughly with hair-triggered automation. We should occupy the fourth and the fifth completely; thus taking care of everything we *know* that he knows . . . but as for the sixth . . ." Crane paused in thought.

"Yeah," Seaton agreed. "That sixth order's an *entirely* different breed of cats. It's a pistol — a question with a capital Q. About all we can do on it, I'd say, is cover everything we know of it and then set up supersensitive analysynths coupled to all the automatic constructors and such-like gizmos we can dream up — with as big a gaggle of ground-and-lofty dreamers as we can round up. The Norlaminians, certainly; and Sacner Carfon for sure. If what he and Drasnik pulled off wasn't magic it certainly was a remarkably reasonable facsimile thereof. All six of us, of course, and . . ."

"But what can you possibly want of us?" Shiro asked, and Dorothy said, "That goes double for Peggy and me, Dick. Of what good could we two possibly be, thinking about such stuff as that?"

Seaton flushed. "Scuse, please; my error. I switched thinking without announcing the switch. I do know, though, that our minds all work differently — especially Shiro's and double-especially Lotus's — and that when you don't have the faintest glimmering of what you're getting into you don't know what you're going to have to have to cope with it." He grinned.

"If you can untangle that, I mean," he said.

"I think so," said Crane, unruffled; he had had long practice in following Seaton's lightning leaps past syntax. "And you think that this will enable us to deal with DuQuesne?"

"It'll have to," Seaton said positively. "One thing we know, *something* has to. He's not going to send us a polite message asking to be friends — he's going to hit with all he's got. So," he finished, "let's hop to it. The Norlaminian observers' reports are piling up on the tapes right now. And we'd all better keep our eyes peeled — as well as all the rest of our senses and instruments! — for Doctor Marc C. Blackie DuQuesne!"

And DuQuesne, so immensely far out in intergalactic space, at control board and computer, explored for ten solid hours the vastnesses of his new knowledge.

Then he donned a thought-helmet

and thought himself up a snack; after eating which — scarcely tasting any part of it — he put in another ten solid hours of work. Then, leaning back in his form-fitting seat, he immersed himself in thought — and, being corporeal, no longer a pattern of pure force, went sound asleep.

He woke up a couple of hours later; stiff, groggy, and ravenous. He thought himself up a supper of steak and mushrooms, hashed browns, spinach, coffee, and apple pie a la mode. He ate it — with zest, this time — then sought his long-overdue bed.

In the morning, after a shower and a shave and a breakfast of crisp bacon and over-easy eggs, toast and butter and marmalade, and four cups of strong, black coffee, he sat down at his board and again went deep into thought. This time, he thought in words and sentences, the better to nail down his conclusions.

"One said I'd have precisely the same chance as before of living out my normal lifetime. Before what? Before the dematerialization or before Seaton got all that extra stuff? Since he gave me sixth order drive, offense, defense, and communications, he could have — probably did — put me on a basis of equality with Seaton as of now. Would he have given me any more than that?"

DuQuesne paused and worked for ten busy minutes at computer and control board again. What he learned was in the form of curves and quantities, not words; he did not attempt to speak them aloud, but sat staring into space.

Then, satisfied that the probabilities were adequate to base a plan on, he spoke out loud again: "No. Why should he give me everything that Seaton's got? He didn't owe me anything." To Blackie DuQuesne that was not a rueful complaint but a statement of fact. He went on. "Assume we both now have a relatively small part of the spectrum of the sixth-order forces, if I keep using this drive — Ouch! What the living hell was that?"

DuQuesne leaped to his feet. "That" had been a sixth-order probe, at the touch of which his vessel's every course of defensive screen had flared into action.

DuQuesne was not shaken, no. But he was surprised, and he didn't like to be surprised. There should have been no probes out here!

The probe had been cut off almost instantaneously; but "almost" instantaneously is not quite zero time, and sixth-order forces operate at the speed of thought. Hence, in that not-quite-zero instant of time during which the intruding mind had been in contact with his own, DuQuesne learned a little. The creature was undoubtedly highly intelligent — and, as undoubtedly, unhuman to the point of monstrosity . . . and DuQuesne had no doubt whatever in his own mind that the alien would think the same of any Tellurian.

DuQuesne studied his board and saw, much to his surprise, that only one instrument showed any drain at all above maintenance level, and

that one was a millimeter — the needle of which was steady on the scale at a reading of one point three seven mils! He was not being attacked at all — merely being observed — and by an observation system that was using practically no power at all!

Donning a helmet, so as to be able himself to operate at the speed of thought, DuQuesne began — very skittishly and very gingerly indeed — to soften down his spheres and zones and shells and solid fields of defensive force. He softened and softened them down; down to the point at which a working projection could come through and work.

And a working projection came through.

No one of Marc C. DuQuesne's acquaintances, friend or enemy, had ever said that he was any part of either a weakling or a coward. The consensus was that he was harder than the ultra-refractory hubs of hell itself. Nevertheless, when the simulacrum of Llanzan Klazmon the Fifteenth of the Realm of the Llurdi came up to within three feet of him and waggled one gnarled forefinger at the helmets of a mechanical educator, even DuQuesne's burly spirit began to quail a little — but he was strong enough and hard enough not to let any sign show.

With every mind-block he owned set hard, DuQuesne donned a headset and handed its mate to his visitor. He engaged that monstrous alien mind to mind. Then, releasing his blocks, he sent the Llurdi a hard, cold, sharp, diamond-clear — and lying! — thought:

"Yes? Who are you, pray, and what, to obtrude your uninvited presence upon me, Foalang Kassi a' Doompf, the Highest Imperial of the Drailsen Quadrant?"

This approach was, of course, the natural one for DuQuesne to make; he did not believe in giving away truth when lies might be so much cheaper — and less dangerous. It was equally of course the worst possible approach to Klazmon: reinforcing as it did every unfavorable idea the Llurd had already formed from his lightning-fast preliminary once-over-lightly of the man and of the man's tremendous spaceship.

Klazmon did not think back at DuQuesne directly. Instead, he thought to himself and, as DuQuesne knew, for the record; thoughts that the Earthman could read like print.

To the Llurd, DuQuesne was a peculiarly and repulsively obnoxious monstrosity. Physically a Jelm, he belonged to a race of Jelmi that had never been subjected to any kind of logical, sensible, or even intelligent control.

Klazmon then thought at DuQuesne; comparing him with Mergon and Luloy on the one hand and with Sleemet of the Fenachrone on the other — and deciding that all three races were basically the same. The Llurd showed neither hatred nor detestation; he was merely contemptuous, intolerant, and utterly logical. "Like the few remaining Fenachrone and the rebel faction of our own Jelmi and the people you think of as the Chlorans, your race is, definitely, surplus population; a nuisance that must be and

shall be abated. Where —" Klazmon suddenly drove a thought — "is the Drailsen Quadrant?"

DuQuesne, however, was not to be caught napping. His blocks held. "You'll never know," he sneered. "Any task-force of yours that ever comes anywhere near us will not last long enough to energize a sixth-order communicator."

"That's an idle boast," Klazmon stated thoughtfully. "It is true that you and your vessel are far out of range of any possible Llurdixian attacking beam. Even this projection of me is being relayed through four mergons. Nevertheless we can and we will find you easily when this becomes desirable. This point will be reached as soon as we have computed the most logical course to take in exterminating all such surplus races as yours."

And Klazmon's projection vanished; and the helmet he had been wearing fell toward the floor.

DuQuesne was shocked as he had never been shocked before; and when he learned from his analysts just what the range of one of those incredible "mergons" was, he was starkly appalled.

One thing was crystal-clear: He was up against some truly first-class opposition here. And it had just stated, calmly and definitely, that its intention was to exterminate him, Blackie DuQuesne.

The master of lies had learned to assess the value of a truth very precisely. He knew this one to be 22-karat, crystal-clear, pure quill. Whereupon Blackie DuQuesne turn-

ed to some very intensive thought indeed, compared with which his previous efforts might have been no more than a summer afternoon's reverie.

We know now, of course, that Blackie DuQuesne lacked major elements of information, and that his constructions could not therefore be complete. They lacked Norlaminian rigor, or the total visualization of his late companions, the disembodied intellectuals. And they lacked information.

DuQuesne knew nothing of Merigon and Luloy, now inward bound on Earth in a hideout orbit. He could not guess how his late visitor had ever heard of the Fenachrone. Nor knew he anything of that strange band of the sixth order to which Seaton referred, with more than half a worried frown, as "magic". In short, DuQuesne was attempting to reach the greatest conclusion of his life through less than perfect means, with only fragmentary facts to go on.

Nevertheless, Blackie C. DuQues-

ne, as Seaton was wont to declare, was no slouch at figuring; and so he did in time come to a plan which was perhaps the most brilliant — and also was perhaps the most witless! — of his career.

Lips curled into something much more sneer than grin, DuQuesne sat down at his construction board. He had come to the conclusion that what he needed was help, and he knew exactly where to go to get it. His ship wasn't big enough by far to hold a sixth-order projection across any important distance . . . but he could build, in less than an hour, a sixth-order broadcaster. It wouldn't be selective. It would be enormously wasteful of power. But it would carry a signal across half a universe.

Whereupon, in less than an hour, a signal began to pour out, into and through space:

"DuQuesne calling Seaton! Reply on tight beam of the sixth. DuQuesne calling Seaton! Reply on tight beam of the sixth. DuQuesne calling Seaton . . ."

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I

As he was unaccustomed to being interrupted in the middle of a massage session, even by so exalted a personage as Base Commandant Henly, Nestil Lagotilom lifted his eight-foot reptilian form from the massage table, dismissed his masseur, and swore vigorously about bureaucrats. Then, glaring balefully at the Official Messenger, or Mercury, he told the emissary to tell Henly he'd report to his office in a few minutes. The Mercury snapped a smart salute and left. Lagotilom pulled on a faded gray Harvard sweater that was at least a thousand years

old, a webbing belt with a long, dragging, red leather holster on it and a large gun in the holster, and a black beret, which he perched rakishly atop his basketball-sized cranium. He struck a pose before a mirror, corrected his belt's carriage, and left.

Commandant Herbert Washington Henly had unusual tastes in offices. When he had been given command of the Keeler's World Star Naval Base, he converted the neat, conservative, sunlit office that had served two hundred former commandants into a red, uterine chamber encircled by a spiral corridor that led to a similar waiting room, done in blue. He liked it, but the base economists

jumped on his desk immediately and raised hell about large sums on slips of pink paper. Henly had told them all to go to the Naval Bank with their problems, figuring that the red tape they'd get entangled in there would keep them out of his hair for years. In the meantime, he had drawn on naval sums to fill the office with soft stuffed leather furniture built on alleged Hrillan designs and enough comfort-producing devices to make the office look like the site of the mad tea party.

When his desk intercom buzzed he had to crawl over sundry pieces of ironmongery that his interior decorator had said were out of the way, hide his putter and golf balls, and struggle into his seat before he could answer it. The intercom's screen showed his young human secretary, Myra Corning, whose face was twisted into a sort of distasteful frightened expression. She opened her mouth as if to speak, cast her eyes at something beyond his field of vision, and spoke.

"Ummm . . . Lieutenant Lagotilom is here, sir. Shall I send him in?"

Henly glanced at his appointment list, found Lagotilom's name, glanced at the ivory dragon's tooth with the clock in it, and replied, "Yes. Send him in. And if he has his gun, check it for him. I know he hates to part from it, but it's regulations. Thanks."

Henly relaxed a few seconds, then glanced at the sphincter door of his office, which had opened. Lagotilom strode over to Henly's desk, saluted unenthusiastically, and sat down on an ashtray pedestal that looked like

a dragon's paw. Henly harumphed, and began.

"Mr. Lagotilom, did the Mercury tell you why I had you brought down here?"

"No, sir."

"Ummm . . . okay." He riffled through a sheaf of vellum papers clutched by a smiling varnished frog, and finally found the few he wanted. "Do you know what a SIMO is?"

"A side from it being one of those code names the military is so fond of, I don't."

"Well, it's sort of a mind transference device. Means Subelectronic Integrator for the Manipulation of Objects."

"Sounds like a robot arm."

"Does, doesn't it?" The commandant lit a cigarette and blew a few smoke rings into the ventilator before he went on. "Nothing so simple. I thought that's what it was at first, too. No, it does this. Someone puts a helmet on your head, and some soldier puts a similar one on his head, and the machine is turned on. Then your mind is duplicated in this soldier's brain, his mind goes dormant until the device is shut off. Your original mind remains the same, however, so you can do whatever you want while you're connected with the machine. The mind in the soldier's body is, in essence, his own, born there, and is in no way dependent on your mind. But when your helmet is removed, the minds cease in the other heads. The overall effect is that of a whole squadron of Nestil Lagotiloms on the field,

fighting with your tactical knowledge. Very clear?"

"Like mud. Do I ever know what happens to those bodies?"

"Yes. As soon as the machine is turned off, the memories gained revert to your original mind. I should think it's help in writing reports."

"I should care. I never write my own reports anyway. But why pick me?"

"That, my dear friend, is the classical question. 'Why me?' You are our best military strategist for any base in this whole damn star cluster. One point for you." The commandant motioned Lagotilom off his dragon's paw seat, threw the cigarette butt in, and continued. "And as a mutant, your mental pulsations should be far clearer and stronger than any nonmutant. Besides, you're simple."

"I detest that," Lagotilom stated.

"I knew you would. That's why I said it." A grin split the commandant's chubby red face, and he lit another cigarette. "Seriously, Nestil, you are. Granted, you do rack up in the supergenius bracket on IQ tests, but your mutant mind isn't too complex to be packed away into a Terran brain without a little room to spare. So it's your job to give this thing its field tests."

"Umm . . . sir, this . . . this SIMO sounds remarkably like that mental jammer I tested for the Roota campaign," Lagotilom suggested cautiously.

"It is. I used a jammer myself after it passed its tests."

"Well, the officials smothered this, but while I was testing the

thing, a Roota hit it with a magnetic blast, and it backfired. I was in a mental institution for three months, recovering from the mind crasure it gave me. Ever since then, I've been uneasy about testing machines that I'm not familiar with. And what happens if someone using my brain gets killed?"

"Nothing, except that he's dead. You have a cessation of memory on his part when he gets killed. I doubt if that'll bother you any great deal. Now, I've picked out a world for you to test it on."

"Gee, thanks," Lagotilom muttered leeryly.

Henly ignored the sarcasm, went on. "It's in the part of the Bird campaign that's in this cluster, and it's called Meglor's Hunk. It's a grassy, mountainous clod that cooled off ages ago and split itself with cracks. These cracks have since filled in with water, and are very deep, narrow seas. Big red sun, but it looks yellow through the atmosphere. Surface gravity, three quarters of a gee, pressure of air, 25.09 pounds per square inch. Natives are reptiloid, feathered and possessing four tentacles instead of arms. Size of a full-grown man."

That meant four feet, and about 100 pounds. In the twenty third century, man had discovered the anti-evolution drugs, which kept him from changing his physical appearance, for the most part. However, he could still adapt to the worst that any planet could dish out, and his size changed. Over the following two billion years of human civilization, he had grown from six feet racial size



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to twelve feet, then down to two feet, up to eight, and finally to the present four feet. But since the people who lived to be old enough to see this were rare, the only beings who ever noticed it were archeologists and historians. And enemies.

"The Bird lines," Henly went on, "are nothing but a line of disjointed wattle huts, rotting tents and stone sheds all protected by those lousy Bird force shields that blow fuses every time they're turned on. All you have to do is go in and crack their lines, and take the planet. Got it?"

"Vaguely."

"Then read this. You leave tomorrow at 0900." He handed Lagotilom a slip of yellow paper, and fumbled in the frogs bowed arms for another thing. He drew out a buff envelope and handed it to Lagotilom. "Fighting plans. Don't open them till you reach Meglor's Hunk. Good luck."

"Yes, sir. Will that be all?"

"Yes, Nestil. Dismissed."

As soon as Lagotilom was outside in the waiting room he tore open the envelope, read the top-secret plans, and threw them away.

II.

The *L'il Abner* was an old ship, rotted by a hundred war's barges and decayed by a million years of use. Her monocrystalline hull had long since ceased giving piezoelectric current, and even her pile was old. But she was dependable, and probably would remain so for another ten thousand years. Having once been a cargoship, she was only a collection of rooms on four decks

wrapped about a giant, spherical cargo hold. The whole arrangement was wrapped in shielding and mounted on a set of antiquated engines and told to fly. Sometimes it wouldn't.

This trip it carried 2,000 fighting men, 100 engineers, 100 crewmen, 1 SIMO, and one Nestil Lagotilom.

Lagotilom strode up the ship's ramp into the airlock, checked his papers with the purser, who stamped the ship's coat of arms on them, and went to his room. It was a fairly large suite, with good ventilation, antique furniture in excellent condition, and a viewscreen in one wall.

Through this Lagotilom watched a straddle-crane come up to the ship bearing a huge, black stasis box between its spiderlike legs. The box probably contained the SIMO, for it was stamped with numerous warnings concerning the fragility of its contents. These were ignored; the box was treated like a wrecking mace. A few red-clad engineers stood nearby, watching with boredom on their faces. They had the silver S on their uniforms which identified them with the SIMO project, but they seemed not at all to care about their brainchild. It was dropped onto a conveyor belt without concern for its contents, and vanished from Lagotilom's sight.

Somewhat later, the old motors whined like whipped dogs and the wavering tones of the pendulum drive sang. As the strain was let off its old bones, the ship creaked, changed from a flattened ball to a near oval, and a sound like molasses glugging from a jug added its charms to the cacophony. The ship

lifted from the atmosphere in seconds, and vanished into the space-wrinkle of the pendulum drive.

"Will Lieutenant Nestil Lagotilom please report to the machine shop in the cargo hold?" a female voice requested from a seascape on the wall. Lagotilom left and sauntered down two levels to the hold. A Mercury ushered him through a companion-way into the hold.

The hold was a huge room, almost a perfect sphere in shape, except for the large, flat planes that dotted its floor in no particular order. Gravity pointed away from the center of the sphere so that everything clung to the walls. About a hundred feet above the floor, a girder framework supported ropes, block-and-tackles, and tracks upon which ran small or large winch cranes. The opposite floor was clearly visible, despite the veils of misty smoke that drifted about the hold. The entire room, lit with vast clusters of blue and yellow lights, smelled of the acrid fumes of solder. Nearby, a blond human technician saw him and moved over his way. He held out his hand and flashed a grin.

"Nestil Lagotilom? George Hapsburg, chief technician to that thing." He jerked his thumb at a complex device on one of the raised flat planes. It was a sparkling glass globe supported by a shiny metal base in which intricate machinery was exposed. In the globe were all manners of spark-gaps, fan-coils, solid state parts and other hardware, emphasized by thousands of gossamer blown glass parts. It was almost twenty feet in diameter. Along the globe's base

were dozens of dashboards and screens, sparkling with lights and wavering lines. Atop the orb three glass globes reposed, antennae in each. As they moved around to the stairs that led to the platform's top two more items came into view; a stuffed red cushion and a black, spidery machine standing over it.

"So that's the SIMO. Will it waltz? Umm . . . What's that thing?" Lagotilom indicated the metal spider.

"Well, Mr. Lagotilom . . ." he started, but Lagotilom broke him off.

"Lagotilom is actually my individual name. Nestil's my surname."

"Um . . . okay, Mr. Nestil. What you do is rest on this cushion with your head on this rest, and this helmet is attached to your head by probe drills and kept there by electrode spikes."

"Which all means?"

"It means we take this helmet," he tapped the glassy helmet hanging from the spider-device's belly, "and put it on your head. The tiny drills it's bristling will go directly into your brain and tap the necessary nerve centers. Then, in addition to being unremovable, you can get up and leave the machine any time you please."

"You mean I have to be perforated so that thing can be attached to me?"

"Yes. But it won't leave marks, is completely painless, and will come off as soon as it is necessary. Now sit back, please." Lagotilom sat back, and felt the helmet slide down onto his head. Hapsburg made a motion

at a man controlling the spider, and there was a sudden buzzing and Lagotilom's head itched for an instant. Hapsburg pulled out thin plastic tubes and released a few wires, then stepped back to survey his work.

"It's on now, Mr. Nestil. Now we're going to test the SIMO. You see that guy in the red tractor on the girder track across the room?"

Lagotilom nodded.

"Fine. He's got a helmet on. When we turn this thing on, you'll be in his head, his body. Try moving it. However, don't be surprised if it doesn't work." Hapsburg left no time for questions. He flipped a switch, and a flash of pain coruscated through Lagotilom's head.

He was in a red tractor, and turned his head to look across the room. He saw his own body far across the room, sitting in an overstuffed red cushion, talking with Hapsburg. His vision promptly vanished. Hapsburg stood in front of him. "How you do feel, now. What did you see?" he asked.

Lagotilom told him.

"That's good. That's good," Hapsburg muttered as he peered at the control boards and at a thin pamphlet. "You meet all the requirements with flying colors," he told Lagotilom. "That's nice. Take off the helmet now?" Lagotilom tapped the morion with a claw. "Oh, no. I'm afraid we can't do that until the testing period's up, about a week from now."

"Oh, fine. That's just grand. And all that time I have to go around with this thing clapped on my head-bone?" He gave a little push, weak

and ineffectual, at the offending skullcap.

Hapsburg sighed greatly. "Yes, sir. Oh, you won't notice it after the first few hours. We kept the decorations to a minimum, and just gave it a plating of superiron, so it should be quite a bit more resistant than your own skull. I know its weight won't bother you much longer. Okay?"

"Yeah. I'll settle for it. What now?"

"Well, seeing as you understand the machine, nothing. I imagine you can loaf the rest of the trip."

"Okay. How far do you accompany this thing?"

"Oh, I'll be on Meglor's Hunk to operate it."

"Then why didn't you teach me to run it?"

"Something might go wrong. You'd need help, maybe, and that's where I come in. Lord knows there's a lot that might go wrong."

"Such as?"

"The thing gets too much power from your head. Then it sends out a big blast of power to all the minds in the locality. Every mind has a protection wall to defend it from psychic attack, but if in this burst of power, the machine puts a hole in this wall, it needs only a little bit more power than normal output to keep your mind in an unhelmeted head, too. This probably won't happen, though. Don't lose sleep over it."

The *Lil Abner* came in to Meglor's Hunk on time, landing within an easy shot of the Bird lines.

However, none of the Birds did anything about it, since they could easily see the ship was untouchable, because of its force screens. But when the airlock was opened, and disembarking had begun, a Bird, aided by luck and a pressor beam, chunked a rock at a tank. It bounced harmlessly off, and would seem to be a rather minor incident, but it set the strategy experts to jabbering like a pack of monkeys. The Birds, who were utterly devoid of creative talent, were thought to be incapable of thinking up a stunt like that. They finally ended in agreeing that it had been an accident. No more rocks flew.

Lagotilom sat on a heap of warbird saddles, idly watching the tents go up and tanks and guns moving to their positions. A line of fifty warbirds, huge 25 foot tall birds like prehistoric Diatrymas were brought out to rock pens, which were painted red. The birds were deathly afraid of this color unless they had their saddles on, and would not leap the pen. This measure kept them from panicking and flying the coop, and hot-footing it over the horizon. They all squawked and shuffled about uneasily. Several soldiers, armed with hypodermic needles like calking guns, moved about through the forest of treelike legs injecting them with a tranquilizer.

Their war harnesses, big artifacts of leather straps, mail, velvet cushions and fighting tools, were resting on the grassy turf outside of the pen, and Lagotilom, perched atop the pile, was boredly watching the passing show, and occasionally flung a pebble

at the Bird lines. A few natives, in the meantime, had approached to watch the proceedings, and were allowed to stay because they avoided getting in the way. One stared long at Lagotilom, and then began a quiet conversation with a companion about some urgent subject. The crowd of them pushed forward, and observed Lagotilom, who returned the interest half-heartedly, and a few stepped forward. One began speaking in a tongue unknown to Lagotilom, but his thoughts were clear. He thought that Lagotilom was some sort of a god, and had come to liberate the people of Boodai from the yoke of the Birds. While probably an unknown god, he showed little interest in mortal affairs, and was big enough to fit the qualifications. While Lagotilom was not a god, he reflected that they were right in that he was to free them from the Birds.

It was quite late before the little tents were set up in the camp, and the *L'il Abner* got back into the orbit in which she would remain for the duration of the fighting. But the operation was quite ahead of schedule, owing to the native beings having kept Lagotilom out of the way. All the inhabitants of three towns had turned out to see him. The Birds, surprisingly enough, had done nothing about the constant line of natives pouring into the Terran camp, even though it might have been a dangerous situation, with Terran and aborigine fighting Birds side by side. But, the Birds were totally uncreative, merely intelligent. All they had ever accomplished in the

past was from sheer fecundity and a talent for plagiarism.

Later that night, Lagotilom walked over to the cook tent, where several engineers were trading jokes under the hanging electric lights, glowing a bland yellow.

"Oh, Mr. Nestil." This from Hapsburg. "I was just considering getting you so we could discuss when to test the machine. As long as you're here, we might as well start."

The others in the tent mumbled and nodded agreement. Hapsburg cleared his throat and began.

"The SIMO is outside someplace, all set to run. It needs a watch engineer. We'll draw cherries from my hat." He loaded some cherries into his hat, one of which was red. "Whoever gets the red cherry gets to play around with the SIMO tomorrow."

Muffled agreement. A redheaded, blue-eyed engineer with a big nose, whose name was Logansport, got the booby prize.

"Mr. Nestil, this is Pete Logansport, the guy who's gonna run the SIMO."

"Hi," Lagotilom mumbled, his voice muffled by a banana he'd been munching.

"What time do we start?" Hapsburg asked. He lit a cigarette while waiting for an answer.

A balding technician who must have been close to ten thousand years old, who had been sitting near the refrigerator field supplied the answer. "0900. That way we'll all be up early, and can get this damn job over with all the quicker. I hate this planet!"

"Any objections?" None. "Fine. Then everybody show up at the SIMO tent at 0900."

Lagotilom left. As he walked to his own tent and left the warmth of the floodlamps, he felt a cool wind picking up. The Bird lines, three miles away, showed as a line of dim red lights. There were sounds in the Terran camp of men preparing for a storm. The SIMO was parked under a tent just visible to Lagotilom, and its tent's side flaps were as yet turned up, and lesser engineers were securing things inside. Lagotilom entered his tent, and turned on the heater and the fabric stiffener field that made the canvas invulnerable to attack.

He wrapped an old hotel towel from Terra around his waist, after stripping, and sauntered over to the medical tent to procure a sleep needler and three sleep charges for it. He injected them into his rump and shoulder brains, and injected the third into his neck to work on his head-brain, which was protected by the helmet.

The air began to smell wet, and they were running the side flaps down on the SIMO tent.

Lagotilom caught a fleeting glance of the machine, yellow, red, blue and green lights flashing, and then nothing as the canvas covered it. He closed up his tent, hoping the medicine would allow no nightmares about the SIMO that night.

The dull rumbles of thunder shook the night, but gingerly. The grass bent before the cool, wet wind, and the thunder muttered again, much closer.

III

The rain had kept up all night, accompanied by high winds and hail. Now, however, the wind was gone, and only a steady rain fell, drenching the yellowish grass. The two camps and the soldiers were out doing calisthenics. The Birds had their fires going, dull orange smudges smoldering in the distant gray, and were thinking the dull, dreary thoughts that dull, dreary races think on dull, dreary mornings — if such mornings inspire them to thinking.

Lagotilom had awakened from an uneventful slumber. He had not enjoyed a delicious meal of fermented banana and pineapple mash; and had taken his morning jolt of brominated Mars Whiskey, made by the Mars Whisky people especially for him, without event.

This morning, though, he was far too frightened and apprehensive to get drunk. He reported 15 minutes late to the SIMO tent, but that made no difference to anyone. The engineers were finishing up on the job that they said had been done the night before, and he loafed about inside for a full half-hour before anyone noticed him. It was Logansport who finally did.

"Mornin', Mr. Nestil. Sit in this chair, huh?"

"Okay." Lagotilom sat in a puff of velvet with the golden neural pick-up strands in it, and leaned back. He saw an engineer across the room wearing the jewellike tiara of solid state parts that was the SIMO receiver. A technician attached a wire to Lagotilom's helmet, Hapsburg

flipped a switch, and Lagotilom was in the scientist. Then he wasn't. The SIMO had passed the test. Then a physician Lagotilom had never noticed spoke up.

"Mr. Lagotilom . . ." he began, to be broken off by Hapsburg, who grumbled, "Nestil's his surname, Cal-lot."

"I'm sorry, Mr. Nestil. Um . . . Mr. Nestil, we've been watching you for the last ten minutes, and it's pretty plain that you're jerky and nervous. Bad for the SIMO. So I suggested some sort of sedative to Mr. Hapsburg. He agreed, seeing as we want top efficiency from the device . . . unlike that mental jammer you tested; I was there, incidentally." He looked into a box he had on a table, and withdrew a bottle of some black liquid that sloshed about and stained the glass inside. "With this in mind, I've selected a sedative for you. Like the SIMO, it's untested, but it has shown desired effects." He sat in another of the puffs, and began fidgeting with a tiny teleportic injector. Lagotilom tensed, then relaxed instantly, calmed.

"One effect. Prothalamine, the drug, seems to be a mind drug. It first effects the body, as the mold and vehicle for the mind. Then, after its effect on the body has died down, it works specifically on the mind. No problems there." He handled the bottle to Lagotilom, who looked at the inklike fluid inside.

"What's it made from?" he asked.

"Salivary glands of castrated bulls."

"Go on."

"Effect Two. It seems to relax the body for mind transfer. It'll smother any surprise at your new body, and permits efficiency. The drug is such that the transferred mind will obey only the orders planted in the body before the transfer." He waved a hand at the smoldering Bird fires. "In other words, if you were to occupy the body of a pheasant, you wouldn't be at all surprised and you would do what the vulture had been ordered, not your orders. Thank God that can't happen to you." He paused and looked at Lagotilom. "Get me?"

"Sorta. Go on."

"Three. There can be no countermanding the duplicated mind once the transfer is made. That means that there can be no interference from the enemy. See?"

"Yes. How soon do we start? Judging from those ominous things you've been doing with that teleportic there, I figure that I already have the bullspit in me."

The doctor grew slightly red. "I wasn't willing for this job either, so I want it over with too! We start as soon as the soldiers are in their positions. That's it, isn't it, George?"

"Yeah. Get ready, Lagotilom. I'm almost done with the preliminaries."

"Okay. How soon?"

"Three minutes."

The rain had abated somewhat, though a cold drizzle still clung to the air. The Birds had begun larger fires, and were milling about noticeably, as though they expected something big was coming off right under their noses and weren't out to miss the game. Already some of

their gunners were trying unsuccessfully to pick their way through the Terran nets of defenses. Hapsburg sat down, and stared solemnly at Lagotilom, who looked back even more solemnly, using his long, thin face to achieve a remarkably bassethound effect. Hapsburg grinned.

"Good luck, Mr. Nestil."

"Good luck yourself. I'm not leaving . . ." The switch was thrown, and a pulse of blue-white searing pain exploded in Lagotilom's head, and vanished. — "the room. Damn you, Hapsburg. That hurt like hell."

"It's on," replied Hapsburg, glancing up at a wall screen upon which 2,000 lights were arrayed in ranks. "Well, Mr. Nestil. All of you accounted for."

"Great." Lagotilom looked at the screen, as the technicians left, and saw that the fighting had begun. Odd, he reflected, to know each spot of light on that screen is another you, and you're fighting this war in two thousandicate, without leaving the tent.

The day dragged on, and became oppressively hot. Numerous small animals were skittering through all of the tents, primarily the SIMO tent, since the mental broadcaster seemed to draw them. Lagotilom had to keep shooing them from beneath his feet, where they persisted in crawling, and from the SIMO, which had a refrigerator.

The Terrans had been making advances all day, and had driven the Birds back some 2,000 yards. About that time, Logansport left for the cook shack, leaving Lagotilom and his animal friends alone. Minutes

later, a small group of natives entered the cavernous tent, and looked awestruck at the giant god with the crystal altar in the giant tent. A pair of them, pressed on by their comrades, went up to Lagotilom's feet and presented him with a big vat of some sticky stuff, colored a wicked yellow. Lagotilom sniffed it, and the poison detector sense in his nose told him it was safe. It didn't really smell bad, either. He ate a little. That was a mistake. Twenty minutes later he had a roaring headache.

He began blundering about the SIMO tent, wailing hoarsely and looking through red-rimmed eyes at the cook tent, where the technicians and medics and camp janitors were drinking freely. He watched them without special interest for a few minutes, then struck out in the direction of the medical tent, seeking relief. After a wobbly five minutes afoot, he swayed into it and looked for the medic who wasn't there. Discovering this, he clambered feebly over the counter to wander among rows of medicine cabinets until he found one full of "Emergency Drugs For Lieutenant Lagotilom." He extracted a box of pain pills, and, ignoring the instructions, swallowed a handful. Seconds later, his head began to swim, and he felt as though he were expanding, becoming as vast as space. He blacked out.

IV

His mind duplicated, as it expanded, and lodged in the brains of unhelmeted beings. It entered a technician . . .

The headache was suddenly gone, to be replaced by a feeling over his entire body. He felt glorious, triumphant, reckless. He felt drunk.

He was in the cook tent. His vision, though blurred, could discern his body weaving about unsteadily outside, as though in the throes of pain. He looked about the cook tent, and saw other technicians sitting up or standing in the same strained, semi-alert attitude he was in. A few clutched crystal goblets of a pale green liquor, and the balding 10,000 year elder was sitting up in a corner, spilling the contents of a bottle of brown, thousand-year-old Mars Whisky into his lap. He returned his attentions to his wavering form, now almost to the SIMO tent, and finally decided that he was in the body of one of the drunken technicians, or janitors or medics. At any rate, his original body needed help, and to properly administer that help he had to be sober. To be sober, he had to take a few Antiboos tablets, which were found in the medic tent. He took a wobbly step in that direction. And one by one, the others did, too. But the exertion was too great, and they all fell flat on their faces, stone cold drunk.

His expanding mind also encountered other minds like his, but these were lodged firmly in place. They could not be budged. They were the minds of the SIMO helmeted soldiers.

Having been under moderate fire for the past half hour, Lagotilom could see through his peepscreen that the Birds had concentrated attacking the sham fort thrown up on the hill-

side a hundred yards in back of him. But now, they turned their fire on the most likely places for soldiers to be entrenched, therefore the places that they were. He peered through the dust that had risen and saw that a small contingent of Birds had drawn back, and still more were moving forward, protected by force screens and hurling small bombs in all good hiding places. There was one group moving down a gully toward him. He withdrew an implosion grenade from his weapons pouch, activated it, and threw it at the Birds once they were near enough. He watched with savage satisfaction as it turned them into supercompressed matter, along with a sizeable portion of the gully walls. Then he cleared the entrenchment lip and ran down the devastated gully, carefully skirting the red-hot area of the grenade blast. In a few minutes he would be in the Bird camp.

The minds that Lagotilom's free minds could not enter were ignored, and the free minds went on, till they found lodging. In Birds. But the free minds were weak, and slipped out halfway.

Lagotilom peered over the adobe wall surrounding his tent, and watched the hollow between the Terran camp and his. It was almost impossible to see into the depression, owing to the dust that had risen. But he could see the pale-green flashes of the Terran implosion grenades which meant that his comrades were being stretched across the local landscape. He could hear the tinkling of the

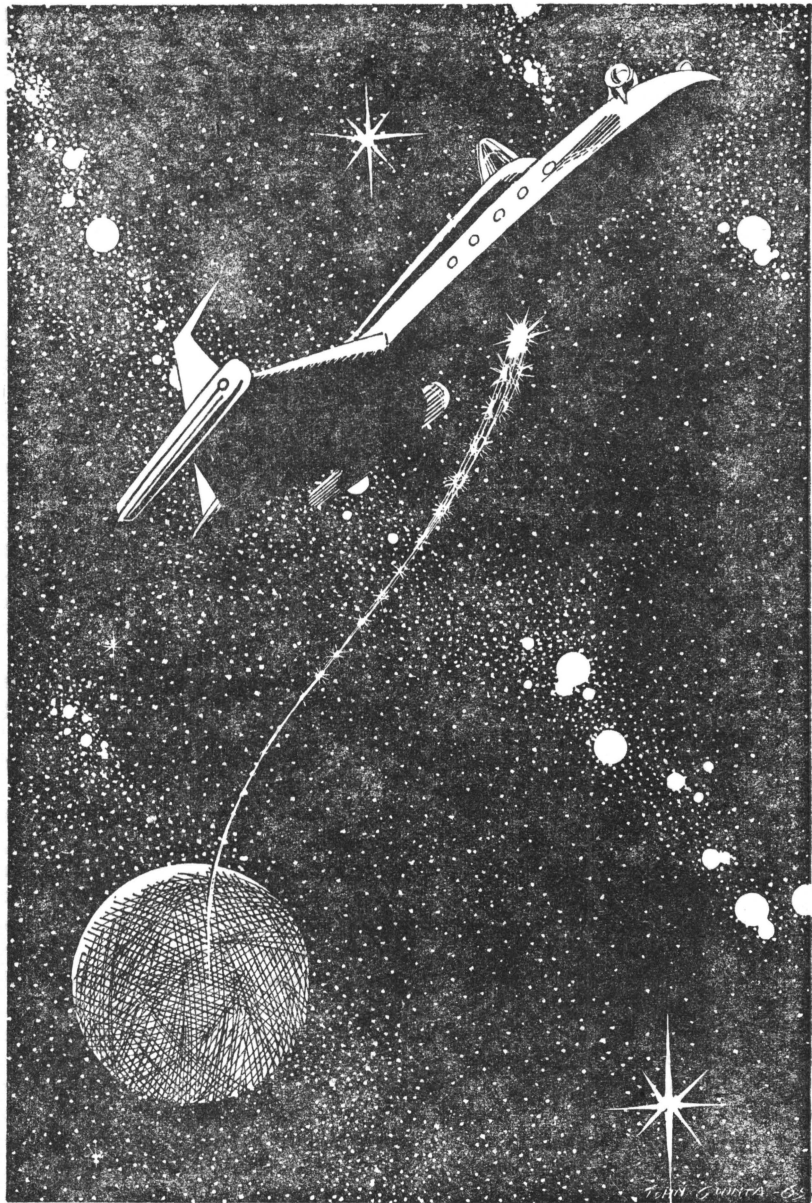
fracturing glass nerve disruptors thrown by his troops. For some reason, however, the disruptors didn't work; and the Terrans were fighting far too efficiently to make him happy. Lagotilom doubted that his troops could hold their ground much longer, and wished that he could command them more directly. He felt capable of it, for his thoughts had suddenly cleared from murky gloom to crystal clarity. He went back to his fur hammock and lay in it.

Toying idly with the black feathers on his left wing, he pulled out some red ones that were to him as a gray hair was to a Terran. He looked out the door again, and standing up, told himself that he was doing absolutely nothing by staying in the tent. He removed some small atomic grenades from a wooden crate, selected a few candies from a bowl resting on a table, and walked out to his pedacycle. Before entering it, he took a final look at the battlefield. The Terrans, advertising their sentiments concerning war, had put up a sign on their sham fort which said, "Birds, go to hell!"

Lagotilom gunned the motor on his pedacycle, and progressed at a leisurely pace. By the time he reached the battlefield, he had noticed that his soldiers were all fighting in a new and very nasty manner.

As he turned his pedacycle down a gully he reflected that it was as though he was doing all of the fighting himself.

One mind, remained with his original body, pain wracked, at the Terran camp.



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His headache having abated somewhat, Lagotilom inspected the camp with a clearer head. He shooed a few small animals from the tent, looked about for his technicians and the camp personal, and saw them on the cook tent floor, dead drunk.

Damn fools, he thought, with a war going on they think their new toy is so goddam good they could get drunk. He glanced at the wall progress map, then, and saw something uncanny was going on. Only half of the Birds were at the fighting front, with the rest back of the line, doing something that seemed to be mechanical in nature. A few minutes later, Lagotilom saw that they were assembling the huge spring catapults that they always carried about with them but never used. When they were finished, they used them to lob concussion bombs over the lines, and in the terranean tsunami that followed, they advanced 100 yards. This strange, original tactic unnerved Lagotilom. He sat closer to the screen for the next few hours, watching maneuver after brilliant maneuver on each side. He wondered.

The Terran maneuvers he could account for, but the Birds, no. It was almost as though he were doing all their fight-controlling himself.

Abord the *Lil Abner*, General Pruneface Duffey was fascinated. He felt anxiety such as 90 prior years of Bird fighting had never before given him. Never before had he heard of the stinking pheasants fighting like this; and that Lagotilom lizard was doing a beauti-

ful job of controlling the Terran troops. But being realistic, Duffey could see that the situation was getting serious. He waved his hand over a red globe, and his aide, Ensign Piet van Mieris, a smallish man with thinning blond hair and a nervous tic in either cheek, entered the room, to be waved to a settee.

Duffey looked at him and spoke. "Watch that screen for a few minutes."

"Um. . . Sir, I have been watching it in the other room. The Birds are doing pretty good."

"Too damn good. Far too damn good." Duffey stood up, walked across his room, and aimed a vicious kick at a stuffed Bird propped up in a corner holding a handful of cigars and a tomahawk. He missed, took one of the cigars, lit it, and continued. "The Birds never fought this way before. I don't see why they should start now."

Van Mieris looked gloomily at Duffey. "Well, they have to start someplace."

"If I want philosophy, I'll ask for it," Duffey snarled.

"Well, General Duffey, I don't see why they shouldn't fight well, now. What I'm about to tell you I have no substantial proof for, but it's what I heard, and it seems to fit in. Before I signed up as your aide, I was on the report staff of General Copeland in the Crotch, and I heard something about the Birds having captured a military computer on Tarrarree, when they were holding that world. Its parts are subspacial, and it operates on the same force that keeps time moving.

It would occupy almost no space at all, so it could be lodged in each soldier's head, or, if it is as hard for the Birds to make as I suspect, it could be hidden anyplace on their base. Mind you, sir, I've no proof for this. Don't regard it as gospel truth." He sighed greatly and started to leave. Duffey stopped him.

"Dutch, how long ago was this?"

"About three months."

"Then that must be what's going on down there. The Birds must have one of those military computers commanding them. Get the Whiz Kids up here. I want to build an anti-computer for that sort of thing."

"But, sir . . ."

Duffey waved the complaining van Mieris impatiently. "Hop to it, man. I want those crazy bastards here at once."

Van Mieris sighed again, and groaned, "Yes, sir."

Twenty minutes later, the Whiz Kids, or Starship Computorial Team and Emergency Weapons Modifiers shuffled in. They were six tall, bleak-looking men with a funeral air hovering about them.

Duffey surveyed them with distaste, and said, "Did Dutch tell you what the Birds are using down below?" Nods and dull uh-huhs.

"Fine. I want a machine built to knock out that kind of . . . of machine. How soon can you have it done?"

A gaunt-faced man with short-cropped gray hair, dressed in an oil-paint-smeared smock, spoke up. "By morning, if we work all night."

"Great! Get it done. And make sure it's readily portable."

"Yes, sir." The cordon of engineers dragged out again, and Duffey almost made a sarcastic remark about rousing them from their coffins.

Evidently they didn't work all night, for it was 1300 before they brought their machine up to show Duffey. As they plodded in, Duffey saw, sitting on a stretcher, a blue-metal generator that fairly bristled with glass tubes. The oil-painted engineer, who in all probability was the one who was to test the machine, was a bit perkier. He struck the hull of the machine, which responded with a hollow clang.

"This is our baby. Weighs three tons. On such short notice, it was as portable as we could get it. It'll have to do," he said.

Pruneface asked. "Anything you need?"

"There is. Yeah. An armored car. I want one of the larger ones with the star-drive in them. The little ones don't have enough of a power supply in them to run this thing. I want it to have an efficient force-field, too. I don't want the Birds shooting us down once they realize what it is we're up to."

"You mean you gotta fly this thing all over hell's half acre to make it work?" Pruneface asked with angry insinuation in his voice.

"Just to plant our seeds. We gotta know whether it'll work at all, first. That's the way we'll find out quick. Then we can land in the camp and run it from there? Say! Have you gotten any hints from camp as to where this thing may be hidden?"

"Not a one. In fact, we haven't heard from camp since early last night. Seems their radio went on the fritz."

"Well, it won't make much difference. Call the carport. Tell 'em to get one ready. Okay, sir?"

"Yeah." Duffey picked up his desk phone's receiver and listened to it click throatily before a nasal voice sounded in his ear.

"Yes?" it said.

"Get me the armored car division." It clicked again. Duffey then said "I want car number ten for the Whiz Kids. I want a pilot and a copilot in it, too. Get it to port seven."

The porcupine generator was loaded into the weapons hold, and the occupants of the little bottle-shaped spaceship entered it. Humming slightly, the armored car dropped away from the *Li'l Abner*, and plummeted to the yellow and purple planet below. Inside, the Whiz Kid thought about his machine. Then he thought about the SIMO. He put two and two together, then, and hoped that his machine would not foul the SIMO's works. He feared greatly it would. Then he took a swig of whisky.

V

One of the soldier Lagotiloms of Terra crept rapidly up a gully.

Lagotilom found the gully quite a bit longer than he had first thought, and was considering jumping its sides and running across the surrounding land, when another wave from a concussion bomb surged in back of him, and an excited chatter

began very close. Bird talk. Above this there was the soft hum of a Bird staff car, progressing slowly down the gully. It was a flat disk mounted on two soda-straw legs, with a primitive gasoline motor in the back, a scrap of armor in the front, a gun, and a piece of black-feathered brass. Only the Sexed ones, the rich aristocracy of the Birds, had black feathers, and these were only found at established Bird bases. But one was riding a staff car down the gully. Lagotilom figured that it would be quite a feather in his cap if he were to capture this one. He hid in a wide crack in the gully floor, and threw a rope noose out to trap the leg of the staff car as it went by. As its hum grew louder, he wondered what the Bird inside was thinking, doing, observing.

Lagotilom could see that the gully he was in led past the Terran lines, right to under the bluff that the Terran encampment rested upon. He increased the pedacycle's speed, and saw that the gully was longer than he had expected, probably due to both the dust and the concussion bombs, which made mirages that fooled one's distance-sense. The cycle ran over an area of arroyo floor that was a bit cracked, so Lagotilom slowed his pedacycle again, and saw the noose in front of a crevice, waiting. He gunned the motor, and turned the speed down to slow, resulting in steps of rather bone-crushing violence. A foot stepped into the crevice, a choked scream came from within, and Lagotilom felt proud of himself. His first Terran.

Then he turned his attention to the Terran camp, and saw a reptilian figure peer from a tent, far off. He wondered what this figure was.

The day had been hot and sunny. So hot, in fact, that Lagotilom had thought the very air to be turning yellow. Now, though, it was cooling off again, and through the veillike clouds that had formed, the westerling sun presented a dull, smudgy appearance. Occasionally, Lagotilom could hear rumbles of very distant thunder. A cool wind was blowing from the west, carrying cool air down from the distant blue-gray mountains.

Lagotilom watched the dozing technicians, the battle chart, the sky and the SIMO. It was having one of its restless periods, and it hummed louder, its spark-gaps flashing with considerably more power. Another sound, coming from the sky, could be heard above the SIMO's droning. Lagotilom cast his eyes that way and saw a glint that he recognized as a Terran armored car encompassed by a force-field.

It leveled off, and made a few passes above the battlefield, as if expectant of something that didn't seem to be happening. It dropped to a mile, and made a few more passes, swishing about as though a bit frustrated. Finally, it circled the camp, and landed a few hundred yards from the tents. A jeep with three people and a metal and glass porcupine slid from the transportation hold, and drew to a halt outside of Lagotilom's tent.

A tall, cadaverous man jumped

out, took a swig from a liquor bottle, and began moving dials and twisting knobs and punching studs on the machine in back. It glowed fitfully, sounded off like a flushing toilet, and did nothing else. One of the two men in the front seat, after watching a few seconds, said something softly. The tall man snorted, and, turning his attention to a small viewscreen clamped in the front seat, made modifications on the porcupine. It sputtered and quit. He raised a huge fist and hit it hard on its side, then, after calming down, walked over to the SIMO tent, watching Lagotilom.

"Lieutenant Lagotilom." He stated it, not asked it.

"Yeah. I'm me. What?"

"You been watching that cartoon up there?" He jerked a thumb at the wall battle screen.

"Yeah. Lousy show. Whatever's got into those lousy bastards, anyway? Why are they fighting so good?"

"Ah, we think it's some sorta time-spacial computer they captured at the Crotch on Tarrarree. The Pruneface told us it's doin' all their thinkin' for 'em, so we built that thing and hauled it down here and it went and broke down. You saw it do that . . . hey. What's wrong with that thing?" For the first time, he seemed to notice the SIMO, which, upon arrival of the computorial disruptor, had been composing an electronic symphony.

"I dunno. I been wired to it all day, and all it gave me was a headache."

"Oh. Where are its technicians

... where is *everybody*, for that matter?"

"Drunk. In the cook tent."

"Drunk?"

"Yeah, drunk. Dead drunk. They got so confident about their toy they thought that it didn't need them any longer. So they went and got drunk. They flopped on the floor about noon, and they've been that way ever since."

"I oughta leave them there."

"You might as well. I doubt if you could rouse 'em, anyway."

Later, after the machine had been repaired and taken to the front lines, Lagotilom saw the rolling gray clouds turn a sinister blackish-green, lightning flashing out of them. Rain began plicking at the taut fabric of the tents, and with every lightning flash, the SIMO crackled loudly, and an unhealthy yellow glow pervaded the tent. As Lagotilom let the side flaps down, he saw the bullet-shaped jeep run up the ramp of the armored car, which extruded its psionic radio staff the next minute. It was immediately struck by lightning, and Lagotilom's head exploded. The SIMO broke into a frenzied tocsin.

Lagotilom's mind grew larger than it had the first time creeping across the planet's surface to ten miles from the SIMO. It struck many minds, including those of natives. Again, it slipped, leaving enough of the native's mind in the body to taint Lagotilom's mind.

Lagotilom dropped his feathery aluminum pitchfork, and threw

open the door to his small, hideskin barn. A cold wind blew the dried snakeweed hay about the barn. Leaving the barn, he shut the door with his lower tentacles, ruffled his plumage with his feathered muscles, and shut out the cold rain that fell. In the direction of the town fields, he saw flashes of imploding imploder grenades in unison with concussion bombs. Beyond that was another glow, but red. It was the town burning. Lagotilom grimly damning both the Terrans and the Birds entered his stave and hide house. He took a drill-lance from the wall, put on a suit of bronze chain mail, and loaded his hand-pistol with drillheads. He was going to stop both the Terrans and the Birds. On the road, he met others who were going to the town for the same reason, and he joined them without a word. He thought about the Terrans, and wondered what they were doing.

After the pedacycle had narrowly missed stepping on him, Lagotilom had crawled from the crevice, and saw that the staff car was going to be hard to catch. So, deciding against chasing it, he turned his attentions to the burning town, whose medieval walls stood black beneath leaping flames. He saw tiny figures moving along the top of the wall, and decided to join the fun. But he still wondered what the Bird in the staff car was doing.

Lagotilom, only a mile distant from the Terran camp, knew he stuck out like a fishwife in a Parisian fashion show, but he hadn't

drawn a single shot. In fact, with the exception of a single tent that seemed to be having a miniature storm of its own going on inside, there was no visible action anywhere in the camp. He muted his cycle's motor, and brought it to a slow sneak, and drove up the incline to the Terran base. He watched the instruments on his dashboard to warn of monkey-business detectors, but there were no such detectors. He moved cautiously up the slippery hill. He wondered what was going on inside that tent.

Lagotilom watched the armored car a few minutes, but it showed no signs of life. Well, he thought, it would take care of itself. He left the SIMO tent for the medical pavilion, and saw a large thing approaching the camp from the hill's bottom. He was alarmed for an instant, then grinned as it slipped and went crashing down the hill, amid squawks of consternation. When were those Birds ever going to learn that pedacycles can't climb hills? He went on his way, but before he entered the medical tent, he looked at the dark hulk of the armored car, and wondered what had happened to the men within.

Lagotilom's mind, in expanding, had caught the three men from the ship and lodged in them immediately. But they were unconscious. Then one stirred . . .

Lagotilom regained consciousness with a spinning vision of a ship's control room. He looked at the ruined psionic projector, with its

now-dead horse brain lying on the floor amid shards of glass that was its former casing globe. He looked around the control room of the armored car and saw his pilot and copilot on the floor, woozily trying to regain their feet. He searched feverishly about for the first aid kit.

Lagotilom's mind, in expanding, had caught the three men in the armored car, and it had also struck the psionic radio, which was trained upon the ship. In the instant before it burst and died, it cast his mind up . . . up . . . up to the *Li'l Abner* where it found another place to lodge.

There was no other personality in this brain . . . he took over completely . . .

The phone on Norge Gearling's desk rang, and he brushed aside piles of colored papers, lifted the receiver and asked, "Yeah. Whoozis? Whatcha want?"

An excited voice sounded in his ear, constantly dimming because its owner kept turning his head to look at something.

"Mr. Gearling! That big psionic radio down in the communications room. It thinks it's Lagotilom! You better get down here, fast!" Gearling stared at the receiver as if it were a disease carrier.

"You wanna repeat that, please?" he asked.

"I said that big psionic radio in the communications room thinks it's Lagotilom! It's been sending complaints all over its screens for the last few minutes, but we just figured out what's wrong now. It

keeps changing from red to gray and back again. I don't see why it should think it's Lagotilom. Lagotilom's down on the Hunk. Come on down and see for yourself!"

Gearling could see that something had very definitely gone wrong, for the huge horse brain suspended in the giant glob of waxy, oily gum was changing colors very fast, and it did indeed hold to the opinion that it was Lagotilom. In a very slow, plodding voice it inquired what in hell was going on. Then a few sensor units went into action, the voice cleared and became that of Lagotilom. "Gearling. I can see you in here. I'm supposed to be in soldier-type brains. I'm in a horse-type brain. What the hell went wrong?"

"Lagotilom. Is that you?" Gearling shouted.

"No. It's not me. I'm the Centaur and I'm out to conquer the universe. Dammit! Of course I'm Lagotilom. What in hell am I doing here?" The voice held anger and fear, and had an urgency to it.

Gearling was gesticulating to the communications engineers, who were scuttling about trying to keep the giant brain cool. He looked at the gleaming waxy chunk, suspended in a nest of wires and supported by a metal box and shouted. "Don't worry, Lagotilom. We'll get you out of there." As he shouted these words, he immediately realized how inadequate and ridiculous they sounded. Then he turned on his heel and ran up the ramp to the Whiz Kids' office, three levels up. At the peeling veneer counter he rang the little silver pushbell until one of the

cadaverous men stirred from the perpetual backroom craps game. "What the hell do you want, Gearling?" he snarled.

"What do you know about psionic radios? Especially the big one?"

"Nothing. You're the chief communicator. You oughta be able to fix it."

"Well, I can't. They never taught me one thing about anything but temporospatial radio." Gearling grabbed a wall phone, got the radio room, and asked for a straight connection to Lagotilom and the psionic radio. "Lagotilom. What's going on down there, on the Hunk?"

"What do you want me to tell you?"

"You got any idea what got you up here?"

"Unless it's the SIMO, no. I've no idea what it may be doing now, but when I saw it last, it was buzzing and sparking to beat the devil."

"Why don't its technicians fix it?"

"Cause they've been dead drunk since noon. Nobody down here but me and those three guys you sent down in the armored car. They haven't shown their faces since the storm started and their car got hit by lightning. At least, I don't think they've shown their faces."

Gearling put his hand over the mouthpiece of the phone, and spoke to the Whiz Kid. "What do you know about fixing SIMOs?"

"Precious little. Last night you told me all its technicians were down on the Hunk. What are they doing?"

"Dead drunk, according to Lagotilom."

"Dammit, Gearling. Can't you get something done? I have a feeling something bad is gonna happen down there and . . ." A sudden scream burst from the phone. Seconds later, it drifted up from the communications room. Then after a pause, the phone began babbling thoughts so disjointed as to be absolutely senseless. Gearling put the phone down.

"Did you hear him?" he said.

"Yes. But what happened?" the Whiz Kid asked.

"I'd bank he nearly got struck by lightning, and that SIMO did something with all the excess energy that I don't like to think about. We have to go down."

"In this storm? God, no. And we have to find out what happened first, too."

The verdict came, minutes later, when the phone jangled coarsely.

"Yes?" asked Gearling.

"We've deciphered that babble. Get down here at once." The voice was tense.

And Gearling wondered what was happening to Lagotilom.

VI

Lagotilom's head was bursting. New starbursts of pain exploded inside his skull each time some lightning flashed. Besides, he was in the middle of what he had been assured would not happen. His mind was lost among hundreds of other minds, all pressing down on him, all babbling, all confused. He wished for unconsciousness, but it would not come—all of those minds . . .

Gearling looked at the papers and grimaced. So that was it. The infallible SIMO had been broadcasting Lagotilom's mind to everything that could accommodate it. To top it off, it had obtained a jump from a psionic projector to fling his mind up to the ship's psionic radio. The booster brain was very dead, but it had only given the SIMO what it needed, the power to push a Lagotilom-mind to the ship. No more power than the SIMO normally provided would keep it up there once contact had been made. Now it had been deciphered that Gearling had been right about the lightning. Some had struck the SIMO tent, and this had jolted the machine so severely that Lagotilom and the ship's psionic radio had been confused with all the soldier brains' activities. And Birds and natives. Now one thing remained to be done. Deactivate the SIMO. And he wondered about the Terran soldier Lagotiloms . . .

Lagotilom crouched in a square-mouthed culvert high on the city's wall shooting Birds as they passed by. The town was burning, and the horrible stench from burning leather was wafted his way. And he was weary, too. A few minutes before, a sudden wave of confusion had hit him, and while it wasn't as bad as before, he still couldn't keep his mind on urgent subjects. He thought about his friends, the *Lil Abner*, and the Bird that he had left walking to the Terran camp . . .

After his pedacycle had broken a leg in the slide down the muddy

hill, Lagotilom had crept back up the side and had tried to enter the camp, but was nearly struck unconscious by a blast of sheer confusion. He backed away hastily, but it still lingered, and, combining with the cold and the wet, made him very miserable indeed. He sat in the rain, shivered, and cast longing glances at the warmth of the burning town, five miles away. Then he wondered how the natives were taking all of this; what they were doing . . .

Lagotilom was in tow. He had killed two Terrans and ten Birds. The little rune-painted stave and hide houses of the people of Boodai, his people, were almost all in flames, despite the rain. Lit by the orange fires of the conflagration, Birds could be seen fighting Boodai and Terrans on the thick city walls. The fallen and dead of all three races fell on the sharpened wooden spikes that thrust up inside the walls, and spattered tri-colored blood into the gutters and streets, where it mixed in veils with water and was swept down drains or collected in puddles. He tripped over a loose barrelhoop, and at the same time, felt the hot kiss of a knife sever a tentacle. He twisted and sent a spiral drill-charge through the neck of the gray Bird that stood over him with a huge butcher cleaver. He scuttled to his feet, and ran across the bloody town square to the shelter in the sub-city passages. If he stayed out here missing an arm, he might lose his life. Best to run to live another day. As he ran into the passages, he felt the confusion

that had struck him five minutes earlier pass. He wondered what could have caused it, and why it seemed so sinister, despite its weakness . . .

Lagotilom had screamed himself hoarse from the pain in his head, from the minds, from the deafening pounding sounds from the SIMO. He now blundered about the tent aimlessly, pounding on whatever he ran into, hoping it to be the SIMO. Finally he collapsed, and the tiny air tubes that permeated his brain to provide air-cooled thoughts were spouting hot blood. He assumed the foetal position on the floor which ran with mud, and fell backward in his thoughts . . . until he did not even notice Gearling come up to the SIMO, unlock its control box, and shut it off. But he was aware of the effect, for he collapsed happily, feeling, just before the deathlike plunge, that it was good to be alone again.

“So, Commandant Henly, sir, that is my report. No more Birds on Meglor’s Hunk, and no more Terrans. The natives just want to be left to their own devices, without meddling from space. And that machine . . .” Lagotilom let the sentence trail into meaningful oblivion.

“Well, Nestil, at least you did test it. I’ll give you ~~the credit~~ for that. And you got your promotion.”

Lagotilom looked at his colonel’s Comet on his sweater’s collar, and said, “Yes, I did. I’m damn happy the New Inventions Bureau knows

it's just a pipe dream at present." Suddenly Lagotilom sat erect, as if he had just struck an elementary truth. "Sir, there's been something buzzing around the back of my mind the last few days. I know what it is, now. This SIMO machine. Subelectronic Integrator for the Manipulation of Objects, by Nestil. SIMON. Ever heard of Simon Says?"

"Beg pardon?"

"Simon Says. It's a game. When I was on Terra my first week the Education Administration put me into a first grade class with 50 other first graders of as many different races. They thought I was of normal IQ. There was this game called

Simon Says. The kid'd mimic the teacher as long as she said Simon Says Do This or That. But if she said do this or that without the Simon Says, and the kid mimicked her anyways, he was out of the game. I always thought this was pretty damn unfair, so I rigged the game. This was just like one of those rigged games. You couldn't lose; ergo, the machine *did* work; but you couldn't win. And everyone did what they were supposed to do." Lagotilom chuckled immoderately. "This whole damn demonstration, all of it, was just another game of Simon Says." And he left the office, chuckling thoroughly . . .

END

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*The way to space involves great
sacrifice and daring—but not
necessarily by the astronauts!*

I

James M. Heyden, head of the Advanced Research Projects Division of the Continental Multitech-nikon Corporation, blew his breath out exasperatedly, sat back in the expensive aggregation of pads and springs that served as his desk chair, and read the handwritten note again:

Jim—

Pat tells me we are now so far ahead of the international competition, defensewise, that no large new government orders can be expected. Introduction of any new and revolutionary gimcrack at this time would, therefore, be most unwelcome and inexpedient. So put the new gimmicks on the back burner, and get going full

blast on that Kiddie Kit Science Series. We'll expect rapid progress, as we want the first three Kits on the market at least ninety days before Christmas. Naturally the Moon Krawler should be one of these first Kits.

Any suggestions you may have for utilizing our now top heavy staff of technicians and engineers would be appreciated. We assume you will cull the deadwood. Remember that in pruning, you want to cut pretty close into sound wood, as this actually promotes rapid healing and leaves no dead stump to fester.

Also, you will of course bear in mind that we have a little different approach, expensewise, on items for the general public, as opposed to rush government orders. The Krawler should retail at not over \$13.95, according to market simulation on our big new MIMIC computer. The Krawler, remember, does not have to fit into a cramped space, or endure high acceleration, vacuum, or a lunar landing. It won't break our heart if the thing fails to last long enough for our great-grandchildren to play with it on Mars; of course, it shouldn't fall apart before the holidays are over, either.

I know I don't have to spell this out for you, Jim. Ed and I are going to be out on the coast for a couple of weeks, enjoying the California smog, and trying out those twelve-lane, six-deck highways they brag about. If the merger goes through, we'll be gone another week, anyway, but that

won't matter. We'll be so diversified then that nothing but another 1929 could really put us under.

So, bear down hard on the re-conversion, streamlining, and rationalization of your operation. Incidentally, the MIMIC simulation indicates that the other two kits should sell, respectively, at \$8.95 and \$29.95. Obviously, you can shoot the works on the latter model, though we'll expect a more generous profit, too.

Just what these other two kits should be, we don't know, as our programmer was evidently unable to figure out just how to put the question to the computer. The computer gave out nothing but gibberish on the subject. So we'll leave that up to you.

This is, of course, all *your* responsibility, Jim, but I hope you'll be generally guided by the spirit of these few suggestions.

We'll look forward to seeing things well along when we get back from Cal.

Stu

Heyden sat up straight, and swore. He hit the intercom button.

"Nell!"

There was a startled feminine squeak, "Sir?"

"Dig up that note from Stu Grossrad—the one he sent about eighteen months ago—the one that said 'full speed ahead, damn the torpedoes,' and so on."

"That was longer ago than eighteen months. I think—"

"Never mind that. Dig it up. And the one before that—that one about blasting out a foxhole and hiding in it. And the one before that, too—I think there was one before that."

Heyden sat back and looked over the note. A fresh burst of profanity escaped him just as his secretary came in with several sheets of paper, and then, blushing bright pink, turned to leave.

"Hold on," said Heyden. He looked over the previous notes, and glanced up at her. "Listen to this: ' . . . the sky's no limit, boy. With this monster government program shaping up, we can carve off any size chunk we can eat. So beef up your technical staff, get that wild blue yonder stuff out of the deep freeze, shove this low-key junk we're working on onto a back burner, and set your sights on Arcturus . . . ' "

Heyden looked up in angry indignation. "There're three pages like that."

"Yes, sir." His secretary looked baffled for a moment, then struggled to match his look of indignation.

"And," said Heyden, reaching for an earlier note, "before that, we had *this* business:

" . . . too bad, but the bottom has gone out the way it can only go out when Uncle pulls the plug, and now instead of cruising along in ten fathoms of deep green sea, all of a sudden we're grinding on the rocks. We're going to have to shorten sail and throw the ballast overboard, or we're ended right here. We're top heavy with hypertechnical stuff that

nobody wants but Uncle—when he wants it. And now he doesn't want it. So get rid of it. Junk the fancy projects. What we need is a money-maker, fast. . . ' "

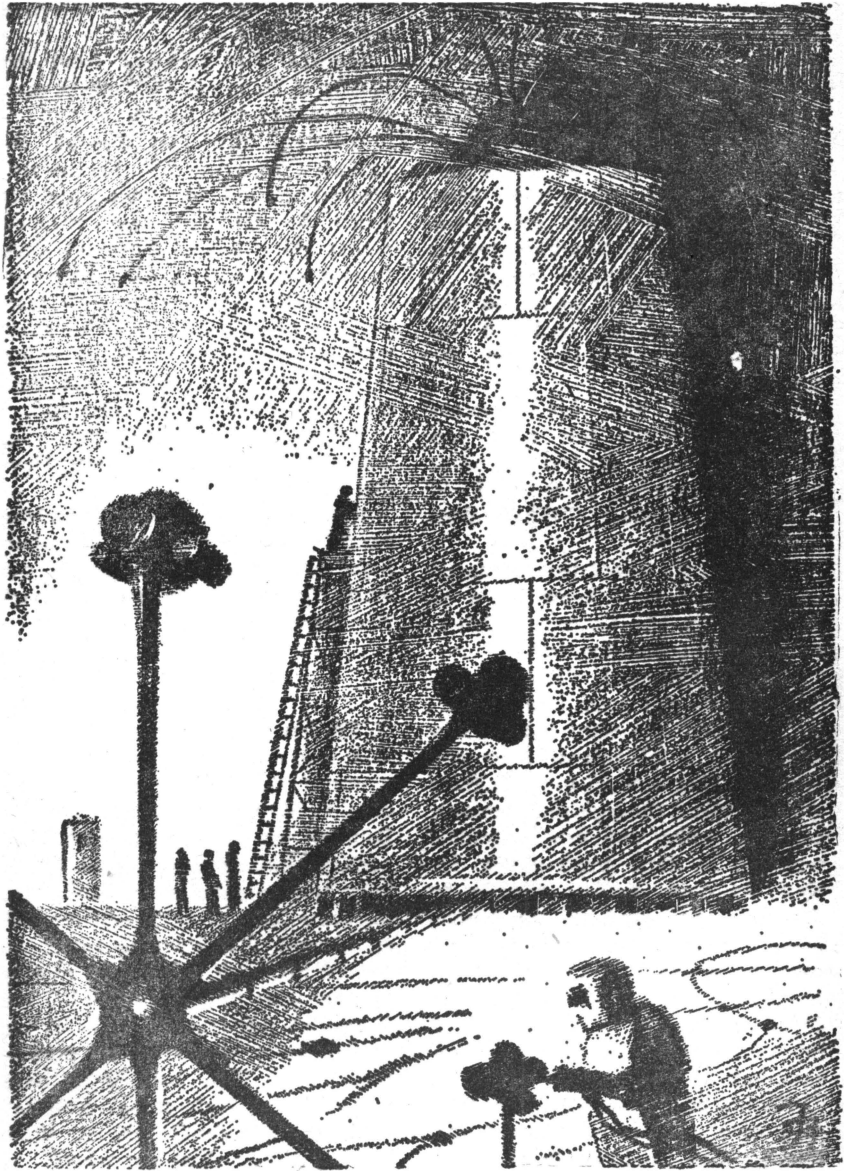
Heyden shoved that aside, glared up at his secretary, who swallowed nervously, and then he reached for the earliest sheet of paper, settled back, and read aloud:

" . . . the opportunity of the century, boy. We can get in there on the ground floor. The public is screaming for action. Congress is boiling over with urgency. It's, "Get results! Damn the expense!" I don't need to tell you that in an atmosphere like this, the streets are paved with golden opportunity. Now's the time to beef up your technical staff, build for the future, get in on the ground floor, and . . . ' "

Heyden slapped the papers down. "And so on, for pages. Well, there we are. Just what do you think of that?"

His secretary scanned his face quickly and looked indignant again.

"**Y**ou see," said Heyden angrily, "just what happens here. We're like a damn-fool rocket that wastes half its thrust decelerating. Now we're supposed to unload people we pirated away from other outfits six months ago. Twelve to eighteen months from now, we'll be scrambling to get these very same people back again. We set up a winning team, then when we get a few points ahead in the international game, we have to disband it. The other team, over across the ocean, keeps on playing, and all of a sud-



den there comes a howl from the fans. The opposition is wiping us all over the field. Then, *quick*, we've got to put together a winning team again. And then, again, when we get a few points ahead—"His face changed expression, and for a moment he looked boiling mad. Then he blew out his breath, and shrugged, "It's like a manic-depressive psychosis. The wasted energy is terrific. And when we're on the 'down' half of the cycle, if the other side should just get far enough ahead—"

"Yes, sir," said his secretary agreeably. "That's just what you said the last time, sir. Did you want to see Mr. Benning, or should I —"

Heyden scowled. "What does Benning want?"

"He says it's about that advanced 'High-G' project. I knew you'd be busy reading Mr. Grossrad's letter, so I had Mr. Benning wait."

Heyden shrugged. "It's all academic now. But send him in."

"Yes, sir." She went out. A moment later, a tall intense man with blue eyes that seemed to be lit from within walked through the doorway, carrying under one arm a bundle wrapped in dark green paper. He shut the door, walked directly to Heyden's desk, and set the bundle down. There was a faint light crackle of paper, and then the bundle tipped lightly back and forth, resting on the desk with all the solidity of a piece of hollow balsa wood.

Having set the bundle down, Benning now glanced all around furtively, then nodded to Heyden.

"Well," he said, in a low secretive voice, "we got it."

Heyden was glancing from the bundle to Benning. He'd never seen Benning like this before.

Benning, blue eyes glowing, repeated, "We got it." He turned, glanced around the room, put his finger to his lips, and reached across the stupefied Heyden's desk to pick up a scratch pad. He scribbled rapidly as Heyden, with fast-growing uneasiness, moved his chair back so he'd have freedom of action if it suddenly developed that Benning had gone off the deep end.

Benning sat down across the desk, and slid the pad to Heyden. Heyden read:

High-G total success. Working model right there across the desk from you. Don't talk about it out loud. Have reason to think your office here is bugged.

II

Heyden glanced rapidly from the pad to Benning to the green-wrapped package. For a moment he considered what it would mean if Benning was telling the truth. The package immediately looked like a huge bundle of big green banknotes. He came back to earth and reminded himself that Benning might be out of his head. He wrote rapidly on the pad: *Bugged by who, the Russians?* and said aloud, "When you come in here with that portentous look, Ben, you better have something to back it up. You say you 'got it.' Don't just sit there looking happy. You got *what?*"

Benning could now do any of a number of things, and Heyden sat on the edge of his chair, watching intently to see what came next.

Benning looked at the pad, glanced at places where a "bug" might be hidden, and crossed his fingers to show he spoke for the benefit of uninvited listeners. "What we've got is a damn good gimmick to get us a government contract on this, boy. We've run into a little glimmer of pay dirt on this one. I can see just how to start the golden flood pouring in, and keep it flowing for years."

He wrote rapidly on the pad, and shoved it across the desk. Heyden read.

Not the Russians. I. I.

Heyden winced and glanced around. "M'm," he said aloud. "Well, I don't know. I got quite a note from Stu Grossrad."

Benning sat up. "No kidding?"

"No kidding."

"What did Stu say?"

"What does he ever say? It's either 'Full speed ahead!' or 'Emergency reverse!' The last time, we were supposed to go all out, shoot the works. Naturally, this time we're supposed to chop off all the deadwood, shove everything we're working on now onto the back burner, and pull that toy kit idea off the back burner and put it onto the front burner. Whenever we're eager to do something, we're supposed to let it congeal on the back burner. When we couldn't care less about the thing, *then* we're supposed to work on it. How does this fit in with your bright new idea?"

"Not so hot. What toy kit is that?"

Heyden wrote: *I. I. You mean Interdisciplinary Intellectronics? Or Interspatial Ionics?*

He shoved the pad across the desk, then handed over the note from Grossrad. "Read it. You'll remember."

Benning crackled the paper, glanced at the pad, wrote briefly, looked back at the note, wrote some more, glanced at the note and groaned.

"Ye gods. Hasn't somebody else got a Moon Krawler out by now? This thing was a bright idea when we thought of it. It's stale now." He slid the pad across, and Heyden read:

I mean Interdis-, etc.-Jawbreaker Electronics, Inc.

Heyden wrote, *Where did you learn this?* Aloud, he said, "Naturally, we'll be supposed to gimmick it up with flashing lights, clicking noises, and a recorded voice like a talking doll, only more mechanical. No doubt the thing should have claws that open and shut, a power scoop for, quote, taking samples of the lunar surface, end-quote, and maybe a guide-wire to control it with as it crawls across the living-room rug waving its claws."

"Boy," said Benning. "From the sublime to the ridiculous in one easy jump." He shoved the pad back. "What's this business about the \$29.95 item? What toy could we make that anyone would be crazy enough to buy at that price?"

Heyden was reading: *Right from the horse's mouth. Their Industrial*

Intelligence chief. They're in some kind of financial cramp, want to cut his salary and slash his staff, "temporarily."

Heyden said, "Take a look through some recent toy catalog. You'll get a shock." He wrote, *Is he reliable?*

Benning had been rapidly scanning Grossrad's note, but was now reading it more carefully. He glanced up in exasperation. "Listen to this: '... of course, it shouldn't fall apart before the holidays are over . . .' Isn't *that* nice?" He glanced at the pad, wrote rapidly, and said, "What kind of sleazy junk are we supposed to turn out, anyway?"

"Just so it sells," grunted Heyden. He took the pad, and read: *That guy is as reliable as a rusted-out two-buck hair-trigger Spanish automatic. He just figures I. I. is double-crossing him, and he never lets anybody get ahead of him in that game.*

"You realize," said Heyden, frowning, "we're going to have to let some people go and that we'll wish we'd kept them about eighteen months from now."

"Agh," growled Benning, still reading the note. "Listen to this: 'Introduction of any new and revolutionary gimcrack at this time would, therefore, be most unwelcome and inexpedient.' Just suppose we *should* hit on something new and revolutionary?" He tipped his head toward the green-wrapped bundle. "Then what? Are we supposed to think you can actually put it in cold storage, and keep it like frozen fish? Suppose somebody else gets it? What's the *point* of this whole thing, anyway?"

Heyden wrote: *What's in that bundle?* He slid the pad across the desk, and said, "Let's get back to the question of those people we're going to have to let go."

Benning wrote on the pad, then said aloud, "This is crazy."

"Do you think," said Heyden drily, "that you're telling *me* something?" He glanced at the pad: *Lift off the paper and see.*

Heyden felt a tightness in his chest. He said, "Let's have that note from Grossrad. I've been reading some of his previous stuff here—" He stood up, gently pulled off the green paper — "and nobody can tell me anything new about how crazy —" He stared at the short length of board with square box attached, and slide-wire rheostat beside the box. Beneath the rheostat was a penciled arrow pointing to the right, and marked "Up".

Heyden felt a brief spasm of irritation. What was this supposed to be? Antigravity? He felt a brief wave of dizziness as he thought, *Ye gods, what if it is?*

Belatedly, he finished his sentence: "— how crazy a thing like this really is."

"But," said Benning sourly, "we're stuck with it? Is that what you mean?"

"Yeah." Heyden pulled the board toward him, noting its weird lightness, despite the fact that it felt solid enough to the fingers. "We're stuck with it, and we better figure out who to let go."

"I should think," said Benning, "that would be *your* job."

Heyden shoved the rheostat slider in the direction of the arrow. The board drifted up out of his hands, and started accelerating toward the ceiling. A hasty grab brought it down, but it continued to tug toward the sky.

"My responsibility," said Heyden, eyeing the board, "but I need your suggestions."

"As to who to fire?"

"Say, as to who to keep." He slid the rheostat slider in the opposite direction, and the board sagged so heavily that it seemed to Heyden that it must be made out of solid lead. Frowning, he said, "Take Magnusson, for instance. We could unload him to start with, I suppose."

"He's had a lot of expenses. His bank balance is pretty feeble."

Heyden was experimenting with the slider. He got the impression that as he approached either end, the weight or lift of the concealed device went off toward infinity. He paused to glance at the connections to the rheostat.

"Not our fault," he grunted.

"No, but —"

"The point is, that's his worry."

The board was headed for the ceiling again, and it felt as if it would tear Heyden's arm out by the roots. Scowling, he pulled the slider back toward the center.

Benning said, "I think we ought to be decent enough to give Magnusson enough time to get back on his feet."

"How about Simms?"

The board was so heavy Heyden had to rest it on the corner of his desk. As he pushed the slider furth-

er, the board settled immovably in place, as if spiked down.

"Well," said Benning evasively, "Simms has had a little streak of bad luck, too."

"What have we got," said Heyden, carefully pulling the slider back, "nothing but hard-luck cases?"

"Well, you know how it is —"

"We've got to start somewhere."

"Sure, but poor Simms —"

"We aren't going to get anywhere this way. Make out a list of the people you think are essential. I want them in groups, the most essential at the top of the list." He wrote on the pad: *Did I.I.'s spy-chief say there was a visual pickup anywhere in here?*

Benning glanced at the pad. "What the heck, Jim. I can't know which men are essential till I know what we'll have to do later."

"Just assume it's the usual thing, Ben. We've been through this before." He pulled the pad over, and read:

He didn't say. Personally, I doubt it.

Heyden wrote: *We better explain this package, in case there's something outside.*

Benning read it, and nodded.

Heyden said, "Well, forget that for now. What have you got over there in that paper?"

Benning shrugged. "A little promotion gizmo." He rattled the paper. "See, you look in these port-holes, and you're inside the spaceship. Shows our control panel, amongst other things, for the Genie Project."

"Cute," conceded Heyden, smil-

ing wryly. "Well that's down the drain now. Wrap it up and forget it."

"Based on the old-time stereoscope," said Benning, putting the actual board with its box and rheostat inside the paper wrapper. "Too bad. It seemed like a good—"

Heyden wrote on the pad, *Let's go somewhere where we can talk.* Aloud, he said sourly, "Put it on the back burner. Now, I've had enough of this for a while. Where are you headed?"

Benning glanced at the pad. "Back to my lab. You want to come along?"

Heyden put Grossrad's latest note in his pocket. "Sure."

III

They went out, walked down a lengthy corridor, went into a big airy structure built on the general lines of a hangar for dirigibles, walked along the wall to the right, and finally arrived at a door marked, "Private — Danger — Keep Out."

Heyden followed Benning inside, and down a short hall. Benning did something complicated at the door, then they stepped in. Benning snapped on the lights, then flipped another switch, and the room filled with sounds of laughing voices, the clink of glasses, cars starting up somewhere in the background, and a close-at-hand murmur and mumble that seemed to include every tone of voice conceivable.

"Okay," murmured Benning, "I think this room is safe enough, but if they *have* got anything in here,

they're welcome to try and filter us out from this mess. You did see what we've got, plainly enough, back in your office?"

"I saw it. But did you see what we're going to run into when we try to convince Grossrad?"

"He couldn't be so stupid he wouldn't catch on to this."

"That's not the point. He says new gadgets aren't wanted. This means somebody higher up figures we've now settled down to a nice international stalemate, with us ahead of the opposition. This device, it strikes me, is going to make a lot of expensive equipment obsolete in a hurry."

"You're not just kidding. With this, we could put a man on the moon in a few weeks, not years from now. And that's just the start."

"What the Sam Hill is it, anyway?"

Benning frowned. "Did you ever hear the comparison of gravitational fields with the bending of a frictionless surface?"

"I think I know what you mean. If you had a flat frictionless surface, flexible enough to bend when objects were placed on it, and if this whole frictionless surface were accelerating uniformly at right angles to the plane of the surface—"

Benning nodded. "That's it."

Heyden went on. "If you had such a frictionless surface, an object would slide across it in a straight line until it neared another object, when the dip in the surface caused by these objects would pull them toward each other. There would be, apparently, a 'gravitational field'

around each object, the strength of the 'field' depending on the mass of the object."

"Exactly. This would cause the effect of attraction. Now, how would you creat *repulsion*?"

"Well—" Heyden frowned. "There would have to be a hill—a ridge, or rise, in the frictionless surface. You could do it only if the surface had some other property—if it were made of the right metal, for instance, you could position magnets toward the stern of a properly shaped object resting on the surface, and this might create enough slope to cause the object to slide forward—"

Benning was nodding and smiling broadly. "That's one idea. And how much power would it take?"

"It would depend on the properties of the surface."

"Yes. Well, we started this project without much hope that there was any physical counterpart to this comparison. But after tracking down some previously unexplained discrepancies, we found it. The effect can be made comparatively large, the power consumption is small, and by proper manipulation, we can create either a positive or negative deflection of the 'surface'. The result is, we've got a space drive."

Heyden sat back, and thought it over. "This just *could* be a nightmare. How complicated is it?"

"Mathematically, it's very complicated. Physically, it's not bad."

"This might make life very *exasperating* for everybody concerned with it."

Benning frowned. "Of course, it's bound to be highly classified. They'll doubtless bury it under a ton of regulations, but — Oh." Benning was silent. "Naturally, we discovered it. We shouldn't be running around at loose ends, ready to spill the works in the nearest bar."

"Naturally, that's one aspect. But there are others. Now, how much leverage do you get with this thing? How much advantage over a rocket, for instance?"

"Agh. Ye gods, a rocket."

"Could it beat a rocket for *speed*?"

"Easy. Weight for weight—I mean weight at rest with the device turned off—there's no comparison."

"How about for lifting a payload?"

"There's still no comparison. You don't have to lift a lot of cargo you're just going to fire out the tail end anyway."

"Could you put a warhead in one of these and hit within five miles a thousand miles away?"

Benning hesitated. "Not yet."

"But eventually?"

After a long silence, Benning said, "For accuracy, used as a missile power source, I fail to see any advantage in this. But you could knock one of your opponent's missiles off course with it. You might even smash it up in mid-air."

"How would you do that?"

"Make one big enough, with enough power back of it, make a strong enough mount and screw the thing down to a solid base—What do you think you've got? It's a tractor-repulsor unit. You can make

a steep 'hill' in the 'frictionless surface' the missile is sliding along. What does that interpret as in physical reality? A violent repulsion. Then you can make a trough. Subject anything to sudden yanks and shoves, and what happens to it?"

Heyden nodded slowly.

Benning said, "Didn't I see you pick up Grossrad's note before we left?"

"Yes, you want it?"

"I'd like to look it over again."

Heyden felt through his pockets, and handed the note to Benning.

Benning read the note amidst gales of hurrying girlish laughter that grew loud and faded, with male curses, mumbling, a variety of audible conversations, and a weird varying note in the background.

Benning grunted and looked up. "He sure doesn't leave any doubt about this 'no new advances wanted at this time'."

Heyden nodded. "That's what bothers me."

"But," said Benning, "any good business man can see the potential in this."

"What potential? Where's the profit in something you can never put on the market because it's sure to be classified?"

"Well, the defense contracts, then."

Heyden shook his head gloomily. "Remember: 'we are now so far ahead of the international competition, defensewise, that no large new government orders can be expected.'"

Benning said angrily, "Can't you convince that guy—"

"Probably, but so what? Grossrad doesn't write contracts with himself. Suppose I convince him? Then he's got to convince somebody else. That guy has to convince the next one. At some point in there, someone conceivably may have to convince the defense secretary, and he may have to convince Congress. This is assuming it goes through all those offices and ever comes out again. Each of those guys is going to be hard to convince, precisely because he knows how hard it's going to be to convince the next man. Meanwhile, all we can do is chew our nails and wait for their decision."

Benning said, "While we're waiting, what if somebody else, say in some foreign laboratory, maybe even where they've got pictures of Big Brother hanging on the wall — What if they should come up with this?"

"Is that conceivable?"

"Sure, it's conceivable. I told you, physically, this thing is not too bad." He frowned. "Well, what then?"

Heyden frowned. "As soon as they make it public, count on us to get a contract so big we couldn't fill it if we were General Motors, U.S. Steel, and A. T. and T. combined. We'll have to kidnap every scientist and technician we can lay our hands on."

Benning said angrily, "We're missing something here. What if they don't make it public? What if they quietly build up a fleet of these things while we're sitting around waiting for the go-ahead? They could seal off outer space so tight

we'd never get out there." An intense look appeared on Benning's face. "Think, Jim—what if they're building them *right now*?"

Heyden blinked, gave an irritated wave of his hand as if to dismiss the thought, then frowned. "How hard is it to make these things?"

"I've told you. The actual physical construction isn't too bad, once you know what to do."

There was a long period in which neither man said anything. Then Heyden said slowly, "You said, 'With this, we could put a man on the moon *in a few weeks*.' Did you mean that literally?"

Benning nodded. "Remember all the research that's already been done. Think of the problems we *don't* have, because the drive is no worry. Think how we're set up here. Sure, in three weeks, we could put a man on that moon."

"Could you mount the drive so it could also be used as a weapon?"

"Yes. And, for that matter, a smaller one could serve as an auxiliary weapon in flight, if you wanted. But it would take money."

Heyden thought it over, then grinned. "If Grossrad's going to have his Kiddie Kits ready in time, he's going to have to give us money."

"Are you serious?"

"Yes, I'm serious. This is the biggest technological advance in history."

Benning was wide eyed. "And what you're thinking of making is a full-size spaceship—good enough for an *actual expedition*?"

"That's exactly what I want—if

we can make such a thing. No trim. No flimflam. Just let it work."

Benning seemed to lose some enthusiasm. "This is risky."

Heyden nodded. "You bet your life it's risky. If Grossrad gets wind of it I'll be hung from the rafters. But never mind that. Are you sure you can *do it*?"

"Of course I'm sure," Benning frowned. "Right now we can do this better than Kiddie Kits. A month from now, if we follow Grossrad's letter, it'll be a different story. But—"

"Then this may be the only chance our side gets. We'd better take it."

Benning drew a deep shaky breath. "Okay."

IV

The next two weeks passed in a blur of desperate activity that left Heyden with no time to think of anything but the problem immediately in front of him. Benning's remark that a man could be put on the moon in a few weeks turned out to be a little optimistic.

Benning said exasperatedly, "I didn't figure in all that life-support stuff. So far as the drive is concerned, that's what I meant."

Heyden said angrily, "We could have put a corpse on the moon a long time ago."

"I'm sorry," said Benning. "We're coming fast, anyway. Thank heaven the thing is basically simple."

Before them loomed a big black shape like an overgrown boiler. It had all the sophistication of a

sledge-hammer, but Benning insisted it could take off inside a week.

"You see," he said, "the only real problem with the drive is durability under stress. Theoretically, we could use that demonstration model I showed you. The trouble is that in practice if the drive-unit is too small, it will crush."

"That's nice. But we've got around that, have we?"

"Yes."

Heyden eyed the looming black boiler shape. "We don't want to get out there" and get cooked.

"The other side shades from black into a pure reflective coating."

"How do we see out of it?—In addition to the radar, which may fail on us?"

"There's a window in the end. Also, we're practising with a light-weight kind of drive-unit. We figure we can use that as a sort of detector."

"How does it work?"

"To create a given negative bending or warping where there's a physical object present takes more power than where there isn't. Set things up right, and you can read the mass of the given object off a meter."

"How about distance?"

"The reading drops in front and behind the object. There's no problem there."

Heyden stared at the looming shape and nodded slowly. He had no clear idea *why* there was no problem there; but there was nothing to do but take Benning's word for it, and hope things would turn out. He turned to make a final comment, then paused.

A bulky overalled form had just ducked out the door of the boiler-shape, and now, scowling deeply, pushed through a knot of people standing just outside. Carrying a flimsy sheet of yellow paper, he headed straight for Benning, and immediately got down to brass tacks.

"That inside-drive idea won't work. If we try that, we're going to swivel that drive around, stress the walls, and crack the window on the end. That leaves us with an air-leak. That drive has to go *outside*."

"That's insane," said Benning angrily. "With that size unit, the whole ship's inside the distortion."

"Maybe, but there's a fringe effect."

"We're inside it."

"We are? Look at this."

Benning took the paper. "Well . . . This is just a freakish —"

"Maybe it doesn't last long, but what's it going to do to that window?"

"Yes, but if we put it outside, it will *still* —"

"Not if we have it on a boom. That puts us outside that gradient."

Benning stared at him. "How long a boom?"

"About two hundred feet should do it."

"Two hundred—"

"Unless you can breathe vacuum, that's where it's got to go, if we make it that size."

Benning was staring at the flimsy sheet of paper as there came the sound of a feminine throat-clearing to Heyden's right. He

glanced around to see his secretary holding out a special-delivery letter. Leaving Benning to deal with the technical problem, Heyden headed back to his office, and read the handwritten letter:

Jim—

Well, boy, we've got the merger, but doing business with this outfit really puts your wallet through the wringer. I hope you're coming along fine with the Kiddie Kits. We'll need every cent we can scrape up, so pare expenses to the bone, and shave everything just as fine as you can. We're going to have to cut down more than I expected on the scientific talent, and I just hope we can pick them up again when we need them.

I know how this Kiddie Kit business must strike you after the stuff we've been working on, but when the oasis gets this dry, there's nothing to do but fold your tents and move on. Nothing we could produce, no matter how advanced, would get a really sympathetic hearing right now.

I don't mean to dwell on this, Jim. I know we can count on you all the way, even if it is a let-down. I keep harping on it because I think this toy business is going to make the difference, one way or the other. It's hard to believe, I know, but there it is.

Ed and I are both totally worn out. There are some

things that you have to do in business that aren't very business-like, but there's no time to argue about that. You either do them or get kicked in the head, and somebody else walks off with the prize.

I must be more worn-out than I realized to go on like this. Well, here's to the merger, and stick to those Kiddie Kits. You don't know what it means to know we've got somebody back there we can count on.

We'll see you in a week, Jim.

Stu

Heyden swallowed and sat back dizzily.

When his vision cleared, there stood, across the desk, an apologetic individual from Purchasing. "Sorry, sir, but it seems we have to have your signature on this."

Heyden took it, and scowled at the figures. "Are you sure the addition is right?"

"Yes, sir. That special silver wire is expensive stuff."

Heyden sat still for a moment, then scratched out his name. The paper was briskly whisked away.

"Thank you, sir." The door shut, and the incident was gone beyond recall. Heyden picked up the note, read it through again, and shook his head. He started to get up, then changed his mind. He sat still a minute, then drew in a deep breath and let it out in a rough sigh. The realization went through him with inescapable finality that in seven days the ship would be ready or not ready.

And then something else, that he'd been vaguely aware of theoretically took on a sudden solidity and reality.

In seven days, he would be either a hero of broad vision, or a fool and a traitor.

And there was not a thing he could do about it.

He had made his move, and if it didn't work out, he could never, never explain it.

The first four or five days after that crawled past with Heyden almost in a daze. Time and again, between emergencies, he dredged up memories, trying to discover exactly how he had gotten into this. The astonishing thing was that, in retrospect, the decision seemed to have been so easy. Blandly, calmly, he had given the decision that might wreck the corporation, and land him, personally, in the worst mess he'd ever been in.

His meditations were enlivened, toward the end of the week, by a telephone call from the comptroller.

"Hello, Jim?"

"Right here, Sam." Heyden tried without success to inject a little warmth into his voice. His voice retained a calm unconcerned coolness.

There was a hesitant cough over the phone. "Say, no offense, Jim, but what the devil is going on there?"

"Business as usual," came Heyden's voice, cool and totally assured. "Granted the changes that I'm sure Stu must have told you about."

"Well, Stu told me—" There was a brief pause. "Do you know something I don't know? Is that it?"

Heyden laughed. The sound was that of a man without a worry in the world. "Sam," his voice said cheerfully, "before I know if I know anything you don't know, I know you know I have to know what you know, otherwise I won't know, you know, if what I know is something you *don't* know."

"Ah, for—" Over the phone, the cautious voice sounded irritated but relieved. "Listen, we can kid all we want, but this is serious business."

"It is," said Heyden emphatically. After a moment, he added, "Thank heaven."

"What do you mean? Wait a minute, now, do you mean—" There was a long silence. "I know, of course, that the merger went through, but I didn't realize—Do you mean that we're frying *their* fish?"

"All I can say is, this here is *serious* business. If Stu didn't tell you, I'm not going into it over the phone."

"What if I come down there?"

"Glad to see you anytime, Sam. But I can't mention it if Stu didn't."

"Did Stu say, specifically, *not* to tell me?"

"No. Of course not."

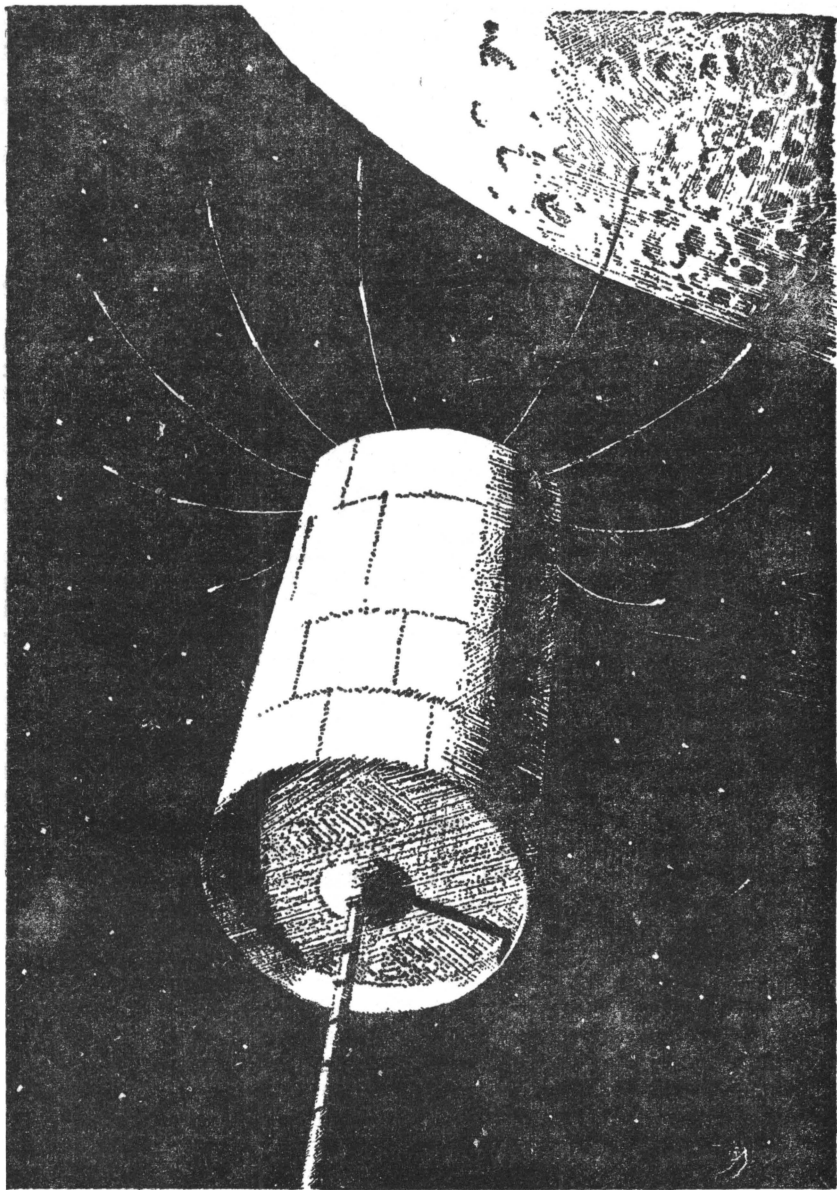
"Then why can't you—"

"Because he didn't tell me to mention it."

"Maybe I better call *him* up."

"No harm in it. Just don't give anything away over the phone."

"Then how the devil am I —"



Heyden said irritably, "Look, Sam, I'm sure it was an oversight on his part. Stu doesn't make a practice of leaving anyone in the dark. But he was worn out. I don't know what he had to do to put the merger across, but he seemed pretty thoroughly wrung out to me. Now, you can either try to locate him now, or you can wait a couple of days till he can tell you himself."

"All right. But meanwhile we're spending—"

Heyden exploded. "What do I have to do, spell it out? For Pete's sake, Sam! Look, do you think Stuart Grossrad is a commercial moron? With things the way they are now, would he deliberately stretch us out as thin as a rubber band? This merger wasn't a cheap proposition, you know."

"Well—the point of the merger was that, ultimately we'd reap the advantages of diversification."

"How would that get us through the next six months?"

There was a lengthy silence. Finally there was a long sigh over the telephone. "Did Stu tell you this beforehand?"

"Beforehand, all he told me was such a tale of misery I almost drowned in my own tears. No. He didn't tell me a thing, *beforehand*. What I couldn't figure out was why he was so eager for this merger, if there wasn't more in it than what he mentioned."

"He's smooth, all right. He wanted us psychologically set up to take full advantage of this. Or, if the merger fell through, he didn't want

us moping around, thinking we'd lost our last chance. Either way it went, he was ready."

"I suppose that must have been it."

"Well—I just had to find out. No hard feelings, Jim?"

"Of course not, Sam. Any time."

"See you, boy."

"So long, Sam."

Heyden put the phone in its cradle, and mopped his forehead. He had, if Sam remained convinced, succeeded in hanging on to two more days. If, that is, Grossrad didn't decide to come back early. If there were no other catastrophes. Heyden glanced at his watch, and decided to go take a look and see how Benning was coming along.

It took Heyden some time to walk down the long corridor, but only a few moments more to find his answer. The big boiler shape stood in solitary glory in the hangar-like building, apparently forgotten. Everyone was fifty feet away, crowded around a smouldering mess about a foot-and-a-half long and eight inches in diameter, and that had, apparently, once been something useable. Benning had his hand at his chin, staring at his ruin. He, and the rest of the men, all looked so dazed and tired that Heyden didn't have the heart to ask what had happened. Warily, he shut the door, went back to his office, and sat down.

"Well, Stu," he said mentally, "you see I thought we could make it to the moon . . . Yes, the *moon* . . . Yes, I know the thing doesn't work, Stu . . . That's where all

the money went Stu . . . That's right . . . Yes, Stu . . . Sorry . . . Yes . . . That's right, Stu—I mean Mr. Grossrad . . . Yes, Mr. Grossrad, I did it on my own responsibility . . . Yes, sir, I know, but—You see, sir, if somebody else had got it—And if it *had* worked, Mr. Grossrad, then . . . I know it didn't sir, but —”

Heyden abruptly sat up, and smashed his fist on the desk. “Damn it,” he said savagely, “it's *got* to work!”

By the time he got to Benning again, Benning looked glassy-eyed with pure stupefaction, and the others had expressions that varied from ordinary gloom to total defeatist resignation.

Heyden told himself that he would have to keep himself under tight control.

“What's this?” he said abruptly, and a good deal louder than he'd intended.

Instantly, every eye in the room was focused on him. They watched him with the alert attention a man gets when he breaks the silence by cracking a bullwhip.

Benning turned around, his expression that of bafflement and disbelief. “This size builds up heat faster than we imagined. It's got to have a cooling system.”

“Is that the drive-unit for the ship?”

“No, this is the forward unit. The ship drive-unit is bound to be worse yet.”

“How long to rig up a cooling system?”

“Too long. We've not only got to cool the drive-unit itself, we've then got to unload all the heat from the cooling system. The stupefying thing is, we tested for this with smaller units, and the heat build-up was gradual and well within bounds. We've apparently run into some effect that increases exponentially with mass, while thrust—”

“Can you get the same thrust with a group of small units as with one large one?”

Benning blinked. “It wouldn't be as *efficient*, but yes, we *could* do that.”

“Any drawbacks to having a bunch of them?”

“Yes. All the mounts have to be duplicated—”

“Why not mount them together?”

“If they're too close, we've discovered they interact.”

“Can you mount them far enough apart so they don't interact, but not so far apart as to make control impossible?”

“Yes, but the expense—”

“Damn the expense,” said Heyden savagely. “How long will it take?”

Benning mopped his forehead. “If we work straight through without a break we can have it ready the day after tomorrow.”

“All right. Starting now, everyone who volunteers to work straight through, and who sticks with it, gets a quadruple pay, and a thousand-dollar bonus after taxes, if the job's done on time.”

There was a brief sudden buzz of excitement.

“My God!” blurted Benning.

"Look what's at stake!" said Heyden angrily. "Control of space! A drive that can reach the planets! All the high-grade ore in the asteroid belt!—Are we going to fold up, or are we going to get it?" He paused just long enough to see the glint in their eyes, then turned to Benning. "What do you need?"

Benning said soberly. "A list as long as your arm."

"Let's have it."

Benning got him off away from the others. "Listen, do you know what's going to happen to you if—"

"It's too late for that."

"I wish I'd never brought that damned thing to your office."

"We've taken a flying jump, and we're now halfway out over the crevasse. There's no point wishing we'd never jumped. We've got to go the rest of the way and put our mind on grabbing any bush or clump of grass that will get us over the lip of that drop."

Benning swallowed. "Okay."

"Now listen," said Heyden. "You're going to need plenty of hot coffee in here, and I don't know if you can literally keep going without any break. We don't want a bunch of zombies staggering around in here holding the wrong end of the wrench."

"You're right. Could we have some rough army blankets and some narrow folding cots? That's heaven for an exhausted man, but he shouldn't be too reluctant to get up."

"Good idea. Now *can* you finish it by the day after tomorrow?"

Benning nodded. "If, God willing, nothing *else* goes wrong."

The next day was a nightmare. Suppliers were beginning to need reassurance about pay. A weird rumor was making the rounds, to the effect that Grossrad had stripped the corporation treasury and was now settled down in Brazil with a nicely tanned blonde mistress, the two of them living cozily in a mansion with an Olympic-sized swimming pool outdoors, and gold-plated faucets indoors.

Heyden put the rumor down temporarily by showing the two hand-addressed envelopes from Grossrad, with their recent postmarks, but the rumor failed to stay down. It popped up again with new refinements. Someone who looked just like Grossrad had been seen in Brazil by Milton Sharpbinder, vice-president of Interdisciplinary Intellectronics, and Milton had immediately called back to sell his holdings in Continental Multitechnikon before the bottom fell out. Somebody else had actually been out near Grossrad's Brazilian mansion, and had seen him lolling with a bottle in a deck chair while the blonde did laps in the Olympic-sized pool.

The details mounted up fantastically. Grossrad had been seen wheeling around the streets of Rio driving a Mercedes-Benz roadster. Later information had it that it was a 1959 300SL Mercedes-Benz with removable hardtop, and Grossrad was gripping a long thin cigar between his teeth, and had one arm casually around the blonde. Some-

how, the burgeoning details added further solidity to the rumor, which grew yet more solid as Grossrad moved on and was seen with the blonde at Copacabana.

That this was not just a local rumor developed as Continental Multitechnikon began to slide on the stock market while other space stocks were creeping upward. This, in turn, seemed to support the rumor. In the midst of this, with suppliers demanding payment in solid-gold bars on delivery, the phone rang and a familiar voice jumped out:

"Say, Heyden, what the hell is going on out there? I just got a phone call from Sam, and he's—"

"Stu?" shouted Heyden, his voice filled with synthetic delight. "Hello? Is that you?"

"Is it me? Who the—"

"Hold on! Listen, we've got a bunch of guys here who think—wait a minute. Where are you calling from?"

"Where am I calling from? Santa Barbara. What about it? Listen, what—"

"Where have you been the last week?"

"I've been holed up, getting over what we had to go through to get that merger across, what do you think? Didn't you get my letter? Listen, what the —"

"We've got a bunch of guys here that claim they don't supply us, because you're down in Brazil with a blonde, rolling around in a Mercedes 300SL."

"I'm what?"

Before Heyden could say any-

thing, one of the men in the room said nervously, "Is that him? How do we know—"

Heyden said, "I don't know if you heard that, Stu. They think maybe this isn't you. Could you talk to a few of these—"

"Wait a minute now. What is this? I don't get this."

"**B**race yourself. There's a rumor afloat that you've disappeared, vanished completely, and someone like you has been seen in Rio by—get this, Stu—by Milton Sharpbinder, who immediately dumped all his holdings in Continental before the news of what had happened got out—"

"Sharpbinder, eh?"

"Yes, and someone else definitely saw you living in a mansion down there with gold plumbing and a big swimming pool. It seems you were outside by the pool, taking the sun, watching this blonde plow back and forth—"

Grossrad laughed.

Heyden said, "Before you laugh this off have you taken a look at the financial page lately?"

On the other end of the line, Grossrad was starting to have hysteria, but that brought him around.

"No," he said, "that's one thing I haven't been doing. I've been trying to get a rest. Is this stupid play by Sharpbinder actually—"

"We're going down. Everybody else is going up."

"That boob is just one week too late to hurt us. If this drop had come *last* week, without our having any idea what was wrong —"

"Just the same, I still don't think it would hurt if you showed yourself out there."

"I will. Now, let me speak to a few of these boys that think I'm in Brazil."

Heyden said, "Okay," and held out the phone.

A few minutes later, Grossrad was saying to Heyden, "I had no idea this was the trouble. Sam went through all kinds of verbal contortions trying to tell me something without giving away anything. The impression I got was that *you* were making off with the treasury, not me." He laughed. "I was relieved to even hear your voice."

Heyden laughed. "I was relieved to hear *you*. I was starting to believe this business about the blonde."

Grossrad laughed so hard Heyden had to hold the phone out away from his ear. Then Grossrad, half-choked, said, "Say, Jim, you won't skip out now? You *will* be there when I get back?"

"Either here, or halfway to the moon."

"I know what you mean." Grossrad burst out laughing again. "I was in orbit myself for a little bit there. Well, so long, Jim. I'm going out and make myself public."

Heyden felt like a hollow shell as he put the phone back in its cradle. But, with an effort of will, he looked deliberately around the room, and studied the shamefaced glances that looked back at him.

"Now," he said, with forced calm, "can we go back to doing business on a normal basis?"

No one offered any objection.

The needed supplies came in, but the tension failed to ease. The final day was the worst. The controller came to Heyden's office while Heyden was on pins and needles to go see Benning, and it was a precious half-hour before Heyden could get free. Then, just as he was leaving his office, a telegram arrived from Grossrad telling when he would be back. Heyden glanced at his watch and saw with a shock that he had only two hours and fifteen minutes left. If he wasn't at the airport, Grossrad would be puzzled, and then curious. If he *was* at the airport, Grossrad would be bound to question him about the Kiddie Kits, and the lack of work he had done on them would show up quickly. Either way, the lid would be off inside an hour more at the longest. That gave him three hours and fifteen minutes.

Heyden sucked in a deep breath, forced himself to look brisk and confident, and went to see Benning.

He found Benning slumped on a bench with his head in his hands.

Heyden stared around. A number of men were asleep on cots, or rolled up in a blanket on the floor. Several were at the big coffee boiler filling their cups.

Heyden looked at the spaceship. Despite what he'd said about forgetting appearance, the overgrown-boiler look had been softened, at least from this angle. There was a shining silvery surface, that shaded off to one side. Heyden blinked, and glanced at Benning.

"Say, you've moved this?"

Benning looked up drearily.

Heyden glanced uneasily back at the spaceship, with its radiating arms holding what must be the drive-units.

"Ben—" he said. "It's all right, isn't it?"

Benning looked down at the ground. "It doesn't work."

Heyden shut his eyes.

Benning's voice reached him. "I'm so tired I can't think. It worked once. We rotated the ship on minimum power. It was smooth—perfect. And it apparently burned something out. We're all half-dead. We've checked and checked—"

Heyden forced himself to be sympathetic. "You've been working overtime for three weeks." He sucked in a long breath. "Is everything on board that I had on that list?"

"Everything. But it doesn't work. There's no response at all."

"How long to fix it?"

"We'll have to tear it down completely."

"How long?"

"Another three weeks."

Heyden sank down onto the bench beside Benning.

"Oh, God," said Benning miserably. "Jim, I'm so sorry I got you into this."

"Yeah," said Heyden.

"It's a flop," said Benning. "We should have taken more time to test it. We ran off half-cocked."

Heyden didn't say anything.

Benning said, "All that money. I'm so sorry, Jim. What will Grossrad do?"

Heyden shut his eyes.

Benning's voice came through. "We must have been crazy. That's the only explanation. No one ever does anything like this. Well, now we pay the piper."

Heyden dizzily looked up to see the big shiny boiler through a haze. Someone was leaning out the door, and put his hands to his mouth like a megaphone.

"Hey, Chief. The trouble is, somebody left this master switch open, back of the control panel."

Benning sat paralyzed for an instant, then sprang from the bench. He was across the floor and inside the ship before Heyden realized what had happened.

Slowly, the meaning seeped through to Heyden. He watched.

The big silver form lifted, hovered, and then smoothly rotated, the radiating arms swinging around like the spokes of a giant wheel, the central hub shading from silver to gray to black, then back to silver again. Smoothly it settled down, with a faint grating crunch.

Heyden stood up. Across the room, the sound of that faint crunch turned men around at the coffee boiler. An instant later, they recognized the ship's changed position, set their cups down with a bang, let out a wild yell, and ran to wake up the men on the cots and stretched out on the floor.

Heyden was still fervently thanking God when the men burst into cheers. Then Benning was wringing him by the hand. All around the huge room, it seemed that people were banging each other on the back.

Heyden sucked in a deep breath. "Listen, when can we take off?"

"Take off?" Benning looked blank. "We're finished. The thing's ready. It's completed, and it works."

Heyden stared at him. "Do we talk different languages? What do you think we're going to do now?"

Benning stared at him. "Show it to Grossrad. It's finished. It works. He'll see—"

Heyden opened his mouth and shut it with a click. "You remember what I said we wanted?—A full-size actual spaceship, so far as we could make such a thing. Now that we've got it, you think we're going to just *show it to Grossrad*? What good would *that* do? Outer space is in our hands, *now*, if that ship will do what we think it will do. And yet, what can Grossrad do with it but use it as a working model? What good does that do?"

Benning swallowed. "You mean, *we*—"

"Who else? Have we gone through all this to quit now? We have to carry this through all the way to the finish."

Benning paled. "I thought we were going to make a demonstration—"

"We are. When can we take off?"

"I thought all that food and the cargo and that other gear was just to make it look good. More realistic. More—"

"The idea is to keep us from starving out there, and to fix it so we can get some use out of this. Will that radio work?"

"Everything should work."

"Then," said Heyden, "let's get a crew and get out of here before something else goes wrong. It shouldn't be hard to get volunteers, should it? Can you pick the men who'll be most help to us?"

Benning grinned suddenly. "We're going to try to do this like Lindbergh?"

"Why not?"

"What about germs on the moon? What about—"

Heyden said brutally, "If you don't want to go, say so now."

Benning paused. "I want to go."

"Then pick the crew while I write a note to Grossrad."

Benning nodded, and started over toward the coffee boiler. Heyden whirled, and went back to his office. He yanked out a sheet of paper, and wrote fast:

Stu—

When you receive this, we should be, as I jokingly said earlier, on our way to the moon. Only, this is real.

Now, this is the first commercial venture into space, and no doubt the Government will blow all its fuses. Nevertheless, it is up to us to make it pay. First, I'm afraid that at the moment we're in something of a hole, financially; but we have powerful radios, along with enough lights and selected chemicals to make ourselves seen, and it seems to me there are a few commercial outfits around that ought to be happy to pay through the nose to have

a commercial beamed toward earth from the moon.

Charge more for the visual stuff, Stu. When the Government screams, point out that they will get their cut of the profits in due time.

There is doubtless a whole lot of rock and dust on the moon that it wouldn't break our backs to load into the ship, and that would sell for a price per pound to rival solid platinum, but I'm sure there will be objections to that.

As the next best thing, I've gotten a large quantity of thin sheet metal and loaded it on board. While we're out there, we will orbit the moon. When we come back, we can stamp out millions of little flat spaceship models, which can be colored suitably and molded in plastic for souvenirs. Bear in mind, each one of these will have been around the moon and back.

Next, we have a large cargo of fabric, Stu, which will also go around the moon, and can be cut up into moon scarves and moon dresses when we get back.

Figure out what you can make on this, without having to charge anybody more than he will cheerfully pay for the vicarious pleasure of taking part in this trip. If this doesn't cover expenses, and leave enough over for handsome bonuses all around, I'll be surprised.

Incidentally, you might put some of this money into a special fund—I may need it for bail bond.

Jim

Heyden put the letter in an envelope, wrote Grossrad's name on the outside, and gave it to his secretary to deliver.

He went back down the corridor, found Benning waiting with his chosen crew, and climbed on board. The ship slid smoothly and easily out the big opened doors, paused momentarily, and then the ground began to fall away.

Heyden was beginning to have doubts. He stepped back as Benning shut the door, and said, "How are the odds on our getting out there and having some little thing strand us a hundred thousand miles from home?"

"Surprisingly poor," said Benning, "assuming we can count on odds at all when we're dealing with something this new."

"Why? I mean, why are the odds against us poor?"

"The amount of weight we can lift with this drive. Suppose just half the weight that goes into the lower stages of a chemical rocket could be added to the payload. Think of the added space, stronger materials, spares, and general increased margin of safety. After you work on stuff to be lifted by rocket, this is a dream."

Heyden relaxed and glanced around. They were standing in a small chamber with a second door

partly open behind them. He became conscious of a continued sensation like that of rising in a very fast elevator.

Benning said, "All the same, this is incredible, in a way."

"That—we hope—we're going to the moon?"

"No, we're used to that idea, fantastic as it would have seemed a few years ago." He frowned. "No, it's—it's—"

Heyden suddenly caught his thought. "That we're just *doing* it?"

Benning sighed. "Yes. Without filling out forms in quintuplicate. Without stewing over it. Without a hundred changes of direction and reevaluations."

Heyden nodded. "But that's supposed to be more 'scientific'."

"It's more bureaucratic, anyway. But even if a method is more scientific, that's beside the point. The point is to *get the job done*," said Benning.

He stood thinking back to that endless interval when the ship sat dead on the ground and Benning told him the whole thing was a failure, and when the weight of failure crushed him down. Then he'd learned in his bones the penalty of following one's own judgment

against the shrewd decisions of superiors — when one's own judgment turns out to be wrong.

But now, beneath his feet he could feel the solid unvarying thrust, lifting them up at constant acceleration and steadily increasing speed.

Down far below now were the nations of the earth, run by monster bureaucracies made up of many people who hesitated — partly because they sensed the awful penalty for failure — to take the risk of questioning even the most self-defeating procedures.

And yet, here were Heyden and Benning and their men, high above the bureaucrats, and rising higher fast, because they *had* risked disgrace and disaster. They were only here by the skin of their teeth, and Heyden was beginning to realize from his reaction just how long he would think before taking a risk like *that* again.

But, all the same, they were *here*.

"Come on," said Heyden, walking a little heavily under the steadily maintained thrust. "Let's either get to a place where we can sit down, or go up front to that window. *Maybe* we could see the moon."

END

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THE FOLLOWERS

by BASIL WELLS

His mind roamed the planet in a carcass of steel—while his own body stayed safely in the rocket!

Balt Donner was conscious of the muted thunder of blood in his ears as he stretched out on the sleeping plate. In vain he tried to relax the lank five feet of his spare frame as he dropped the colorless hood of the mentrol unit over his head and upper torso.

In a matter of minutes he would be walking outside the *Avalon's* inner cabins—moving through a lacy blue-green jungle to his rendezvous with the disturbingly shapely Halden called Alno.

His sweaty fingers fumbled the knobs and studs that connected his mind with the super mech nicknamed Cass. Once the contact was established he could forget that he was a graying little technician—plain-featured, stooped, and timid.

Ernest Lytte, senior member of the planet-mapping spacer's crew of three, would be busy for three or four hours, with his records. And Jefferson Carney, the fair-skinned, bluff giant, was on his own sleeping plate, his mentrols linked with the

super mech, Herk. He was free for two or three hours . . .

He moved forward out of the retaining clamps. For a brief moment he was yet Balt Donner, marveling at his handsome seven-foot frame and at the sleek bronzed pseudo-flesh with the powerful warm muscles rippling beneath. And then he was Cass: super mech, humanoid robot, mentrol-linked extension of Balt Donner's brain.

Only faintly, in the dim reaches of his brain, did he recall that he was actually a thinning-haired wisp of a man. Now he identified himself as the thousand-pound godlike being named Cass.

He checked his paralysis gun, holstered at his hip, and patted the zippered pouches that formed his only garment here on Hald.

The humanoids of this uncharted fourth planet of Greth II went unclad even as Cass. And the policy of star mappers is always to mingle as unobtrusively as possible with the native races. For this same reason Cass' well-shaped nose had vanished into blank tanned flesh, and he sported Haldian-type nostrils below either elongated ear.

The triple airlocks sucked softly shut behind him and he stood upon the springy bluish sward of the hillock's treeless crown.

And below him, to the right of the well-trodden path to the marshy lowlands where the Haldians built their slime-daubed villages, he caught a glimpse of a furtive heart-shaped face among the leaves of a scarlet-flowered thicket.

He hurried toward the face. And

now it was fully revealed, and the curving loveliness of the feminine body belonging with it.

"Azaa, Cass!" the hidden one's liquid voice welcomed.

"Azaa, Alno," Cass replied. Forty hours with the banks of speech analyzers and recorders of the great ship briefing him in the simple language gave him a working knowledge of this Haldian tongue.

"I saw the huge one you call Herk leave the god cocoon." She shivered daintily, daintily although she lacked but inches of his own seven feet of height.

"I have great fear of him." She came closer, trembling.

Cass chuckled, his deep voice a mellow rumble of thunder. He put his arm around the shoulders of the girl as she turned wide violet eyes upward. Momentarily he winced at the alien smoothness of her noseless features. Yet she was beautiful. He loosed her.

"Herk will not harm you," he assured Alno. "Any more than will I."

They started walking away from the ship in its hilltop clearing, Cass thrilling to the admiration of the girl at his side. To Cass, or, more realistically, Balt Donner, such interest was heady as whiffed oxygen. In all his forty-odd years only his mother had ever admired or kissed the homely little Terran.

"Perhaps," said Alno wistfully, "I will not long be an Outcast here on your hill, Cass. One of the People, Great Arm, has fallen into a pit. If he dies his Follower will come for me."

"You do not sound happy, Little Tree Flower," Cass said. "When first we met you were weeping because your Follower had died beneath a fallen tree."

"I know. I was banished from the village until once again I overcame my sin of being twinless. And the only other Outcasts were two old men. Never had Followers claimed them again."

"Yet, now when you may be free to return —?"

"I could no longer visit you, Cass. Outcast and one of the People do not speak together. Rather would I remain Outcast and be near you."

Cass' reactions to Alno's words were not typical of Earthmen in Balt Donner. And by the time he had decided to venture a friendly embrace, Alno was a dozen paces ahead of him, peering on tiptoe into a papery black nest of skull-shaped material.

"Three tiny vutaas!" she chortled happily, and her slim rounded arm disappeared into the hollow nest.

The vutaa she held was featherless, colorless and plump as a huge grub, and its ugly stub-billed head was gaping hungrily. Alno daintily bit off the craning neck, spat and crunched greedily at the tender flesh.

Cass felt what should have been a stomach turning over. For the moment he was gripped by a sick revulsion against space, the ten years of planet-mapping, the constant growing hatred of his two superiors aboard the *Avalon* and the alien and quasi-humanoid races they contacted.

If he were only back on Earth again at his accustomed technician's job in the testing laboratories of Super Mechs Inc . . .

Alno — "Little Tree Flower" — in the tongue of Hald — screamed and dropped the clean-picked bones of the bird. She spun about and darted toward Cass.

"The serpent!" she screeched, casting quick glances backward.

Cass shook himself and stepped past the terrified girl.

Whipping from the concealing undergrowth beyond the dangling dark nest came a sinuous, blood-hued, saurian head and scaly neck. White shards of fangs glistened in the yellow moistness of that gaping mouth. A yellowish muscular rope was its tongue.

Wisdom dictated that he use the paralysis gun. Instead he opened his big long-fingered hands and waited. He felt that he must pit the might of this giant's body against some tangible foe or go mad.

Ernest Lytte fought the cumulative pull of space madness with ever-increasing doses of drugs, and Jeff Carney struggled along with alcohol and forbidden carousing on humanoid planets enroute. But until now the third member of the *Avalon* had kept his balance near Earth Normal with his work and the several hundred spools of televue adventure recordings that had been brought along.

The neck elongated, swaying nearer. The neck became the body, no larger around than Cass' body but thirty or forty feet in length.

Stubby, double-jointed legs, four-clawed, studded the ridged serpent's belly. Dozens of them.

Cass clamped his hands back of the hideous head. He squeezed, his hands sinking deep. The coils writhed, wrapping about him tautly, even as his hands ripped the reptile's head free. He tore away the entangling coils, glorying in the unhuman strength and cunning of those robot fingers. This was all his timid dreams of heroism come to life.

"Cass! Cass!" Alno's voice reached his ears at last. "The People come! They hunted the serpent. We must go."

Cass tore a velvety fern-like growth from the path's edge and wiped the blood from his bronzed flesh. His eyes studied the spear-armed People who now pushed into the path's opening.

Tall they were, their noseless faces and elongated ears accenting the perfection of their naked bodies. And with them, close to the heels of each seven foot native, trotted the rounded intelligent beasts, the Followers.

But two feet in diameter were the Followers, their four pudgy legs and four diminutive upper limbs less than a foot in length. Yet their two shallowly set eyes, pale blue and unwinking, and their slim ears lifting through a tangle of curly black hair were all too repellently human to Cass.

None of the People or the Followers paid any heed to Cass or the girl. They were Outcasts, taboo, because they had no Followers. They were out of step in the peculiar

system of three sexes on Halc. And so, to the People and their grotesque doglike companions, they did not exist.

Alno and Cass hurried on down the path toward the edge of the swampy lakes rimming the hill.

"I still cannot understand it, Alno," Cass muttered. "How two so unlike creatures could be born of the same mother. You are four-limbed — they are eight-limbed."

"Always was it so," the girl smile.

"But do not the Outcasts, those without Followers, have young?"

"Perhaps." She smiled invitingly at Cass. "You are strong, Cass. Much stronger than any of the People in my village."

Cass was not to be diverted. He wished to know more.

"The Followers are born of the same mothers as the People?"

Alno's wide violet eyes were puzzled.

"Naturally." She frowned at Cass. "You must know that. Surely all your villages on Earth have twins who are Followers! Only poor dumb beasts have no twins."

"You — you've been there." Cass was fumbling for words. "When babies were born — you've helped?"

The girl's mouth dropped. She gave a startled little cry and then she was laughing merrily.

"You are making fun with me now," she accused, "for of course you know that only Followers care for mothers and their young."

Cass grunted something. "Of course. But I wondered whether your customs were not different."

"How could they be?" Alno's uncomprehending face was pouting. "The People are the same anywhere. If they were not they would not be the People."

The path ended where a ridge of moss-grown grayish granite pushed out into the semi-fluid green soup of mingled water and aquatic plants. They sat down on a convenient ledge, the water lapping choppily at the rocks twenty feet below.

"A Swimmer!" whispered Alno in an awed voice, her eyes fixed on a spot a hundred feet or more from shore.

Cass sighted the Swimmer's graceful golden-green body. In all the eighty hours of their stay on Hald they had seen but two other Swimmers. Lytte and Carney's theory was that these sacred almost-gods were a very rare and intelligent race of amphibians.

He caught an impression of golden-flecked blue eyes, wise eyes, in a weirdly unhuman face. Flippers, or blunt limbs, propelled the drifting Swimmer leisurely along. And the mysterious swimming creature was eight-limbed. Of that he was positive.

"Another — and another!" Alno's hushed voice thrilled Cass. She clung to the super mech's muscular arm.

Cass watched the weird creatures of the warm seas of Hald until they dove at last beneath the floating green surface and disappeared. One part of his mind was busy with the puzzling alien life of this planet — but another portion was all-too conscious of the warmth and softness of the female's body at his side.

Clumsily he encircled her waist. His handsome noseless face came down upon her own, and their lips met. He did not lose the illusion of being Cass. All the sensations of taste, smell, warmth and pain transmitted faithfully through the mentrols.

And then memory of the vutaa's headless body, these same lips bloodied by the bird-thing's raw flesh, came to him. He pushed away, stood up. Suddenly he was just a middle-aged, slightly muddled little man controlling a robot, and she was a savage alien.

Cass sighed, his feet oddly heavy as he turned to go.

"Time I was getting back, Alno."

The forty hours of Haldian daylight were almost ended. Balt Donner was working thoughtfully at a delicate bit of control mechanism, and Jeff Carney had just returned from a routine tour of the great ship's outer storerooms and holds. Always, after a session with the mentrol-controlled robot, Herk, he worked off the nervous strain so.

And after that he would get very drunk and shout insults through the intercom system at Ernest Lytte. Usually, that is.

Tonight, however, he bypassed the alcohol and the intercom. Instead he went directly to Lytte's cabin. With the intercom system linking Balt Donner to them there was nothing secret about their conversation.

"Think I've cracked this third sex setup here on Hald," he boomed. Donner could imagine the dark

scowl of bony Ernest Lytte at this interruption.

"Record it," Lytte's reedy voice crackled back.

"So you can bypass it for your stinking beetle carcasses and edible grasses." Carney's heavy voice was insulting. "Not much! You're listening."

"Correction," Lytte said, his voice sharpening. "This para says you're leaving."

Donner heard a scuffle of movement, a chuffing soft sound — the blast of paralysis rays in the cramped confines — and then the meaty impact of a clenched fist or a gun butt on flesh. He pushed back from the bench, his slim sensitive fingers twitching nervously.

"There," Carney's voice was breathless. "You're slow, Lytte. Not enough exercise. And drugs don't help."

"I'll kill you," promised Lytte, his voice low and deadly.

"As I was saying, Lytte, it's about this Follower setup. The old natives I've contacted have no Followers. And they're old. But in the villages all the humanoids and Followers are young."

"Make a recording, Carney," said Lytte tonelessly.

"You old space-wracked —" Carney's harsh laugh crashed out shortly. "I'm not recording this. But after dark I'm checking up on what I suspect."

"I refuse to listen."

"Refuse. But you'll listen. Remember those cells I discovered along the swamp edge? Like oversized cocoons."

Carney must have slammed his fist down on a desk for emphasis at this point.

"I'm examining them tonight. This whole setup is crazy. I don't believe the humanoids and the Followers are of common ancestry. A third sex or neuters doesn't explain it," Carney said.

"You can't do it, Carney!" exploded Lytte. "We pledged ourselves not to meddle with the political or religious beliefs of the planets we map. Nor to kill or enslave any reasoning entity."

"That's why I'm waiting for night. The natives won't be about. And when I have my proof we can blast off for the dayside again."

"It's dangerous, Carney. I warn you not to risk it."

"I know. Clean hands for Ernest Lytte. And Rabbitnose Donner listening on the intercom to back you up. But you know you're as curious as I am."

"Curious, yes, but there are rules."

"Rules!" Carney roared angrily. "I'll ready the equipment and have Donner check over Hercules."

Donner heard the big man's feet on the deck.

"Hear that, Donner?" the voice roared from the intercom.

"Yes sir," agreed the little man almost inaudibly. "I'll check the super mech at once."

"And stand by to follow with that girl-faced Casanova mech in case I am in trouble."

"Very good, sir," agreed Balt Donner.

He started assembling the gauges and tools he would need.

Three hours later he was once again lying on the sleeping plate beside the plastic dome shielding the mentrols, and the hood was clamped lightly down upon his corded neck and chest. Here he could keep in communication with Jeff Carney, but he could also be following the huge super-mech, Herk, with its fellow robot, Cass.

Lytté was sulking in his cabin, his eyes glassy and his senses blanked by an overdose of the drugs so essential in star hopping. For fifteen, perhaps twenty, hours he would be little better than a witless cretin.

"Have reached a nest of the cocoons, or cells," came Carney's voice over the intercom. "They're located in a group of water-rooted trees, almost an islet. Twelve of them."

Cass came alive in his clamps as Balt Donner pressed the mentrol's activating stud. He passed out through the triple locks. About his tapering slim waist were belted twin paralysis pistols, and over his shoulder projected the short snout of a heavy paralysis rifle.

The super-mech crossed the treeless clearing, the dew-wet sward softening his footfalls. He could see well, his eyes adjusted to the invisible radiations from his chest torch.

An erect running shape blundered toward him. He recognized the slim alien features. Alno! She ran unseeing into his arms. In time Donner remembered to shut off his throat mike as she cried out.

"It's Cass," he said. "But where do you go in the darkness?"

"It has come!" she cried. "A Follower has summoned me. Great

Arm is dead. And I am to go to the village."

"I am glad for you, Alno."

"Then you do not wish me to remain Outcast—like you?"

Her voice was wistful, and yet unsteady. He could sense that her loyalty to her people battled the strange attraction she felt for him. And he was relieved to know she would obey his desires.

"We are of different villages. Of different worlds. Go back to your village."

"As you wish, Cass." Her voice was throaty. "But once more, please, the tasting of lips."

Cass grimaced into the darkness. Odd how soon the infatuation he had cultivated earlier had vanished. She was warm and pleasant in his arms, but any desire for her had gone.

With a smoothness and practiced skill, result of hours spent watching televue recordings, he drew her close and let her taste his moist synthalips. He was the very epitome of a polished, and bored, Casanova—not the mousy little Balt Donner of Earth.

Carney's heavy voice burned into his ears as the girl slipped, softly sobbing, away into the darkness. And Donner flicked on the mike.

"You there, Donner?"

"Yes sir."

"Thought you were sleeping."

"Not a chance, sir."

"Found what I was after. Opened two of the pupae cases. They're partially developed Swimmers just as I expected. Explains the lack of middle-aged and old natives."

"Something like the insects of earth," hazarded Donner.

"In a way."

"All these humanoids turning into amphibious monsters."

Carney chuckled. "In a way you're right. But it's not that simple. You forget the Followers."

"That's right. What about them? Where do they go?"

"They're in the chrysalis. In fact they construct it. And they choose the time for this final metamorphosis."

"But just how — ?"

"Can't tell you more at the moment, Donner. See a couple of Swimmers offshore and I want to take a few pictures."

Cass started down the hill again. And now he carried the rifle cradled in his arms. He had feared that the cocoons would be guarded, though he had hardly suspected the Swimmers of being interested.

"Donner! Get that super-mech down here at once!" Carney's voice was strained and strangely muffled.

"Paralyzed the two Swimmers. Then a few dozen more landed on my back. They broke my para with their flippers. Now they're working at . . .

"Hurry, Donner! My lord, there goes a leg! Something shorted. The other leg's gone dead too. They're twisting off my arms. Ripping out my equipment!"

The Donner part of Cass groaned. Precious irreplaceable parts! And this was the third of the four super-mechs to be damaged or lost since leaving Earth. The first super-mech

they had left in a slimepit on that giant yellow planet—its salvage impossible because of the crushing gravity. And on Xel IV's lone planet, ice-bound and lifeless, a crevasse had swallowed up the second mentrol-controlled mech.

Cass came bursting through the trees, out toward the isolated clump of trees now swarming with glistening-hided amphibious life. There was no sign of Herk in that fluid mass.

He leveled the paralysis rifle, sweeping it in a broad arc that was half a circle. The Swimmers slid, quivering and twitching, away from the stilt-rooted bases of the trees, and Cass could see the shattered metal and gleaming plastics and quartz of what had but now been a smoothly functioning super mech.

Cass groaned as he hastily gathered up the fragments of battered equipment. Even the robot's head was torn away and this he tucked under his left arm. Then, using the half-crushed torso as a container, he salvaged all the visible parts.

Back through the trees he raced. Back to the *Avalon* and its triple locks. And once inside he activated the meteor screen. There would be no blundering of Swimmers upon the spacer this night.

He went down the corridor to his workshop, carrying the battered torso of Herk. And there a haggard-eyed giant, his pink-whiskered cheeks oddly gray, was waiting. He wrenched at the powerful arm of Cass.

"It isn't ruined, is it?"

Cass shook his head. "Hopeless," he rumbled.

Carney's eyes were wild. "But with only one super-mech!"

"I know. If this last super-mech goes bad, we're through."

"We must blast back to Earth. Now! At once!"

"Without completing the swing?" Cass asked. "There yet remain seven possible planets to explore and map."

"Our present information is sufficient," bellowed Carney, sudden rage restoring his color and vitality.

"As you wish — sir," said Cass, withdrawing from the shop. Gently he put down what remained of Herk.

"I'm blasting off at once, Donner. Clamp your boob-faced dummy in his cell and join me in the control room."

"Yes, sir."

"About these Followers, Donner. You didn't get the right of it. The cocoons are for themselves. The humanoids sealed inside with them are for nourishment during the change!"

Carney's laughter brayed after him. And as he strode blindly toward the super-mech storage compartment his mind was reluctantly accepting the truth. For the Swimmers were octopods, even as were the Followers.

Carefully the People were bred and cared for — even as are the

cattle and sheep of Earth. Each Follower was assigned to look after and follow his own future food supply. Undoubtedly, too, most of the thankless and heavy tasks were performed by this willing slave he controlled.

Then, when the time was ripe for the change, and when the humanoids had reproduced their kind and were grown sleek and fat, the grotesque "twins" paralyzed their charges and spun the cocoons. The metamorphosis slowly came about, and eventually the Swimmers split apart the outworn cells and escaped. Leaving behind —

Balt Donner gagged. He was seeing Alno, happy to be once again given a twin, and then he was seeing her empty husk, drained of all edible tissues and fluids, within the broken shell of the chrysalis. The feet of the super-mech stumbled uncertainly across the cabin. His mental commands were confused.

Viciously he drove Cass back into the clips retaining his half-ton body. He locked it there, and then broke contact. He pushed up the mentrol hood, his scuff-clad feet reaching for the deck.

Earth was far away and the years were long. He was sick to death of alien cultures and savage worlds. Only in the depths of space might he find a measure of forgetfulness.

END



NO FRIEND OF GREE

by C. C. MacAPP

Illustrated by NODEL

*The planet was an enemy
of Mankind—all of it!*

I

It was not clear to Steve Duke what a Gree ship-of-the-line was doing in this unimportant little eddy of the galactic rim, all alone except for a single exploration ship one-tenth her size. Of course, she might be the bait in a trap; therefore, though she was a prize well worth the risking of his Scout squadron, he stayed hidden for the moment, as close as comfort allowed to the big red star of the binary, keeping watch via a series of tiny instrument drones.

The exploration ship had evident-

ly visited the single planet of the binary system, a world of moderately Terrestrial type except for being too close to the red star's smaller blue-white companion. Steve had already noted that there were no radio emanations from the planet, or other hints of technology — indeed, it was a planet where one would not look for any life. Why, then, had the huge fighting ship been summoned?

He watched. Shortly after the exploration ship finished matching courses, the big ship fired a salvo of missiles in the general direction of the blue-white star. Steve could not tell, from the picture his drones

brought back, what kind of missiles they were. It was obvious, though, that it was not battle-salvo, because there was no swarm of smaller computer-guided missiles along to fight off a counter-salvo. Neither could it do anything to the blue sun except raise an insignificant short-lived flare. Therefore, it must be aimed at the planet. He considered nulling a larger drone close, but decided it was too risky.

Yet, if Gree explored a planet then hastily bombed it — probably with cobalt bombs, or something equally deadly — Steve wanted to know what was there. Suddenly deciding, he jabbed at a button on his console and said into his helmet mike. "All ships except number Two. I'm locking you into central control. Battle Condition One. Null in thirty seconds. Two, stay here and collect the rest of the drones, then compile a report to date and null it to Headquarters. If you lose contact with us, leave at once. Otherwise, we'll send message drones once an hour. Out."

He nulled the eleven ships in a group and spaced in ahead of the Gree salvo, far enough from the big ship to avoid direct detection and far enough from the salvo to avoid instrument drones that would be with it. Then he got on the command circuit again. "We're going to have a busy twenty hours or so, in a little while. When those missiles orbit the planet, we're going to shunt them off one by one — on the other side of the planet, where it won't be seen — and substitute

simple warheads of our own, so Gree'll think the planet's sterilized. We'll have to locate any watch-drones and neutralize them temporarily. We can't be seen, and we can't let a single Gree bomb hit the planet. Better get all your computers cleared of everything else; they'll be busy. Gunnery Officers, get your own material ready. Gunnery One, I want a co-ordinated tentative plan right away and a team to keep revising it as we get more data. Any questions?"

There were only a few technical questions. Then the CO of Scout Three dared the question that was in everyone's mind. "What are we going to do when we finish with the bombs, Colonel?"

"When — and if — we finish with them, I'll take a small team down and see what's got Gree so scared."

There were times during the operation when Steve thought he was failing, and once he was mere seconds from death; but eventually all the deadly bombs were shunted away from the planet, and detonations of his own produced convincing clouds in the atmosphere. He sent the squadron, except for his flagship, into null; in case the Gree leviathan hadn't been fooled after all. As soon as he could, he'd have himself set down on the planet and send the flagship away too — the sooner the better — but before that he had to scout briefly from space.

The planet had a diameter close to twelve thousand miles and a density, compared to water, of a little over three point nine, which meant a comfortable surface grav-

ity. With such a total mass and considering the amount of dispersed gas (especially hydrogen and helium) in the neighborhood of the binary, there might have been a very dense atmosphere, but it only computed to a little over twenty pounds per square inch at the surface. It didn't take long to realize why. This planet kept one face always turned to the blue-white sun. The temperature at meridian on that side was something over two-hundred degrees Centigrade, which meant that a lot of air molecules must reach escape velocity. As a matter of fact, he realized, if it hadn't been for the huge red companion star, there wouldn't be any atmosphere at all, to speak of. What didn't boil away on the hot side would be frozen on the dark side. As it was, the latter hemisphere would only be dark, and space-cold or nearly so, for part of the year, when the orbit around the blue star faced it away from the red one. At the moment about a third of the off side was lit with a mild reddish light, and obviously was warm since unfrozen seas and lakes could be seen. It was a beautiful world, seen from space. An impossible one, though, for carbon-based life.

Or was it? There seemed to be a band, the twilight of the blue star's fierce glare, that was neither baked nor frozen—even where the red star's gentle illumination did not fall. Steve frowned at the viewscreen. It wasn't only that the blue sun's rays went in slantingly through the deep atmosphere, but a narrow, very high wall of clouds along the bright

edge of the twilight zone cast long semi-shadows, ending in an actual rainbow upon the ground. The whole band was five hundred or a thousand miles wide, depending upon where one set the arbitrary limits. It seemed to him that there was more green in it than there should be. He called his Med Officer, the nearest thing he had to a biologist. "Did we read for chlorophyll?"

"Why, no sir. I thought it was obvious that —"

"So did I; but I think we'd better check."

However, even before the spectrograms confirmed it, Steve was sure. The twilight band was vegetated.

II

He decided to take with him only two B'lant crewmen; a mature one named Vrebl, who'd been with him on several missions, and a young one named Zaanj who had the standard training, if no experience. The ship deposited the three of them on a large rock in a field of grass that grew higher than a man's head, just over a ridge from where the Gree team had camped.

The chill air had a faint musky smell. No large animals had been seen from the ship, but here and there the grass waved with hidden movements. On a saber-like grassblade ten feet away and only a little below eye level, an insect the size of Steve's thumb perched on six fat legs, and, he was sure, stared back at him out of bulging faceted eyes. It looked like a giant bumblebee that had lost its wings. Then,

suddenly, the fat legs exploded with hairs or tiny feathers and became wings which blurred into motion. The thing droned away, very slowly and in a straight line, like a mechanical toy on a stretched wire. Here and there above the grass, other such bugs floated in the same way.

Several hundred yards away something flapped along on slow rigid wings, like a monstrous moth. It must have had a six-foot wingspread. It seemed to be catching the two-inch bugs and eating them on the fly.

Along one horizon — technically it had to be called the west, but only because of their position relative to the planet's north pole — was the wall of cloud that hid the blue sun; murky at the horizon, luminous farther up, with a bright fringe at the top that hinted at a spectrum. That one brightness only accentuated the gray bloom that surrounded Steve and the two B'lant. Above the bright fringe the sky was dirty blue. As the eye arched overhead, the blue became darker until, in the 'east' where no sun would ever rise, it was black and the stars stood out. Northward and a little east, a faint reddish glow above the ridge revealed the direction of the red sun.

Steve told his two companions, "We'll have a look at the Gree campsite first, then we'll head north. There are some mountains there, and their other slopes will be lit by the red sun. We ought to be more comfortable there. A ways beyond is the ocean, where we'll wait for the ship. It'll be back in five hundred hours unless we call it back sooner."

He began allocating supplies and equipment to be carried. Some of the more vital things, such as the small message drones that were the only way to contact the squadron, he assigned to Zaanj, who because of his inexperience would walk second. Steve would lead the way, even though he'd chosen B'lant partly because their thick gray skins would withstand the swordlike grass better than any other 'humanoids'. It would be up to Vrebl to keep a watch to the rear.

It was depressing in the grass, totally cut off from everything but the dismal sky overhead. Steve pushed on grimly, forcing a way by holding his rifle at a slant ahead of him, and was very glad when they crossed the top of the ridge and found themselves in the open.

The wide shallow ravine below them was in even deeper gloom. This slope, and the opposite one, were rocky, with only scattered patches of grass. At the bottom a small creek found a crooked way among flat slabs that looked like weathered lava flows. He helped Vrebl and Zaanj set up electronic sentries, then unslung his field glasses.

The campsite, on a level spot beyond the creek, was marked by a triangle of fire-blackened stones and some empty food containers. That the Gree team had left without policing up attested to its haste. He couldn't tell, in the uncertain light, where the ship had parked.

They broke out field rations, ate, and made themselves as comfortable as possible. Nothing moved in

the ravine for a couple of hours. Then there was a stir in a clump of grass halfway up the opposite slope. Steve focussed on the spot. Something dark and bulky moved into the open and came down the incline, slowly and haltingly. Once it went flat for three or four minutes, then heaved itself up and continued. He couldn't make out its exact shape, but it seemed to move on four stumpy legs. One of the giant moths came gliding over the ridge, circled the thing a few times, and flapped away, without any sign of reaction from the beast.

The thing reached the campsite and nosed around very deliberately among the fire stones and empty containers. Presently it moved downstream and seemed to be digging at the edge of a small patch of grass.

Steve abruptly stowed the glasses, got to his feet and told Vrebl, "Stay here and watch. Get on the radio if anything tries to sneak up on us." To Zaanj he said, "Come with me. We'll cover each other. I want a close look, then I want to anesthetize the thing without killing it, if possible."

He scuttled alone to the nearest clump of grass, scouted it quickly then motioned Zaanj to him. They worked their way in such relays to the stream below the animal, waded across, and approached the clump of grass carefully. Steve set his rifle for the anesthetic darts, made sure Zaanj did likewise, then motioned the young B'lant around the other side of the clump.

When Steve got where he could

see the animal, he stopped, with a feeling almost of nausea.

It was turned partly away from him, scraping slowly and awkwardly at the ground with one stubby forepaw. He should have been able to see its head from this angle, but couldn't. The hind legs were stumpy too, with bulbous clumsy feet. But it was the thing's pelt, if it could be called one, that revolted Steve. It looked like a huge and obscenely filthy and moth-eaten fur coat. Dried grass clung to it as if the creature had wallowed in glue then rolled in a haystack. There were also packed masses of the large bugs, dead and dismembered, and scraps of what looked like rotten leather.

The thing stopped pawing and stood, flanks aheave with its loud rasping breath. Then, as if under mindless compulsion, it resumed the slow pawing.

Zaanj stepped into sight beyond the creature, froze, and let out a shocked sound. The thing reared up, clumsily, whirled toward Steve, saw him too, and lurched away from both of them. It struggled to its hind legs, staggered, caught its balance. It ran up the slope, awkwardly but with fair speed. Its stride was almost humanoid, or like a humanoid hobbled. Now Steve saw there was a head, or at least a formless bulge between hulking shoulders. He could hear its hoarse gasping. He put an anesthetic dart into it and saw it jerk; then, more for his own state of mind than because he thought it necessary, another. He glanced at Zaanj. The normally phlegmatic blunt face was twisted in

horror. Zaanj's rifle hung forgotten in one hand. Steve found himself grinning. "Come on. It won't get far."

He was wrong. The thing labored badly near the top of the slope, but reached it and pushed into the grass. When they reached the spot Steve held up a hand for silence. He could hear the beast deep in the grass, panting, but still going on. There were other furtive rustlings in the grass.

He didn't think he wanted to pursue.

He led the way back down the slope, meanwhile calling Vrebl on the radio, "Gather up the stuff and come on over. Stay in the open where we can cover you."

By the time the older B'lant joined them, they were standing where the animal had dug, staring down. There was only a small area of plastic exposed, but Steve knew what they'd find, and he was right. It was a Gree slave, neither B'lant nor human, buried in his uniform and a limp plastic spacesuit. The face was horribly battered or eaten, and dark fragments clung to it, as if a coating of something like black wax or hard rubber had been scraped off. Steve turned away. "Let's find some rocks to pile over him, then we'd better get away from here."

He didn't say so, but he had a strong hunch that before the humanoid in the grave had been cleaned off he'd looked like the creature they'd chased.

He had an impulse to call a ship



back at once. There was the risk of Gree ships lurking about, and he had confidence in himself and the two B'lant armed with rifles that could shoot, besides the darts, explosive bullets or laser beams. He decided not to call a ship.

He'd seen from the air that the grassfield ended a few miles upstream. He worried vaguely that they couldn't get far before full darkness. Then he felt foolish and angry with himself. There *wasn't* any full darkness. He led them up the ravine, assigning Vrebl to watch behind.

III

Four hours took them ten miles upstream and perhaps three thousand feet higher. It was damper up here, and the rock tablelands were green and slippery with moss. The two-inch bugs were everywhere.

Once Steve brought up suddenly and grunted a warning. Something the size of a large dog moved toward them. When it was closer he saw that it was a giant insect, with an ovoid body and six closely bunched stiltlike legs that moved in an odd mincing gait. A head the size of his two fists doubled together, with two great faceted eyes and several stubby antennae, swivelled from side to side like a turret, mounted in the forward end of the body without a neck. At the other end was a three-foot whiplike tail that the thing carried over its back, like a scorpion's sting. Steve was about to shoot when it saw them and stopped. The mincing stride re-

versed and it backed away without turning, then stopped and was motionless for several minutes. Finally it turned with little prancing steps and moved to the side. Suddenly the legs flashed into motion and two of them thrust out forward to seize one of the two-inch bugs and haul it, feathery legs droning, to a pair of small mandibles on the head. Zaanj let out his breath and raised his rifle. Steve put out a restraining hand. "Never fire an unnecessary shot on a strange world."

They found a flat area big enough so nothing could creep up on them, and made camp. From here they could see the unimpressive mountains to the north, with the reddish glow above them.

Steve was by no means through with the Gree campsite, but it would be imprudent to stay near it just now. Later, if things went well, he'd come back with a larger, better equipped team. Right now he wanted to get out of this clammy twilight and to the other side of the mountains.

Vrebl evidently followed his gaze and guessed his thoughts. "I hope there is game. Zis zings we see so far is not tempting."

"No," Steve agreed. He suppressed a grin. It was a standing joke, if not strictly true, that a B'lant would eat anything. He idly watched one of the stilt-legged giant insects munch on a bug, warning away with its tail a monster moth that flapped around it. "At least," he said, "we'll take time now to heat some water and dump some soup powder into it."

They traveled north, staying well above the grasslands, for fifty hours, with short stops. Then, within a few miles of the mountains, they found the way barred by a great rift. It looked about two miles wide and a thousand feet deep.

No doubt it was some ancient rupture of the crust and related to the mountains, but it was filled in now with a level floor, and the grass had spread into it solidly except for the steep sides and the taluses at their bottoms. It looked as if it might reach a long way in either direction, so if they wanted to get to the mountains, they'd have to cross it. Once more, Steve found himself thinking in terms of day and night. Annoyed, he jerked out the binoculars.

The way the grass rippled showed that a river of air moved along the rift, from the direction of the grasslands toward the cloud band on his left. He puzzled that out. The floor of the rift must slope slightly toward the left, even against the general rise of the land; and the air in the rift must be denser—possibly because of some distilling action of this planet's peculiar seasons.

There were giant moths down there, and stirrings in the grass that were not made by the moving air. He decided to climb down, then reconnoiter before pushing into the grass. He spied out a clear spot at the edge, and a way down to it. "Let's go."

The air was dried and warmer at the bottom, and heady, and instruments showed a higher percentage of oxygen. The insect life was pro-

fuse. He set up sound amplifiers and listened to the rustles in the grass. They seemed to move in random directions. He looked at the B'lant to see what shape they were in, and said, "Let's get an hour's nap apiece, one at a time."

When they'd had that, and there was still no sign of trouble, he said, "Well, we'd better get it over with. Set the guns on laser. If anything actually attacks, burn it down quick then cut a circle around us in case there are more."

Vrebl said, "Should I not go first? My skin—"

Steve shook his head. The B'lant were very reliable, once they'd learned something, but human reflexes were a little faster; and besides . . . He led off. He'd already learned, during the earlier trip in the grass, that the thing to do was to use his feet to bend stalks forward ahead of him, more or less breaking the way. Still, it was tedious going.

He timed his first hundred steps. At this rate, it would take them about an hour and a half to cross, which wasn't a pleasant prospect. The feeling of oppression returned.

In about ten minutes he ran into a matted wall of grass that didn't yield. He muttered an oath as a blade slide along the back of his hand, giving him about the twentieth cut. He tried to go around the obstruction, thinking it was just a thick clump, and found it was actually a straight long barrier, stretching longitudinally in the rift. He stood perfectly still for a few mo-

ments, listening. There were no unusual sounds. He fished in his pockets for a small light and examined the barrier. The stalks were not just matted; they were interwoven in a way that was surely artificial. He glanced at Vrebl and Zaanj to see if they realized it too. They did. He said softly, "Let's get ourselves a little breathing room." He held the rifle low and triggered it, swung it in an arc, carefully avoiding the fence. Grass toppled upon him. The B'lant got the idea and helped him complete the arc and trample the cut stalks, until they had a clear half circle of about twenty-foot radius. It felt good.

Carefully, he parted the thin stand of grass he'd left along the barrier and studied the latter more closely. The stalks were not only interwoven; where they crossed, little bridges had grown between them to hold them in place. The barrier was eight or ten stalks thick. No wonder it didn't yield easily. It would be simple to burn through it, or even hack a way with a knife, but he wasn't going to do either hastily. That might be what the Gree explorers had done.

On the other hand, they might have followed along a similar fence to their doom.

Could there be such a thing as sentient grass? If so, he'd just slaughtered some thousands of individuals. If they were individuals. But there'd been no sign of resistance or awareness. He bent and tugged at a stump until it came up. It had an ordinary, discrete root system, and when he sliced off the burnt

end it oozed a light colorless liquid, as any grass might.

He turned back to the fence. He noticed now that the tiny bridges joining the interwoven stalks were withered and dry, though the stalks were green. He found a few of the bridges ruptured, letting the stalks break away and in a few cases untangle themselves. He used a magnifying glass to examine the stalks, and the blades, for any sign of special organs. It was just big grass.

He said, "Let's follow along this a ways to see if it ends or turns. At least, it protects us on one side."

It wasn't until they'd gone a hundred yards or so that he realized he'd instinctively turned left, away from the grassfields.

A half hour brought no change in the fence. He called a halt and turned on the sound amplifier to make sure there were no unusual rustlings around them. Then he gave his companions a look to alert them, triggered his rifle and cut a doorway through the fence. On the other side, he led on for about twenty yards, then stopped to listen again.

In the next hour they found over a dozen of the fences. Some were very fresh—that is, the bridges were not withered—and some were so old they'd almost completely vanished. Sometimes dead stalks were held upright, still tangled with live ones, while new ones pushed up through the tangle. After the first two, Steve cut through them without hesitation. He was more interested in getting across the rift fast than in staying to ponder.

They must have been three-fourths of the way across when he sensed some change in the pattern of sounds. He crouched, listening. Something was approaching from ahead. He snapped, "Burn a clearing!" and slashed right and left with his own rifle. There was a grating sound somewhere close, and a thrashing. Grass collapsed upon him. He threw it off, did a hasty dance to get it trampled down. The B'lant were struggling similarly, Zaanj almost with hysteria, which was unusual for his race. Steve got clear of the last stalks and gestured toward the center of the clearing. "Back to back!"

The rustlings had stopped, and the silence was worse. At the edge of their clearing, something bulky stirred feebly beneath fallen grass. Steve took four steps forward and poked the grass aside with his rifle. One of the stilt-legged things lay there, mortally burned. Its scorched stench mingled with the punky smell of burnt grass.

Then he saw that the thing was swaddled in grass the rifles had never cut. Dried stalks were woven around its body and around each of the six legs, and a thick twisted grass rope circled like a collar where its neck should have been. The head was encased in a crude woven basket that left only patches of the huge eyes exposed. The stinger-tail was free, moving feebly.

Steve ended its misery and retreated to his companions. They waited. The various rustlings resumed, then the thing he'd heard in front came on again. It mumbled

now, almost in human speech. Zaanj whirled toward the sound, and Steve snapped at him, "Hold your fire!"

IV

A horrible caricature of a man pushed the grass aside and stood looking at them vaguely with dull bloodshot eyes. Steve couldn't tell what race he was because he was encased in woven grass much as the insect was, except that his head was buried in a mound of dead two-inch bugs. The eyes peered out through small tunnels.

One of the arms lifted in an inhuman gesture, fell again. A black gap of a mouth split open in the horrible mass and an incomprehensible mumble came out. Steve fought down the urge to trigger his rifle, and demanded in English, which all Gree slaves spoke more or less, "Can you understand me?"

The creature obviously half understood. More mumbling emerged from its mouth. Then, one word came clear. "Gr — Gree?"

Steve hesitated. To say anything against Gree to a Gree slave was like talking to the wind, but this thing, perhaps, no longer had the mind of a Gree slave. Steve said slowly and distinctly, "Gree abandoned you. Gree wants to kill this planet. We stopped him. Do you understand?"

The eyes strayed blankly, struggled back to Steve. Then they dropped to the rifle. "Kill?" the creature said absently.

Steve dropped the muzzle toward

the ground. "No," he said, pointing to himself, "I won't kill you. I won't hurt you. Gree tried to kill you."

From the wavering of the eyes, it was clear the thing was struggling with the thought. There was none of the instinctive disbelief a Gree slave ought to show. Finally the eyes came back to Steve's face. "Gree . . . kill." Suddenly, the encrusted head began to nod laboriously. "Yes. Gree kill. You . . . not Gree . . ." An exhausted sigh, and the eyes went dull again.

Steve waited a moment, but there were only vague mutters and small meaningless motions. He said, "Are you hungry?"

That brought a flicker of intelligence. "Hu-hungry?" A hand came up, unsteadily. The fingers plucked slowly, absently, at a dead insect and crammed it into the mouth. The mouth chewed slowly, mechanically. There was a movement of swallowing, then an idiot laugh. The eyes were vague again.

Steve said, "We won't hurt you. We will help you."

Intelligence fought back into the bloodshot eyes, as if from another universe. They squeezed shut with the effort of speech. "You . . . not enemy . . ." The thing took an aimless step forward.

Zaanj mouthed an hysterical sound and swept his rifle up. Steve batted at it, and the beam sizzled into the ground at the creature's feet. The creature leaped and lunged sideways into the grass, scrabbling to escape. Zaanj let go

of the rifle and, mewling mindlessly, whirled to plunge into the grass on the opposite side. Steve shouted after him. Vrebl spun to follow, and Steve seized his arm. "Don't get separated from me!" As they raced after Zaanj, Steve tossed a look behind and saw that the creature had vanished.

They shouted for Zaanj, and called on the radio, and, when they knew they'd lost him, stood still and used the sound pick-ups. There were rustlings, many of them, and all seemed to be down the rift now and moving away, fast. They fought in that direction for a while until they had to admit they were hopelessly outdistanced. Vrebl stopped and turned, facing Steve silently. Steve said, "We won't find him this way. Let's get clear. If he's all right he'll come to his senses eventually, and use his radio." He headed back toward the clearing, as well as he could judge. "We've got to pick up his rifle."

They found the clearing without much trouble. The rifle and the dead stilt-insect were still there. Steve picked up the rifle and, reluctantly, nodded to Vrebl to break trail.

When they got clear Steve chose a spot part way up the side of the rift and they climbed as fast as they could. He stood a minute, fighting for breath, then, his hands clumsy with exhaustion, uncased the binoculars. He located an area of ripples, a mile or more down the rift, as if a small army were fleeing through the grass.

He tried the radio again, without

response. He swept the glasses around once more, then slowly put them away. "I think," he said, "we'll have to assume he's been captured. God knows by what. But it looks as if they're going down the rift. I think we'd better climb up and go along the rim; it'll be faster." As Vrebl looked reluctant, he added, "If he uses the radio, we'll still hear him."

It took over two hours to catch up with the army of ripples. They paralleled it, stopping when it stopped. Vrebl didn't protest, though obviously he wasn't sure they were doing the right thing. For that matter, Steve wasn't sure either; he was merely making the best gamble he could. However, after nearly seven hours, they had a bit of luck.

There was an open pool of water near the far side, where a small creek came down; and, as they rested, Steve turned his glasses on the pool. There were small creatures of some sort at the edge of the water. Then he went tense. Two man-like figures waded into the water, which was only up to their calves, and slumped down into it, rolling and splashing and gulping great draughts like children on a hot day. One of them, Steve thought, was the afflicted Gree slave they'd talked to. The other, though woven grass partially covered him, might be Zaanj. He handed the binoculars to Vrebl.

Vrebl looked a long time, then handed back the glasses. "Yes. It is Zaanj."

"Well," Steve said, "we could try to rescue him. But it's more important for us to stay alive and sane until rendezvous time. We may not get to the ocean, but the ship'll make a pass this way and we'll reach her by radio. And I want to know where that bunch is headed. There's something significant about this rift."

Vrebl thought it over, slowly. "Yes," he agreed finally, "zat is right. But is it not worz while to call ze ships early so we can rescue Zaanj?"

Steve gave him an annoyed look. "I'm not all that cold-blooded. If you'll remember, Zaanj was carrying all the message drones."

The land continued to slope up, and the floor of the rift continued to get lower. Steve left the edge when the going was faster away from it, returning every few miles to make sure the hidden army was still moving. The mountains loomed only a few miles to the north, so close the red sun's glow was completely hidden. Ahead, the cloud band towered incredibly, and its dark base seemed very close. The drizzles were heavier and more frequent here; the moss thicker. Still the movement in the rift went on. Steve was sometimes tempted to climb down, to get into the warmth and dryness again. He also kept thinking what it would be like to cross the mountains, feel the luxury of that red sun. It would be easy enough to rationalize that the right thing to do was to abandon Zaanj; keep the rendezvous with the ship. But—he admitted it to himself—

the thing that really kept him going was curiosity about the rift.

Then the drizzles became constant, and they were entering the cloud band itself. Sometimes the floor of the rift was obscured, and he led Vrebl along as fast as their exhausted bodies would take them, to find a clear spot and lie watching until the mysterious army caught up. It was very hard to keep track of now, even when the mist was thin, because of the deep gloom here under the clouds.

There was no change for perhaps twenty-five miles more, then the clouds — heavy mist now, that surrounded them except for a clear updraft out of the rift — began to brighten. They couldn't go much farther without breaking out into the deadly rays of the blue sun. Then, the next time he looked into the rift, he found that it had changed.

V

Instead of a smooth grassfield, there was a tangled steaming writhing jungle, slashed by weed-choked lagoons. The coiling tentacles that were so startling at first were only giant plant tendrils groping for holds on the tallest trees. Slug-like things—they must be a foot long, or more—crawled on the tendrils. Huge segmented worms undulated like eels through the thick-grown water, or looped themselves along limbs or tendrils. The giant moths were everywhere. He noticed that they, and the worms, carefully avoided the sluglike things, though

the latter had no apparent means of defense. A smell of rot and fermentation rose in the updraft. He said, "I think we'd better backtrack a ways."

It was only two miles or so back to where the swamp was invaded by long fingers of dry, grass-covered ground. Billows of mist showed how abrupt the transition actually was. He swept the binoculars up the rift. There was movement in the grass, but he couldn't tell whether the bunch they'd been following was here yet. He studied the slope below him. The talus was high here, well above the grass. "I think we'd better go part way down, so we can see better."

He chose a place that was high enough for a good angle of view, and far enough from the swamp so they couldn't smell it. They made camp and broke out rations.

As he kept watch on the grass, Steve grew discouraged. The breezes were so broken here, and there were so many random movements in the grass, as well as swarms of bugs, plus giant moths, that he couldn't be sure of anything.

He tensed as he saw a dark roughly globular thing bobbing along the surface of the grass, a little way up the rift and near this side. When it got closer he could see that it was not something's head, but a detached mass, a foot or more through, supported and moved along by stalks of grass that bent and gathered themselves beneath it. It progressed at what he judged to be less than a mile an hour. Behind it, it left a visible trail which, he was

sure, would be one of the fences.

He looked elsewhere. There were several such blobs in sight, all moving toward the swamp. He turned his glasses back to the close one. The surface was definitely grainy; and without actually seeing so, he told Vrebl, "I'll bet you half my soup powder that that's a ball of dead bugs." He handed over the glasses.

Vrebl looked, then handed the glasses back. "Yes. I will not bet."

The weird progress continued, swerved out onto one of the grassy fingers of land. Near the end of it, there was a halt and a period when the grass moved obscurely below the object. Then the ball shot up suddenly as if from a catapult, arched out and over, and plopped into the swamp. Steve saw water splash.

Vrebl said, "Do you zink something is getting rid of garbage?"

"No. I think something just deposited an egg. It attracted the bugs somehow, maybe by forcing juice out of the grass, killed them and formed them into a ball, with its egg inside." He put the glasses away and got slowly to his feet. "If something takes eggs to the swamp, whatever hatches will go back to the grass; and that's the time to see it. Let's get down there."

One of the big slugs labored from the swamp, crawling where it could, wiggling painfully through the weed-choked water where it had to. It reached the finger of land where Steve and Vrebl were waiting, humped itself urgently to the



edge of the grass and squeezed itself in among the stalks, where it slumped as if exhausted.

After a while it stirred again. Pseudopods poked slowly from it and crawled up the nearer grass stalks. Others grew long and slim and felt about until each attached itself to a stalk. There must have been nearly a hundred, finally. The slug-body was shrunken and empty, and were already beginning to dry out.

A trembling seized the stalks. They began to writhe like worms, near the bases at first, then higher until even the blades came alive. They interlaced themselves, those on the side away from the swamp searching farther, like blind snakes, thrusting themselves against new stalks, weaving in and out. Steve, heedless of danger, ran close and saw the controlled stalks grow tiny bridges to the new ones. The process grew faster and more confident, and he was reminded of a new-born colt finding its legs. Always, there were about a hundred stalks moving, but that hundred progressed away from the swamp, leaving behind the inert interwoven fence. Ten feet from the swamp, the live group was moving steadily at least two miles per hour.

Steve thought of rushing into the grass ahead of the thing, burning a swath around it to isolate it and see what it would do. But that was an experiment that could wait for a subsequent landing. He tugged at the inert structure left behind. A few stalks pulled loose, but there was no reaction.

This, then, was the thing that could not only live in grass, but could somehow take over animals. No wonder the humanoid they'd talked to didn't have the mind of a Gree slave; and no wonder Zaanj had never used his radio. Steve remembered the giant insect, clothed or shackled in grass. Did they just use animals as steeds, to move where grass didn't grow? Or did they use them for special purposes such as fighting?

Zaanj didn't matter now. Even the message drones could be abandoned.

The thing to do was to get to safety; make sure he and Vrebl stayed free until the ship arrived. He looked at his chronometer. They had time to get to the summit of the mountains, at least, where they'd have line-of-sight contact with the rendezvous spot. The radios had plenty of range.

But there might be peril in the mountains. Wasn't it wiser to camp up on the edge of the rift, in an environment they'd already come to know?

In any case, the first thing to do was to get out of the rift. He jerked his head to Vrebl.

They made camp on a high spot of the rim, near the edge, where they could keep watch on the rift as well as on the mossy tablelands. Steve looked longingly toward the mountains. In a few hours, perhaps, he'd decide to leave the rift. Meanwhile, they needed rest.

Then, a few hours later, he awoke from a nap to find that Vrebl had gone.

The B'lant had left all three rifles and most of the rations, and all the instruments except his own radio. Steve immediately called, and got no answer.

He didn't have to look for a trail to know where Vrebl had gone. He got out the glasses and trained them on the grass below him. A quarter-mile out, the grasses stirred in a steady way that a walking man might produce. He laid a tentative hand on his rifle. He could put an explosive bullet close enough to kill the B'lant, and the breach of discipline justified it. That he liked Vrebl was no factor. Still, killing was pretty final; maybe he could reserve the option for a while, and see what happened. At the worst, he could evade Vrebl — and Zaanj, if they joined forces — until the ship came. And Vrebl deserved some consideration for leaving the rifles, and the other things.

It wasn't just the breach of discipline, of course. Vrebl might be taken over by the grass-dwellers, and they might be able to absorb, somehow, what was stored in his brain. Vrebl knew quite a lot. Steve's superiors might decide, as Gree had, to sterilize the planet.

He pushed such thoughts from his mind. His own duty was to stay alive and sane until the ship arrived. Actually, he should be on his way now, to some hiding place. Still he stood watching the movement in the grass.

Suddenly, Vrebl was on the radio. "Please do not go away yet."

Steve pushed the transmit button and said drily, "You know, you're a pretty easy target."

"Yes, Colonel. And not only for you." The voice was calm.

Steve said coldly, "I suppose you're looking for Zaanj."

"He is of my — clan is not ze right word."

"I appreciate that. But what about your duty?"

"I do not zink I can become a zret to you, Colonel. Wiz all ze rifles you need not worry."

"Maybe so; maybe not. There may be things on this planet we haven't met. Your duty was to stay with me so we could protect each other."

"Zat was part of ze gamble. If I am lucky, you will have ze message drones soon. I am looking for zem too, Colonel."

Steve grunted. That hadn't occurred to him as Vrebl's motive. "All right. As long as you've taken this upon yourself, I'll spot for you. There are some movements in the grass about twenty-five yards to your left as you face toward me. Also, a ways behind you, some of the grass-users were moving along a fence, in tandem. They've stopped, so I think they may hear you."

"Zank you, Colonel. Good-by for ze moment."

Steve tried hard to follow Vrebl's progress, but he couldn't hold the glasses entirely steady, and there were other stirrings to watch. He said on the radio, "I've lost you. Shake the grass so I can pick you up."

There was no answer. Steve opened his mouth to speak sharply, then hesitated. Vrebl might not dare to talk to him, nor even have his receiver turned on. He swept the glasses back and forth, but there was no movement such as he'd been following, though there were many gentler ones. Finally he lowered the glasses in despair.

Time passed. He spoke into the radio, periodically, without response. He got up and paced, wondering why he hadn't had the presence to call a ship back when he first encountered the horribly afflicted thing at the campsite. At least, he could have sent a message. By not doing so, he'd lost one crewman, and probably two. He found it hard to understand what Vrebl was doing. To risk one's life, with a fair fighting chance, was one thing; but this

He glanced at his chronometer. Vrebl had been gone two hours, at least. What was he doing — criss-crossing back and forth in a search pattern? There was a ludicrous area to cover.

Three more hours passed, then the radio suddenly blurted, "I have found him, Colonel, and we have ze drones. We are coming back."

He watched the two figures emerge from the grass a full mile up the rift and plod down this side, at the foot of the talus. Zaanj walked with his head down, stumbling now and then.

Steve moved the equipment back from the edge of the cliff, hid two of the rifles, and chose his waiting

spot. When they came into sight at the edge he was twenty yards from them, rifle steady. "Stand right there," he ordered bleakly.

Zaanj was naked and no longer had grass woven around him. Neither were there any dead bugs stuck to him, and there were no marks on his hairless gray hide except a few at the neck. His face was swollen, though, and his eyes were not quite right. His arms hung limp.

Vrebl had the message drones, and some other stuff Zaanj had been carrying, clipped to two belts around his waist. Carefully, he unfastened the drones one by one and dropped them on a soft area of moss. "I zink you should send a message at once, Colonel. But first I want you to know zat you have no enemies on zis planet."

Steve eyed him closely, then gestured with the rifle. "Move over there."

When they complied he went to the drones, picked one up and worked at its protective covering with one hand. He did not relax his watch either on Vrebl and Zaanj nor in other directions. "How do you know that, Vrebl?"

"I am not Vrebl. He is sleeping." The eyes met Steve's calmly, with a little smile. "I am just using ze body, and ze brain."

Steve was not surprised. "If that's so, why aren't you like him?" He nodded toward Zaanj. "Or like the others?"

"Because Vrebl offered himself voluntarily, and because we have learned finally how to move into ze humanoid body wizout damaging

ze brain. Before, we do it all wrong. Zat was what made ze horrible zings you saw. When we catch ze one named Zaanj, we almost do right, but we damage ze brain a little. I zink he will get well. We are sorry about zat, Colonel, but after all zis is our planet, and . . .”

“Which I should have let Gree sterilize,” Steve said flatly. “Is there any reason I shouldn’t burn the two of you down right now?”

“No reason,” Vrebl’s voice said calmly, “except zat we are friendly. You can count ze message drones. Zey are all zere. I could have sent a false message, to tell ze ship you are dead and it should pick me up somewhere else. Zere is no reason we should lie to you, Colonel. We are no zret to your kind. We are not comfortable in zes bodies—even zo ze brains and ze eyes are wonderful; and ze inside bones and ze muscles . . . I know all zat Vrebl knew, and I have talk wiz ozzers of my kind. We know Gree will return to destroy us. We know your side, ze Birds of Effogus, will be friends. Zerefore, to save my own planet I want to go wiz you, as an ambassador to ze Birds. I am telling you everyzing, Colonel. I do not zink you will doubt.”

Steve got the drone free, pressed its recorder button and spoke into the receiver tersely but at length, giving the facts that had to be given, ordering that a transcript be sent immediately to Headquarters and that the whole squadron except two sentries come to pick him up at once. He activated the drone, laid it on the ground, and stepped back. With a loud implosion, it nulled away.

Without relaxing, he looked quickly around him to make sure nothing was sneaking in. Then he answered Vrebl, or what had been Vrebl. “I doubt *everything*. But the Birds will make the decision. You’ll both go back in sealed compartments, under heavy guard. So will I. We’ll stand right here, and be picked up in a few minutes.”

He sighed. If it were left to him, he thought he might sterilize the planet, after a little study. On the other hand, possibly the entities *would* become friends and allies of the Birds, though he personally wasn’t eager for much contact with them.

Anyway, he thought, there was one thing in their favor. Gree had wanted to destroy them; and, as he himself had once remarked, it was always good to disagree with Gree.

END

BACK NUMBERS

If you’ve missed any copies of *Galaxy*, *IF* or *Worlds of Tomorrow* from 1960 to date our Back Number Department has a limited supply available at 50c each, any three issues for \$1.00, regardless of original cover price. Copies sent postpaid anywhere in U.S. or Canada. Sorry, no copies before 1960 at present available. Send dates and title of issues you wish with remittance to *Galaxy* Publishing Corp., 421 Hudson Street, New York City 10014.



The Place Where Readers And Editor Meet...

Dear Editor:

I was disappointed when I received my March *If*. *Skylark Duquesne* delayed another two months? Every month for the past year I have torn into each new *If* to see if there was any news on it. I have been going crazy trying to figure how even Doc Smith could write a sequel to *Skylark of Valeron*. I sincerely hope June is *the* month.

Now for the bright side of things. After little thought and deliberation (who needed it here?) I nominated *If* for the Hugo for 1964. For short stories another magazine had a slight edge on *If*, but for novels there was no comparison.

For 1965 so far I have not yet seen any novels and only one short story worthy of a Hugo: *The Replacers*, by A. E. Van Vogt. Notice, *If* again!

Authors you have now who I wish to see more of are Van Vogt, Schmitz, Young, Russell and especially Keith Laumer. Two more whose short stories have not graced your pages recently are Hal Clement and Robert Sheckley (he is

good). These are the best short-story writers. The rest are good, but rarely outstanding.

As usual Cordwainer Smith's novel was a lemon. I think that it is the worst to appear in years. *Star-child* was a great disappointment. Both Jack Williamson and yourself have previously been exceptionally good, whether in collaboration or alone. But that???

On serials, I don't particularly like to wait one, two or three months to finish a story. However I do have a significant preference for novel-length stories. I think novels are the backbone of a sf magazine, and the shorts are an added luxury. So please, a serial in each issue, the longer the better. (About 93,000 words.) My preference for novels got *If* my Hugo nomination.

Lettercol: I would like a two to five page letter column in each issue of each magazine, discussing the *science fiction* in the magazine. Not the editorial or the articles.

Story ratings: This is something you are missing that would improve the magazines tremendously. Less than a third of a page per issue.

Book reviews: Here I draw the line. One book review in *Galaxy* is okay, but please don't expand to *If* or *Worlds of Tomorrow*.

Editorials: A one or two page editorial on sf would be appropriate. Either on fandom or on authors or on stories. But please, none on Hyperinfracanifilia and the like. Interesting, but not for a sf magazine.—Martin F. Massoglia II, 434 West McDonel Hall, Michigan State University, East Lansing, Michigan 48823.

• Hal Clement? Last month (and again soon!) Schmitz and Van Vogt? Next month. Sheckley? This month—but in *Galaxy*. And we're after all the others you mention, too.—*The Editor*.

* * *

Dear Editor:

I am struggling to understand the motives of Mr. A. E. Van Vogt. Does he have a lot of trouble getting published? Perhaps he is too old to be encouraged as various others were from time to time—but personally, I am one who believes that his aliens—past and future—comprise the most cogent theme in modern sf writing.

If anyone can stir imagination among a bunch of lazy engineers, let that person be loudly applauded!—J. Alwood, Van Nuys, California.

• Van doesn't have a bit of trouble getting published, that's for sure. It seems there are simply other things he would rather do than write—but we've been pretty lucky about persuading him to change, as witness next month!—*The Editor*.

* * *

Dear Fred:

I think the story your reader J. O. Alvea of Missouri wants identified is *Cloak of Aesir* by Don A. Stuart . . . though it's not a novel.

One of the Master's best, I think.

What's with all these Greens and Wockiis and so on? A veritabobble epidemic of them lately.—Jim Blish.

• As of press time about twenty other readers made the same identification. What we can't figure out is why *we* didn't!—*The Editor*.

* * *

Dear Editor:

I just read *Hue & Cry*, in the April issue of *If*. It did my heart good to find that I am not alone in my objections to the cancellation of *Outer Limits*. I have written to ABC, *TV Guide* and now *If*, hoping for some sort of retaliatory movement.

I am a devoted wife and a harried mother, with little time for writing. But I do not despair. My love for science fiction and my strong desire for a good television program keep my fingers and/or my hands as busy as possible. Since I have been reading sf for some six years, I think it is about time we sf fans bombarded ABC with our pleas for the return of *Outer Limits*—or perhaps, if my aspirations are not too high, something better!—Mrs. Evelyn L. Maher, 204 Webster Avenue, Jersey City, New Jersey, 07307.

* * *

Dear Editor:

There has been so much *Hue & Cry* lately about alleged sf television that I was aroused from a twenty-year sleep long enough to write this letter. In the first place: Yes, I agree that horror movies are ruining all our good reputations. But no, I will not write to ABC and ask them to keep *Outer Limits*. I disagree with those of your readers who consider it the best show of its type. It is devoted to "no plot monster stories"—or was before I

gave it up in disgust, some time ago.

What is really needed is something new. A series, perhaps based on the Retief stories . . . there are endless possibilities. Anybody know a producer?—Charles Smith, 37 Hinckley Road, Waban, Massachusetts 02168.

* * *

Dear Editor:

What's happened? Ever since *If* went monthly it's been the best around. It's even better than *Galaxy*. Glad you're finally publishing E. E. Smith's story—how about some more Heinlein or Asimov?

For my money the best covers were January 1964 and March 1965. Let's have more McKenna, what say?

Can't see where any readers could support that *Outer Limits*. Best sf on TV was some of the better shows on *Twilight Zone*. Ramona Alderson can see good TV when somebody figures out how to sell it to high-school kids and beer slops.

Maybe some reader can help me. When, in which book or magazine and where, can I get a story called *The Crystal Tower*? As I recall, the story concerned a boy who escaped from the domesticated humans to a pack of wild humans and ended by taking off in a rocket with a girl. It was either a long novelette or a novel.—David Lyon, 41 Cedar Street, Belfast, Maine.

* * *

Dear Editor:

I wonder if you can help me? Some time ago I read a science-fiction story about a man driven to desperation by the advertising gimmickry of his age. He couldn't walk down the street for the racket of blaring recorded commercials. He couldn't ride in a bus

or subway train for the big color television ads that carried nothing but loud hard sell. He couldn't sit quietly in his room for the mechanical birds that would sense him by his body heat and clamp themselves onto his windows to deliver their sales message. So overwrought did this make him that he viciously conned his beloved (estranged) wife out of some \$20,000 on the pretext of re-establishing housekeeping with her. Instead he took the money and bought for himself a lifetime in Paradise. But "Paradise", it turned out, was a commercial outfit that rented out rooms to the lucky few who could afford them—dull, gray, soundproofed rooms that could not be penetrated by advertising messages.

Anything you could do to help me trace this story would be very much appreciated.—James W. McLean, 54 Prince Arthur Avenue, Toronto 5, Canada.

* * *

Dear Editor:

I would like to congratulate you on two excellent issues in a row (November and December) and your first good cover illustrations since way back when. How about getting some more Poul Anderson stuff? He is the greatest.—Dave Spegel, 221 Anderson Road, Lincoln, Michigan.

* * *

• Well, that's it for another month. This issue's "first" is *Simon Says*—one of the few novelettes we've published in our program of bringing you at least one brand new writer in each issue of *If*, but, we think you'll agree, worth it. Next month—del Rey, Van Vogt, Schmitz, more of Doc Smith's great *Skylark Duquesne*—yes, indeed. See you then!—*The Editor*.

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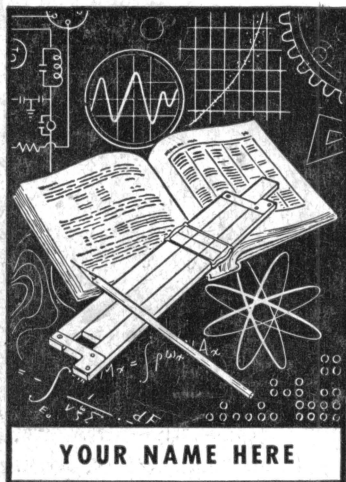
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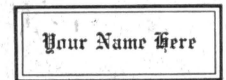
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