OCTOBER 1966
50¢

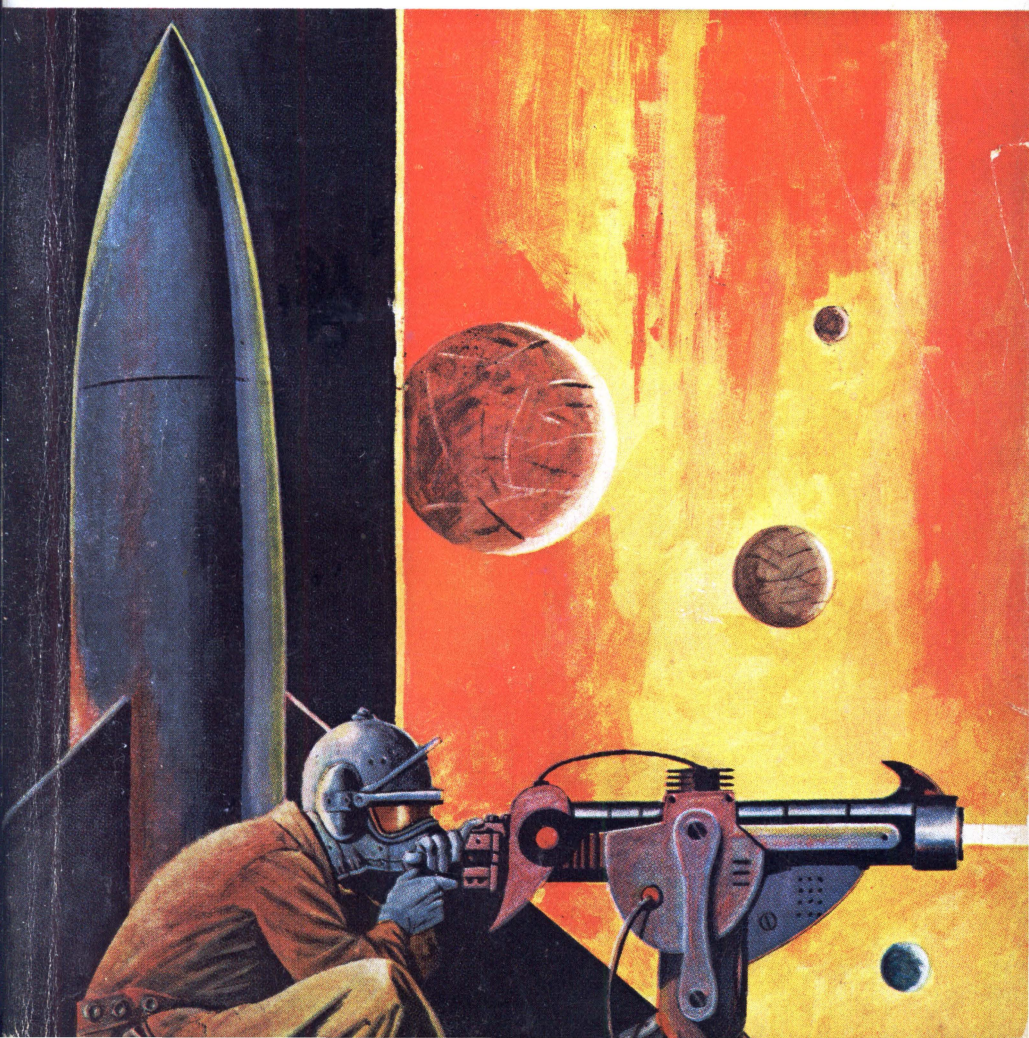
WORLDS OF

IF

SCIENCE FICTION

SNOW WHITE AND THE GIANTS
by J. T. McIntosh

GORDON R. DICKSON • LARRY NIVEN • A. BERTRAM CHANDLER



MOON MAP PUZZLE

Official Rand McNally Map taken from actual photos of the moon. This circular Map Puzzle shows mountains, craters, seas, basins and valleys, with frame containing information about eclipses, tides, and seasons. Map when completed 21¼" x 14¼". Made of heavy cardboard and diecut.

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WORLDS OF IF SCIENCE FICTION

ALL NEW STORIES

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TV BY THE NUMBERS

Murray Leinster was in the office the other day to talk about stories. So we talked about them (and hope to be bringing you some of the results of the talk shortly); after which the conversation turned to the business which had brought Leinster to New York. He had been talking patent releases with a large corporation. The patent was his own. It seems that some years ago one of Leinster's stories was being adapted for a television program and, visiting on the lot, Leinster noticed an awful lot of activity going on in putting up and breaking down sets. Turned out, that studio alone was spending an amount in five figures every week — not to build new sets, but just to truck old ones back and forth between the warehouse and the studio as needed.

That struck Leinster as rather a waste. It was just background, after all. If you photographed it once, it should *stay* photographed. . . . So he went home and designed an optical system to make it possible to retain the backgrounds without all the bother of having them physically present all the time . . . and the royalties from that are one reason why you don't see as many Leinster stories as you used to any more.

Which started your editor thinking.

Photographing sets once instead of a hundred times is a fine saving, no doubt. But look. You don't really want the sets at all in the long run, do you? All you want is an image of the sets.

For that matter, you don't really want props — or actors.

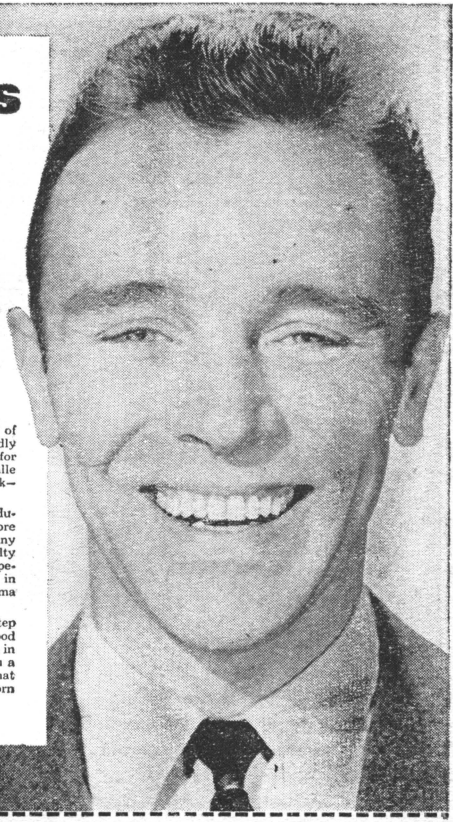
Maybe you don't even need cameras.

In order to give your television audience an hour's amusement (or addicted boredom, which is more like it), you only need to make sure that a finite number of phosphor spots on the inside of a cathods tube sparkle in the proper order. That's all that goes on now, of course. It happens that the electron gun that makes the phosphors sparkle is programmed by a video camera, which in turn is programmed by scanning live actors on a live set. But still. . . .

Each point of light on the TV tube is still just a point of light. It's either on or off. That's all. (Not counting color television, where the signal in the set specifies "chrominance" as well as "luminance" — but let's not bother about color for a moment.)

There are about 420 active phosphor spots on each line of an American tube. You could write that line as a binary number. Let "1" be on;

"Look who's smiling now!"



"The department head's job had just been left vacant. When the boys in the office learned I was gunning for it, they gave me their widest grins. One thing they didn't know: I had made up my mind sometime back to take LaSalle training that would qualify me for a better job. My study paid off so fast it surprised even me—I was picked for that shiny promotion over everyone's head. Who wouldn't be smiling with a neat new $1,500 increase!"

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Name.....Age.....

Address.....County.....

City & State.....Zip No.....

Occupation.....Working Hours....A.M.....P.M.

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let "0" be off. A string of 420 1's would mean every one of those spots would be on. A binary number like 1001 . . . 00 would mean the first spot is on, the second off, the third off, the fourth on . . . up to the last two being off. (Write the missing 414 digits to please yourself — we don't have room!)

That takes care of one line; there are 525 lines to a frame. Well, write each line separately. It takes 220,000 binary digits to describe the whole picture — but it is still just a number. And yet that number can represent anything a television screen can show, from Chet Huntley announcing the end of the world to Lassie preventing it from happening. That's all a television picture is, you see; a binary number.

The only thing wrong with the picture is that it's a snapshot. It doesn't move.

But that's easily enough solved. Erase the picture — actually, you don't have to; the decay time of the phosphor is carefully planned so that it will erase itself as necessary. Write a new one. Write thirty new ones and run them one after another, and you have a full second of actual animated activity on the tube — total size of the numbers you have written, now just short of seven million bits.

From there on its just multiplication. A 25 billion digit number gives you an hour show. 600 billion digits gives you twenty-four hours of programming, or more than you get on any but a few eccentric stations in the world each day.

Of course, you may want it in color, which adds a problem. How much of a problem depends on what system of color television you are using and how you elect to encode it; but you could do it by simply tripling the number of digits.

You still only have to write one unique number each day, and out of it comes the morning news, the housewives' exercise hour, the quiz shows, the sports events, the comics and the singers, the panel shows and the documentaries . . . and all the little commercials as well. Nothing hard about writing one number a day, is there? Even if the number chances to be slightly less than two trillion digits long?

Actually it might not be as hard as you think. Between the 220,000 digits in any given frame and the 220,000 digits in the one that follows it a thirtieth of a second later, there isn't really a great deal of change — and what change there is is reasonably systematic. I.e., can be programmed into a computer. And think what you'd save! Production costs on a single TV hour can run half a million dollars. Each of those little one-minute commercials can cost tens of thousands — and go on costing thousands in residuals, every time they're used. But your computer-generated binary number wouldn't expect residuals. Computers rarely if ever belong to AFTRA.

Anyway, there it is. NBC, ABC, CBS, BBC and others — take notice. And when you get around to sending royalty checks, please make them out to —

—THE EDITOR

NEUTRON STAR

by LARRY NIVEN

Illustrated by ADKINS

It was the kind of star so tiny but massive that it trapped even light. Now it trapped even me!

I

The Skydiver dropped out of hyperspace an even million miles above the neutron star. I needed a minute to place myself against the stellar background and another to find the distortion Sonya Laskin had mentioned before she died. It was to my left, an area the apparent size of the Earth's moon. I swung the ship around to face it.

Curdled stars, muddled stars, stars that had been stirred with a spoon.

The neutron star was in the center, of course, though I couldn't see it and hadn't expected to. It was only eleven miles across, and cool. A billion years had passed since BVS-1 burned by fusion fire. Millions of years, at least, since the cataclysmic two weeks during which BVS-1 was an X-ray star, burning at a temperature of five billion degrees Kelvin. Now it showed only by its mass.

The ship began to turn by itself. I felt the pressure of the fusion drive. Without help from me, my faithful metal watchdog was putting

me in hyperbolic orbit that would take me within one mile of the neutron star's surface. Twenty-four hours to fall, twenty-four hours to rise . . . and during that time, something would try to kill me. As something had killed the Laskins.

The same type of autopilot, with the same program, had chosen the Laskins' orbit. It had not caused their ship to collide with the star. I could trust the autopilot. I could even change its program.

I really ought to.

How did I get myself into this hole?

The drive went off after ten minutes of maneuvering. My orbit was established, in more ways than one. I knew what would happen if I tried to back out now.

All I'd done was walk into a drugstore to get a new battery for my lighter!

Right in the middle of the store, surrounded by three floors of sales counters, was the new 2603 Sinclair intrasystem yacht. I'd come for a battery, but I stayed to admire. It was a beautiful job, small and sleek and streamlined and blatantly different from anything that's ever been built. I wouldn't have flown it for anything, but I had to admit it was pretty. I ducked my head through the door to look at the control panel. You never saw so many dials. When I pulled my head out, all the customers were looking in the same direction. The place had gone startlingly quiet.

I can't blame them for staring. A number of aliens were in the store, mainly shopping for souvenirs, but they were staring too. A puppeteer is unique. Imagine a headless, three-legged centaur wearing two Cecil the Seasick Sea Serpent puppets on his arms, and you'll have something like the right picture. But the arms are weaving necks, and the puppets are real heads, flat and brainless, with wide flexible lips. The brain is under a bony hump set between the bases of the necks. This puppeteer wore only its own coat of brown hair, with a mane that extended all the way up its spine to form a thick mat over the brain. I'm told that the way they wear the mane indicates their status in society, but to me it could have been anything from a dock worker to a jeweler to the president of General Products.

I watched with the rest as it came across the floor, not because I'd never seen a puppeteer, but because there is something beautiful about the dainty way they move on those slender legs and tiny hooves. I watched it come straight toward me, closer and closer. It stopped a foot away, looked me over and said, "You are Beowulf Shaeffer, former chief pilot for Nakamura Lines."

Its voice was a beautiful contralto with not a trace of accent. A puppeteer's mouths are not only the most flexible speech organs around, but also the most sensitive hands. The tongues are forked and pointed, the wide, thick lips have little fingerlike knobs along the rims. Imagine a watchmaker with a sense of taste in his fingertips . . .

I cleared my throat. "That's right."

It considered me from two direc-

tions. "You would be interested in a high-paying job?"

"I'd be fascinated in a high-paying job."

"I am our equivalent of the regional president of General Products. Please come with me, and we will discuss this elsewhere."

I followed it into a displacement booth. Eyes followed me all the way. It was embarrassing, being accosted in a public drugstore by a two-headed monster. Maybe the puppeteer knew it. Maybe it was testing me to see how badly I needed money.

My need was great. Eight months had passed since Nakamura Lines folded. For some time before that, I had been living very high on the hog, knowing that my back pay would cover by debts. I never saw that back pay. It was quite a crash, Nakamura Lines. Respectable middle-aged businessmen took to leaving their hotel windows without their lift belts. Me, I kept spending. If I'd started living frugally, my creditors would have done some checking . . . and I'd have ended in debtor's prison.

The puppeteer dialed thirteen fast digits with its tongue. A moment later we were elsewhere. Air puffed out when I opened the booth door, and I swallowed to pop my ears.

"We are on the roof of the General Products building." The rich contralto voice thrilled along my nerves, and I had to remind myself that it was an alien speaking, not a lovely woman. "You must examine this spacecraft while we discuss your assignment."

I stepped outside a little cautiously, but it wasn't the windy season. The roof was at ground level. That's the way we build on We Made It. Maybe it has something to do with the fifteen-hundred-mile-an-hour winds we get in summer and winter, when the planet's axis of rotation runs through its primary, Procyon. The winds are our planet's only tourist attraction; and it would be a shame to slow them down by planting skyscrapers in their path. The bare, square concrete roof was surrounded by endless square miles of desert, not like the deserts of other inhabited worlds, but an utterly lifeless expanse of fine sand just crying to be planted with ornamental cactus. We've tried that. The wind blows the plants away.

The ship lay on the sand beyond the roof. It was a #2 General Products hull: a cylinder three hundred feet long and twenty feet through, pointed at both ends and with a slight wasp-waist constriction near the tail. For some reason it was lying on its side, with the landing shocks still folded in at the tail.

Ever notice how all ships have begun to look the same? A good ninety-five percent of today's spacecrafts are built around one of the four General Products hulls. It's easier and safer to build that way, but somehow all ships end as they began: mass-produced look-alikes.

The hulls are delivered fully transparent, and you use paint where you feel like it. Most of this particular hull had been left transparent. Only the nose had been painted, around the lifesystem. There was no major reaction drive. A series of


ADKINS

retractable attitude jets had been mounted in the sides, and the hull was pierced with smaller holes, square and round — for observational instruments. I could see them gleaming through the hull.

The puppeteer was moving toward the nose, but something made me turn toward the stern for a closer look at the landing shocks.

They were bent. Behind the curved, transparent hull panels, some tremendous pressure had forced the metal to flow like warm wax, back and into the pointed stern.

"What did this?" I asked.

"We do not know. We wish strenuously to find out."

"What do you mean?"

"Have you heard of the neutron star BVS-1?"

I had to think a moment. "First neutron star ever found, and so far the only. Someone located it two years ago by stellar displacement."

"BVS-1 was found by the Institute of Knowledge on Jinx. We learned through a go-between that the Institute wished to explore the star. They needed a ship to do it. They had not yet sufficient money. We offered to supply them with a ship's hull, with the usual guarantees, if they would turn over to us all data they acquired through using our ship."

"Sounds fair enough." I didn't ask why they hadn't done their own exploring. Like most sentient vegetarians, puppeteers find descretion to be the *only* part of valor.

"Two humans named Peter Laskin and Sonya Laskin wished to use

the ship. They intended to come within one mile of the surface in a hyperbolic orbit. At some point during their trip, an unknown force apparently reached through the hull to do this to the landing shocks. The unknown force also seems to have killed the pilots."

"But that's impossible. Isn't it?"

"You see the point. Come with me." The puppeteer trotted toward the bow.

I saw the point, all right. Nothing, but nothing can get through a General Products hull. No kind of electromagnetic energy except visible light. No kind of matter, from the smallest subatomic particle to the fastest meteor. That's what the company's advertisements claim, and the guarantee backs them up. I've never doubted it, and I've never heard of a General Products hull being damaged by a weapon or by anything else.

On the other hand, a General Products hull is as ugly as it is functional. The puppeteer-owned company could be badly hurt if it got around that something *could* get through a company hull. But I didn't see where I came in.

We rode an escalladder into the nose.

The lifesystem was in two compartments. Here the Laskins had used heat-reflective paint. In the conical control cabin the hull had been divided into windows. The relaxation room behind it was a windowless reflective silver. From the back wall of the relaxation room an access tube ran aft, opening on various instruments and the hyperdrive motors.

There were two acceleration couches in the control cabin. Both had been torn loose from their mountings and wadded into the nose like so much tissue paper, crushing the instrument panel. The backs of the crumpled couches were splashed with rust brown. Flecks of the same color were all over everything, the walls, the windows, the viewscreens. It was as if something had hit the couches from behind: something like a dozen paint-filled toy balloons, striking with tremendous force.

"That's blood," I said.

"That is correct. Human circulatory fluid."

II

Twenty-four hours to fall.

I spent most of the first twelve hours in the relaxation room, trying to read. Nothing significant was happening, except that a few times I saw the phenomenon Sonya Laskin had mentioned in her last report. When a star went directly behind the invisible BVS-1, a halo formed. BVS-1 was heavy enough to bend light around it, displacing most stars to the sides; but when a star went directly behind the neutron star, its light was displaced to all sides at once. Result: a tiny circle which flashed once and was gone almost before the eye could catch it.

I'd known next to nothing about neutron stars the day the puppeteer picked me up. Now I was an expert. But I still had no idea what was waiting for me when I got down there.

All the matter you're ever likely

to meet will be normal matter, composed of a nucleus of protons and neutrons surrounded by electrons in quantum energy states. In the heart of any star there is a second kind of matter: for there, the tremendous pressure is enough to smash the electron shells. The result is degenerate matter: nuclei forced together by pressure and gravity, but held apart by the mutual repulsion of the more or less continuous electron 'gas' around them. The right circumstances may create a third type of matter.

Given: a burnt-out white dwarf with a mass greater than 1.44 times the mass of the Sun — Chandrasekhar's Limit, named for an Indian-American astronomer of the nineteen hundreds. In such a mass the electron pressure alone would not be able to hold the electrons back from the nuclei. Electrons would be forced against protons — to make neutrons. In one blazing explosion most of the star would change from a compressed mass of degenerate matter to a closely packed lump of neutrons: neutronium, theoretically the densest matter possible in this universe. Most of the remaining normal and degenerate matter would be blown away by the liberated heat.

For two weeks the star would give off X rays, as its core temperature dropped from five billion degrees Kelvin to five hundred million. After that it would be a light-emitting body perhaps ten to twelve miles across: the next best thing to invisible. It was not strange that BVS-1 was the first neutron star ever found.

Neither is it strange that the Institute of Knowledge on Jinx would have spent a good deal of time and trouble looking. Until BVS-1 was found, neutronium and neutron stars were only theories. The examination of an actual neutron star could be of tremendous importance. Neutron stars could give us the key to true gravity control.

Mass of BVS-1: 1.3 times the mass of Sol, approximately.

Diameter of BVS-1 (estimated): eleven miles of neutronium, covered by half a mile of degenerate matter, covered by maybe twelve feet of ordinary matter.

Escape velocity: 130,000 mps, approximately.

Nothing else was known of the tiny black star until the Laskins went in to look. Now the Institute knew one thing more. The star's spin.

"A mass that large can distort space by its rotation," said the puppeteer. "The Institute ship's projected hyperbola was twisted across itself in such a way that we can deduce the star's period of rotation to be two minutes, twenty-seven seconds."

The bar was somewhere in the General Products building. I don't know just where, and with the transfer booths it doesn't matter. I kept staring at the puppeteer bartender. Naturally only a puppeteer would be served by a puppeteer bartender, since any biped would resent knowing that somebody made his drink with his mouth. I had already decided to get dinner somewhere else.

"I see your problem," I said.

"Your sales will suffer if it gets out that something can reach through one of your hulls and smash a crew to bloody smears. But where do I fit in?"

"We wish to repeat the experiment of Sonya Laskin and Peter Laskin. We must find —"

"With me?"

"Yes. We must find out what it is that our hulls cannot stop. Natuarlly you may —"

"But I won't."

"We are prepared to offer one million stars."

"I was tempted, but only for a moment. "Forget it."

"Naturally you will be allowed to build your own ship, starting with a #2 General Products hull."

"Thanks, but I'd like to go on living."

"You would dislike being confined. I find that We Made It has reestablished the debtor's prison. If General Products made public your accounts . . ."

"Now, *just* a —"

"You owe money in the close order of five hundred thousand stars. We will pay your creditors before you leave. If you return —" I had to admire the creature's honesty in not saying *when* — "we will pay you the remainder. You may be asked to speak to news commentators concerning the voyage, in which case there will be more stars."

"You say I can build my own ship?"

"Naturally. This is not a voyage of exploration. We want you to return safely."

"It's a deal," I said.

After all, the puppeteer had tried to blackmail me. What happened next would be its own fault.

They built my ship in two weeks flat. They started with a #2 General Products hull, just like the one around the Institute of Knowledge ship, and the lifesystem was practically a duplicate of the Laskins', but there the resemblance ended. There were no instruments to observe neutron stars. Instead, there was a fusion motor big enough for a Jinx warliner. In my ship, which I now called Skydiver, the drive would produce thirty gees at the safety limit. There was a laser cannon big enough to punch a hole through We Made It's moon. The puppeteer wanted me to feel safe, and now I did, for I could fight and I could run. Especially I could run.

I heard the Laskins' last broadcast through half a dozen times. Their unnamed ship had dropped out of hyperspace a million miles above BVS-1. Gravity warp would have prevented their getting closer in hyperspace. While her husband was crawling through the access tube for an instrument check, Sonya Laskin had called the Institute of Knowledge. ". . . we can't see it yet, not with the naked eye. But we can see where it is. Every time some star or other goes behind it, there's a little ring of light. Just a minute. Peter's ready to use the telescope . . ."

Then the star's mass had cut the hyperspacial link. It was expected, and nobody had worried — then. Later, the same effect must have stopped them from escaping what-

ever attacked them, into hyperspace.

When would-be rescuers found the ship, only the radar and the cameras were still running. They didn't tell us much. There had been no camera in the cabin. But the forward camera gave us, for one instant, a speed-blurred view of the neutron star. It was a featureless disc the orange color of perfect barbecue coals, if you know someone who can afford to burn wood. This object had been a neutron star a long time.

"There'll be no need to paint the ship," I told the president.

"You should not make such a trip with the walls transparent. You would go insane."

"I'm no flatlander. The mind-wrenching sight of naked space fills me with mild, but waning interest. I want to know nothing's sneaking up behind me."

The day before I left, I sat alone in the General Products bar letting the puppeteer bartender make me drinks with his mouth. He did it well. Puppeteers were scattered around the bar in twos and threes, with a couple of men for variety; but the drinking hour had not yet arrived. The place felt empty.

I was pleased with myself. My debts were all paid, not that that would matter where I was going. I would leave with not a mini-credit to my name; with nothing but the ship . . .

All told, I was well out of a sticky situation. I hoped I'd like being a rich exile.

I jumped when the newcomer sat down across from me. He was a foreigner, a middle-aged man wearing an expensive night-black business suit and a snow-white asymmetric beard. I let my face freeze and started to get up.

"Sit down, Mr. Shaeffer."

"Why?"

He told me by showing me a blue disc. An Earth-government ident. I looked it over to show I was alert, not because I'd know an ersatz from the real thing.

"My name is Sigmund Ausfaller," said the government man. "I wish to say a few words concerning your assignment on behalf of General Products."

I nodded, not saying anything.

"A record of your verbal contract was sent to us as a matter of course. I noticed some peculiar things about it. Mr. Shaeffer, will you really take such a risk for only five hundred thousand stars?"

"I'm getting twice that."

"But you only keep half of it. The rest goes to pay debts. Then there are taxes. But never mind. What occurred to me was that a spaceship is a spaceship, and yours is very well armed and has powerful legs. An admirable fighting ship, if you were moved to sell it."

"But it isn't mine."

"There are those who would not ask. On Canyon, for example, or the Isolationist party of Wonderland."

I said nothing.

"Or, you might be planning a career of piracy. A risky business, piracy, and I don't take the notion seriously."

I hadn't even thought about pi-

racy. But I'd have to give up on Wonderland . . .

"What I would like to say is this, Mr. Shaeffer. A single entrepreneur, if he were sufficiently dishonest, could do terrible damage to the reputation of all human beings everywhere. Most species find it necessary to police the ethics of their own members, and we are no exception. It occurred to me that you might not take your ship to the neutron star at all; that you would take it elsewhere and sell it. The puppeteers do not make invulnerable war vessels. They are pacifists. Your Skydiver is unique.

"Hence I have asked General Products to allow me to install a remote control bomb in the Skydiver. Since it is inside the hull, the hull cannot protect you. I had it installed this afternoon.

"Now, notice! If you have not reported within a week I will set off the bomb. There are several worlds within a week's hyperspace flight of here, but all recognize the dominion of Earth. If you flee, you must leave your ship within a week, so I hardly think you will land on a nonhabitable world. Clear?"

"Clear."

"If I am wrong, you may take a lie-detector test and prove it. Then you may punch me in the nose, and I will apologize handsomely."

I shook my head. He stood up, bowed and left me sitting there cold sober.

Four films had been taken from the Laskins' cameras. In the time left to me, I ran through them several times, without seeing anything out of the way. If the ship had run through a gas cloud, the impact could have killed the Laskins. At perihelion they were moving at better than half the speed of light. But there would have been friction, and I saw no sign of heating in the films. If something alive had attacked them, the beast was invisible to radar and to an enormous range of light frequencies. If the attitude jets had fired accidentally — I was clutching at straws — the light showed on none of the films.

There would be savage magnetic forces near BVS-1, but that couldn't have done any damage. No such force could penetrate a General Products hull. Neither could heat, except in special bands of radiated light, bands visible to at least one of the puppeteers' alien customers. I hold adverse opinions on the General Products hull, but they all concern the dull anonymity of the design. Or maybe I resent the fact that General Products holds a near-monopoly on spacecraft hulls and isn't owned by human beings. But if I'd had to trust my life to, say, the Sinclair yacht I'd seen in the drugstore, I'd have chosen jail.

Jail was one of my three choices. But I'd be there for life. Ausfaller would see to that.

Or I could run for it in the Skydiver. But no world within reach would have me, that is. Of course, if I could find an undiscovered Earthlike world within a week of We Made It . . .

Fat chance. I prefered BVS-1 to that any day.

III

I thought that flashing circle of light was getting bigger, but it flashed so seldom I couldn't be sure. BVS-1 wouldn't show even in my telescope. I gave that up and settled for just waiting.

Waiting, I remembered a long-ago summer I spent on Jinx. There were days when, unable to go outside because a derth of clouds had spread the land with raw blue-white sunlight, we amused ourselves by filling party balloons with tap water and dropping them on the sidewalk from three stories up. They made lovely splash patterns — which dried out too fast. So we put a little ink in each balloon before filling it. Then the patterns stayed.

Sonya Laskin had been in her chair when the chairs collapsed. Blood samples showed that it was Peter, who had struck them from behind, like a water balloon dropped from a great height.

What could get through a General Products hull?

Ten hours to fall.

I unfastened the safety net and went for an inspection tour. The access tunnel was three feet wide, just right to push through in free fall. Below me was the length of the fusion tube; to the left, the laser cannon; to the right, a set of curved side tubes leading to inspection points for the gyros, the batteries and generator, the air plant, the hyperspace shunt motors. All was in order — except me. I was clumsy. My jumps were always too short or too long. There was no room to turn at the stern end, so I had to back fifty feet to a side tube.

Six hours to go, and still I couldn't find the neutron star. Probably I would see it only for an instant, passing at better than half the speed of light. Already my speed must be enormous.

Were the stars turning blue?

Two hours to go, I was sure they were turning blue. Was my speed that high? Then the stars behind should be red. Machinery blocked the view behind me, so I used the gyros. The ship turned with peculiar sluggishness. And the stars behind were blue, not red. All around me were blue-white stars.

Imagine light falling into a savagely steep gravitational well. It won't accelerate. Light can't move faster than light. But it can gain in energy, in frequency. The light was falling on me, harder and harder as I dropped.

I told the dictaphone about it. That dictaphone was probably the best protected item on the ship. I had already decided to earn my money by using it, just as if I expected to collect. Privately I wondered just how intense the light would get.

Skydiver had drifted back to vertical, with its axis through the neutron star, but now it faced outward. I'd thought I had the ship stopped horizontally. More clumsiness. I used the gyros. Again the ship moved mushily, until it was halfway through the swing. Then it semed to fall automatically into place. It was as if the Skydiver preferred to have its axis through the neutron star.

I didn't like that in the least.

I tried the maneuver again, and again the Skydiver fought back. But this time there was something else. Something was pulling at me.

So I unfastened my safety net and fell headfirst into the nose.

The pull was light, about a tenth of a gee. It felt more like sinking through honey than falling. I climbed back into my chair, tied myself in with the net, now hanging face down, turned on the dictaphone. I told my story in such nitpicking detail that my hypothetical listeners could not but doubt my hypothetical sanity. "I think this is what happened to the Laskins," I finished. "If the pull increases, I'll call back."

Think? I never doubted it. This strange, gentle pull was inexplicable. Something inexplicable had killed Peter and Sonya Laskin. *Q.E.D.*

Around the point where the neutron star must be, the stars were like smeared dots of oilpaint, smeared radially. They glared with an angry, painful light. I hung face down in the net and tried to think.

It was an hour before I was sure. The pull was increasing. And I still had an hour to fall.

Something was pulling on me, but not on the ship.

No, that was nonsense. What could reach out to me through a General Products hull? It must be the other way around. Something was pushing on the ship, pushing it off course.

If it got worse I could use the drive to compensate. Meanwhile, the ship was being pushed *away* from BVS-1, which was fine by me.

But if I was wrong, if the ship were not somehow being pushed away from BVS-1, the rocket motor would send the Skydiver crashing into eleven miles of neutronium.

And why wasn't the rocket already firing? If the ship was being pushed off course, the autopilot should be fighting back. The accelerometer was in good order. It had looked fine when I made my inspection tour down the access tube.

Could something be pushing on the ship *and* on the accelerometer, but not on me?

It came down to the same impossibility. Something that could reach through a General Products hull.

To hell with theory, said I to myself, said I. I'm getting out of here. To the dictaphone I said, "The pull has increased dangerously. I'm going to try to alter my orbit."

Of course, once I turned the ship outward and used the rocket, I'd be adding my own acceleration to the X force. It would be a strain, but I could stand it for awhile. If I came within a mile of BVS-1, I'd end like Sonya Laskin.

She must have waited face down in a net like mine, waited without a drive unit, waited while the pressure rose and the net cut into her flesh, waited until the net snapped and dropped her into the nose, to lie crushed and broken until the X force tore the very chairs loose and dropped them on her.

I hit the gyros.

The gyros weren't strong enough

to turn me. I tried it three times. Each time the ship rotated about fifty degrees and hung there, motionless, while the whine of the gyros went up and up. Released, the ship immediately swung back to position. I was nose down to the neutron star, and I was going to stay that way.

Half an hour to fall, and the X force was over a gee. My sinuses were in agony. My eyes were ripe and ready to fall out. I don't know if I could have stood a cigarette, but I didn't get the chance. My pack of Fortunados had fallen out of my pocket, when I dropped into the nose. There it was, four feet beyond my fingers, proof that the X force acted on other objects besides me. Fascinating.

I couldn't take any more. If it dropped me shrieking into the neutron star. I had to use the drive. And I did. I ran the thrust up until I was approximately in free fall. The blood which had pooled in my extremities went back where it belonged. The gee dial registered one point two gee. I cursed it for a lying robot.

The soft-pack was bobbing around in the nose, and it occurred to me that a little extra nudge on the throttle would bring it to me. I tried it. The pack drifted toward me, and I reached, and like a sentient thing it speeded up to avoid my clutching hand. I snatched at it again as it went past my ear, but again it was moving too fast. That pack was going at a hell of a clip, considering that here I was, practically in free fall. It dropped through the door to the relaxation room, still picking up

speed, blurred and vanished as it entered the access tube. Seconds later I heard a solid Thump.

But that was *crazy*. Already the X force was pulling blood into my face. I pulled my lighter out, held it at arm's length and let go. It fell gently into the nose. But the pack of Fortunados had hit like I'd dropped it from a *building*.

Well.

I nudged the throttle again. The mutter of fusing hydrogen reminded me that if I tried to keep this up all the way, I might well put the General Products hull to its toughest test yet: smashing it into a neutron star at half lightspeed. I could see it now: a transparent hull containing only a few cubic inches of dwarf star matter wedged into the tip of the nose.

At one point four gee, according to that lying gee dial, the lighter came loose and drifted toward me. I let it go. It was clearly falling when it reached the doorway. I pulled the throttle back. The loss of power jerked me violently forward, but I kept my face turned. The lighter slowed and hesitated at the entrance to the access tube. Decided to go through. I cocked my ears for the sound, then jumped as the whole ship rang like a gong.

And the accelerometer was right at the ship's center of mass. Otherwise the ship's mass would have thrown the needle off. The puppeteers were fiends for ten-decimal-point accuracy.

I favored the dictaphone with a few fast comments, then got to work reprogramming the autopilot. Luckily what I wanted was simple. The X force was but an X force to me, but now I knew how it behaved. I might actually live through this.

The stars were fiercely blue, warped to streaked lines near that special point. I thought I could see it now, very small and dim and red; but it might have been imagination. In twenty minutes, I'd be rounding the neutron star. The drive grumbled behind me. In effective free fall, I unfastened the safety net and pushed myself out of the chair.

A gentle push aft — and ghostly hands grasped my legs. Ten pounds of weight hung by my fingers from the back of the chair. The pressure should drop fast. I'd programmed the autopilot to reduce the thrust from two gees to zero during the next two minutes. All I had to do was be at the center of mass, in the access tube, when the thrust went to zero.

Something gripped the ship through a General Products hull. A psychokinetic life form stranded on a sun twelve miles in diameter? But how could anything alive stand such gravity?

Something might be stranded in orbit. There is life in space: outsiders and sailseeds and maybe others we haven't found yet. For all I knew or cared, BVS-1 itself might be alive. It didn't matter. I knew what the X force was trying to do. It was trying to pull the ship apart.

There was no pull on my fingers. I pushed aft and landed on the back wall, on bent legs. I knelt over the

door, looking aft/down. When free fall came, I pulled myself through and was in the relaxation room looking down/forward into the nose.

Gravity was changing faster than I liked. The X force was growing as zero hour approached, while the compensating rocket thrust dropped. The X force tended to pull the ship apart; it was two gee forward at the nose, two gee backward at the tail and diminished to zero at the center of mass. Or so I hoped. The pack and lighter had behaved as if the force pulling them had increased for every inch they moved sternward.

The dictaphone was fifty feet below, utterly unreachable. If I had anything more to say to General Products. I'd have to say it in person. Maybe I'd get the chance. Because I knew what force was trying to tear the ship apart.

It was the tide.

The motor was off, and I was at the ship's midpoint. My spread-eagled position was getting uncomfortable. It was four minutes to perihelion.

Something creaked in the cabin below me. I couldn't see what it was, but I could clearly see a red point glaring among blue radial lines, like a lantern at the bottom of a well. To the sides, between the fusion tube and the tanks and other equipment, the blue stars glared at me with a light that was almost violet. I was afraid to look too long. I actually thought they might blind me.

There must have been hundreds of gravities in the cabin. I could even feel the pressure change. The air was thin at this height, one hundred and fifty feet above the control room.

And now, almost suddenly, the red dot was more than a dot. My time was up. A red disc leapt up at me; the ship swung around me; and I gasped and shut my eyes tight. Giants' hands gripped my arms and legs and head, gently but with great firmness, and tried to pull me in two. In that moment it came to me that Peter Laskin had died like this. He'd made the same guesses I had, and he'd tried to hide in the access tube. But he'd slipped. As I was slipping . . .

When I got my eyes open the red dot was shrinking into nothing.

IV

The puppeteer president insisted I be put in a hospital for observation. I didn't fight the idea. My face and hands were flaming red, with blisters rising, and I ached like I'd been beaten. Rest and tender loving care, that's what I wanted.

I was floating between a pair of sleeping plates, hideously uncomfortable, when the nurse came to announce a visitor. I knew who it was from her peculiar expression.

"What can get through a General Products hull?" I asked it.

"I hoped you would tell me." The president rested on its single back leg, holding a stick that gave off green, incense-smelling smoke.

"And so I will. Gravity."

"Do not play with me, Beowulf Shaeffer. This matter is vital."

"I'm not playing. Does your world have a moon?"

"That information is classified." The puppeteers are cowards. Nobody knows where they come from, and nobody is likely to find out.

"Do you know what happens when a moon gets too close to its primary?"

"It falls apart."

Why?"

"I do not know."

"Tides."

"What is a tide?"

Oho, said I to myself, said I. "I'm going to try to tell you. The Earth's moon is almost two thousand miles in diameter and does not rotate with respect to Earth. I want you to pick two rocks on the Moon, one at the point nearest the Earth, one at the point furthest away."

"Very well."

"Now, isn't it obvious that if those rocks were left to themselves they'd fall away from each other? They're in two different orbits, mind you, concentric orbits, one almost two thousand miles outside the other. Yet those rocks are forced to move at the same orbital speed."

"The one outside is moving faster."

"Good point. So there *is* a force trying to pull the Moon apart. Gravity holds it together. Bring the Moon close enough to Earth, and those two rocks would simply float away."

"I see. Then this *tide* tried to pull your ship apart. It was powerful enough in the lifesystem of the Institute ship to pull the acceleration chairs out of their mounts."

"And to crush a human being. Picture it. The ship's nose was just seven miles from the center of BVS-1. The tail was three hundred feet further out. Left to themselves they'd have gone in completely different orbits. My head and feet tried to do the same thing, when I got close enough."

"I see. Are you moulting?"

"What?"

"I noticed you are losing your outer integument in spots."

"Oh, *that*. I got a bad sunburn from exposure to starlight."

Two heads stared at each other for an eyeblink. A shrug? The puppeteer said, "We have deposited the remainder of your pay with the Bank of We Made It. One Sigmund Ausfaller, human, has frozen the account until your taxes are computed." "Figures."

"If you will talk to reporters now, explaining what happened to the Institute ship, we will pay you ten thousand stars. We will pay cash so that you may use it immediately. It is urgent. There have been rumors."

"Bring 'em in." As an afterthought I added, "I can also tell them that your world is moonless. That should be good for a footnote somewhere."

"I do not understand." But two long necks had drawn back, and the puppeteer was watching me like a pair of pythons.

"You'd know what a tide was if you had a moon. You couldn't avoid it."

"Would you be interested in . . ."

". . . a million stars? I'd be fascinated. I'll even sign a contract if it includes what we're hiding. How do *you* like being blackmailed?"

END

Your Soldier Unto Death

by MICHAEL WALKER

They were Man's greatest heroes. They'd won a war — but now what was there left for them to do?

On the final day of the conflict Infantry Commander Third Class RB-1079AX, soldier in the service of Man, had driven a file of heavy infantry out of western highlands to meet the enemy of his masters.

Rocket-fire had long since knocked out his command vehicle, and for half a day he had fought shoulder-to-shoulder with his soldiers, continuously alert to the dictates of Over-Command that filled his headset and mechanically relaying them to his decimated phalanx in an uninflected voice that had grown hoarse with the passage of time. At length, Over-Command had issued orders of termination and had closed down its frequency, leaving him trembling now in a sudden shock of silence, a sticky mace swinging in his hand. An enemy soldier-form beside him lowered its rifle, relaxed its coils and wriggled away through the freezing mud. Around him in the twilight, soldiers turned against the death-scented wind and straggled toward their recovery zones.

He had known that the battle on this planet could not last much longer. The end was a shock only to his strained body — the recent trends in the battle had forewarned his care-

fully trained mind. There had been heavy losses. If the forces of Man had sought retribution, the battle might have lasted another day. But the war had never been vindictive to the extent that a satisfactory position would be sacrificed to emotion. While he was but dimly aware of such things as emotions and of their roles as determininates in the strategic decisions of Men, he had suspected from experience that the end was near.

A little dazed, he consulted a map-board incorporated into the sleeve of his battle armor and turned, stumbled northward through the interminable litter of bodies. In the offal of the day-long attrition he saw an occasional familiar face. For some reason he faltered and paused to look into one.

RB-2442AY lay on his side, the left leg below the knee crushed flat by a tank. A medic hurried by, halting only to spray the breastplate of the fallen soldier with fluorescent paint — unsalvageable. The soldier, who had somehow withstood the shock of his injury, took no notice. His pain-tightened eyes passed over his commander without recognition or feeling. RB-1079AX watched him for a moment more and touched the butt of his sidearm, vaguely wondering if the damaged soldier might not be able to fight again, perhaps with an artificial limb — he had fought with him for so long. But the splash of paint said no, and the commander moved on.

An hour later he had collected the tired remnant of his phalanx in the recovery zone and had submitted his final status report to Over-Command, where Men listened calmly and drew their plans for the future. But for him the work here was done.

Now began a time of waiting. At first, for transportation. Later, for the command that would send him to another battlefield on some new world.

Squatting in their midst, he watched the survivors quietly, listening to the rattle of final preparation and the cries of the salvageable wounded, punctuated at decreasing intervals by a muted thunder that was building in the west. Eventually, a formation of ships moved over the plain, slowing, and in the deepening night his transport slipped out of the sky and touched down a kilometer away.

He marched his soldiers across the blasted terrain and up the extended ramps, pausing for a moment to see all of his command aboard. Overhead, moving up from the horizon, a chain of bright beads stretched itself across the sky, passing among the stars. The beads were enemy transports following on the same orbital track. As they crossed the zenith, each flared up briefly and slowed as it broke orbit for planet-fall on some battlefield on the other side of the world. He went into the ship.

Scattered on the plain, the abandoned wounded let their eyes fall beneath patient, hooded lids as the transports rose and mounted on columns of fire.

The windows of the small office overlooked a flat sweep of des-

ert that stretched uninterrupted to a wall of hazy mountains that edged the horizon. Nearby, the desert was patterned with the geometric precision of maneuvering soldiers. On the right the beginnings of a complex of corrugated aluminum barracks were visible.

It was very hot. The hum of air-conditioning shut out the noises of the base.

Major General Blackwood sat behind a bare desk, silhouetted against the windows. Across the desk a small, balding man in civilian dress sat stiffly in a straight-backed chair, holding a plastic folder in his lap. Between them, at the side of the desk, a woman leaned forward anxiously from a leather-upholstered seat.

"We were told through normal channels that the war had ended, Mr. Chalmers," the general said. "I don't quite see the point of your visit." There was a note of hostility in his quiet voice.

Chalmers coughed and looked toward the woman apologetically. "Actually, General, I'm here for something else. Terra Central sent me out to appraise the Empress of certain diplomatic aspects of the peace that we felt were too delicate for direct broadcast. She suggested that we take them up with you, since you're closer to the problem, so to speak." He looked toward the window meaningfully.

General Blackwood, refusing to interpret his glance, leaned forward slowly. "Get to the point."

"Well, as you know, the peace is not decisive. There was surrender on neither side. We've merely reached a permanent understanding. In the past year, the war became so vicious that only complete ruin for both us and the Kreekal could have resulted from its continuance. I don't suppose you realize it, but the conflict had actually been extended from the disputed colonial planets to the home systems." He fumbled in his folder and produced a photograph, held it carefully. "We suffered terrible losses. Last month the Kreekal struck at the Terran system with the better part of their fleet. Earth was saved, but to hold them off we had to contract the system's defensive sphere drastically. Mars was sacrificed."

He slid the glossy print across the desk, and the general picked it up casually, looked at a brilliant yellow-white disk set against star-flecked blackness. He glanced from the picture to Chalmers.

"I take it this isn't the natural Martian albedo?"

"That isn't reflection at all, General. The surface was still incandescent when the picture was taken, two days after the attack. They blanketed the planet with hell-bombs. Naturally, there were no survivors. Two billion died."

"I suppose we were avenged," the general said, not really wanting to know and definitely not wanting to know now. He had said what was expected of him.

"We hit back at their home system. Their sun was extinguished."

"And that settled it, I suppose? The rest of the war was incidental to the conclusion — just for the

sake of form while terms were being settled?"

"I'm sorry, General. I understand your bitterness, but it doesn't really matter, does it?"

General Blackwood gazed levelly at the Empress, realizing what was coming, then looked back at Chalmers. "My army alone lost several million soldiers during the last weeks, Mr Chalmers. That matters very much. Make your point."

"The point is, damn it, that the human race has got five billion soldiers on its hands with no more wars to fight. Terra Control has ordered that they be destroyed."

The general nodded, looking down at the desk. "Yes. I thought it would come to this. But why were you sent?"

"Terra Central thought an unaccompanied directive of this nature would seem a little too arbitrary. They thought if I delivered it, it would . . . well . . ." Chalmers faltered, embarrassed by what he had to say. "They thought it would be less inhuman, this way."

The general laughed harshly, but immediately regreted his cruelty. He did not envy Chalmers's responsibility. He became aware that the Empress was speaking to him.

"Can't you explain this to us, General?" she asked. "Mr. Chalmers assured us that this expedient was necessary, but we don't quite understand why. Why can't the men be deactivated and returned to civilian life?"

The general did not reply, and after a while Chalmers spoke for him. He had rehearsed it to himself so many times that it no longer sounded convincing to him, but he recited it meticulously. He looked at the Empress.

"As you know, the Kreekan society is hive-oriented. Their soldier-forms are adapted from the vast worker element of their community and are conditioned to fight from the moment of hatching. Mankind had never faced an opposition organized along these lines, but the very nature of the conflict demanded that we fight them on their own terms — that is, in land wars on the contested planets.

"Two hundred years ago, the worlds under the control of Terra Central began to develop a warrior class to match the Kreekan soldier-forms. Great numbers of men were needed, and each system recruited an independent army from male infants purchased at birth from their parents.

"To meet the personnel requirements, virtually the entire male portion of the human race has come to be tied up in the service of Man. They are trained from birth, and their training consists of two parts. The first is the complete focusing of all emotion into a single drive to destroy Kreekan soldier-forms, and the second is the development of the physical and technical prowess necessary to implement the first. In short, the infants are reared so that their only feeling is one of enmity toward the Kreekal, and their only skill is a propensity for destroying Kreekal. They are exact counterparts of the Kreekan soldier-

forms. They are machines designed to serve one purpose, and with the end of the war that purpose has ceased to exist. They no longer have an object in life." He paused, having said what was needed. There would be questions and objections, but he had stated the case.

"I think we see the difficulty," the Empress said. "But why? Why was this done to them?"

Chalmers started to answer, but the general interrupted him — rather bluntly, as Chalmers thought.

"Your Highness, the enemy has a great deal in common with communal insects: A small aristocracy and a huge mindless working class. I say mindless advisedly. Single-minded is what I mean. They are generated to work — or in time of war, to kill. The distinction is slight, since there's no real emotion involved in either. With them, wielding a gun is little different from wielding a shovel. This isn't so with mature men. The greater part of training an adult human to kill has never been the development of the killer instinct and the killer skills — these are always present, if latent. It has been, rather, the suppression of the array of gentler instincts that have been generated in the course of a normal life: Love, ambition, social instincts and so forth. Getting rid of these is the problem. And to meet the mechanical animosity of the Kreekal, it just wasn't practical to start out with mature men whose very way of life had conditioned them against warfare with an absolutely passionless adversary. It just wasn't practical. Hell, it wasn't possible. We had to start with blank slates, and we needed a lot of them."

But couldn't they be retrained, General?"

"No. They're lost to us in that respect, Your Highness. Naturally, we've looked into it completely. They're like the survivors who are sometimes found on colonial worlds that were thought to have been totally depopulated by disease. Abandoned as infants, they grow up entirely on their own, roaming in the wild, and when they're finally brought back into the fold they can never adjust. Maybe they can learn a few words — a few simple tasks — but they remain subhuman. They never develop social skills."

"But these men must have social skills already, General. They're members of an army — they have comrades. And they can speak."

"The basic lack is the same," the general explained unhappily. "The factor underlying meaningful society is the sexual drive and its fulfillment, but these men have no sexual outlet in the ordinary sense. Harnassing that drive has been our greatest problem. Initially, we had contemplated castration, but if it's performed early it interferes with the physical development we require, and after maturity it's out of the question — the trauma would destroy the psychological balance we set for them from birth. Homosexual outlets are even more out of the question — we can't afford to have any feeling of affection developing between comrades. They

are trained to think of each other as they would of any other piece of military equipment — as gears in a mechanism of which they are a part — and this ultimate, impersonal rationality is all that has allowed us to operate successfully against the enemy.

"All that remained was to supply them with women at regular intervals, which we do. One woman can service a great many soldiers, and it proved the most practical solution. But other than a very basic sort of tenderness toward their sexual partners, emotion doesn't enter into the relationships. They *have* no emotions. They're incapable of any sort of reciprocal relationship. They don't even recognize the females as human. Or themselves, for that matter. We never teach their females to speak, you know — there's no reason to."

They were silent for a moment, and when she spoke, the Empress gave voice to what they were all feeling. "I think this is rather awful, General. I don't believe most of us have quite realized what was going on."

Chalmers came to the general's rescue. "Precisely, Your Highness. That's why Terra Central didn't send their directive out through ordinary channels. No one is *ever* to know what has happened. God knows how close we came to extinction in this mess. All that saved the human race is this terrible thing we've done. That's all in the past, now, though — for better or worse. We're at peace, and the new format is cooperation and cohabitation with the Kreekal. Our soldiers simply could not survive in such a context, or even be permitted to enter it. They can't be taught to support themselves, and now that we're off the war footage we can't afford to support them ourselves. They lived off ravaged worlds in the past — where are they to find sustenance now? We did something terrible in creating them, and we must do something just as awful to dispose of them.

"There's no possibility of beating swords into ploughshares — not in this case. These are not so much men as they are weapons. They have no versatility. Versatility was painstakingly bred out of them.

"No, Your Highness. Tanks may be converted to tractors, but the virtue of this human steel is in its temper. Any attempt to reforge it would leave us with nothing."

The Empress smiled gently. "Your point is well taken, Mr. Chalmers. But I think that in putting our rationalizations into words we tend to become rather too picturesque. These are human beings, after all. Let's deal with them in human terms."

"I'm sorry," Chalmers said. "What I mean to say is that they've been forced into the mold so tightly that they would be shattered completely if their molds were removed. I don't think they're psychologically equipped to deal with any situation other than the one they're in. Certainly they're not capable of independent action. They act only in response to their superiors, and their superiors are ultimately men."

"Damn it, Chalmers," the general snapped. "You insist on segregating them under this absurd 'they.' They *are* men, Chalmers. Their victory wasn't won for your exclusive 'us' — it was won for the human race. For themselves. It's not fair to shut them out!" The general fell silent, realizing that he had begun to plead.

"No, it's not fair," Chalmers replied. "But it's necessary. Never have so few owed so much to so many, and yet what can we do for them in return? We haven't the means to support five billion nonproductive men. Assuming they were susceptible to retraining, we haven't the means to effect even that. They're no longer a necessity to our survival, and we have other work to do. If we don't destroy them, they'll die horribly of starvation — or worse. You know that."

The general said nothing.

"We need so badly to expand our population now," the Empress ventured. "Couldn't they take mates? There are so many more women than men — couldn't the women shoulder the load? It would just be for one generation."

The general shook his head. "The soldiers have no conception of reproduction. There is no creche on this world, and they have never seen children. They could only serve as stud animals, and for that there are enough normal men."

"But what becomes of the soldiers who grow too old to fight?" she asked. "Surely you don't liquidate them?"

"No, Your Highness. That's one problem we haven't had to face. You see, no one grows old in the service of Man."

She stared at the general helplessly. "But you say nothing in their behalf. You're signing their death order!" she cried desperately, accusingly.

"I know I am," he answered, and there was a tightness in his voice that made her drop her eyes in shame.

After a long moment the general looked at Chalmers, but it was to her that he spoke. "I've arranged to have one of the soldiers drop by. You may want to talk to him — he'll be in the outer office. If you don't mind, I'll wait here."

Infantry Commander Third Class RB-1079AX had been summoned from the exercise field early in the morning, and had been told at the barracks to report to the general's quarters at noon. He had spent the morning in unaccustomed idleness, sitting on his bunk and listening to the sounds that drifted in through the open door. A half hour before noon he had showered and dressed in clean fatigues and now stood in the general's deserted staff office, waiting.

The inner door opened, and two strange men emerged and stopped before him. He saluted and stood at attention. Neither of the strangers was in military dress, and it soon became apparent that one of them was not a Man at all, but something more like a She. He had never seen a She in the company of Men before, but from the contours of its loose, peculiar cut tunic he could see that its body must more nearly approxi-

mate that of a She than that of a Man or a soldier. The tunic in itself was surprising ,for he had seldom seen a She with clothing of any sort. Its unclad legs were unfurred, and there was a heavy growth of hair on its head, neither of which was typical of a She, but he conjectured that it might be some sort of form peculiar to Men — a sort of Man-She, perhaps. He waited for information that might confirm his theory.

Then, shockingly, the She looked at him — and *spoke*: "What a magnificent Man."

He turned and looked, but there was no Man in evidence. He looked at the She, puzzled, and noticed that it was in pain. He picked up a phone from a vacant desk and named the hospital extension, ordered a medic to the general's quarters. When he looked up, the general was beside him.

"Sir, the She had water in its eyes. I have asked for Medic, sir," he replied.

The general took the phone from him and cancelled the order, replaced the receiver. "It's okay, Commander. The She is all right." He walked the commander to the other side of the room and, putting a hand on his shoulder, spoke to him in a low voice, watching the others. "Look, Commander, this She and the Man with it might want to ask you a couple of questions. They may not be too pertinent, but just answer the best you can and don't worry about it, huh?"

"Okay, sir," he said.

He faced the strangers carefully. The General spoke to them, and after a moment the She approached him.

"Who are you?" the She asked.

"Infantry Commander Third Class RB-1079AX, soldier in the service of man . . . sir."

"But *what* are you?"

He repeated the information.

"Yes, I see," the She said. "You are a soldier. Will you always be a soldier?" Its voice was quiet.

"Until death."

"But what would happen to you if there were no more wars? If there were no more enemies to fight?"

He did not answer.

"Don't you know that you're a Man?"

He did not answer.

The general stepped between them and winked at him. "That's all, commander. You can leave now. Pick up your routine this afternoon."

He saluted and left the general's quarters.

"Has he no dress uniform?. asked the Empress, eager to break the hiatus of silence that had descended in the wake of the soldier.

"There are no dress uniforms," the general said without expression. "The dress uniform is a mark of the juncture of the military and social spheres. There is no society here."

"I'm sorry. I thought he might not have been intelligent enough to . . . that is, I thought he might not have known . . . " She paused, uncertain of what she had wanted

to say. Then she simply said, "He seemed awfully stupid."

The general did not smile. "With respect to intelligence, you know, there isn't one person in ten thousand who could approach him. He is, of course, much more clever than any of us. I felt he would acquit himself well."

He beckoned to Chalmers and turned to the Empress. "If you would wait here for a moment, Your Highness. I will have a word with Mr. Chalmers."

They went into the inner office together.

"I suppose she represents the typical reaction to the soldier," Chalmers remarked when the door was closed. "A magnificent, pathetic creature whose way of life offends her sense of propriety and whose intelligence is oriented in a way she can't comprehend."

The general had not heard. "I won't let them die," he whispered. It was his duty to say it.

"The nerve gas is painless and instantaneous," Chalmers said, disregarding the general and disregarding something within himself that echoed the general's words. "Several bases have already been treated. The exterminators are orbiting a few thousand miles out. I'll have them come down tomorrow morning. It will be over in a few minutes."

"I *can't* let them die."

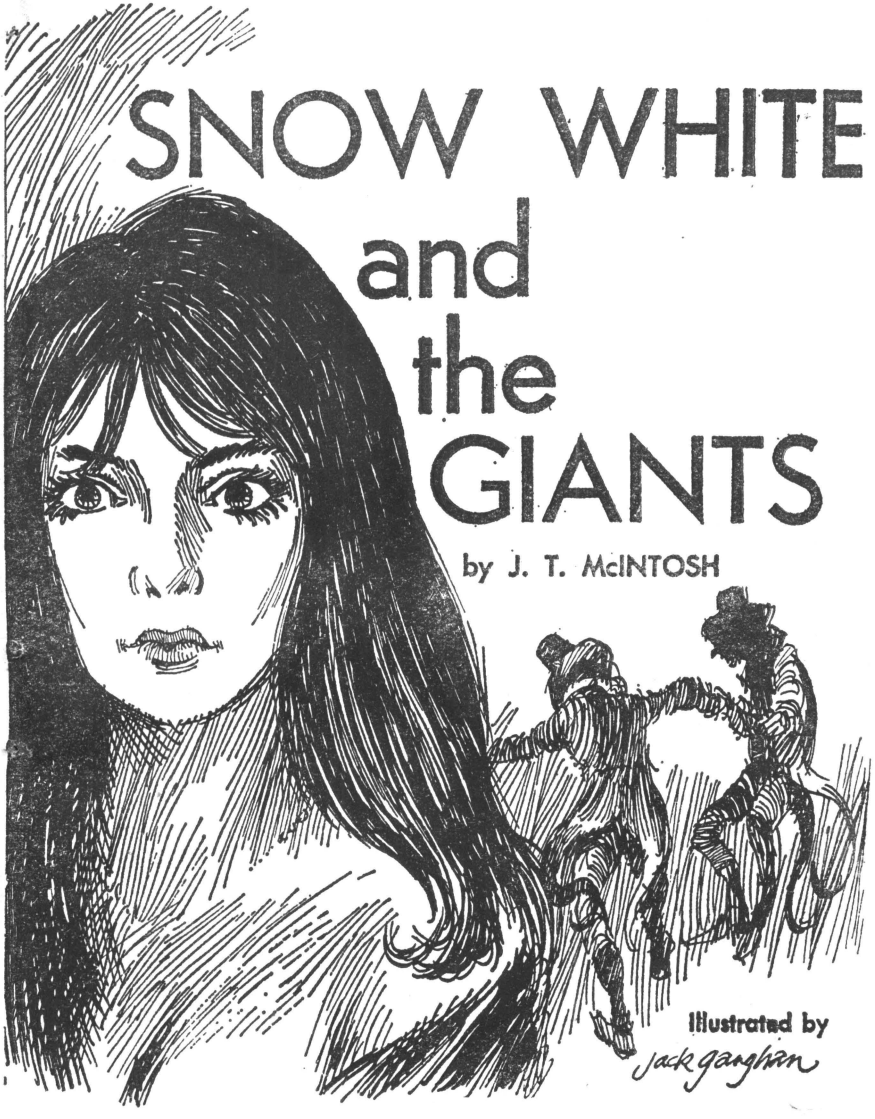
"Yes you can," said Chalmers heavily."

"We all can. We have to."

END

SNOW WHITE and the GIANTS

by J. T. McINTOSH



Illustrated by Jack Gaughan

Strange girls! Their clothes vanished from time to time, and their home was—nowhere!

Lunching at the Red Lion on roast beef of Old England, I glanced out of the upstairs window and saw, across the road, a girl in a pink suit.

A moment later I choked. A morsel of meat went down the wrong way, and for a second or two, fighting for breath, eyes streaming, I couldn't see anything.

When I could see again she was just a girl in a pink suit walking along a narrow street in a quiet town, possibly the quietest country town in England. I went back to the roast beef. What I had thought I saw was a trick of the sunlight, obviously.

Many remarkable and some impossible things had been attributed to the sun in the last month or two, since a preternaturally hot summer took England by surprise. A hot summer always took England by surprise. When Byron wrote of the English winter ending in July to recommence in August, he wasn't coining an epigram. He was merely stating the obvious.

But this year . . .

In Shuteley we weren't concerned with things that happened in London, Liverpool or Leeds. In places like that anything could happen. When we heard that three Socialist M.P.s had turned up at the House of Commons dressed in sandals and shorts, we sniffed and decided to vote Tory next time (as we did anyway).

In Shuteley, however:

The river was so low that about four miles upstream you could walk across, something which had never happened before in the history of Shuteley — which went back to the Ark.

We had the first-ever traffic jam in the center of town, and it was caused by a mini-car sticking in melted and churned-up tar.

A poacher claimed in court that the trout he took from a pool was not only dead, but already cooked. Although this was agreed to be the tale to beat all anglers' tales, he was discharged without a stain on his character (except those which were there already).

The hot summer was not, we were told, caused by anything of any permanent significance. Next year the temperature would probably be normal. A combination of factors, said the meteorologists (and they'd go into a wealth of detail if you gave them half a chance) was keeping the temperature up and the rainfall down. Such conditions might not recur for two hundred years.

Every year I could remember, and I could remember about thirty, plus a few more about which I had vague childhood impressions, people had complained about the poor summer. Now they complained about the hot summer.

The dining room at the Red Lion,

directly above the bar, was the pleasantest room in Shuteley, and that was probably why I nearly always lunched there, in spite of the food. It had windows on three sides, a high roof, oak stalls which insured quiet as well as privacy, spotless linen and middle-aged waitresses who afforded no possible distraction. It was the kind of room you often find in a very old town, not aggressively modern, not dating back to Magna Carta — a room which had been many things in its time, which had been modified and renovated and redecorated time and again, but never until it cried out for it, which had been left alone apart from cleaning and painting for at least thirty years.

Also, it was never too hot. You had to say this for solid old buildings — there wasn't much they could not keep out. I sighed as I finished the apple tart. And I wished . . .

I wasn't old. I was thirty-three. I was married to a pretty girl nine years younger. As manager of an important insurance office, I was probably one of the three most important men in Shuteley. I had no money worries, no health worries, no children to worry about, no relatives to worry about, except Dina and a mother in a mental home. And by the time people are in a mental home and so far gone that the medical staff advises you not to visit them, there's certainly no point in worrying about them.

I was probably envied. I couldn't be sure, because a young boss has to be careful. He can't be too friendly, or people take advantage.

I was pretty solitary and old before my time.

And I wished something would happen.

I'd heard a story about the two-year-old son of the principal English master at the Grammar School. The infant had been at his first kids' party, and he didn't like it. He was found under the Christmas tree, crying his eyes out. Asked why, in the middle of all the fun and games, he wasn't happy like everybody else, he said: "I'm so terribly, terribly bored."

Well, a kid like that was only repeating what he'd heard at home. Poor kid, he thought it was impressively grown-up to be bored.

I wasn't two. I wasn't bored, exactly. I just wanted something to happen, sure that when things settled down afterwards they couldn't be worse and might easily be better.

And something happened.

II

When the waitress said there was a phone call for me, I was neither surprised nor interested, even when she said it was long-distance.

But when I picked up the phone in the office and found the call was from Cologne, I certainly wondered. No senior executive of FLAG was likely to call me from Cologne, in such a hurry that the call had to be put through to the Red Lion.

And when I heard Jota's voice, all sorts of feelings hit me all at once.

I hadn't seen him for two years, not since the row. I'd been quite glad not to see him, naturally enough,

and yet I had missed him. He was my cousin. He had also been, perhaps still was, my best friend. I was not entirely sure I liked him, but you don't have to like your best friend.

"Val," he announced, "I'm coming back."

"Permanently?" I asked, without wild enthusiasm.

"Hell, no. But there's been trouble here."

"The usual trouble, I suppose."

"Well, apart from that, her husband's dead. No, nothing to do with me, of course. But *she* thinks . . . anyway, I'm coming home for a while. Can I stay with you?"

"As to that, Jota," I said cautiously, stalling, "I'm not altogether . . . I mean —"

"Oh, that business is finished," said Jota airily. "Never began, really. Still, maybe . . . I do see your point. I could go to Gil instead. Not much risk of trouble there." And he chuckled.

Then he said: "I suppose it's hot in Shuteley too?"

"As Hades."

"Anyway, it must be cooler than it is here. I'll fly home. Expect me some time tomorrow."

And he hung up.

Jota and Gil Carswell and I had been the Terrible Three of the Third at the Grammar School. In the Fourth, Fifth and Sixth we remained inseparable, but only one of us remained Terrible. Maturity had made Gil morose, engulfed me in respectability, and made Jota more Terrible than ever, especially after he invented sex.

Once Jota had been Clarence Mulliner, but the name was abandoned, unwept and unsung, from the day a science master dubbed him J.O.A.T.-A.M.O.N., for Jack of all trades and master of none. For about a week he had been Joatamon, and then in the way of nicknames, convenience had made him Jota.

I paid my bill, crossed the road to the office, and there I found a crowd around old Tommy Hardcastle, who was trying desperately to explain something and getting nowhere.

"Break it up," I said coldly.

Nobody budged.

"But Mr. Mathers," said Wilma Shelly, "he says he saw — "

"I did see her," Tommy said eagerly. "As clear as I'm seeing you, Mr. Mathers. She was walking along the street, right past the front door. Not six feet from me. She had a pink suit on —"

"And she didn't have it on," said Sayell, who fancied himself as a wit and was half right. "She was walking along the street in the nude with a pink suit on."

"That's right," said Tommy, relieved to be understood at last, and the sniggers swelled.

A tall, thin youth from the accounts department, who always tried to settle everything to the last decimal part of a penny, said: "She was wearing a see-through dress, Tommy? Lace, maybe?"

"No, it was an ordinary pink suit, but sometimes it wasn't there. I mean . . . " He floundered on, and the kids chuckled, and for the time being I didn't stop them.

I had seen the girl too. And I had thought, just for a moment, as she turned and glanced across the street, that she was wearing a pink skirt and giving away everything above her waistband free. The impression had been strong enough to make me choke.

Of course in such a summer there had been some startling sartorial spectacles. I wouldn't have turned a hair if the girl had been wearing a bikini, because all over, that summer, even in Shuteley, conventional ideas about when and where to wear what had been tacitly dropped. Even policemen were allowed to wear shorts, and sometimes only shorts.

But long before this remarkable summer, the world had decided it wasn't ready for the topless dress. And that wasn't all. If the girl had been casually strolling along the street in a topless dress, I'd have goggled my eyes but I wouldn't have choked. It was the abrupt change before my eyes, like a piece of montage in a movie, that hit me.

"Now you see it, now you don't," Sayell was saying, working hard for more laughs.

Although that was exactly what I was thinking myself, I came down sharply on Sayell and the rest of them, sending them all back to their desks except Tommy, who went to the door.

"I did see her, Mr. Mathers," Tommy insisted.

"Of course you did, Tommy."

I went to my private office, thought for a moment, shrugged, and started work, trying not to give the incident too much thought.

The Shuteley branch of the Fire, Life and General Insurance Company—usually known as FLAG—was unique in its way. Shuteley, situated in the approximate middle of England, was a fair-sized old-world town, yet there was only one insurance office that counted. Ours.

This was almost entirely due to the cunning and villainy of one Amos Hardy, an old rogue who died in 1913 at the age of 108. As a young man, he set up his own insurance company in the town, with no capital and no connections. It was said he had not been above fire-raising in the early days when insurance was a more adventurous business than it is now. After 1909 every fire insurance company had to deposit £20,000 with the Board of Trade before it could do business — but by that time, having made hay while the sun shone, the wily old scoundrel was making the law and not obeying it more than he ever did.

He got such a hold on insurance in the town, did old Amos, that by the time he died nobody for miles around knew that other insurance companies existed. Of course, his business was eventually taken over by FLAG, a big national firm, but Amos had done his work so well that even in the sixties any agent of any other firm trying to drum up business in Shuteley was wasting good expense money.

That was why, in a sleepy country town that had more of Old England in it than most — we still had a village green with a pump, surrounded by timbered houses in which Queen Elizabeth might have slept, but had

not — there was an insurance office the size of a young factory.

One of the girls had to go to the bank, and I gave her a message for Gil Carswell, who worked in the local branch of the Midland Bank, merely telling him that Mr. Mulliner would be arriving the next day.

She had just left the room when the phone rang. My calls were vetted: this was one I had to take. I announced myself.

"Sheila here," said the phone, rather starkly.

"Yes, honey?"

"Dina has locked herself in her room."

I didn't manage to place the crisis, though clearly there was one. "What about it?" I said.

"Have you forgotten, Val,? The electrician's here. Mr. Jerome. He has to get into Dina's room."

"Well, tell her to come out."

Sheila sighed in exasperation. "There is now no further competition for the silliest suggestion of the month."

"Well, I suppose you did tell her. Tell her again. Make her come out."

"Break the door down?"

I was exasperated too. "If you have to."

"A great heavy teak door? With my own fair hands? Hardly, Val. Mr. Jerome would have to do it. And then —"

"Yes, yes, I know." And then it would be all over town that Dina Mathers had tantrums and locked herself in and doors had to be burst open. "What did she say," I asked, "when you told her to come out?"

"She said," Sheila said evenly, "that she was scared of the fairies."

"The what?"

"You heard. Last night she saw fairies at the bottom of the garden. So she's staying in her room. They may be good fairies, but she isn't taking any chances."

I didn't prolong the discussion.

"All right," I said. "I'll come."

Sheila and I got along no worse than most imperfect marital partnerships. We might have got along a lot better — Sheila certainly thought so — but for Dina.

Dina was my kid sister, tiny, seventeen, as pretty as a picture and sunny-tempered with everyone but Sheila. One reason why I cracked down so hard on anyone who made fun of Tommy Hardcastle was because, although Tommy and Dina couldn't be more different in every other way, they had one thing in common . . .

I slipped out as quietly as I could, because it never does an office any good when the boss goes out and everybody knows it isn't on business. I took the car from the firm's car park and drove out past the Grammar School . . .

. . . And stopped. A hundred or so boys between thirteen and fourteen, all wearing blue shorts, filled the road.

The Grammar School was four hundred years old. The school field was a hundred yards along the road, on the other side of it, and there was no changing accommodation. So the kids changed at the school, crossed the road to the field, and came back after sports.

The arrangement, or lack of same, was typical of Shuteley.

After all the boys had crossed, I drove past the castle across the Old Bridge and turned into the track which led to our Queen Anne house about a quarter of a mile beyond the town boundary. The track also served a few farms farther on.

Sheila, in a paint-speckled sweater and jeans powdered with plaster, had evidently been tidying up after the electrician. She was a slim 24-year-old blonde, and I had not married her because she was the ugliest girl in Shuteley.

"All right," she said grimly. "You shift her."

"You didn't . . . say anything, honey, did you?" I asked tentatively.

She knew what I meant. "I told her the electrician had to work in her room, that's all. And she talked about fairies."

I sighed. Dina just couldn't see why I wanted Sheila around, and never would. What did I want with another girl when I had her? And Sheila, though she had no deficiency of understanding, was driven quietly desperate by the way Dina, the moment my back was turned, became mulishly, deliberately obstinate as only a grown-up child could be.

I didn't see Mr. Jerome, who had found a job to do elsewhere in the house. I went up to Dina's room, Sheila at my heels, and tapped on the door.

"Dina, honey," I said.

"Val?" came Dina's voice, surprised and slightly, but only slightly, apprehensive. "What are you doing home at this time?"

"You have to come out, honey," I said patiently.

"No. I'm scared of the fairies."

"Fairies don't do you any harm."

"How do you know?"

"Dina, you didn't really see anything at all, did you?"

"I saw the fairy ring. In the wood. Didn't Sheila tell you? I'd have told you this morning, only you were gone before I got up. I thought Sheila would have told you."

No one could be as innocent as Dina when she was trying to make trouble for Sheila.

"Anyway," I said, "you've got to come out."

A brief pause, then: "I can't. I'm not dressed."

"Then get dressed."

Triumphantly: "Sheila took all my clothes away."

Sheila's eyes met mine. She didn't have to tell me that any clothes she'd taken were to be washed.

"Come out, Dina," I said.

There was silence.

Sheila held my gaze steadily. "This is what I have to put up with all day and every day," she was saying, without uttering a word. I didn't say anything either. She knew what I was thinking too. What could a man do? There wasn't anywhere else Dina could go. Our father was dead, and our mother . . . well, to give Sheila her due, even in our bitterest rows she never brought up the subject of Mary, who was in an institution, who was the reason why Dina was the way she was, who was the reason why Sheila and I had no children and never would have.

At last the door clicked and Dina came out. Exactly five feet, dark-haired, she had the unsophisticated beauty that sometimes occurs in the feeble-minded. She also had a highly provocative body that would create a lot of problems soon, though they hadn't caused trouble yet. Not all men could be expected to keep their hands off such an attractive creature simply because there was a short-circuit in her head.

She wore a faded cotton dress far too small for her, split down the front and unfastened at the back, because there was no possibility of getting the buttons to close. Her feet were bare.

"Now listen," I said more harshly than usual, "I have to get back to work. Will you promise, Dina, word of honor, to go to the summerhouse and stay there till I get home again?"

"But the summerhouse is near the wood."

"Fairies only come out at night. You never saw fairies in the daytime, now, did you?"

She frowned. It was quite true that she had never seen fairies in the daytime.

If she gave her word she would keep it. She was trying to figure out a loophole that would enable her to do what she liked without exactly breaking a promise. If she could find one, she'd promise.

"Word of honor?" I insisted.

"Oh, all right," she said. "Now?"

"Now."

She scampered downstairs, quite content again already. She would be able to stay in the summerhouse all afternoon, talking to herself or playing with the dolls she had there, without any feeling that she was being confined, or even that she'd done anything to be confined for.

On the point of telling Sheila that Jota was coming, I decided it would be wise to wait for a better moment. "See you, honey," I said and leaned forward to peck her cheek.

She leaned back, avoiding me. "Honey," she said. "Everybody is 'honey.' I'm 'honey,' Dina's 'honey.' Am I like her? Do you think of me like her?"

I didn't want to get involved in anything. "Bye, Sheila," I said and went back to the car.

I had just crossed the Old Bridge when the engine coughed and died.

I cursed silently. When I had left the car in the lot I had known perfectly well I'd have to stop at the filling station on my way home, and I would have, if I hadn't been called out unexpectedly to deal with a domestic crisis.

I was about as far from a garage as I could be in Shuteley. The street I was on was so narrow that planning permission for garages had been refused, there being no room for cars to stop and fill up. I'd have to walk back to the office and phone a garage to pick the car up.

I left the key in the car and started walking. No one would touch the car, not in Shuteley. Kids might, but the car would be picked up before the Grammar School came out.

In the early afternoon, on the outskirts of town, there was very little traffic and few pedestrians, for there

were no shops out here, and Shuteley was not on the main route from anywhere important to anywhere else. In fact, there was nobody else in sight but one girl, and my eyes rested on her and didn't register a thing, because I was thinking about Dina and Sheila and me and wondering gloomily if there was any solution to the age-old problem of two women in one house.

I was also envying Jota, who got his girls on a conveniently temporary basis (invariably stunning and wildly cooperative girls at that) and who got them in every country on the map, plus a few that weren't.

All in all, I was pretty sorry for myself. It wasn't my fault that my father had married a woman who was already close to insanity and went closer. It wasn't my fault he escaped the problems he had created by dying. It wasn't my fault Dina was the way she was. It wasn't my fault Sheila and I didn't dare have children.

It seemed to me that my problems, unlike those of everybody else, had been created for me and were no fault of mine.

Suddenly I blinked and looked again at the girl coming toward me.

III

She was not the girl in the pink suit. Although I had seen that girl only across the street and from a second-story window, one thing I was sure of was that she had blue-black hair. This was a near-blonde of about eighteen, wearing a green dress. Or was she?

At the moment, beyond all doubt, she was. She was very tall and not particularly attractive — just a girl who would not as a rule attract a second glance, unless on account of her height.

She came level with me, not paying the slightest attention to me. And that must have been an act, because when a girl passes a man goggling at her with all three eyes, it just isn't possible for her not to notice him at all.

And as she passed me, it happened again. Not the same thing — it never seemed to be the same thing. This time, side-on, I saw palely-tanned flesh from ankles to armpit, uninterrupted.

When she had passed, I swung round, of course. However, whatever I'd seen or thought I'd seen, all there was to be seen now, though I watched her out of sight, was a very tall girl in an ordinary green dress, wearing ordinary shoes. The only thing that was slightly unusual was that I could swear she wasn't wearing nylons.

She did have, too — and this was the first time I noticed it — a certain baffling elegance, or smartness, or neatness. As I said, she wasn't a particularly pretty girl, and though not fat, she didn't have a sensational figure. Yet there was something about her that reminded me of the difference I had vaguely sensed when Sheila had pointed out to me a woman in a Paris creation and a woman trying hard to look as if she was in a Paris creation.

Whatever it was that women wanted to have when they dressed

up, this girl had it. Even if she had very little else to contribute.

As I walked on, for a moment an old shadow darkened my mind. Mentally I was normal, indeed well above average. I'd been told after physical and psychiatric examinations that there was no trace of psychosis or anything in that terrifying area, no brain damage, no malformation. Yet no one with a background like mine could escape occasional grim doubts and fears.

I dismissed the idea for a moment, only to find it creeping back when I remembered that the only other person who had seen this kind of phenomenon was Tommy. Maybe this was something that happened only to people like Tommy and Dina and me.

Tommy had seen something — once. I had seen something — twice. And Dina had seen something. Fairies, she said. Or rather, a "fairy ring."

Nobody else, apparently, had seen anything.

I went back to the office, called the Central Garage and gave instructions about my car. Then I worked hard for all of an hour.

When the phone rang I answered absently, still able to concentrate fairly successfully on insurance — for the last time in weeks.

"Val," said Sheila, "now the electrician has to get into the summerhouse."

"Oh, hell," I groaned.

I should have known. The wiring in our house dated back with the rest of the house, I strongly suspected, to the time of Queen Anne. I'd probably have let it be as long as it worked, but a FLAG executive from London, paying a semi-social call, happened to notice the wiring in the house and hinted strongly that it was hardly the thing for the local insurance manager to have an electrical system in his own house that constituted a greater fire risk than a moat filled with crude oil. So we had called in Mr. Jerome.

The cable out to the summerhouse was probably more dangerous even than anything in the house itself.

Obviously Sheila had already asked Dina to let the electrician in. In childish triumph, Dina saw how to score over Sheila after all. Dina had promised to stay in the summerhouse till I got back. So she'd keep her promise. Come hell or high water, she'd barricade herself in and stay where she'd promised to stay.

"I can't come again," I said. "Can't he come back tomorrow?"

"He says if he doesn't finish today he won't get back for a week."

"Well, get her out," I said in sudden irritation. "Don't keep calling me."

"She's your sister."

"Sure, but you're there and I'm here. Surely you can outsmart someone like Dina?"

"Get her out, you said?" Sheila retorted in a hard voice. "Okay. I'll get her out. I'm bigger than she is, and older, and much tougher. I'll get her out. And I'm going to enjoy it. I'm going to have the time of my life."

There was something vicious about the chick as she hung up.

I didn't care. I was fed up with Sheila and Dina. Why couldn't either of them, just once, in their different ways, leave me alone? Sheila was always with me, Dina was always with me. I couldn't settle down to my work any morning or any afternoon with the slightest confidence that I wouldn't suddenly be called upon to deal with a Sheila problem or a Dina problem.

Rather wildly, I thought: why couldn't Sheila and Dina fight to the death so that there would be only one of them left? I could render unto Sheila the things that were Sheila's only if Dina didn't interfere — and vice versa.

But could I put Dina in an institution? No. Apart from anything else, she was too innocently reasonable. Even if I wanted to do it, I doubted if Dina could be certified. She wasn't even feeble-minded in the usual sense. In many ways she was quick and shrewd. In no way was she slow. She was quite a bright eight-year-old. Only she happened to have a body nine years older.

Grimly I forced myself to work. But my heart wasn't in it.

IV

Business with an agent kept me at the office until about seven, and when we were through I took him for a drink. Since he didn't like noisy pubs we went to the the cocktail lounge, The Copper Beech.

The place was empty when we entered. People going for a drink on their way home went to the pubs. The Copper Beech, all glass and chromium and plastic and inflated prices, catered mostly for couples and parties having a night out, from eight o'clock onwards.

The agent gulped his beer and departed, and I finished my pint of bitter in more leisurely fashion. I was downing the last drop when a party of kids in their late teens came in, quietly for kids, looked around and marched to the back.

They were all in shorts and blouses, and for a moment I thought they were Grammar School seniors. Then I saw that they were all about eighteen or over, too old and far too tall to be school kids. All the men were over six feet, and the girls not much less.

With merely a glance at them I was rising to go. In Shuteley in summer we saw hundreds of campers, hikers and cyclists.

Then I saw that one of the girls was the girl in the green dress, and another, the only one who was not tall, had blue-black hair.

I ordered another pint and sat down again. The bartender rapped on a partition behind him and a waitress in a black frock came to attend to the new customers.

There were eight boys and eight girls. They weren't noisy, and they evidently intended to keep strictly to themselves, for they sat together in a corner round one table and only one of them spoke to the waitress, giving the order. The others didn't even talk among themselves until she left them. Then they started talking and laughing like any other kids, only more quietly, as if afraid they'd be overheard.

The girl I had seen wearing the extraordinary green dress was now clad like the others. She had not looked at me and perhaps wouldn't have known me if she did, because earlier, in the afternoon, she had gone to a lot of trouble not to look at me at all.

Now I saw that they weren't exactly like any other group of young campers after all.

I wouldn't have noticed anything out of the ordinary if I hadn't had a spur to my curiosity. Nobody else did. As it was, I saw for the second time a curious immaculacy which seemed to be common to them all. Every one of these kids was a glossy, spotless, highly-polished model of a teenage camper.

I thought about that and remembered where I'd seen the same kind of glossy unreality before.

A pretty girl *really* on a jungle safari might conceivably spend most of her time in a leopard-skin swimsuit or a white suntop and shorts, though it's unlikely. But unlike actresses in safari movies, she simply could not go on day after day looking as if she'd just stepped from her dressing-room.

That was it. That was exactly it. The boys in this group had every hair slick in place. Their shirts were dazzling. There wasn't a spot even on their shoes. The girls weren't in the usual motley collection of loose sweaters, tight sweaters and rumpled shorts. Everything anyone wore had been made to measure, and there wasn't a crease to be seen among the lot of them.

A small thing? Certainly. A small, impossible thing. Did these kids have dressing-rooms right outside The Copper Beech?

Two or three of the girls were pretty, and one had a one-in-a-million face. Out of any large group of girls you could pick a dozen of more or less uniform prettiness, attractive through the possession of firm young bodies and regular features, well-shaped eyebrows, small noses, soft mouths. But it would be a matter of chance if, even in a hundred thousand girls, you'd find one with both the individuality to make her unmistakable and unforgettable and the beauty to go with it.

One girl had the kind of face that could launch a thousand nuclear submarines.

She had blue-black hair, very white skin, and was probably the girl who for me had started it all, the girl in the pink suit. But I couldn't be sure. Apart from her beauty, other things set her slightly apart from the rest. She was only about five feet four, easily the smallest in the group. She was pale and all the others were tanned. She might have been a little older than the others. She was treated with a certain slight deference. And despite what I've been saying about them, she made the others look untidy.

I sipped my beer, not inviting conversation with the bartender, who was busy anyway. As it happened I'd been sitting facing the far corner when the kids entered and could therefore go on looking in their direction without showing undue curiosity.

I managed to pick up a few words. They were talking about "a duel." A duel, they thought, would be fun. Some argued, said it was a crazy idea.

Evidently they'd seen the plaque on one of the old houses round the green. One of the last duels in England had been fought on the village green, between the squire and a wealthy traveller who both fancied the same serving wench. Neither of them got her. They were both fatally wounded, and for thirty years or so (until the incident became romantic, quaint, something to be proud of) the affair was hushed up.

There was some reference to "Greg", who was not present. (So there were more of them). And glances were cast at Snow White when he was mentioned, puzzling glances which I couldn't fathom.

Snow White and the giants, I thought. *Snow White is the fairest in the land.* She had blue-black hair, too. Snow White, dwarf among giants.

Watching as casually as I could, I noticed something else.

Nobody smoked. And nobody drank beer.

It makes sense not to start smoking now that we know what we know. But could you get sixteen sensible kids all in one group?

As for the beer question . . . quite a few of the youngsters had soft drinks. Others had what looked like cocktails: sherry, port, whiskey, rum. Obviously they were not teetotallers.

Out of sixteen campers, surely at least three or four would drink beer on a hot summer evening?

I had finished my beer again. It was a small moment of crisis. Was I to walk boldly up to Snow White and the giants and say: "All is discovered. You are not what you seem," or buy another beer and stay quietly watching them?

I did neither. I stood up to go.

And as I stood up, Snow White glanced at me and recognized me. I saw it in her face, although the moment after recognition she looked casually around as if she'd merely been giving the place the once-over.

But I knew I wasn't mistaken.

One thing was certain. That expression, half startled, half interested, had not come over her face simply because she had seen me in the upstairs window of the Red Lion. For one thing, I hadn't seen her look up. For another, it wasn't just an I've-seen-you-before-somewhere expression.

She *knew* me. She hadn't expected to see me, but the moment she did, she thought at once: *That's Val Mathers* . . . and a lot more.

I wished I knew what the lot was.

I'd certainly have gone over and spoken to her, but for the fifteen giants. You don't use the "Haven't we met before?" routine when the girl has fifteen friends with her.

Instead, I went home.

As I closed the garage door after driving home, Dina rushed up to me. She was still in her Cinderella dress, but her arms and legs were swathed in bandages which she had obviously put on herself.

"She hit me," Dina panted. "She hit me and scratched me and threw me out."

"Now, Dina — " I began.

"She got in through a window and pushed me and hit me and scratched me, pulled my hair; and I couldn't stay in the summerhouse."

"Forget it, Dina," I said wearily.

"It was her fault I couldn't keep my promise. She — "

"Dina, I'm not interested," I said firmly. "You knew there was a man working in the house. You knew he had to get into your room and the summerhouse later. There was no need for any trouble if you'd done as you were told."

"I do what you tell me, don't I? You told me to stay in the summerhouse, only she wouldn't let me."

At that moment Sheila came round the front of the house. She looked at me uncertainly, ready to explain, or fight, or refuse to say anything, depending on my attitude.

"Dina," I said, "go and get dressed."

"Aren't you going to — "

"I'm not going to do anything. Go and get dressed. Now. And no argument."

Hurt, Dina not only went but stayed in her room the rest of the evening, sulking.

Sheila and I had an unusually pleasant evening on our own for once. I opened a bottle of Rudesheimer and then a bottle of Niersteiner, and we got pleasantly merry.

At last I thought the circumstances were right and told Sheila that Jota was coming back to Shuteley.

They weren't right enough. Sheila's face set hard and she said: "For how long?"

"He didn't say."

"He's not staying here."

"No. He's going to ask Gil — "

"If he visits this house, I'll stay in my room till he's gone."

"Sheila, he promised — "

"*He* promised," she said fiercely. She stood up and began to prowl about, clenching and unclenching her hands. Sheila didn't often hit the roof, but when she did she was inclined to go right through it. "I never told you why I was so wild that time, Val. Not because Jota made a pass at me. If a man like him never made a pass at me, I'd know that I'd better take up tatting. Not even because he used your trust to get me in a situation where those horrible things could happen. But because when you came back, when you walked in on that . . . "

She had worked herself up to such a pitch that for the moment she couldn't go on. Her color was high, her chest was heaving, and I thought it was a long time since I had seen her look so marvelous.

Of course I'd never forget that time when I found Jota quite crudely trying to rape my wife. It had been horrible and it had been incredible. I'd always thought, not so much that Jota would never touch Sheila because she was my wife as that if he did feel it coming on, he'd tell me. "Val, I want Sheila. I'm going to have her." That was Jota's way. I'd been afraid of that.

I'd never thought for a moment it would happen the way it did — Jota, having got me out of the way

by a brazen lie, which I discovered only because the person I was going to see happened to meet me in the street, fighting coarsely with his best friend's wife, his cousin's wife, like a sex criminal.

Sheila, under control again, broke into my thoughts. "You were surprised, weren't you?" she said.

That was an understatement. "I couldn't believe it," I said. "But when I did, I — "

"Yes, we're not talking about that. That was all right. You threw him about so efficiently I was quite cheered up. Never thought you could do that sort of thing, Val. I was proud of you then. And I didn't mind seeing Jota hurt, not in the slightest. That bit of it was fine . . . Let's go back a bit. You were surprised."

I waited uneasily, vaguely sensing what she was getting at.

"You were surprised because I was fighting," Sheila said. "You were astonished because I was being half killed and still went on resisting. You were certain that Jota merely had to cast a lustful eye on any girl, and she'd immediately surrender with a sense of profound gratitude."

It was true, but I couldn't admit it. "I never said — "

"Val, I know perfectly well what you never said. I also know what you did say. Afterwards, when we had to talk, when we had to pretend to be civilized again and work out whether Jota was to be charged with assault, or what — that's when you gave yourself away. All you were concerned with was Jota. *He* had to promise. *He* had to go away. *He* was the one to be convinced beyond a shadow of doubt that nothing remotely like that must ever happen again. And when *he* accepted all that, you were satisfied."

I just looked back at her.

"Nothing about me," she said bleakly. "You couldn't trust me. If Jota tried again, next time I'd obviously leap into his arms."

"I never said — "

"Oh, Val, who cares what you never said? Your whole attitude made it a hundred per cent clear. Jota was the one to handle somehow. I didn't matter at all. Whatever Jota decided was as good as done. You had to work on Jota. I was merely a pawn in the game, if that."

I couldn't argue convincingly, because she was working a vein of truth. No girl ever said no to Jota. No girl ever could. Whoever she was. Whatever the circumstances. And it was entirely correct that my surprise on that horrible night had been due largely to Sheila's desperate resistance. I frankly couldn't understand that. Why had a girl who had never resisted me resist Jota?

A diversion was available. "Why did you wait two years to tell me this?" I asked.

She sighed and sat down, crossing her legs. All the fire had gone out of her. She wasn't going through the roof this time. "Some things you can't take back, not ever, even if you want to. Two years ago, we might have been on the threshold of a great new understanding. Now we know we weren't. You won't have children, though I ache for them.

And Dina's getting worse every day."

I was grateful to her for phrasing the problem of Dina like that. "Dina's getting worse every day." If she'd wanted to be venomous, there were a thousand other things she could have said about Dina, seven hundred of them not unjust.

"Sheila," I said, "I like you."

She smiled faintly. "I know. You couldn't quite say 'love,' because you're being sincere tonight. And I put you off your stroke earlier when I stopped saying 'honey.' You'll never call me 'honey' again. You'll be careful, cautious, like a good insurance manager, and from now on you'll call Dina Dina and me Sheila."

There wasn't much to say to that, so I went for a brief stroll.

V

Remembering Dina's story about fairies in the wood, I walked down the garden, not expecting to see anything at all.

The river Shute, meandering tortuously across flat country and through woods, half enclosed our house in the inner walls of a W bend. As far as I knew the house had never been flooded, though the river had been known to reach the garden.

Behind our garden, in the apex of the W, was a small patch of trees and scrub which would have been very popular with courting couples, but for the fact that they couldn't get into it. The river curved round it, and on the land side the only entry was through our garden. And we had high, thick hedges.

It was a piece of wasteland which was of no use to anybody. The local landowner had tried to sell it to us, but we didn't want it. Anyway, as Dina said with childish shrewdness: "Why buy it when it's ours anyway?"

At the fence at the bottom of the garden I stopped.

Was it imagination, or was there a faint glow in the copse?

It wasn't a fire, there was no moon, and it could hardly be fairies — though I now understood Dina's story. To her, what else could a glow in the copse at night mean but fairies?

I climbed the fence and advanced slowly.

The glow was very faint and would never have been noticed on a night which was not completely dark. The odd thing about it was it didn't seem to have a source. There was nothing but the glow. I walked through it, stood in the middle of it, looked in all directions, and there was nothing but a faint blue radiance.

I ran back to the fence, climbed it and hurried back to the house.

Sheila was in the bedroom, in a shortie nightdress (in this extraordinary summer, most people wore less than that at night), about to go to bed. We had left a very important discussion hanging in the air. But this was something I had to share with somebody, and Sheila was my wife.

"Sheila," I said breathlessly, "I want you to come and look at something outside."

"Where? Not in the garden, for heaven's sake?"

"In the copse."

She laughed in protest. "Like this?"

"It'll cool you down. And no one can see."

On the point of protesting further, she saw I was deadly serious and realized it would probably be quicker in the end to humor me than to argue with me. She put on shoes and we went down the garden.

I was afraid it was going to be like those frustrating incidents in detective stories where the hero takes the cops to the murder apartment, only to find the body's gone, the signs of a struggle have been removed, and even the bloodstains have vanished.

However, as I helped Sheila over the fence she saw the glow and suddenly became reluctant to go further because she thought there *was* something instead of because she thought there wasn't.

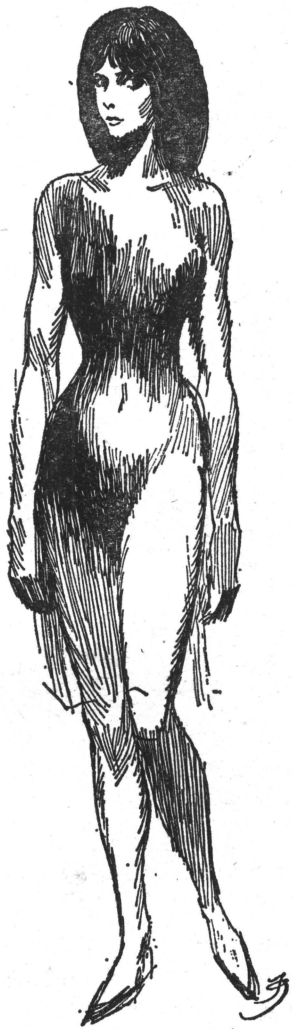
"What is it?" she whispered, making no move forward.

"I don't know. You do see it?"

"Of course I see it. But what is it?"

After a moment or two she came further into the copse with me, and together we tried all the things I had already tried alone — looking among the branches for the source of the light, at the sky through the leaves, at the still river beyond, under the bushes.

Sheila's reaction was exactly the opposite of mine. The less I understood the glow, the more I wanted to find out about it. More practically, perhaps, Sheila satisfied herself that



it was a mystery and was then quite prepared to give up.

"Well, we've looked," she said reasonably. "There's nothing else to see. Whatever it is, it's staying put. Let's go to bed and look in the morning."

And that's what we did. I wasn't sorry, though, that I'd made Sheila come and look. I wasn't imagining things. There was a radiance in the wood with no source.

Later, Sheila wanted to talk about something, but it wasn't the radiance.

"I did hurt her, Val," she said, watching me. "I'm bigger than she is and a lot stronger. I thought, well, after all, she's a naughty kid and she needs a lesson. I meant to beat her up, and I thought it was going to be fun, like that time when . . . "

She stopped, and although I had followed her thought I said nothing. She was thinking of that other time when I had thrown Jota all over the place, fighting mad, hardly knowing what I was doing; and Sheila had watched and been quite happy about it, because it was me who was doing the throwing and Jota who was being thrown, and because of what had happened before that.

But Dina wasn't quite the same.

"It didn't work?" I said.

"No."

"I didn't think it would."

"Well . . . don't you mind? Was I terribly wrong to do what I did?"

"I don't know. I don't suppose so. When any kid's on the wrong track you talk to him, try to persuade him, and I guess if you don't try giving him a good hiding you're missing a bet. But you can't beat sense into Dina."

"But you don't mind?" Sheila insisted.

"I don't see that it's anything to do with me," I said.

When we got to bed, more friendly toward each other than for a long time, I thought it would be a good idea to do something about it. But nothing happened, and Sheila made no move, merely saying "Good night" in a tone which seemed to contain finality. So a chance was lost, like a thousand others.

VI

Before breakfast next morning I was back in the wood. Sheila didn't come with me. She said that if I found anything I could tell her, and she'd take my word for it.

I found absolutely nothing. The copse was exactly as it has always been, and in daylight no radiance could be detected. By the time it occurred to me to look for footprints or other signs that people might have been there recently, I'd done so much stamping around that the search was futile. Besides, hardly anything grew under the trees, and the thick, springy leaf-mold did not retain tracks well.

When I got back, Sheila merely said: "It must have been some kind of natural phosphorescence. One egg or two?"

"Phosphorescence has a source, like any other light," I insisted.

"Well, look again tonight. I wonder if Dina will be down in the next ten minutes? It's no use calling her, of course."

Nobody at the office mentioned any unusual incidents of the day

before. Being the boss, I didn't hear the gossip. If Sally Henry, my secretary, hadn't been on holiday I could have asked her about the morning's topics. Wilma Shelly, who was standing in for her, was too junior for me to confide in her.

I wasn't a confident boss. I was efficient, of course, or I'd never have reached my present position. But I didn't possess the sheer self-assurance that every good boss has to have, the feeling that he's a boss by right, the unquestioning, unquestioned conviction that things will always be done his way, the right way, the only way.

After an hour's correspondence, there was a lull, and I considered phoning Gil Carswell. But Gil, far less self-confident than me, had not become the boss, and I didn't like to call him at the bank unless the matter was really urgent. That was why I'd sent the message the day before by a girl who had to go to the bank anyway. Gil was terrified of the bank manager, who had always seemed singularly inoffensive. But then, Gil was terrified of everybody and everything.

While I was still thinking about Gil, the phone rang. Aloud I muttered: "Oh, God, not Dina again."

It was Jota. "I'm at London Airport," he said. "Be with you this afternoon sometime. Have you seen Gil since I phoned yesterday?"

"No, but I sent him a message."

Jota chuckled. "Of course. Mustn't disturb him at the bank. The manager would chew his ears off . . . at any rate, such desperate liberties must never be taken. By the way, is anything happening in Shuteley?"

"What would happen in Shuteley?" I said cautiously, wondering if by any chance he'd heard anything.

He hadn't. "As you say. Silly question."

"As a matter of fact," I said, "there *is* something going on. Maybe just a small thing, but something . . . No, don't ask questions. Wait till you get here."

"You intrigue me. Something happening in Shuteley seems like a contradiction in terms. But I can wait. Oh . . . how did Sheila take the great news that I was coming back?"

"Unenthusiastically," I said.

He chuckled again. "Don't worry. I promised. If you remember, I never promised before."

He rang off.

That was technically true, that he had never promised not to make a pass at Sheila. I wondered, however, if anyone but Jota would have considered such a thing worth saying. You weren't morally entitled to stab a man in the back because you'd never promised not to.

As I hung up, Wilma came in. She was breathless and rather indignant. "Mr. Mathers, there's a young man insisting on seeing you, and nobody but you. He looks like a camper, and he's . . . well, the things he's been saying to the girls —"

"Send him in," I said. "Right away."

She looked surprised, but said nothing and went out.

The door opened again and a young Goliath entered. He wore a

white T-shirt and shorts and was obviously one of the giants, probably the biggest of them all. I judged him to be six feet seven.

He had not been one of the giants with Snow White at The Copper Beech.

"Val Mathers?" he said, advancing with outstretched hand. "I'm John Smith."

"Really?" I said politely.

"No, not really, if you insist. But it's as fair a name as any, isn't it?"

"You wouldn't by any chance be Greg, would you?"

He dropped his hand. He was not pleased.

"How in fisk do you know that?" he snarled.

Not pressing my luck, I said: "Where's your camp, Greg?"

For a moment he simmered and then decided to be friends again.

"In a bend on the river about a mile upstream."

I knew the place. It was three-quarters of a mile beyond my house, on the other side of the river, the north side.

He sat down without invitation, looked at me expectantly and said nothing.

He was blond, very good looking, perhaps nineteen or twenty. His accent puzzled me a little. It was not foreign, his speech was very clear, and yet I had never heard anyone speak quite like him. I had not missed those two words *fair* and *fisk*. The natural thing to say would have been "as good a name as any," and "fisk" seemed to be a cussword.

There was nothing strange about his shirt and shorts and shoes except that they fitted better than clothes generally do and looked as if they had just that moment been put on, brand new. But for the giants that was nothing strange.

He was completely at ease, and I was therefore puzzled by his easy manner and sudden silence — as if he expected me to tell him why he'd come.

"Well, Mr. Smith?" I prompted. "Or Greg, as you like?"

"I want to insure against catastrophe in Shuteley during the next twenty-four hours," he said coolly.

"Catastrophe?" I asked.

"Catastrophe."

"In the next twenty-four hours?"

"In the next twenty-four hours. You're remarkably up on the quick-take, Val."

There were lots of openings. I chose one. "You can't do business under a false or incomplete name. John Smith won't do. Greg won't do."

For a moment, for the second time, his eyes gleamed with a feral light, and I knew that this man was dangerous. He didn't like to be balked. Despite his easy manner, he was liable at any moment to become an animal. A huge, dangerous animal.

I tried another opening. "We can always supply better rates for particular contingencies. If you wanted to insure against flood, say — "

He grinned, all easiness and friendliness again. "Flood's unlikely, isn't it? They tell me the river's never been lower."

"Catastrophe in twenty-four hours

in Shuteley," I said, "is unlikely. Another thing, Greg. You're over twenty-one?"

"What about it?"

"If you're not, there are difficulties."

"Do you sell insurance or not?"

"I don't sell insurance, Greg. I arrange it, if it seems to be to the mutual advantage of both parties. Now, let's see — *you* want to insure, Greg? But you don't live in Shuteley."

"No."

"And — in the next twenty-four hours?"

"We're only going to be here twenty-four hours," he said simply, "give or take an hour or two."

"What sort of sum have you in mind?"

"Nothing most. A million pounds, maybe. Perhaps two million."

It was time, I thought, to restore sanity to the conversation. "I'm afraid such a transaction would hardly be practicable," I said. "Although in theory insurance against any contingency is possible, such as rain on a certain day, failure of a crop, or delay in a certain delivery, there are always difficulties in definition, and it takes time to work out policy conditions. It would be quite impossible to draw up a policy within the time specified, to operate . . . "

Greg was laughing, a great roaring bellow of amusement that rattled the windows. "Val, you sound like an old man," he said.

"You're not really serious about this at all, are you?" I said thoughtfully.

He stopped laughing at once. "No. It was just an idea. Quite a most idea, really . . . but as you say, hardly practicable. I just wondered what you'd say."

"Who is the girl," I said abruptly, "whose dress disappears?"

Unsurprised, he answered: "All of them, when they wear luxon."

"Luxon?"

"Well, you see, the idea is . . . it's one of those feminine paradoxes, arising out of the curious way women think. If you're wearing a dress, a perfectly decent dress, and bits of it disappear at times, that's all right. Nothing indecent about it, because it only seems to disappear. It's really there all the time."

"Why does nobody drink beer?"

"We don't like the taste. And it's grossing."

"Grossing?"

"Fattening."

"Greg, *where do you come from?*"

"Here."

"Here? Maybe. But here isn't Shuteley."

"Here," he repeated blandly.

"What's this about a duel?"

Again I had disconcerted and angered him. The red animal light flashed in his eyes.

"Nothing about a duel," he said shortly. "And what do you know about it, anyway? No, never mind."

He stood up and moved to the door. "Sorry you won't do a deal, Val," he said over his shoulder, his composure restored. "But as you guessed, I didn't really think you would. By the way, you know Gil Carswell, don't you?"

"Yes, but how — "

"And Clarence Mulliner?"

"Yes. In fact — "

"In fact, he'll arrive here at 15:10."

He closed the door quietly behind him.

VII

Gil called me from the bank, for the first time ever, and said: "Val, I want to see you right away. Come out for a drink."

"All right," I said. "See you in The Copper Beech."

"That chrome-plated morgue?"

"There won't be anybody there."

"I see. Right. In five minutes."

I left the office at once to walk to The Copper Beech.

At the door Tommy grabbed my lapels in his eagerness to tell me something. "She just passed again, Mr. Mathers. If you hurry you'll catch up with her."

"Thanks, Tommy," I said, released myself and went out into the mid-morning sun.

Fifty yards ahead was the girl in the pink suit. Although I could see only her back, there was no doubt whatever that she was Snow White. Her slim, smoothly rolling hips were only one of the assets of a one-in-a-million shape to go with her one-in a million face; it would have been a crime to cover legs like hers with the sheerest nylons.

One small surprise: I wouldn't have expected such a girl to wear the same outfit two days running.

Since she was alone this time, I'd have hurried after her and stopped her. But it wasn't necessary. Glancing over her shoulder she saw me and, making no pretense that she didn't know me from Adam, stopped and leaned against a lamp standard to wait for me.

As I approached, her shoulders were suddenly bare. This time I saw more clearly what happened, when it happened. Out of the corner of my eye I still saw the lower part of her jacket and her skirt. It was as if my gaze had burned a hole in her clothes.

There were a few people in the street, and some of them were staring. For the most part, however, they seemed to be pretending that they hadn't noticed anything. (This was Shuteley).

When I was ten feet away Snow White's jacket was complete again, but her skirt was abbreviated to playsuit length. Then she wore the whole suit again except for a large circular cut-out round her navel.

Cut-out wasn't quite the right word. Material and flesh merged into each other like candlelight and shadows.

More than her blue-black hair had made me think of her as Snow White. Her flesh all over — and by this time I'd seen quite a lot of it, in aggregate — was pale and creamy, and in this summer that was a rare achievement. None of the giants was pale. Every one of them was tanned, some lightly, some quite heavily.

She was with the giants but not of them.

I stopped. "Hello," I said.

She smiled.

"I'm Val Mathers," I said, "as I suspect you know very well."

I scored a point with this. Her

eyes widened, and she asked: "What makes you say that?"

"You recognized me in the bar last night."

She nodded, admitting it. But she added nothing, admitting no more.

"Who are you?" I asked.

"Miranda."

"Just Miranda?"

Her suit, oddly enough, was not changing any more. Perhaps what one saw depended on the angle of vision. Moved by a spirit of experiment, I stretched out my hand to touch her waist . . .

She struck my hand hard, though without malice. "Wait for an invitation," she said coolly and turned and walked away, to my disappointment. I had expected more from the encounter.

From the back, like the other girl, she wore perfectly normal clothes.

I found Gil in The Copper Beech. Although the lounge was not as empty as it had been the previous evening, only half a dozen people were there.

We sat in the corner where the campers had sat the evening before, and we had it to ourselves.

Gil and I were the same height and weight and at one time had resembled one another. Now he had thick glasses and a permanent leave-me-alone frown, and I hoped I didn't look remotely like him.

Gil could have done anything. That is, he had the theoretical ability to do almost anything. In practice he had achieved nothing and never would.

Being sensitive myself, I understood him better than anyone else except possibly Barbara. But nobody could do anything for him. He couldn't do anything for himself.

The slightest criticism, the merest breath of condemnation, even meant as a jest, deeply wounded him. He was a bleeder. Scratch him, and he bled for days. If he made a genuine mistake, it took him a month to recover from it. But it didn't even have to be genuine. Someone merely had to hint that something, anything he'd done was a stupid thing to do, and he'd start to bleed slowly, silently.

Of course he defended himself. He spent his life and all his vast potential defending himself against attack, when he wasn't being attacked.

I was nearly as sorry for him as for myself. What was the use of being a near-genius when a casual remark by an officeboy could mean a month of misery for you?

Gil had married Barbara, another moody genius, who sketched and sculptured and wrote poetry and flatly refused ever to go further than five miles from the village green. She had roots, apparently.

"What do you know, Val?" Gil asked abruptly, when the waitress had brought our beers. "What do you think is going on?"

I took out a penny. "Let's toss for first innings," I said. Gil lost, and I put him in first.

"A gang of kids has been hanging round the house," he said. "They seem very interested in Garry."

Garry was Gil's two-year-old son. He was an only child and was going to remain so for two excellent reasons. Barbara couldn't have any

more children, and neither — as he had told me one morosely drunken night when we were both feeling sorry for ourselves — could Gil.

"Can I have Dina?" he asked. "She'd be company for Barbara."

So that was it. "Jota's coming," I reminded him. "And he wants to stay with you."

"With us?" Gil was astonished. "You've got a great big house. We only have — "

He stopped.

They had an outside lavatory. The wooden stairs up to their flat were so worn that they looked as if they'd been carved curved. The floors creaked and were uneven.

When houses had been revalued a year or two back, nearly everybody's valuation, including ours, was doubled, at least. Gil's had been halved. Human beings weren't supposed to live in such conditions any more.

Although as a bank clerk Gil didn't make a great deal of money, others in his position, married with one child, managed to live far more comfortably. But neither Gil nor Barbara was remotely practical. They bought things they thought they needed, but didn't. They didn't buy things they did need.

"We can manage, I suppose," he said stiffly.

"You still want Dina?"

"Yes. I have to go to work, and Barbara's nervous."

"Dina won't be much help."

Gil shrugged impatiently. He was always impatient when anyone didn't instantly understand him, even though he had not supplied all the essential information.

"I don't think they mean any harm, the kids. Maybe they won't even come back. It's just that Barbara's alone in the house all day. I thought of Dina since she doesn't go out much. And if Jota's there . . . "

He let that hang, and I didn't take it off the hook. As far as we knew Jota had only once broken trust with either of us in that particular way. Gil knew what had happened — Sheila had said something to Barbara. The idea of Jota making a pass at Barbara seemed fantastic to me, but it probably didn't seem so fantastic to Gil.

"All right," I said. "I'll ask her."

Rather surprisingly, Dina got on quite well with both Gil and Barbara. Moody geniuses don't like competition or criticism, and Dina never gave them any.

We said no more about Jota. Barbara would cling to Dina, and away from me, away from Sheila (whom she really trusted in a peculiar way) Dina would stick to the one person she knew.

"There's something else about those kids," Gil said. "They came into the bank and changed some money. Silver into notes. I was the only one to notice a certain very strange thing, and for some reason I didn't point it out to anyone else."

Gil felt in his pocket and produced two half-crowns, two florins, two shillings. He made no comment, so I examined them.

It wasn't hard to get the point. The half-crowns were both fairly shiny, dated 1961. The florins were

old and worn, dated 1935. The shillings were dated 1952.

"I see what you mean," I said.

"Do you?" He sounded skeptical. Gil, with his inflated IQ, could never believe that anyone else had more capacity for putting two and two together than . . . well, Dina.

I looked more closely. One half-crown had an infinitesimal scratch across the Queen's hair. So had the other. The milling on the florins was identical, particularly worn just below the date.

"There were a lot more of these?"

"Yes."

"Any notes?" I asked.

"No. Well?"

He was challenging me to reach his own conclusion.

I said: "I know why you didn't point this out."

"Do you?"

"They must be forgeries, of course. Forgeries so good they'd be hard to detect and won't ever be detected now that they're mixed with other coins and the duplication isn't significant. Notes weren't forged, or duplicated, because the numbers would eventually give them away."

Gil nodded with reluctant respect.

"And why didn't I point it out?"

"Because you're responsible. This might mean trouble. If you let it go, it can't possibly mean trouble."

"Clever," he sneered. "Now tell me why it was done."

"They needed money, so they made it," I said.

He sniffed, but didn't pursue the topic. Instead, he said: "Tell me what you know."

I told him. I came last to the brief encounter with Miranda.

His eyes gleamed.

"The ultimate in provocation," he said.

"What do you mean?"

"Could it be simpler? The impact of any outfit any girl wears lasts about five minutes. After she's taken off her jacket and you see the lowest low-cut neckline you ever saw, after you've had a good look, she might as well put the jacket on."

I must have looked unimpressed, for he went on in a torrent of words to develop the theme.

"Does anybody stare at the Grammar School senior girls in their little white pants, except wistful old men? But let them put on skirts and ride bicycles in a breeze . . . A pretty girl peels to a bikini, and every man on the beach stares. For a while. Then she puts on a beach wrap, leaves it unfastened, and they stare again every time it falls open."

"I never thought of that," I said.

He gaped at me. "You never thought of it? Ten minutes after viewing the delectable Miranda you've just been describing?"

"I was too busy doubting my own sanity. But I see what you mean now."

And I did. Successful strippers don't just take their clothes off. They tantalize. And what could be more tantalizing than a luxon dress? What greater inducement to look could there be than not knowing what you're liable to see?

Gil had hit on a good phrase — *the ultimate in provocation.*

Current fashion wasn't anywhere

near the ultimate in provocation. Indeed, with untidy, too-long hair, tight jeans and loose sweaters, long pointed flat shoes, unnatural makeup and too-short skirts on the wrong girls, teenage glamor had never hit a lower low.

This kind of thing was nothing remotely like current fashion.

"Where are they from?" I murmured. "Outer space?"

The complete absence of reaction showed that I was not expressing any idea completely new to Gil. And he was the most confirmed skeptic in Shuteley . . .

VIII

I had meant to go home for lunch and ask Dina if she'd like to go and stay with the Carswells for a while, but I hadn't phoned Sheila to warn her, and it was just as well.

As I left the office, Miranda fell into step with me and asked: "Care to buy me lunch?"

It was a question that needed no answer.

I took her to the Red Lion, partly through lack of choice and partly because the idea of sitting opposite her in a stall all to ourselves was anything but unattractive.

She was not wearing the pink suit. She wore a silvery gray dress that didn't disappear, and she was still sensational.

She must, if the camp was the giants' only base, have gone straight there and come straight back.

As we sat down, I said: "I waited."

"For what?"

"An invitation."

She smiled a faint smile and said: "This is a different kind of invitation."

"What are you going to tell me, Miranda?" I asked.

"Why are you so sure I'm going to tell you anything?"

"Because the only reasons you could have for being here with me now are to tell me something or ask me something. And I have a feeling that I couldn't tell you much you don't know."

"There could be another."

"Such as?"

"Interest in you. I might be curious what you're like. Anyway — what would you like to know?"

"Where do you and your friends come from?"

"Here," she said, as Greg had done.

The waitress interrupted us then, and when she left with our order Miranda moved back a square.

"I'll tell you one reason why I wanted to lunch with you, if you like."

"Why?"

"I want you to introduce me to Jota."

I might have guessed. In this crazy business, one thing could be expected to be unchanged — that Snow White would instantly be drawn to the prince.

"What do you know about Jota?" I said.

She merely smiled and shrugged.

"Greg called him Clarence Mulliner," I observed.

She sat up quickly. "Greg? When were you talking to Greg?"

"This morning. He came to see me."

She was angry, I saw, and perhaps afraid. It was an excellent chance, and I hoped I'd be able to take it. The possibility that I might be able to play Snow White against Giant No. 1 had not until that moment occurred to me.

The less I said, and the more Miranda said, the better.

"What did he want?" she asked sharply.

"Amusement, I suppose. He wanted to insure against catastrophe here in Shuteley in the next twenty-four hours."

"The vandal," she breathed.

"Vandal?" That was interesting. It hadn't occurred to me that Greg might be trying to insure against disaster and then cause it.

"You wouldn't understand."

"Of course not. I understand very little."

"I'm sorry. I didn't mean to be rude."

And then, with a baffling switch that took the wind out of my sails, she smiled and said: "It doesn't matter anyway. Greg's a fool, a dangerous, megalomaniac, irresponsible fool . . . but it doesn't matter."

Rallying, I said: "Why not? Because *we* don't matter? Because we don't live in the same country as you? The same world? The same dimension? The same time?"

Most inopportunely, the waitress brought our soup (brown windsor, of course).

When she had gone, I asked: "How old are you, Miranda?"

I got the smile again, and nothing else.

Possibly, I thought she was many, many years older than she looked. This close, I had an opportunity to see that the flawlessness common to all the young strangers was absolute. I don't mean that they were all handsome or beautiful. But like Miranda, they had no hair out of place, no scars, no scratches, perfect teeth, perfectly manicured hands. In the heat of a summer day, she didn't sweat. She appeared to have no makeup on, yet I was sure she had. Right through history, women had gilded the lily. Even in a different history, I was sure they would do the same.

I asked her: "Are you wearing makeup?"

"Yes."

Her gray dress was at the same time unremarkable and scarcely possible. No creases or marks. Its fit was several degrees beyond currently known perfection.

Ordinary dresses worn by ordinary girls weren't like Miranda's. Either the machinery showed, or the absence of machinery.

"You can't," I said thoughtfully, "be wearing a bra."

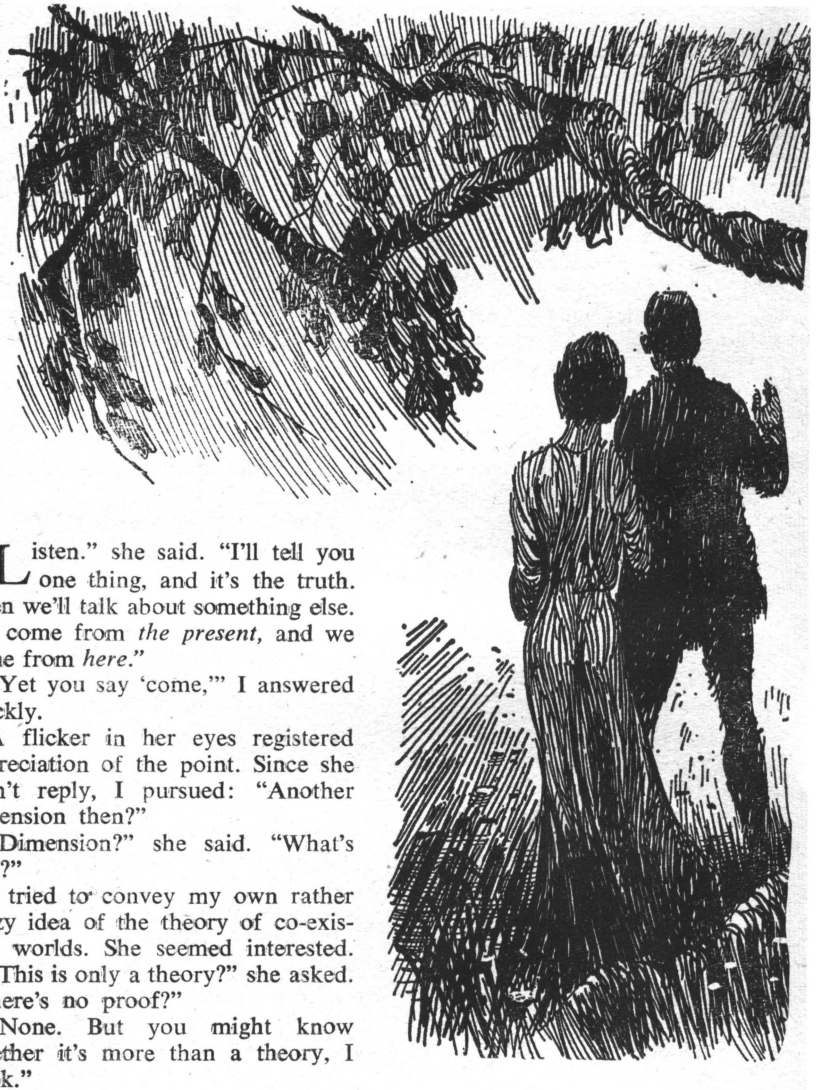
"No."

"Then how . . . ?" Well, romantic myth aside, women needed something to provide their shape.

"Selective tension," she said easily. "Different degrees of elasticity in different places."

And at sight of my expression, she laughed for the first time.

She stopped when I said: "You do come from the future."



"Listen." she said. "I'll tell you one thing, and it's the truth. Then we'll talk about something else. We come from *the present,* and we come from *here.*"

"Yet you say 'come,'" I answered quickly.

A flicker in her eyes registered appreciation of the point. Since she didn't reply, I pursued: "Another dimension then?"

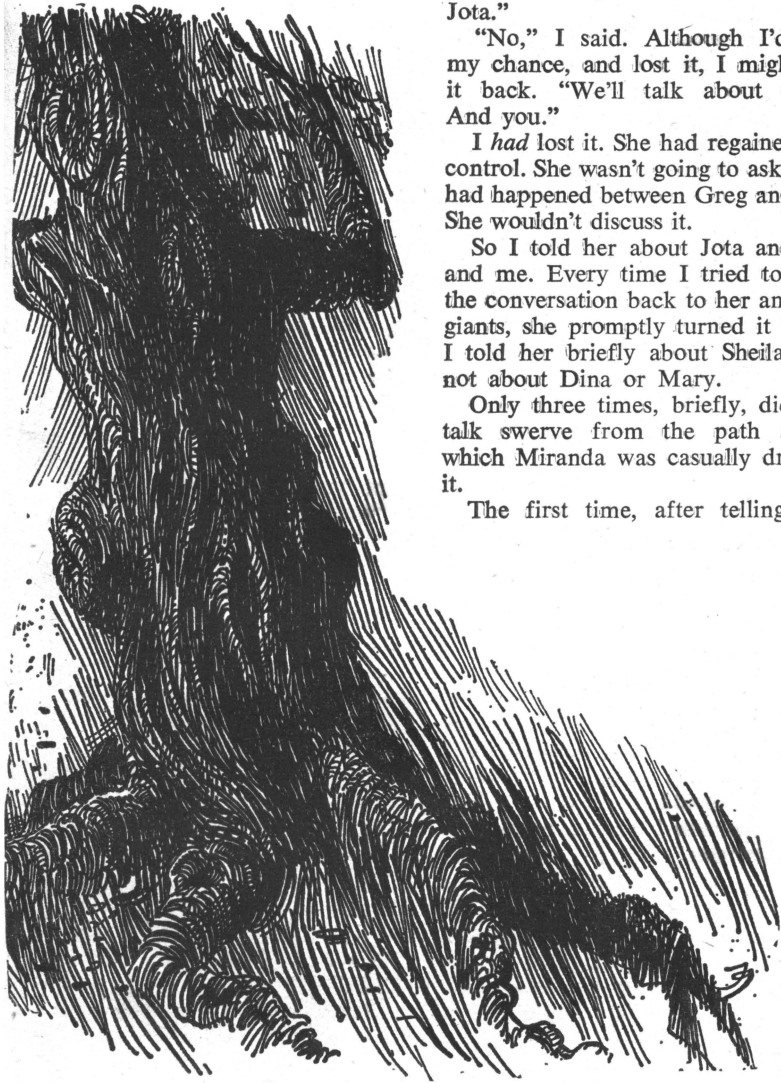
"Dimension?" she said. "What's that?"

I tried to convey my own rather fuzzy idea of the theory of co-existent worlds. She seemed interested.

"This is only a theory?" she asked. "There's no proof?"

"None. But you might know whether it's more than a theory, I think."

The faint smile again. "Now,"



she said firmly, "we'll talk about you." After a pause she added: "And Jota."

"No," I said. Although I'd had my chance, and lost it, I might get it back. "We'll talk about Greg. And you."

I *had* lost it. She had regained her control. She wasn't going to ask what had happened between Greg and me. She wouldn't discuss it.

So I told her about Jota and Gil and me. Every time I tried to turn the conversation back to her and the giants, she promptly turned it back. I told her briefly about Sheila, but not about Dina or Mary.

Only three times, briefly, did the talk swerve from the path along which Miranda was casually driving it.

The first time, after telling her

about the days when Jota, Gil and I were the Terrible Three, I asked what she and her friends called themselves. She thought for a minute and then said: "Well, what would you call us? Any ideas?"

"Snow White and the giants."

She stared and laughed rather uncertainly. She thought she ought to know what I was talking about, but didn't. She was off balance, so I said:

"Greg said 'as fair as any,' instead of 'as good as any.' He said 'how in fisk' . . . ?"

Miranda jumped, nearly spilling gravy over herself.

"I presumed," I said casually, "that meant something like 'how in hell.'"

"It means rather more than that," said Miranda. "There are sexual connotations."

"I'm not surprised. He said 'up on the quicktake.'"

Miranda was silent.

"A simple mistake," I went on, "if you read a phrase in a book. Quick on the uptake. Up on the quicktake. Unimportant . . . except that nobody born between 1860 and 1960 could say such a thing. Then there was 'most,' apparently a term of general approbation. 'Grossing,' meaning fattening. I may have missed a few."

"Greg is careless," said Miranda. "Very careless."

"And you're not, I noticed. Except in wearing a luxon suit."

"I won't do it again."

"Pity."

The second time was when the sweet came up. I asked about the food, and she said, in slight surprise: "It's only food," and though she instantly turned the conversation again, I was left with another strange impression: Miranda and the giants ate and drank as we stoked a fire or filled an oil heater. It had to be done, but the quality of the fuel, so long as it came up to certain minimum standards, was immaterial.

The last time was when we left. As she stood up I noticed something I'd have seen before if I'd been reasonably observant. She carried no handbag, and she had no pockets.

"Where do you carry things?" I asked.

"What things?"

"Money, cosmetics, a handkerchief, keys — that sort of thing."

"Why would I need them?" she asked mildly.

We had emerged into bright sunlight. It was as hot as usual.

"Thanks for the lunch, Val," Miranda said. "I'll see you later."

And she strode off so abruptly that even to attempt to detain her I'd have had to shout or run after her.

From the way she walked, I knew she could run faster than I could.

Looking after her, I decided that Miranda, in her way, was as careless as she thought Greg was. True, it was a different way.

We had lunched together, a man and girl. And we might have been robots.

Certainly some apparently personal things had been said. I'd said a lot. I had acted more or less like a human being.

But Miranda . . .

Everything she had said and done she might have said and done from ten thousand miles and ten thousand years away.

IX

"You don't really believe it, do you?" Gil sneered. A sneer was the only way to describe it. Where anyone else would have expressed polite surprise, Gil's reaction was incredulity that anyone could be so stupid, even you.

"I do," I said.

"You mean one of these — giants tells you Jota will arrive at 3:10, and you expect him on the dot?"

I looked at my watch. It was eight after three.

"You can believe what you like, Gil," I said. "But these giants are no ordinary kids. I've been trying to figure out how Miranda was able to make me talk like that an hour or so ago, without ever letting the conversation get more than two or three degrees above absolute zero, and now I see it. She knew the questions to ask."

Gil started to say something, but I hadn't finished. "Maybe Greg meant Jota would arrive in Shuteley at 3:10 exactly, he didn't say. But I think he meant here. I think he meant that wherever I was, whether I went home or stayed in the Red Lion or came back here, Jota would walk in at 3:10."

"Of all the fatuous, ridiculous, superstitious — " Gil began.

He'd probably have found quite a few more adjectives before he had to cap them with a noun. But just then the door opened.

I'd given instructions for anyone who called on me after three to be sent straight in. That was why Miranda found it so easy.

"Why look surprised?" she said. "I told you I wanted you to introduce me to Jota."

"I'm surprised," I observed, "that you should consider an introduction necessary. You didn't with me."

She smiled and turned to Gil. "Hello, Gil," she said. "Has Garry's flush gone yet?"

Although Gil didn't answer, I could see he was startled. Garry evidently had had a flush, and it wouldn't have surprised me to learn that there was no apparent way for the giants to know about it.

Miranda sat down, primly arranging her skirt the way girls do (though I suspected she had had to practice). And the very instant that she turned and looked at the door, Jota came in.

He had never been handsome. I never knew any ladykiller who was really good-looking. Women seem to go for men of the oddest shapes and sizes. Jota had a long nose, very deep-set eyes, hollow cheeks and black hair nearly, but not quite, as dark as Miranda's. He was tall and very thin. He looked like a fanatic or visionary, and this impression wasn't wrong, though fanaticism was only part of his complex make-up.

He didn't look at Gil or me. He went straight to Miranda, took her hand gently and pulled her to her feet and said, from his nine-inch ad-advantage: "You're exquisite."

"I know," said Miranda coolly. "But thanks for noticing."

"Your name must be Venus."

"If you say so," said Miranda.

There was a lot more of this, and I realized as I watched that Jota, for only the second time, was annoying me far more than Gil ever could.

It's strange about old friends, people you know from way back. You've forgotten long ago whether you like them or not. The question has ceased to be relevant.

Gil, now. He had not made a friend in the last fifteen years. He would die without making another friend. He had become an amalgam of armor and anger and acid and antagonism, a fortress on an island that no army would ever want to storm. On the mainland, they'd march past the defenses against nothing with scarcely a derisive smile.

Only Jota and I (and Barbara, in a different but not warmer way) would ever put up with Gil.

Jota . . . I had admired and envied him. He had done and was still doing many things I wished I could do, and his amatory success was the least of these. He was, after all, a Jack-of-all-trades (even if master of none). There was nothing he couldn't turn his hand to. He had the courage or selfishness or brute insensitiveness to do what he liked and invariably get away with it. Most people treat you as your own attitude and expectation invites them to treat you. And Jota got what he wanted — whatever it was. Always. Everywhere.

I had had every right to object when Jota's roving eye lighted on Sheila. I had no right to object when Miranda caught his eye, but I did.

Surprisingly, the meeting was brought to order by Miranda. She suddenly said: "I must be going," and walked out as abruptly as she had left me outside the Red Lion.

"That girl," said Jota, "fills me with a quite irresistible desire to see that dark head on a white pillow. It will not be resisted. Now— what's going on?"

He hadn't changed. He had never, I suspected, been in love; he had a completely mistaken idea of what love was. Stumbling and imperfect as our connubial relations were, I believed that both Gil and I knew far more about love than Jota would have learned by the time he died.

He heard our side of the story first. He wanted it that way, and things were generally done Jota's way.

Gil had nothing fresh to say. The giants had not been near his house again. I glossed over the fact that I had not yet asked Dina to go and stay with the Carswells.

In my turn I told them all the facts, but not all my guesses.

Then Jota said: "All right, let's call on the giants. We'll go to the camp."

Gil was reluctant. He didn't say he was afraid to go. He argued against the idea in general. But when Jota and I decided to go without him, Gil stopped arguing and seemed to think it might be a good idea.

So Jota and I went to look at the giant's base.

It did not occur to me that one of us would die there.

TO BE CONTINUED

HANDY PHRASE-BOOK IN FANNISH

by LIN CARTER

Here's how to talk like a fan — and even understand some of what you're saying!

The Fannish Lingo

I suppose every in-group has or will develop its own slang, given sufficient time. This is true of every group from the various scientific discipline (each having a slang vocabulary called "technicalese") and such game-worlds as Big Time Chess (forever blathering on with such terms as "Gumphogle's Third Gambit" and the like) . . . right on down to enthusiasts of mystery fiction (called 'tec fiction by insiders who sling around baffling phrases like "procedural novel" and *roman policiere*) and to us science-fiction fans.

In the forty years or more that the science-fiction magazines have been with us, we have evolved, coined, borrowed and stolen a sizeable vocabulary of terms, words and nicknames totally cryptic and enigmatic to The General Public. It all started with Hugo Gernsback, the man who founded the first science-fiction magazine, *Amazing Stories*. We call the stuff we read "science fiction" because he coined the term. He also coined a variant, "scientifiction." *And away we go!*

Now, to avoid the sheer nerve-fatigue of putting down those same old fourteen letters every five minutes, it became necessary to coin nicknames for our favorite reading material. Like sf. Or SF. Or s-f, s.f.,

S.F., S-F, and so on (*Time* magazine came up with a repellent neologism of their own a decade back, when The Great SF Boom began. *They* called it "sci-fi" — is nothing sacred?) And then, consider scientifiction. That got trimmed down to stf. In conversation, pronounced "stef" — and sometimes spelled that way.

Now, suppose you want to apply the term as an adjective. You just can't say, "I saw a real science-fictional movie last night, gang!" What you say is "stefnal" . . . or "stefish."

One Thing Leads to Another

Now, by extrapolating from this not-very inspired word, we came up with: "stefnist" (one who is a fan, but thinks the term Lacks Dignity); "stefnistic" (something that relates to science fiction, *i.e.*, "That new eye-makeup makes you look real stefnistic, toots!" . . . and (again) so on.

"Fan" is a more popular term than stefnist anyday. The plural is fen. A female fan (oh, yes, there are such) is generally a *fanne*. Anything you could call fannish (like an activity such as publishing a fan magazine) you can also call fenly — or, fennish. Fan magazines themselves are called fanzines (the word was coined by Louis Russell Chauvenet) or fanmags — and the plural is "fmz", but don't ask me how you pronounce it, because you don't.

Compounded words, as you can see, compose a major-size chunk of the fannish lingo. The editor of a fan magazine is a "faned." If you belong to F.A.P.A. (Fantasy Amateur Press Association) you publish a fapazine, and you are a fapan. If your fanzine lasts a year (many don't) you put out a particularly large Anniversary Issue called "the Annish." If your "fanac" (activities in science-fiction fandom) are confined largely to reading fanzines and submitting LoC's (letters of comment), you are likely to be sneered at as a "letterhack." If your fanac is big time stuff and you become a celebrity, you are a BNF (Big Name Fan); and if your output is considered "crifanac" (*critical*, or really important fanac) you will be mentioned all over the place and collect lots of "egoboo" (ego-boosting. For when someone mentions your name in print doesn't it boost *your* ego?).

But let's suppose your fan activities are confined to writing scholarly treatises on the Sources Used by H.P. Lovecraft in creating his Cthulhu Mythos, or deadly-serious lit-ry criticism of the latest Ace paperbacks, or dull articles on fannish history (such as Our Man In Fandom does *not* write). In this case, you may very well be dismissed as an eggheady old Sercon (*ser*ious, *con*structive fan). The other end of the spectrum from this is the noisy teen-aged fan with the helicopter beanie and collection of BNF autographs. He's called a *faaan*.

Or suppose you chance to belong to a very large, very old organization called The National Fantasy Fan Federation. The name itself has

been abbreviated down to "the NFFF" or "the N3F." You are referred to as a Neffer. If you publish a fanmag distributed to members only, it's a Neffzine.

Slans and the Star-Begotten

The key word, fan, came in for plenty of usage. Many fanzines punned with it, coming up with titles like FUNTASY (a fanzine of humorous fantasy, now defunct), FAN FARE, FANEWS and like that. Fans have always been able to identify with the eternally put-down mutant supermen in stories like Stapledon's *Odd John*, A. E. Van Vogt's *Slan*, and H. G. Wells's *The Star-Begotten*. The tremendous popularity of *Slan*, coupled with its fortuitous resemblance to the word "fan", produced a host of variations. There was a fanzine called *Slantasy*, for instance, and constructions like "slanzine" and "Slandom" became popular.

Along with this We-Are-All-Mutant-Supermen notion, fans adopted the synthetic language, Esperanto. Fans went through a period of using nicknames which were their names rendered into Esperanto. For example, *Morojo* (Los Angeles fanne, Myrtle R. Douglas): *Aloio* (Arthur Louis Joquel II); *Gakspiro* (Jack Speer). One of the leading proponents of Esperanto in Fandom was Los Angeles superfan of yore, Forrest J. Ackerman, today editor of a couple of those movie monster magazines, *Famous Monsters of Filmland* and *Monster World*. Oddly enough, Ackerman didn't use an Esperantic version of his name during his fanac days. But he did use nicknames aplenty: 4e (pronounced „Forry"); 4SJ ("Forr-est-J); Ef-jay; and many more.

Ackerman founded several nutty fannish innovations. Such as "Ackese", a sort of simplified spelling or typing or whatever you'd like to call it. A sample would read something like this: "U & I r 2 b praps th 1st 2 men 2 r@ch n xtra glaktik planet." (*Translation*: "You and I are to be perhaps the first two men to reach an extra-galactic planet.")

Ackerman also pioneered something called *nonstoparagrafing*. You can see what it is — instead of pulling the carriage back to the traditional five-spaces-in-from-left-margin, you just drop down from the end of the last paragraph — wherever it happens to come in the line — to start the new one.

E. Everett Evans followed the Ackerman-style of nicknames. He was called 3E, or sometimes "Tripoli". Joe J. Fortier did the same — 2J4. Then there was DW3 — composite nickname for Don Wollheim, Dirk Wylie and Dick Wilson — three fans whose initials were the same, and who roomed together in the Ivory Tower.

You Can't Be a BNF Without a Nickname

The weird world of fan nicknames is a never-ending source of amusement to me. I can remember *Ecco* (E. C. Conner), and *Elarcy* (Louis Russell Chauvenet — "L.

R. C."), and *SaM* (Sam Moskowitz, so spelled to avoid that superfluous "M"); and the popular letterhack in the prozines, *JoKe* (Joe Kennedy, once a witty fan humorist and now a college professor in literature, and a prize-winning minor American poet); and, although modesty forbids, *LinC* (pronounced "link" and short for Your Man in Fandom, Lin Carter).

Then there was "Ephless El" — a phan named Elmer Purdue, whose typewriter, when he entered phandom, lacked the "F" key; no phault of his, it phorced him to write like this due to the missingness of this letter.

And a chap out in Bloomington, Indiana, who now writes hardcover mystery novels under his real name, Wilson Tucker, when a fan adopted the first name "Bob" — which naturally laid him wide-open for such terms as "Boob" Tucker, *et al.* And a fan of the '60's here in New York, Bob Stewart, who distorts his first cognomen to "Bhob." And Fred Pohl, the editor of this magazine, who used to sign his letters with a Greek *phi*.

Fanzine Slang

In the world of fanzines, we've evolved and coined a curious group of in-joke terms. For example, *Obliterine*. This is the correction fluid used to mend a tear or blank out a mistake made in typing up a mimeograph stencil. Fans used this stenchful blue fluid so liberally that one once composed a verse in its honor:

Obliterine, obliterine,
Without you where would we
have been?
To err is human, and slannish
too,
But we can correct our mis-
takes with you!

And there's a form of nonsensical verse called *Beardmuttering* ("it's the kind of surrealistic stuff you mutter in your beard"). Since I couldn't possibly describe it — except to say that, for some *very* obscure reason, there are no spaces between the words — I'll just have to quote you a sample:

heredeepdowninthegrave
underthesodandloam
underthecloudsandsky
underthetreesandflowers
iswhereiam
geeiwonderifimdead

That particular specimen of Beardmuttering is by Damon Knight . . . or as he preferred to have the name printed in his fannish days, *damon knight*. Sometimes called *demon* knight.

Fanzines are also partial to something called Interlineations.

I am *not* a louse. — Yngvi

That was an Interlineation. They are usually nonsensical, often surrealistic, sometimes dimly intelligible. This one has reference to the phrase "Yngvi is a louse!" which appeared in the L. Sprague de Camp-Fletcher Pratt book, *The Incomplete*

Enchanter. Harold Shea, the hero, is in jail somewhere in the world of Norse mythology and sees a prisonmate stagger to the bars and shout out this cryptic sentence at intervals during the night. Nobody in Fandom knew what it meant, so they adopted it for its Nonsense value.

Another word you'll find in fanzines is *filler*. A filler is what the editor gropes for when he's stencilling a page and finds he has a blank five or six lines at the bottom. Most fillers are composed on the spot. Like this:

I've never seen a purple cow —
It puts me in a rage!
But I can end this pome right now,
It's the bottom of the page.

Perhaps this might have been a poem
If I possessed the skill; ....
But as things go, you see, my friend,
I had four lines to fill!

Hardly immortal, eh? But then, who is?

A bit earlier, I mentioned Nonsense. Fans like nonsense. Take the phrase "The Gostak distims the doshes." It appeared in an old sf story by Miles J. Breuer. It meant little or nothing — so fans picked it up. Another Nonsense-term, once wildly popular, was *vombic*. Anything that is sort of . . . well . . . oh, you know . . . is *vombic*. To *vomb* makes you a *vombis*. *Vombists* belong to societies for the advancement of *vombii*. When you go around being *vombic*, you *vombiate*. To *vombulate* is to adopt an attitude of *vombiation* without actually getting out and being *vombic*. Understand?

Or take the Nonsense word — *fout*. That is what fans call an "all-purpose" word. It means absolutely nothing. But you can convey a lot by the *context* in which you use it. For example: "Naw, it's too fouty for me!" connotes a deprecative meaning; "The new *If* is out! Hot fout!" implies extreme joy or exuberance. Used without particular emphasis, it implies an enigmatic air of mystery. As in: See you next month, when Your Man in Fandom will be back with another fouty article of fannish lore!

END

TUNNEL WARRIOR

by JOSEPH P. MARTINO

Illustrated by MORROW

They fought the roughest war men have ever engaged in — not on Earth, but under it!

I

Sergeant Alvin Hodge adjusted the focus on the periscope and surveyed the barren landscape, battered and pocked with craters. It looks like the pictures from the Moon-base, he thought. No, it's even more desolate than the Moon. The men at the Moon-base can put on their spacesuits and walk around on the outside if they want to. That land out there hasn't been walked on by human feet for at least two years. Here and there on the surface, little patches of green grass showed, as nature tried to repair the damage man had wrought. Back home in Kentucky, he thought, the morning glories would be climbing all over every-

thing, and the trees would be green after the winter. Here, the spring rain falls on mud and bare rock.

Abruptly the scene blacked out as the light-sensitive glass in the periscope's optical system turned opaque under high intensity illumination. As the blackness slowly faded away, he could make out a writhing pillar of cloud pushing its way into the sky. At least a half dozen times every day one of these clouds made its appearance somewhere on the horizon. Our missiles? Theirs? No one knew except the men who had fired them.

He scanned the periscope around. Off to the left, on a clear day, you could see what was left of the historic German city of Kassel, now just a pile of rubble. And off to the right, toward what used to be Vacha, in Thuringia, was where the whole thing had started.

No one was really clear on what had happened. Somehow or other, the East German and West German border guards had gotten to shooting at each other. This had happened many times before, and nothing ever came of it. This time, however, world tensions were higher than usual because of the Iranian question, and the UN was paralyzed because it was Red China's turn to be chairman of the Security Council. So in three days Europe had exploded into nuclear war. Somehow the bombs had been confined to Germany, and both sides were using pure-fusion clean weapons, so there was no fallout elsewhere. Both sides had dug in like moles and had been slugging it out ever since.

Suddenly he was aware of someone at his elbow . . . "Sergeant Hodge?"

"Yes, what is it?"

"I relieve you as Sergeant of the Watch. Here are your orders."

He took the proffered envelope, tore it open and pulled out the flimsy piece of paper. "Sergeant Hodge will report to Major Lowndes in Room 279, Gallery 3, Level 12, immediately upon receipt of this order."

Room 279. That's one of the rooms where they brief you for missions. It's not right, he thought. It's got to be a mistake. I had a mission day before yesterday. Policy is for three days between missions. And the old, familiar premission feeling of having a lump of lead in his stomach hit him. He stalked into an elevator and pushed the button for the twelfth level.

He saluted stiffly. "Sergeant Hodge reporting as ordered, sir."

The major returned his salute, studied his face for an instant and then spoke, softly. "Please sit down, Sergeant. You don't think this is fair, do you? You should have had another day off, especially after a tough tunnel raid like the one you pulled off day before yesterday. Well, to start with, the business of three days between missions is not an absolute rule. It's merely a policy to be followed whenever feasible. And you have to admit we do follow it pretty well.

"But there have to be exceptions from time to time. This is one of the times. You're one of the few experienced tunnel fighters available

today. As you know, we had a big effort out yesterday, and the men who were on that have had even less rest than you have. Besides, this mission ought to be a creampuff."

He pointed to the Captain seated beside his desk. "This is Captain Maxwell. He's with the Directorate of Geology, Deputy Chief of Staff for Intelligence. Your squad will escort him on this mission."

Sergeant Hodge looked at the Captain. He noted the collar insignia the man was wearing and realized that the Captain was a Component Officer, rather than Line. He got the pay and privileges of an officer, but wasn't allowed to command anyone outside his corps of specialists. Sergeant Hodges would in fact be in command on this mission.

Major Lowndes went to a table beside his desk and pulled a cloth off a model of the tunnel and bunker system. "Sergeant, you know a fair amount about our tunnel system, but you'll have to know a few more things for today's mission.

"Here is our main bunker. It has a series of levels, running from fifty feet below the surface, down to nearly twenty-five hundred feet below ground. It's connected to similar bunkers on either side by these communication tunnels. Here, at two thousand feet down, is our forward tunnel. It runs toward this Russian bunker, about ten miles in front of us. The forward tunnel comes to a dead end just about halfway to the Russian bunker. Vertical shafts run up from it about every mile or so, including one right before the dead end. Each of these vertical shafts has a series of horizontal galleries running sideways from it, at various levels. In the case of the shaft farthest forward, each gallery has additional tunnels running toward the Russian lines. These are the tunnels where the fighting takes place, whenever they meet a Russian tunnel, either by accident or design. I know you're familiar with them. Now you've probably heard rumors we're going on the offensive soon. To do that, we have to have an accurate map of the Russian tunnel system."

"But I thought we got that from sound echo-ranging, Sir."

"To a certain extent we do. At close ranges we can map their tunnels pretty well. But to do this we have to know the velocity of sound in the rock stratum we're doing the echo-ranging in. Now the problem is right here." He pointed to a spot on the model just ahead of the forwardmost tunnel. "There's geological fault here. The rock strata have been slipping past each other, like slicing a layer cake vertically, then moving one of the pieces up. We don't have accurate information about the rock strata on the other side of the fault. We want your squad to escort Captain Maxwell and a tunneling crew as they push a tunnel through this fault. Captain Maxwell will take samples and make measurements on the other side. If we can identify the stratum, we can tell how much slip there was in the fault and thus get complete information on the properties of the rock on the other side. If we can't identify the stratum, at least we'll have a start on mapping the other side. Any questions?"

"Should there be any fighting on this mission, Sir?"

"We don't now plan any. Your job is to get Captain Maxwell across the fault and back safely with his instruments and information. If the Russians intercept you, of course there'll be a fight. But we're not looking for one. You'll be under the command of Sector Three. Their call sign is Birdseye. You will be Birdseye Twelve. Now collect your men and be ready to leave in forty-five minutes."

Sergeant Hodge saluted and hurried out. Forty-five minutes didn't leave much time. His men were all off duty and might be in the PX, watching a movie, reading in the library (although he had to admit that was unlikely) or any one of a number of other places.

II

He entered the concrete cubicle which was home for his squad and counted quickly. Fortunately they were all here. The usual four were playing their usual game of pinochle. Two more were lying on their bunks, avidly devouring paperbacks with lurid covers. The remaining two were cleaning their weapons, the short-barreled, small-caliber machine guns which had replaced the rifle for tunnel fighting.

"Tennessee" Harper, Private First Class, a tall youthful-looking man with a permanent smile under his shock of blond hair, was vigorously running a cleaning rod through the barrel of his weapon.

"Twelve more days," he said in the soft accents of his native state, "and I start my Rest and Recuperation leave in Paris. After surviving another three months of tunnel crawling, I get two solid weeks with no missions, no alerts and no reveille. Just think, I'll have a real sky over my head. And all that French wine and those French girls. Especially the French girls. Ooh, la, la."

Friedmann, whose collection of paperbacks was renowned through the entire corridor, lowered his book and joined the conversation. "Paris is fine, Tennessee, but wait till you've been here as long as I have. Once you're over the hump, and you've got the first eighteen months of your tour behind you, you'll start sweating out the Big R. You'll take Paris, London, Madrid or the other R&R towns as they come, but rotation back to the States is what you'll really think about."

"I'll take your word for it, but the Big R is almost two years away for me. Three months is about as far ahead as I ever look anyway."

Pedro Sanchez, Mexican-American, Corporal, and second in command of the squad, started to assemble his weapon. "Friend Tennessee, it is bad luck to talk about going on R&R just a few days before your three months are up. You should . . ."

"All right, knock it off." Sergeant Hodge felt that just before a mission was no time to talk about bad luck. "Get a move on, you guys. We're due down at the tunnel head for a mission in about half an hour. Make it snappy."

"But we got another day of rest comin' . . . How come? . . . Why

us? . . . " came the disgusted chorus of replies.

"Because there's a job to be done, and we've been told to do it, that's why. And besides, this one sounds like a real creampuff. Just don't anyone go goofing off, and we'll get through this one with no sweat."

Then he started to change from his duty khakis to coveralls more suited to tunnel fighting. Twenty minutes later, the squad was lined up in the Armory, while he checked their equipment. First, the standard equipment they all carried, like the hard hats, the face mask with filter for dust and gas, the emergency bottle of oxygen, infrared goggles, infrared filters for the headlamps. Check the batteries in the headlamps. Then the weapons, basic load of ammunition, plus two grenades and two gas bombs for each man. Extra rations. Then the special equipment. Carson, one of the pinochle players, carried a flamethrower. Friedmann carried the Very Low Frequency induction radio. Williams, another pinocle player, carried the rocket launcher. And Tennessee carried the squad's five-kiloton fusion bomb. All were in order. Even if the mission were to be a creampuff, the squad was too battle-wise to go slack.

They stepped off the elevator at the head of the forward tunnel at the appointed time. Captain Maxwell and the tunnelling crew were there already. As the heavy entrance door of the tunnel swung open, the men gripped their weapons tighter. The lump of lead in Sergeant Hodge's stomach felt like it would carry him through the floor, right down through the solid rock.

They filed into the tunnel and took seats in the vehicle waiting for them. In the lead was a jeep like vehicle with low-pressure, balloon tires, driven by a compressed-air engine which was supplied from a bottle of high-pressure air carried in the back. Sergeant Hodge and Captain Maxwell would ride in that one. Behind that was a personnel carrier which would carry half the squad and the tunnelling crew. Then came some specialized vehicles belonging to the tunnelling crew. Finally the rest of the squad brought up the rear in another jeep. All the vehicles rode on the balloon tires and used compressed air for power. This made far less noise to alert the Russian sound-detector operators and to confuse the American operators. In addition, the compressed-air motors avoided fouling the air and simplified the problem of supplying air to the tunnels.

At first the tunnel was broad and high, lined with concrete, well lighted and well supplied with air. They drove swiftly towards the Russian lines, stopping at the checkpoints at each of the vertical shafts. Finally they reached the last vertical shaft. Here the tunnel underwent a drastic transformation. Farther ahead, the walls were bare rock, the lighting consisted of an occasional bulb hanging from the ceiling, and the air was replenished by diffusion from the rest of the tunnel. From now on, that was the way the tunnels would be. They topped off their compressed-air bottles from the tap at the end of the line.

Their vehicles were loaded, one at a time, onto a slowly rising elevator and carried up to the level from which they would operate, only about twelve hundred feet below the surface. They filed down the gallery parallel to their own lines, then turned towards the Russian lines again. They reached the final checkpoint and stopped. The corporal in charge informed them that the tunnel extended another three hundred yards and came to a dead end. The detectors in the tunnel had given no indications of anyone breaking in, and a patrol which had gone all the way to the tunnel face less than two hours ago reported the tunnel clear. Their sound detectors had not found any signs of Russian activity in the vicinity, although there was believed to be a tunnel parallel to this one, about fifty to a hundred yards away. Armed with this assurance, they went forward with the usual caution. They left all the vehicles except those used in tunnelling at the checkpoint. In the event of an enemy breakthrough, it was much better to be on foot.

As usual, Sergeant Hodge found that the lump of lead was gone from his stomach, and he couldn't say just when it had disappeared. He had been at this business a long time and felt sure he was stretching his luck far beyond any reasonable limits. If he kept it up, he would inevitably find that his luck had run out. Hence he was nervous about each new mission. But once he was back in the tunnels, things were different. He could quit worrying about the future and wondering how long his luck would last. He concentrated on keeping alive for the immediate future. A small part of tunnel fighting involved a high level of tension and excitement, before a breakthrough into an enemy tunnel, wondering whether the enemy had detected you and you were heading into an ambush. By far the biggest part of the time, though, was spent just waiting. Waiting for the enemy to break through, waiting for the enemy to learn you had broken through, waiting for the enemy to enter your ambush.

This mission was just waiting and hoping that the Russians wouldn't detect them or, even if they did, would decide not to do anything about it. Many men couldn't take just waiting. They got to thinking about all the tons of rock over their heads and how much nicer it was to walk the green earth under a blue sky, and they went tunnel-happy. Sergeant Hodge, however, had learned patient waiting as a boy in the Kentucky hills, hunting deer and small game. If you consider hunting as a sport, you can spend the day wandering around the hills, and it doesn't matter whether you see any game or not. When success at hunting means the difference between meat on the table or not, you learn to sit by the game trails and wait patiently for something worth shooting to come by. After a while, you even got to the point where you let small animals go by, confident that there will be a bigger one

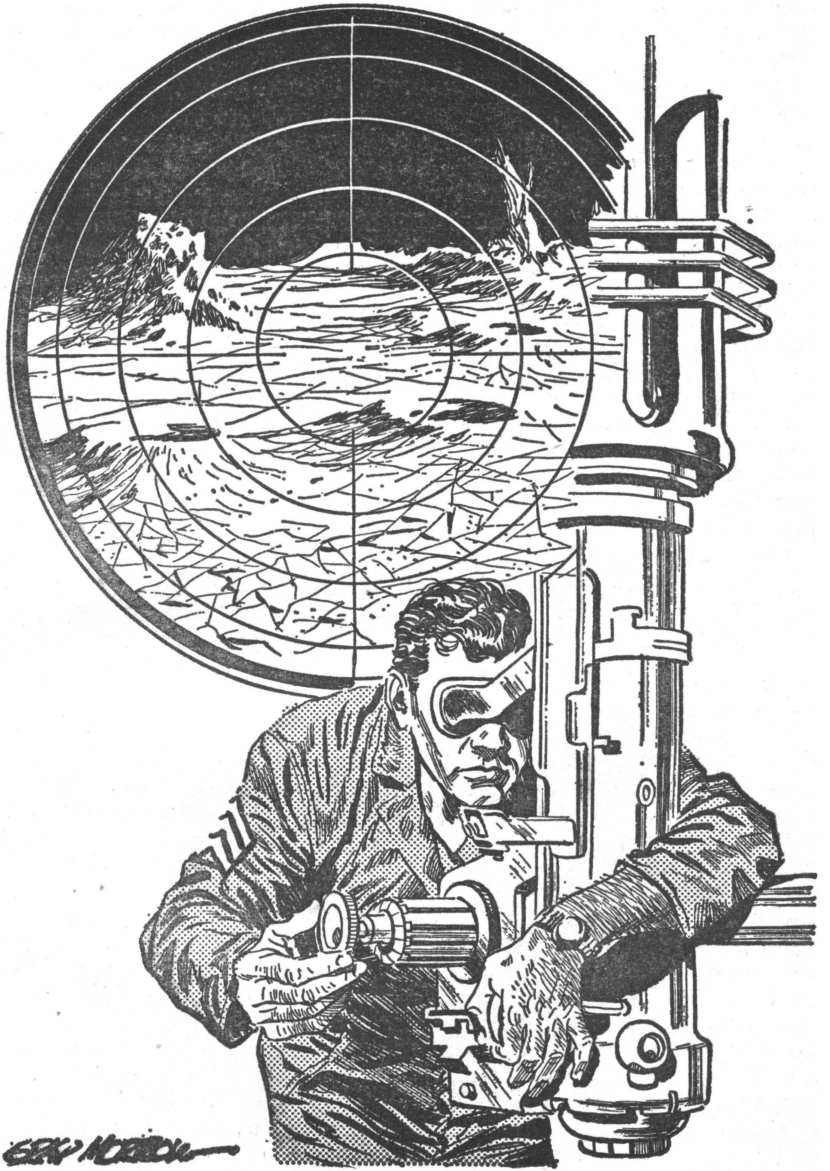
along later. This was the kind of patience successful tunnel fighting called for.

Sergeant Hodge led half his squad up to the tunnel face. There were no signs of trouble anywhere. Then the tunnelling crew brought their equipment to the tunnel face to begin work. Using a low-powered echo-sounder, Captain Maxwell determined that the earth fault was about three hundred yards ahead of them. That would take about six hours cutting time. Sergeant Hodge was glad he had made the men bring extra rations. It would be very unusual if anyone brought them any rations while they were here. He placed half his squad midway between the tunnel face and the checkpoint, where they could serve as a reserve and would also be useful if the Russians broke through into the tunnel behind the face. He kept the rest of the squad near the tunnel face with him. He had seen tunnel-cutting operations before, but they never ceased to fascinate him.

The tunnelling crew used laser torches, powered by fuel cells in one of their trucks, to carve chunks of rock from the tunnel face. This made much less noise than more conventional techniques of boring and blasting. The rocks were then gripped by a special-purpose conveyor and carried back from the tunnel face, where they were transferred to a more conventional truck. When this was full, it hauled the rock back towards the main part of the tunnel, while another truck took its place. The rock would be stored temporarily in an unused tunnel. Later some of it would be used to block tunnels which were no longer desired, and the rest would be hauled behind the lines and dumped on the surface.

Actually, the limit on tunnelling speed was the speed with which rock could be carried away from the tunnel face. The laser torches were capable of cutting away rock much faster than it could be hauled away. In making a major attack, in fact, a process known as "moling" was used. In that case, the rock was cut away, hauled back a hundred yards or so and dumped. Thus a section of tunnel roughly a hundred yards long, closed at both ends, was moved forward. Tunnelling rates well over a hundred yards per hour could be achieved this way. A precision, inertial navigator was required to keep the tunnel on course. With the tunnel open at one end, as it was here, however, the conventional methods of using a transit and laser range finder were sufficient for keeping the tunnel on course.

Behind the digging crew at the face of the tunnel came another crew. They inspected the tunnel walls and ceiling for weak spots and applied braces and shoring as needed. They smoothed the tunnel floor and cut any projections from the walls. Every twenty yards, on alternate sides of the tunnel, the cut niches. These were man-high and big enough for two men. The side of the niche toward the tunnel face was cut perpendicular to the tunnel wall. The side away from the tunnel face was cut at approxi-


GRAY MORROW

mately forty-five degrees, so that the niche narrowed as it went deeper. Finally they strung lights on wires suspended from the ceiling. These were connected to the main power network of the bunker and galleries. Here, they had merely needed to tap into the wires coming up to the checkpoint.

After a while Sergeant Hodge grew tired of watching the work of tunnelling and made a patrol of the tunnel back to the checkpoint. The men on the sound detector reported that the noise of hauling rock drowned out everything else, but that couldn't be helped. Finally he sat down to rest along the edge of the tunnel, out of the way of the vehicles. His men were absolutely silent. There was no small talk, none of the traditional griping of soldiers. The tunnelling, though much quieter than conventional digging methods, was still louder than normal conversation. However, habits acquired in combat are hard to break. When waiting in position, you did not talk, lest the enemy discover where you were.

At last, at almost six hours on the dot, there was a sudden buzz of excitement at the tunnel face. There had been a sudden change in the color and texture of the rock. They had reached the earth fault. The fault here was marked by patches of gravel and fragments, where the rock strata had ground against each other. The tunnel would have to be extended a few yards beyond the fault to assure an uncontaminated sample of the other stratum at this same level, but that was the work of a few minutes. Then Captain Maxwell, using a miniature version of the larger laser torches, cut off a few pocket-sized specimens of rock. He buried probes in the rock and made some *in situ* measurements of sound velocity. Then he packed up his gear and turned to go. The effect on the tunnelling crew was as though a tremendous pressure had been removed. In a few minutes they would well be out of here.

Sergeant Hodge felt the same relaxation of tension, then steeled himself against it. He brought the men with him to the tunnel face and sent one of the tunnelling crew as a runner to order the rest of the squad forward and to alert the checkpoint they were coming. He didn't intend to relax until they were well back into friendly territory. He followed the digging crew away from the tunnel face for about fifty yards, when he heard a noise behind him. He turned, to see the tunnel wall cave in just this side of the tunnel face. An explosion followed, and the lights went out.

He dropped to a crouch and scuttled toward the tunnel face, brushing his left arm against the tunnel wall. He threw himself into the first niche he found, triggered off a short burst toward the tunnel face and ducked out of the way of the fusillade that came back at him. Within seconds, he had slipped an infrared filter over his headlamp, turned on the lamp, flipped his infrared goggles on and stuck

the tube from his oxygen bottle between his teeth, where he could bite down on the valve and mouth-breathe oxygen if the air grew too foul.

He peered back into the tunnel. A steady stream of Russians was pouring through the breach in the tunnel wall. As they entered the tunnel, they hugged the walls, sprawled on the floor or found what shelter they could behind the debris their explosion had caused. A veritable storm of bullets was sweeping the tunnel face, taking a high toll of the entering Russians. However, within seconds, they would have a force large enough to overwhelm his squad, despite their inevitable high losses.

First things first. He blew a series of blasts on his whistle. An answering series from Sanchez told him that Tennessee was in position with the fusion bomb. As a last resort, the bomb could be set off and the tunnel sealed, keeping the Russians out of the rest of the gallery. The next was to stop the flow of Russians into the tunnel.

Carson, with the flamethrower, was too far back to help now. What else might be used? He had seen it done once that way . . . He blew another series of blasts and yelled, "Use the lasers!"

Within seconds the tunnel was filled with an eerie light. Someone had gotten one of the laser torches going and was playing it over the breach in the tunnel wall. At that range the beam was defocussed and would not melt rock. The energy density was still high enough to char flesh and flash coveralls into flame, however. The stream of reinforcements entering the tunnel was cut off abruptly, while the men in the tunnel concentrated their fire on the laser in an attempt to knock it out.

The next step was to clean out those Russians remaining in the tunnel and to do it in the few seconds the laser was likely to continue operating. There were perhaps a dozen Russians in the tunnel still putting up some fight. They were almost totally unsheltered, however. A few had tried firing from one of the niches in the tunnel wall, but found that the sloping, rear side of the niche gave almost no protection against fire from the direction of the tunnel head.

Hodge was startled as something streaked past him, then he realized that Williams had brought his rocket launcher into action. The launcher was equipped with a laser range finder, and the rocket fuses could be set to burst at a given range, with a precision of a foot or two. Thus William could burst a rocket right beside a standing man or right above a man lying prone, sleeting him with shrapnel.

Sergeant Hodge blew his whistle again. Under cover of Williams' rocket fire, the rearmost members of the squad started moving up from one niche to the next. The moves were made with only one man exposed at a time, and he had to run only the twenty yards to the next niche. All the men not running added the weight of their fire in an at-

tempt to disrupt the return fire of the Russians.

Then the tunnel was pitched into blackness again, as the laser went out in a shower of pyrotechnics. Hodge blew a long blast on his whistle, and the whole squad was out in the tunnel, running for the hazy glow cast by the Russians' infrared headlamps. Some of the Russians stood and fought and were quickly overwhelmed. The rest disappeared through their entry tunnel.

Carson and Hodge reached the opening at the same time. Carson unlimbered his flamethrower and started it spraying back up the Russians' tunnel. Then the whole squad was charging into the tunnel. They were met half way by another group of Russians. The earsplitting clatter of machine guns filled the tunnel until the two groups closed with each other. Curses and grunts mingled with the acrid smoke and gloom.

A figure in a Russian hard hat loomed up in front of Hodge. The figure raised his weapon like a club, and Hodge delivered a quick kick to the knee, then dodged the now badly aimed blow. Hodge jabbed the muzzle of his gun hard right under the other's rib cage, then stepped back. As the figure doubled over, Hodge brought his knee up into the other's face and smashed the butt of his weapon down on the other's back, just below the rim of the hard hat.

As the figure slumped to the floor, Hodge was bumped from the side. He stumbled and regained his balance. He found that he had been bumped by a Russian who was intent on horning into a fight between another Russian and one of Hodge's men. Hodge tripped him with a gun barrel between the legs and finished him with a short burst while he was down. Then he swiveled to parry the attack of a Russian coming at him from the other side, who in turn was taken from the side by another of Hodge's men.

Then finally there were no more Russians left standing. Hodge counted three of his squad besides himself still on their feet. Friedmann was down, wounded but still alive. Sanchez, a bloody trench knife gripped in his right hand, was examining the Russians to make sure they were dead. Carson was retrieving his flamethrower from where he had dropped it when the hand-to-hand fighting started. Williams was salvaging ammunition from the dead Americans.

Sanchez turned over one of the Americans and spoke softly. "Friend Tennessee, I told you not to make your own bad luck. Now may God have mercy on you."

Hodge spoke up, "Sanchez, get that fusion bomb Tennessee was carrying and get someone else to carry it. Carson, see how things are back in our tunnel. Find Maxwell if you can. Friedmann, see if you can raise Birdseye on the radio for me."

"Birdseye, this is Birdseye Twelve. Come in please. Birdseye, this is Birdseye Twelve. Come in please."

"Birdseye Twelve, this is Birdseye. What is your situation?"

Sergeant Hodge took the microphone. "This is Birdseye Twelve. I'm down to four effectives, including myself, plus one wounded. We had completed our mission when the Russians attacked. Hold on just a minute," he said, as Carson and Maxwell showed up.

"How are things out there?"

Maxwell replied, "Not as bad as we thought at first. About one third of the tunnelling crew are wounded, and they have a few dead. Most of their tunnelling equipment is wrecked, but all our transportation is still intact back at the checkpoint. I've still got my samples and data. They're carrying back the dead and wounded now."

Sergeant Hodge repeated this information to Birdseye, then went on. "We seem to have lucked into a Russian tunnel here. It would take several squads to exploit it properly. We can try to hold the entrance until you can get more troops here, or we can seal it. In any case, I think we need reinforcements to escort the tunnelling crew back. What do you want us to do?"

"Do you have a fusion bomb with you?"

"Yes, Sir."

"Very well. There's a squad in a nearby tunnel. They can be brought around as an escort for the tunneling crew. We just don't have any forces available to exploit the tunnel. Take your fusion bomb as far up the Russian tunnel as you can and set it off there. It will seal the one tunnel and may collapse some of their others. Don't wait for the tunnelling crew's escort, but get the crew started back without their escort. Any questions?"

"No, Sir. Over and out." He returned the microphone to Friedmann.

He turned to Sanchez. "See if the Russians left any vehicles up ahead we can use. If not, we'll have to bring a jeep up from the checkpoint and try to get it through this intercept tunnel the Russians dug."

Sanchez was back shortly. "Yes, there are several Russian jeeps and a personnel carrier up here."

"We'll take one of the jeeps. I'll drive. Get me a Russian hard hat to wear. The rest of you will crouch down in the back. And Sanchez, make sure that bomb is on a deadman setting. If they ambush us, I want to make sure the bomb goes off. There will be no talking on the way. They undoubtedly have the tunnel bugged, and our speaking English would tip them off. We'll drive up the tunnel a couple of miles and set the bomb. If we get to a checkpoint before that, we'll just drive up to it and start shooting. There's no way to sneak up on a checkpoint in a tunnel like this."

They drove swiftly down the tunnel. At first it was narrow, low and badly lighted. After a thousand yards or so, it started to widen out; then after another thousand yards, it became smooth surfaced and lined with concrete. The lights were now set into the ceiling instead of hanging suspended from wires. There were air vents set into the wall at regular intervals, indicating that this portion of the tunnel had forced ventilation. Clearly this was no

temporary or exploratory tunnel. They had tapped into one of the Russian's main tunnels. Then they saw, a few hundred yards ahead, three or four vehicles lined up along the side of the tunnel. This was evidently the first Russian checkpoint.

Sergeant Hodge drove up at a sedate pace, apparently drawing no particular notice from the handful of Russians bustling about the vehicles and standing by the tunnel well. They evidently saw no cause for alarm in a single vehicle, driven by a single man whose hard hat had the proper silhouette.

Sergeant Hodge glanced at the checkpoint as he drove abreast of it. Instead of the familiar little pocket in the side of the tunnel, used by the Americans, this was a rather elaborate affair, with a small office containing a desk and several chairs behind a counter which fronted on the tunnel. From a small balcony to one side, a pair of machine guns covered the tunnel, but only one of these was manned.

The machine gunner died first, in the fiery stream from Carson's flamethrower. The Russians standing in the tunnel were cut down quickly, most of them even before they realized there was a fight going on. Hodge lobbed a grenade into the office and vaulted over the counter immediately after the explosion, to make sure all resistance there was eliminated. He then turned back.

"Williams, get one of those Russian machine guns aimed up the tunnel, just in case they send someone to investigate the shooting. Carson, see if one of those vehicles has more air in its tank than ours does. If so, we'll take it instead. Sanchez, get that bomb set to detonate immediately if tampered with and set the time fuse for ten minutes."

Sergeant Hodge then started rummaging through the desk drawers. Orders, ledger sheets, messages, personal letters, anything might turn out to be of some value to the Intelligence people. He caught a glimpse of movement at the back door of the office, swiveled around and fired by reflex. A figure pitched through the doorway and fell face down. Only then did he notice the long black hair showing below the uniform cap. He went over to the figure and turned it over. Below the crown of long, silky black hair, a pair of soft brown eyes stared sightlessly out of a young, pretty, Slavic face. The soft, pleasingly rounded contours of her uniform jacket were disfigured by still-spreading dark splotches.

"Sergeant Hodge?"

He jerked himself upright. "Yes, Sanchez?"

"The bomb is ready to go."

"Start the timer." He reached down and closed her eyelids, then dashed for the jeep.

IV

The debriefing officer stared across his desk at Sergeant Hodge. "You're sure that's all, Sergeant?"

"Yes, Sir. I've given you all the details I can remember."

"Then what's eating you? You've never before acted like this after a mission."

"I keep thinking about that Russian woman."

"So that's it. Okay, so the Russians have women in the bunkers with them. They probably assign them to noncombatant jobs like clerks, or cooks or communications technicians. And as an additional duty, they keep the troops happy. The Russians have always been more practical about things like that than we have. If that's what's bothering you, I'll recommend you for a week's R & R in Paris. In fact, I'll recommend your whole squad. After a fight like that, you deserve it anyway."

Sergeant Hodge answered in a dull voice. "I'll accept your offer, Sir. We do need the rest. But that won't really help. It won't make me forget I killed a young girl who was maybe all of twenty years old." Then his voice filled with anguish. "Sir, I've been Regular Army since I was old enough to enlist. I've been in more brushfire wars, police actions and border incidents than I can keep track of. They were all bloody and caused a lot of people a lot of grief, but at least they seemed to make sense. I knew why I was fighting, and I could see how it was helping someone. But this is different. Why does a young girl like that, who ought to be courting or going to dances or whatever it is that Russian girls do, have to get mixed up in the grubby business of tunnel fighting and end up dead on the floor of a tunnel, in a puddle of her own blood? Or how about Tennessee, who got more fun out of life than any other man I ever met? How come he had to die like a mole, grappling with some other moles, in a dark stinking mole hole a quarter of a mile underground? It doesn't make any sense. It's nothing but a mess. How'd we ever get into it anyway?"

"The pendulum swung when we weren't looking."

"What's that, Sir?"

"Look, there's always tragedy in war. If you grant that war is an acceptable means of settling political disputes, then you have to accept a certain amount of the tragedy as unavoidable, since wars are usually fought by the young and healthy. But there's a lot of tragedy, like the death of that girl and like the manner of the death of your friend Tennessee, that's really unnecessary. It comes from being unprepared for war or being prepared for the wrong kind of war.

"You can think of the relation between offense and defense in war as like a pendulum. One time the offense is overwhelming, then later the pendulum swings and defense is invulnerable. Does the term 'Maginot Line' mean anything to you?"

"Ummm, not a thing, Sir."

"Well, let's look at a bit of history. Back in 1914, everyone thought that a modern war would be over in a short time. Economists decreed that highly integrated modern economy just couldn't stand the strain of a prolonged war, with its disruption of trade. A war was to be won by a few decisive battles right at the

outset. The victor would be the one who hurled all his offensive force into the battle first.

"But it didn't work that way. While everyone was busy planning his offense, the pendulum had swung to the defense. Trenches protected by barbed wire and machine guns were nearly impregnable. British and French attacks on German trenches frequently cost ten thousand dead in a single day and achieved a penetration of the enemy lines of a few hundred yards at most.

"So the French, in their war preparations, decided to build a line of fortifications along their German frontier. This was the Maginot Line, a steel-and-concrete super trench which was to be even more impregnable than the trenches of 1918, while giving the troops all the comforts of home. But while they gave their attention to blueprints and concrete mixers, the pendulum swung back. The airplane and the tank made the offensive overwhelming.

"So we and everyone else, drew a lesson from this. Mobility was the key. Faster tanks, bigger Armored Personnel Carriers, more fighter bombers were the answers.

"Well, again it didn't work out that way. If the enemy uses nuclear weapons against you, you have to dig in deep for protection.

"How could we have prepared better for it, if we had realized that a defensive which can withstand a nuclear weapon can surely withstand anything less? I don't know. We might have been smart enough to avoid having the war altogether. It doesn't matter any more. The real problem is how do we get out of it? I don't know, and I don't think anyone else does either. There don't seem to be any shortcuts. We don't bomb the Russians' railroad marshalling yards because they'd bomb our Atlantic ports in retaliation, and no one knows where the retaliation and counter retaliation would end. Likewise, they don't send their subs after our shipping, because then we'd have to bomb their sub pens. So both sides are able to harness their entire Gross National Product to war production and send it over here where we're engaged in a vast underground wrestling match. It looks like it'll end the same way World War I did, when one side goes broke before the other. I'm an optimist, after a fashion. Since our GNP is over twice theirs, I believe we're bound to win in the end. All it will cost us is a couple of decades of economic growth and a generation of young men.

"Well, I've said enough. On that relatively pleasant note I'll end. Enjoy your leave in Paris and try to come back all charged up and ready to do battle again."

Sergeant Hodge rose, saluted and walked out glumly. That old familiar lump of lead was back with him again, trying to pull him down through the floor. And this time, he knew, it wasn't going to go away. It would be with him until, somewhere in some dark tunnel, his luck would run out at last.

END

ON THE EDGE OF THE GALAXY

by ERNEST HILL

Illustrated by FINLAY

You can get used to anything, out on the far reaches of the galaxy — anything but Earth!

I

"They're coming in," Karlsen announced in that exact, perfunctory way of his. "Bang on schedule. Beam 391, approaching outer asteroid belt. Decelerating to half the speed of light. Should land at 0532 our time."

"That computer's always slow," Spandrell goaded him. "I could work it out better with an abacus. If I had an abacus."

"Generals always do," Ngomo grunted.

I raised an eyebrow, half to signify that rank was rank and generals did as they pleased and half to ask what it was they always.

"Arrive on schedule. An hour before first dawn."

"It's our first visit," Spandrell argued. "How do you know they come half an hour before first dawn?"

"They do everywhere else," Ngomo said. "Why should this be

any different? With any luck, Karlsen's got his beams mixed up, and he'll land in the swamp."

"Could you fix it, Karlsen?" Ingles asked, a wry gleam in his green alien eyes.

The time had certainly come to assert my authority. They were quite capable of crashing the general's ship without even asking me first. That is the trouble with outposts. A few dozen technicians, boffins, admin staff, laborers, all facing the same hazards, conscious of sharing a common identity, the bond of one head and two legs. A voice and a home somewhere in some place out on the fringe of the galaxy. All except Ingles — and he was human as the rest of us for all his green eyes and yellow, blue-veined hands. There was a tendency to forget who was who. What exactly a general's insignia looked like. Why I alone wear a khaki uniform and carry a stick. Why in fact I was there at all. For the whole 582 days of the VX 91/6 year on no day of 36.7 hours earth time had anyone addressed me as colonel. 'Geoff' or 'Bud' — thumbs up, thumbs down and Natascha, who called me Boris.

"Listen, all of you!" I said. "General Kalen's the boss of all outer-fringe exploration. We rely on him and the rest of them down wherever they are in the galaxy for supplies. This is his first visit, and if he's happy, it'll be his last. He's getting our reports regularly through the electromag accelerator, and he should know the difficulties. He's landing at the right time anyway. If he comes down an hour before first dawn, we'll have time to get him and his craft under the net before the bombardment. The goons never let loose before second dawn with the binary well above the horizon. We'll have no nonsense about ditching him in the swamp. Instead, we'll have a general smartening up all round. An air of rattling efficiency and — what's that thing called?"

"Esprit de corps!" Karlsen prompted.

"Esprit de corps — what?"

"Esprit de corps, Colonel!"

"That's better!" I looked round at the heavy, masklike faces, pale in the harsh light of the luminoid slung from the dome of the steel beehive structure I termed my H.Q. The hodge-podge of equipment, bunks, tables, chairs, desks with ledgers, coffee pots and beakers. There was a dart board on the wall backed by a map of the outer seven colonial spheres. Some pictures by Ingles, an incredibly observant artist, of Natascha posed like an Hamadryad on a petrified log. There was an auroch's head with a hook on its nose and quoits for throwing at it. Pretty general stuff for an outstation. Nothing much, I thought, to impress the general with what we were all there for. What were we here for? There wasn't much in the outer seven, and one planet looked very like another.

Karlsen threw a switch and projected a hazy outline of a ship with retromotors firing against a background of stars and someone's smudged thumb-print on the screen.

"Here he comes!" he said.

Ngomo sighed and shook his head. "I'd better get the cat out on the landing strip and bring him in fast."

"Fast — what?"

"Past — Colonel!"

Spandrel unhooked his helmet from the main switch of the electromag accelerator. "Okay to use landing lights, or will that invite the goons to lob one over just for luck?" he asked.

"They've never fired one in the dark yet. Lights look like someone lives here. Use them!" I decided. "He's coming in on the beam all right?"

"Right in the beam, Colonel!"

I snapped my fingers, and Waldron brought my helmet and levitator harness. Grinning, he fixed the straps.

"I come with you, Colonel?"

I thought about it. It looked better to have an aide, even an obvious imbecile like Waldron, whose nerve had gone the day we discovered Rastus. Rastus had taken a fancy to Waldron and pinioned him with a friendly tentacle. It had taken all Natascha's coaxing to make him let go, and Waldron had never been the same man since. But he was loyal and useful and harmless and a presence to stand behind me. With any luck the general would not notice the grin under the fish bowl of his helmet and the twitch of the hands in his mittens.

"Come along!" I said. My voice rasped with a new electronic note of authority with the headspeaker in place. "It's 'colonel' from now on and jump to it. Let him see us as a highly efficient little force holding out against insuperable odds. Let him see Rastus and a Goon bombardment, and we'll all get medals and go home. If he thinks someone else could do it better, you'll have a new C.O. and regiments of space administrators and the military. Do you want bull and the goons too?"

"No," they said. "No, Colonel!"

"Right!" I ordered. "Open up, and let's go meet him!"

"Sir!" Inglis snapped to attention and flicked the activator mechanism with one of his prehensile suckers. The inner door to the airlock opened, and Natascha stepped out.

"Why, Boris!" she said.

"Tell her!" I ordered them. "And see to it she understands!"

Ngomo brought a cat round to the door, and I climbed aboard with Waldron and Spandrell. Ngomo drove us through the little cluster of beehives that made up our station to the perimeter of the chain-link dome that covered the safety area. Spandrel heaved on the pulleys that raised a few yards of the curtain high enough for Ngomo to get the cat through.

"Leave it up!" I ordered. "The bubbles won't find that hole before we get back!"

II

We drove to the air strip, and a hundred-square-meter postage stamp cleared in the waving marsh grass at a safe distance from the Rastus swamp. We had made the track from the boles of ossified trees

and the mud from the swamp that dried quickly like aspalt. On either side, the ground was wet and spongy and black with the debris of ancient forests like soft, glutinous coal.

"Blowing a gale as usual." Ngomo, himself as black as the swamp, had a way of noticing the obvious and the worst of it at that. Show him a pearl, and he would see only the oyster. The night was brilliant silver in the light of the three moons. Aglia, Euphrosyne and Thalia. We had thought it a pity to give them the usual numbers after the second oblique stroke. VX 91/6/1, 2 and 3.

The stark beauty of it all moved Waldron to quote from a forgotten earth poet. "How sweet the moonlight sleeps upon this bank!" A long way, I thought, from that bank of the wild thyme and the single moon and winds that blew air one breathed and smelled and used to turn windmills with. No one knew what this wind was made of. It defied all analysis. It was not just a new grouping of atoms into an unknown molecular structure. Even the atom itself was different. Energy in a form that became wind blowing with the dawns from the goon land, but somehow the swamp grass absorbed it. No photosynthesis. No chlorophyll. Just tall, yellow, osier-like grass that sucked up water and a dozen unnamed minerals with a breathing in and out of wind. We turned our faceshields to the sky. Above us, the approaching fire of the ship's motors was suddenly extinguished.

"Retros cut, parachutes open. Landing now!" Karlsen's voice announced in my headphones. The radar confirmed the evidence of my eyes. I was surprised. You never knew with Karlsen, and we'd humped his equipment around so many planets. One day we'd find a gas his beams wouldn't go through, and then perhaps the bigwigs would leave us alone.

"There it is," Ngomo pointed. "Coming out of the sky wobbling like a belly dancer's navel. This wind should shake him up a bit."

"Thou art not more unkind," Waldron quoted, "than man's ingratitude." He refrred, I thought, to the wind rather than to Ngomo's belly dancer. We waited, and the long arms of the landing gear extended as the ship touched down safely on the strip. The loud speakers blared the supranational anthem "God save our glorious world" from the four corners of our postage stamp. A happy thought on Karlsen's part, who apparently had it on tape in the H.Q. The general came down the ladder clearly impressed. His hand was raised in salute, fingers touching the tips of helmet antennae.

"Welcome to VX91/6, General!"

"Glad to be here, Carruthers. Glad to be here."

He took a look round for a guard of honor needing inspection, and a lot of aides came down the ladder behind, keeping step rung by rung. I looked apprehensively at that point on the horizon we called, for nostalgic reasons, east. Already, purple and orange rays were flashing upwards from the general area where soon the arc of the first ball of the binary would blink, to be followed in ten

minutes by its twin and second dawn. Purple merging with orange, a green-gold and then, just before full binary, a new color, indescribable in earth words. We had named it auron — the halo of the new world. VX91/6. The gang rushed to the derricks and was lowering the ships nose down towards the transporter almost before the general set foot for the first time on our planet. I led him quickly to the cat. The aides followed in single file.

"Come aboard, General."

"You certainly hustle here, Carruthers. I like to see hustle." So that was my name! I had wondered.

"Yes, General. Come aboard."

"So this is VX 91/6?"

"All of it, General. We can get your staff on too if they pack tight."

"Is it all as dead as this?"

"Quite dead, General. Up you come! It's nearly first dawn."

"And that would be the dawn over there? A magnificent sight."

"Marvelous. There's very little time, General. The bombardment starts at second dawn."

The general's hand strayed to the lumivex shield of his headpiece, unconsciously stroking upwards the outline of an imaginary mustache.

"My dear Carruthers! I have been under fire before, you know. This concern for my safety is hardly necessary. I remember once on XL 65 — glass shells, they were. Shrapnel. Jagged lumps of it. And then on TS 20, the theta rays. I have managed to survive. What form does your bombardment take? Your reports were somewhat reticent."

"Bubbles!" Waldron began to sing. "Empty bubbles in the air, they fell to earth I knew not where."

"Quite," said the general, glaring at him with two bright eyes inside his helmet. "Your name would be . . .?"

"Waldron," I introduced, "My — er — side-kick."

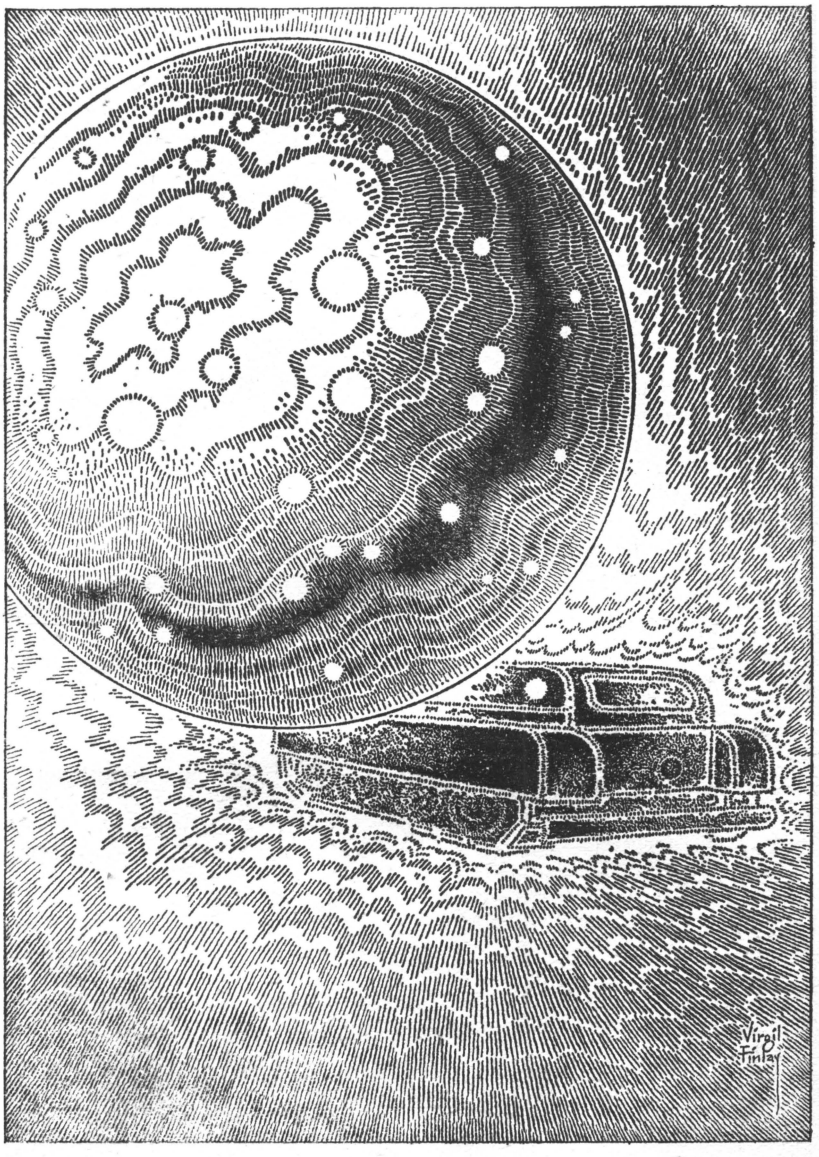
"Side-kick?"

"No," I said, "that's not the right word, is it? We've been away so long, I forget which is rank proper and which is rank derogatory. He's a good chap anyway."

The general was making some noises about being sure he was and meaning sure he wasn't, when I saw the bubble. It was drifting in the apparent aimless, coquettish way of bubbles over the swamp grass, bobbing up and down in the wind. The dawn lights were reflected, sparkling on its surface like patterns of one oil drop in a puddle.

"Everyone down!" I shouted.

The ship crashed on to the transporter with an almighty clang as the gang dived beneath it. Ngomo and Waldron flattened themselves on the lee side of the cat. Only the general and his half dozen aides stood, for all the world like a row of gasoline pumps with notebooks and pencils in the crook of an arm where the notch for the nozzle should have been. I brought him down with a Rugby tackle, and his staff followed their leader in the best military tradition. He said something like 'monstrous' or 'outrageous' or 'court martial' — it was difficult to get the exact message. His antennae had twisted with the fall, and there


Virgil
Finlay

was some distortion. Fortunately for all of us, before anything decipherable came through, the bubble swooped, and the cat was vaporized in a puff of hot steam.

"Lie still!" I shouted. "Don't do anything to annoy it, and perhaps it'll go away!"

We were never sure whether the bubbles could hear us or not. Bubbles are very like the god-in-chief that every planet seemed to have. You never knew if they really existed or how they stood in relation to yours, and you treated them with respect, just in case. Left alone, the bubbles never came down to ground level. They concentrated on anything metal. We had lost a lot of equipment that way but so far, with prudence, not a single man. An aide cautiously straightened the general's antennae, an action I thought worthy of a purple heart or whatever it is they give heroes these days.

"What is it?" he asked when the operation was completed.

"The bombardment," I told him. "They're early today. They probably knew you were coming. We'll move before they all are able to get the range."

The bubble drifted away over a hummock of phosphorescent hornblende Natascha had sculpted into a fair semblance of an X60 man-eating frog-goddess and down the track toward our enclosure. It would eventually expend itself on the protective netting which channeled its energy store to earth or at least to VX 91. The gang climbed aboard the transporter and started the motors. There was a general rush to get home before the next one came floating downwind.

"We'll walk," I told the general. "I wouldn't like to be near your ship if they get it."

"Get my ship?" he asked incredulously.

"They get everything," I said. "We've got one, but it's no use to a general. It was obsolescent years ago, and the maintenance team all went down with U.26 plague before we found the antidote. In fifty years, it's never seen an oil-can."

"I see," he said.

"We'll go by the swamp," I directed. "We're safer with Rastus. Rastus knows all about bubbles."

"Anything you say, Carruthers," he agreed. "Anything you say." His helmet was overlarge, and his head inside reminded me of a hermit crab in a cockle shell.

III

There were no more bubbles, and Rastus was apparently asleep. Not a ripple on the swamp stirred as we made our way along the porous, black-treacle, spongy track. I threw a large diamond from one of the bank meteorites in his usual half mile area of ooze, but not even a tentacle showed.

"Was that a diamond?" a major asked.

"Yes," I said. "No volue here of course. You can pick up a ton anywhere in the outer periphery."

Someone mentioned there was reserve energy in the general's ship and we could use the levitators. We wore ours more from habit than for

flight; we were always short of power.

"Good old Kalen," I thought. "With energy on his ship. I wonder if we can whip a generator or two before he goes."

We sailed back to camp over the grass and the broken, dead trees and arrived at the same time as the transporter. I invited them all to coffee in the H.Q. I wanted to see Kalen without his headgear. He looked the sort of general that all generals try to look like. Clipped mustache; bright, steely eyes; lantern jaw; creases down either cheek so deep his Roman nose jutted like a letter L in brackets. He sat with his back bolt upright. A strain, I thought, on the belly that nature had built to sag a little. Natascha brought coffee, and the bright eyes mapped her contours with battlefield precision.

"Hem!" he said. "Er — yes. Hem!"

"Natascha Kaminskaya," I introduced. "Originally, when we all came together as a team about seventy-five years ago, our medical officer. Now our phagocytes cope with anything, and she only has an occasional broken leg to slip in the autosetter. She's become our universal femme fatale. We share her. On a strictly rota basis of course." The military, I remembered, are always impressed by rotas.

"It's fun," Natascha told him.

"It must be," he murmured. He rose to his full height and stroked his mustache. Inclining his head, he gestured me to follow him to a point away from the others secluded behind an applied atmosphere generator.

"Is she all right?" he asked.

"Marvelous," I said. "You want to slip in on the rota?"

"I mean," he snapped, "is she all right politically? She appears to be a Russian."

"Is she?" I wasn't at all sure about Russia. It was the bad half of some planet or other, but I had forgotten which.

"And then," he went on, "that chap with the suckers sprouting out of his shoulders. Where exactly is he from? You can't be too careful, you know."

"Ingles?" Where had we found Ingles? Somewhere down Earth way — Barnard's Star perhaps. "Ingles is one of the best," I said. "You should see him dicing — hands against suckers. He is quite schizophrenic. The suckers belong to the older half of his development, and they're controlled by an antique corner of his brain. No connection with the humanoid that runs his hands. At all his games, the hands win."

Natascha was handing round the coffee we always laced with a YK 61 rum we had brought along in a tanker. Ingles was already raising his beaker. A reflective sip when the hands held it and a long gulp when the suckers took their turn. The sight of it seemed to trigger off some reaction in the general's adrenal-sympathico system. He snatched a beaker from Natascha, drew himself to his full height and cleared his throat. The aides snapped to attention. He raised his glass appar-

ently in invocation to the genius loci.

"The president!" he bawled.

"The president!" the aides echoed

"Who is president of where now?" Ingles whispered. I twitched an eyebrow, and he subsided. I hadn't the least idea. Presidents came and went. The drill, I took it, was to toast the idea of an office rather than an person. Everyone, everywhere drinks to something they believe the giver of all things good. We often toast Natascha. Why not a president? It was all the same to me.

The general sat and extended his legs to their full length resting on the heels of his high, brown leather boots. He thought it time to unbend, to show himself benignly human like the rest of us with a big heart under the Sam Browne belt. But he was cautious. He wasn't that sure of us yet.

"Tell me," he asked. "What exactly is the military position?"

"The military position," I said, "is — well — myself. The rest of us here are sort of civilians. We had — I think you call them soldiers — in fair numbers when we set out. Somehow they all succumbed, and the civilians survived. The heroes, if I remember rightly, went first, then the not-so-heroic and so on down the scale to me. We set out originally to look for — what was it?"

"Titanium ore." Karlsen said.

"Zirconium!" Spandrell thought.

"What's zirconium?" Ingles asked.

"There wasn't any." I completed.

"I was referring," General Kalen said slowly, "to the strategic position of your encampment and the deployment of the enemy forces. Who or what is, in fact, responsible for the bubbles you call, rather oddly, the bombardment?"

"Oh, those," I told him. "That's the goons."

"And who or what are the goons?"

"We don't exactly know. They live, we believe, on the other side of the marshes."

"And what kind of creatures are they?"

"Anthropoid!" Karlsen snapped.

"Humanoid!" Ingles almost agreed with him.

"Duodecapods!" Ngomo shouted.

It was the old argument. Only humanoids would want to play with that sort of energy, and only duodecapods would know how to.

"We don't know," I explained. "We've never seen one. Their whole territory is encased in a kind of bubble, miles across, very likely made of the same energy substance as their missiles. You can't fly through it; metal dissolves on contact with it and generates considerable heat. You can see through it, but it's like looking at the sea-bed with a light swell running. It's rippling and distorted. Every morning at second dawn, the wind rises, and pieces of bubble appear to detach themselves from the main structure and float down here looking for us. That's goon bombardment. We think the bubbles may be sentient."

"How big an area have you prospected so far?"

"Only our camp under the chain-link dome and the air strip."

"Is that all?"

"It's big enough. The rest of the planet is dead. Marsh and swamp and the goon bubble. Everything died a long time ago except . . ."

"Marsh and swamp!" Waldron shrieked.

I had forgotten. We never mentioned the swamp in his presence. He threw a fit and sobbed. The general treated us all to a long, cold look. He seemed not to like what he saw. The aides were writing rapidly in their notebooks, and a major technologist was walking curiously around our equipment, showing interest in a spiral of copper tubing in a stainless steel vat. It looked like — and it was — a still.

"The titanium ore," the general asked slowly. "The spectrograph showed titanium. Have you really prospected for it?"

"Have we?" I asked my staff.

"The titanium is in goon territory," Karlsen came to my rescue. "Under the bubble."

"In the swamp!" Waldron giggled. He screamed again.

"What's titanium?" Ingles asked.

"Note this!" the general announced. His aides raised their pencils and gathered around him. "In all my experience, I have never visited a station so — strangely — conducted as this. The light-years between your colony and Earth are no excuse for an absence of discipline — of objective — even, it appears, of mental balance." He looked at Waldron. "You have been here five years . . ."

"Two!" Karlsen interrupted.

"I refer," the general snapped, "to the accepted reckoning in all civilized stations. That is, in Earth years. Earth time has a mystic, transcendental significance. It is absolute, true cosmic time. The length of your day and the duration of the VX91/6 orbit around its parents VX90 and 91 are irrelevant to this true time, and I repeat therefore that in five years you have succeeded in achieving precisely nothing. You have been together, you say, for seventy-five years, and you must all be in the region of two hundred years old. An age of discretion. Of maturity even. What have you achieved on your previous missions?"

"We've survived," I said. "And that has been achievement in itself."

"Utterly negative!" he snapped.

"Positive from our point of view," I countered.

"I am a reasonable man," he continued. "I would accept failure brought about by insuperable obstacles. Alien predominance, for instance. But what are your aliens? What is their strength? You appear not to know. What meaures have you taken to defeat them? None at all that I can see. Where is the titanium? Where is the zirconium? Have you any idea of the cost to Earth of these types of survey missions? They have to be paid for. They have to show a profit in the minerals shipped back to the mother planet. That way lies survival. True survival in the communal sense. A small planet the master of the universe, the storehouse of all the treasures the universe can offer it. And how does Earth obtain these

treasures? By the self-sacrifice, gallantry, determination of its merchant fleets and the surveys carried out by teams such as yours. Teams which should be inspired by the same sense of adventure that sent the Vikings to North America, the early Frenchmen to the moon." He paused and swallowed two purple tablets. His eyes brightened, and the pupils contacted.

"Well, Carruthers?" he asked sourly. "And what explanation have you to offer?"

I looked round my staff. Karlsen, blond, bearded, hunched over his electronic paraphernalia. Spandrel, short and fat, biting his fingernails. Ingles, young, yellow and handsome, mustachioed, easily erect, doing his best to appear battleworthy. Yellow hands on hips and shoulder tendrils coiled, Medusa-fashion, around his neck. It was Natascha, who came to the rescue.

"I think Rastus would know about the goons and about the titanium. Rastus knows most things."

"Of course!" I agreed. "The general must certainly meet Rastus!"

"I should be pleased to meet anyone," he said stiffly, "who could give me a simple answer to a simple question." He was watching Waldron crouched behind the distillery and sucking at a hip flask like a hungry calf at the udder.

"That's settled then," I announced. "Shall we go right away, or will you have breakfast first? Hydroponic melons and imported protein? We usually manage on the coffee."

"Can't you send for him?" the general asked. It was really laughable. How little the higher-ups knew about the cosmos they commanded. Even Karlsen's beard bobbed with suppressed amusement. Natascha took his arm maternally. Natascha could be very persuasive.

"Come with us," she said. "We will show you Rastus." I nodded to Ingles, who opened the inner door of the airlock.

"Just you and me and the colonel, General," she said. "Rastus might not like a crowd."

He allowed us to fix his helmet and harness and lead him into the airlock. The aides sighed and sat.

"Weapons?" he asked "Where are your weapons?"

"We never carry any," I told him. It had been Natascha's idea. Natascha had said it was wrong to kill the natives of a new planet just because they were non-humanoid, frightful or strange. She had proved her point the first day we met Rastus. I wanted to shoot at him; but Natascha had stopped me, and we had just stood and watched him unfoil. Looking back I think we had been braver than most heroes. Somehow, Rastus had understood. He was now very fond of Natascha, and we look on him as quite one of the family.

It is just as well. He is quite invulnerable.

IV

We walked down to the swamp, Natascha chattering to the general and asking him what the girls were wearing on Earth and if he would like to take Ingles's place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on the rota that night. The general seemed preoccupied and almost, for a general, ungallant. He said "Niet!" once or twice, using some language which, if we had ever known it, we had long forgotten. Natascha took it as affirmative and said, how nice and she would tell Ingles. I thought I saw his antennae twitch.

"Well?" he said, when we reached the bank.

"We are somewhere about the center of him," she said. "I'll call him up." She stirred the ooze with her foot and called "Rastus!"

The effect was, to the uninitiated, quite remarkable. As far as the eye could see, to right and left of us, the swamp began to stir and eddy as Rastus's mile-long tentacles twitched and their extremities with the little mouths with the extra-retinal perception opened and closed. One of them — we had never been sure how many there were — sensed her presence, arched up into the sky and then plunged downwards to stroke her faceshield.

"Darling!" she cooed.

The general sat without a murmur on a petrified log while two extra-retinal mouths looked him over. They snapped menacingly until Natascha put an arm round him, when the tentacles linked themselves in a knot and the mouths looked at each other in the tongue.

"What is it?" he asked.

"We don't quite know," I told him. "We've never seen all of him. He's quite a boy, isn't he?" I felt a kind of proprietary pride in Rastus, like a suburban householder with a liver and white Great Dane.

"He's — this — knows about the bubbies, the titanium, the goons?" he asked.

"I'll ask him," she said. "Rastus!" She cooed. "The bubbles. The round things." She made circular gestures with her arms and pursed her lips, puffing inside her helmet.

The three mouths unwound and studied her, swaying rhythmically from side to side. I drew bubbles with the heel of my boot in the spongy soil. I surrounded them with radial lines like the rising suns' rays. I didn't know how to draw titanium.

The whole performance must have puzzled Rastus, because for the first time in two years — our time — the whole of him emerged. We had never seen his head before. In fact, we had wondered if he had a head, since he seemed to manage so well without one. It came up now like the rock of Gibraltar, and, to Natascha's delight, he had a real eye in addition to the light-sensitive mouths. It was about the size of the average radiotelescope bowl and would have fitted nicely into the circle of Stonehenge. The iris was purple, and the pupil deep jet black. It was a friendly, intelligent and highly perceptive eye.

"Rastus, you're beautiful," Natascha whispered. I don't think he knew the words she used, but like a petted dog, he gathered the gist of the sound and inference. A lid, like the dome of Saint Paul's tilting, came down out of the rocky mountain of head, and the green-black hue of the bulbous undercarriage and the supporting tentacles, twenty-five of them, turned slightly salmon-pink.

Rastus, all two miles of him, was blushing.

"The bubbles, Rastus!" I asked him, since he seemed rapidly to be getting the significance of words. "What do we do about the bubbles?"

The head tilted forward, and the great eye hung above us, watching as we gestured, and drew pictures. Then he seemed to understand.

Three tentacles whipped from under him, circled our waists and whisked us skyward to a height of about half a mile. We could see the bubble of the goons clearly in the light of the rising suns. We could also see, what we had long suspected, that apart from the dome and our own encampment the planet from horizon to horizon was flat and dead, a world where only the yellow marsh grass waved around the black ooze of the swamps. Rastus held us aloft until we had seen all there was to see, and then the whole of him began to move. By contracting his forward tentacles and extending those at the rear, he swept us toward the dome. At their full extent, he drew the hind ones in beneath him and extended the leaders a full half mile outwards and repeated the process. In two minutes we were swaying high above the dome.

"What now?" I asked.

He uncoiled a longer and thicker tentacle from somewhere in the folds of his bulbous belly and thrust it into the surface to the bubble.

"He's charging his batteries!" Natascha shouted from a long way off on her far tentacle. There could be no doubt that that was exactly the idea of the process. Rastus lived on energy. (We had once wondered why he had shown no interest in living on us.) And the bubble was in some way an energy container formed by the action of the binary on the energy gas of the atmosphere. It all became clear to me. The effect of this feeding on Rastus was quite significant. He really came to life. He danced, hopping from tentacle to tentacle, his great eye sparkling and glinting, the lid sliding up and down and the pupil contracting to the pinpoint of a cartwheel. At last, apparantly satisfied, he withdrew the connector tentacle with a loud crackle and, as the dome closed over the fracture, small balloons of energy dislodged and floated downwind toward our encampment.

We had found the origin of goon bombardment. There remained only to account for the dawn wind. We had not long to wait.

Attracted probably by the explosive crackling of the disrupted energy surface, other giant shapes rose from the swamps around the dome. They plunged their tentacles through its surface; its area shrank still further, and the charged monsters became animated. Soon, as far as we could see, the whole planet was alive with dancing mountains of squid-like shapes, and the wind rose howling from the threshing of their supple, sinuous, mile-long members. Then, one by one, they became calmer, and, with a contraction of tentacle, they sank beneath the surface of their respective swamps. Only Rastus remained, holding us aloft, making sure we saw and under-

stood, then he, too, began to sink slowly downward toward the bubbling blackness of his bog.

"Not in the bog!" the general shouted. "Don't let him drown us!"

"Of course not," Natascha snapped, indignant at his lack of understanding. "He wouldn't hurt a fly."

He set us very gently on the bank, and for a moment towered above us, his great eye blinking at Natascha.

"Isn't he nice!" she said.

The general was laughing rather in the same cracked key that Waldron favored. He danced a clumsy jib in his heavy boots.

"The bank!" he said. "How sweet the moonlight sleeps upon it where the wild thyme grows."

Natascha mothered him, and we coaxed him back to the camp. There were nurses with medals on their white spacesuits in his ship, and they came demurely down the ladder and surrounded him.

Back in the H.Q., Karlsen started up the electro-mag accelerator.

"Messages?" he asked the major who seemed to have slipped on the mantle of authority before anyone else had seen it fall.

"No messages," he said. "I think we'll forget we ever came here. All the galaxy needs attention, and you can't be everywhere. I think we'll just slip away."

"Very wise," I said.

"I saw that thing from your lookout tower," he confided.

We gave him a coffee and a hydroponic melon.

"You lot want a posting home?" He asked. We had always talked about postings home. We had grown so used to supposing that that was what we wanted, we had never really thought about it. To have the opportunity suddenly rolled off the cuff like that caught me quite unprepared.

"Home?" I asked. "Where's home?"

"Earth, of course," he said.

That was it, of course. The place we always referred to when we wanted a good simile.

"Do we?" I asked them. They had their memories too.

"Commuting to space H.Q. on a wet Monday," Spandrel groaned.

"Presidents and generals and bombs and political broadcasts."

"People everywhere," Karlsen remembered.

"What are people?" Ingles asked.

"What about Ingles?" I asked the major, playing for time.

"He can go back to his own planet. He might get on to Earth if he passes the vetting."

"Vet Ingles?" I asked.

Natascha came down the ladder from the single upper-floor but we had built for her. The plain round walls of our beehive with its junk and clobber never seemed dull or sordid when Natascha was there.

"Shall we go home, Natascha?" I asked her. We all knew it was her decision really.

"We couldn't leave Rastus," Natascha decided. That settled it.

I heard later they made the major a general first class. Experience does a lot for a man. But we never found any titanium. END

THE SPY GAME

Watch those toys your children put on their Christmas list — this just may be one of them!

by RACHEL COSGROVE PAYES

Level 70 — Cubicle AAd
Eastern Megapolis, N. A.
September 27, 2329

Super-Galactic Toy Company
Level 90 — Cubicle XNZp
Western Coastal Urban Center, N. A.

Gentlemen,

It is a disgrace that any toy company should put on the market such a toy, supposedly for children, as your "Interstellar Secret Agent Kit."

In your 3-D family entertainment commercials, which you broadcast (by actual count) 317 times daily, you recommend this kit for children of six years and older. Outrageous!

You will shortly be hearing from my lawyers; for, thanks to my purchase of your "Interstellar Secret Agent Kit" for my young son, my wife has suffered a nervous breakdown, and our entire family is severely disrupted. I intend to sue you for ten billion credits for medical expenses for my wife, her psychiatric care, loss of her companionship, *etc., etc.,* as well as many other minor claims which my lawyers will enumerate at length.

In hopes that you will IMMEDIATELY withdraw this alleged toy from the market, I shall give you a detailed report on my family's unhappy experiences with the "Interstellar Secret Agent Kit." I purchased it at Tricky Jack's Super-Discount Subcellar ("We buy and sell down close to Hell") for 1,007 credits (discount price). I wasn't about to pay your list price of 4,998 credits, which is out-and-out robbery for such a piece of junk. My son hadn't had the kit more than an hour, when the handle came off the genuine imitation Betelgeuse immy-skin attache case.

The instructions for use of the kit were in code, which defied me; but my son (age 7) mastered it in no time. He said it was an ancient dead language, Igpay Atinlay, which is all the rage at school. Some wise apple slipped a tape of it into the hypno learner, and they all had it down pat before the teaching machine caught the error.

The first thing my son did was to try out the Scary Scarab Scalper, that nasty little electronic gadget which looks like a cross between a beetle and a midget lobster. He wound it up and turned it loose, when his mother was in the room. Luckily she ducked as it hummed over her head, so that it didn't actually scalp her — it just shaved her head.

We had invited my boss to dinner, and she didn't have time to send out for a wig; so sonny came to the rescue with one of the disguises from that dreadful kit. How was my wife to know that it was a Medusa wig? She'd just put it on, when the door speaker announced that our guests had arrived. When she went to greet my boss, he took one look at those snaky locks and was turned to stone. Now I'm out of a job, and we're the unhappy possessors of a new, grotesque piece of statuary. (His wife wouldn't have it — said she'd warned her husband that the very next time he got stoned at a party, she'd lock him out of his cubicle.)

Needless to say my loss of employment was a severe blow to my wife's psyche, as we owe on the 3-D Home Entertainment Center, the Aircar and the Readi-Meal Servo-unit. The Readi-meal Corporation discontinued service when we lost our credit rating, and my wife had to learn how to add water to freeze-dried foods, a skill her mother never taught her.

Naturally we scolded sonny; so he promised to be more careful with the kit in the future and not direct its diabolical contents at humans. This is what caused all the trouble with our Sirian cat: You know how valuable these imported felines are; not only because of their large size and metallic fur, but also because of their extremely gentle nature. Many people employ them as baby-watchers. Ours, Baby Umtiddledy Pinkums, a female, was scheduled to be bred to Feline Champion Tomas Tigre. And the kittens would have gone for 3,000 credits each. We were keeping Pinkums locked in her cage, which turned out to be a mistake; for the lock inspired my son to try the Electronic Lock-Picking Tool in the Secret Agent Kit. I suppose your company should be congratulated on the fact that this part of the toy worked as advertised — too well. Pinkums got out and headed for the cubicle door. Just then a visitor arrived. It was my teenage daughter's nauseating boyfriend, who let the cat out.

As Pinkums was streaking through the crack in the door, my son sprayed her with the Aphrodisiac Atomizer from his Secret Agent Kit. Before we got the cat back into our cubicle, she'd met a common alley cat that was wandering about on the sidewalk. Now who in his right mind, may I ask, wants a half-Sirian, half-alleycat kitten? Not only will no one pay 3,000 credits apiece for the kittens, but also we'll probably have to pay people to take them off our hands, as the Prevention of Cruelty to Aliens Act prevents our drowning them.

This was very unnerving to my wife, who had already spent most of the credits for the as yet unconceived Sirian kittens. This, too, was a conditioning factor in her breakdown.

The thing which really caused my wife to flip, though, was what happened to our daughter's boyfriend. Let's face it, our daughter is no raving beauty. In fact, she's homely as a Vegan milligual, and homelier than that you don't get. This fellow who has been dating her is one big mess; but my wife argued that he was male and eligible, and

we mustn't look gift spouses in the mouth, even if he did paint his face blue with that new cosmetic and play the latest cosmic discords on his molecular harpsitar.

Well, my son never liked Blueboy; so forgetting his promise about humans, he took the miniature blow pipe, which is disguised as a cancer-free cigarette, and got the boyfriend right between the eyes with the poison dart from the Secret Agent Kit. Pretty good shooting for a seven-year-old, if you ask me; but his mother didn't see it that way. She blamed me for buying the Kit for our son, and proceeded to punish me by having a nervous breakdown. (Otherwise I'd have been able to report to you that at least ONE good thing had come out of my purchase.) For a while, I was afraid that Blueboy's parents would sue me; but when I agreed to pay the exorbitant fee for having his body blasted off into the Cemetery Orbit, they were satisfied. Frankly, I think they're glad to have him off their hands. This added expense was the clincher in my decision to sue your company.

Yours in litigation,
Sean Quentin O'Publick

P.S. As a final affront to my already battered sensibilities, I find that I'm not very skilled at preparing meals from freeze-dried packages, either.

S. Q. O'P.

Edge of Night

by A. BERTRAM CHANDLER

Illustrated by GAUGHAN

It wasn't their galaxy, not even their space-time — but they had to win it for Man!

XV

Sonya asked sharply, "And what else have you to report?"

"I . . . I have been listening."

"That's what you're paid for. And what have you picked up?"

"There's a general alarm out to all ships. And to Faraway, Ultimo and Thule, and to the garrisons on Tharn, Mellise and Grollor."

"And to Stree?"

"No. Nothing at all to Stree."

"It makes sense," murmured the woman. "It makes sense. Tharn, with its humanoids living in the equivalent of Earth's Middle Ages. Grollor, with just the beginnings of an industrial culture. Mellise, with its intelligent amphibians and no industries, no technology at all. Our mutant friends must have found the people of all those worlds a push-over.

What Has Gone Before—

Out of nowhere a strange spaceship appeared in the solar system. It was no ship that man had ever built . . . but its name was scratched on its hull in English letters, even though the spelling was strange and unfamiliar, and its crew was human. But what humans! They were dressed in rags. Their bodies bore the marks of privation and torture. And — they were, every last one of them, dead.

Analysis revealed that the ship was not merely from another star, but from another universe entirely, thrust into our own by some catastrophic distortion of its Mannschen Drive field. But if one such could come by accident, others might follow by design — and the creatures that had built the ship and so maltreated its humans would not be welcome guests. So a human crew — Grimes, his wife Sonya, a picked crew of volunteers — manned the alien craft and in it thrust themselves through the dimensional wall into the other universe . . . to find their enemy and destroy him!

"But Stree . . . *We* don't know just what powers — psychic? psionic? — those philosophical lizards can muster, and we're on friendly terms with them. So —"

"So we might get help there," said Grimes. "It's worth considering. Meanwhile, Mr. Mayhew, has there been any communication with the anti-matter worlds to the Galactic West?"

"No, sir."

Grimes smiled — but it was a cold smile. "Then this is, without doubt, a matter for the Confederacy. The legalities of it all are rather fascinating."

"The illegalities, Skipper," said Williams. "But I don't mind being a pirate in a good cause."

"You don't mind being a pirate. Period," said Sonya.

"Too bloody right I don't. It makes a change."

"Shall we regard ourselves as liberators?" asked Grimes — but it was more an order than a question. "Meanwhile, Commander Williams, I suggest that we set course for Stree. And you, Mr. Mayhew, maintain your listening watch. Let me know at once if there are any other vessels in our vicinity — even though they haven't Mass Proximity Indicators they can still pick up our temporal precession field and synchronize."

"And what are your intentions when you get to Stree, sir?" asked the Major.

"As I told the Admiral, I play by ear." He unstrapped himself from his chair and, closely followed by Sonya, led the way to the control

room. He secured himself in his seat and watched Williams as the Commander went through the familiar routine of setting course — Mannschenn Drive off, directional gyroscopes brought into play to swing the ship to her new heading, the target star steadied in the cartwheel sight, the brief burst of power from the reaction drive. Mannschenn Drive cut in again. The routine was familiar, and the surroundings in which it was carried out were familiar, but he still found it hard to adjust to the near nudity of himself and his officers. But Williams, with only three bands of indigo dye on each thick, hairy wrist to mark his rank, was doing the job as efficiently as he would have done had those bands been gold braid on black cloth.

"On course, Skipper," he announced.

"Thank you, Commander Williams. All off-duty personnel may stand down. Maintain normal deep space watches." Accompanied by his wife, he returned to his quarters.

It was, at first and in some respects, just another voyage.

In the Mannschenn Drive Room the complexity of spinning gyroscopes precessed, tumbled, quivered on the very edge of invisibility, pulling the ship and all her people with them down the dark dimensions, through the warped continuum, down and along the empty immensities of the rim of space.

But, reported Mayhew, they were not alone. There were other ships, fortunately distant, too far away for *Freedom's* wake through Space-Time to register on their instruments.

It was more than just another voyage. There was the hate and the fear with which they were surrounded, said Mayhew. He, of course, was listening only — the other operators were sending. There were warships in orbit about Lorn, Faraway, Ultimo and Thule, there were squadrons hastening to take up positions off Tharn, Mellise, Grollor and Stree. And the orders to single vessels and to fleets were brutally simple: *Destroy on sight.*

"What else did you expect?" said Sonya, when she was told.

"I thought," said Grimes, "that they might try to capture us."

"Why should they? As far as they know we're just a bunch of escaped slaves who've already tried their hand at piracy. In any case, I should hate to be captured by those . . . things."

"Xenophobia from *you,* of all people?"

"No. Not xenophobia. Real aliens one can make allowances for. But these aren't real aliens. They're a familiar but dangerous pest, a feared and hated pest that's suddenly started fighting us with our own weapons. We have never had any cause to love them — human beings have gotten, at times, quite sentimental over mice, but never rats — and they've never had any cause to love us. A strong, mutual antipathy . . ." Absently she rubbed the fading scar between her breasts with her strong fingers.

"What do you make of this squadron despatched to Stree?"

"A precautionary measure. *They* think that we might be making for there, and that they might be able to intercept us when we emerge into normal spacetime. But according to Mayhew there have been no psionic messages to planetary authorities, as there have been to the military governments on Tharn, Mellise and Grollor." She said, a note of query in her voice, "We shall make it before they do?"

"I think so. I hope so. Our Mannschenn Drive unit is running flat out. It's pushed to the safety limits. And you know what will happen if the governor packs up."

"I don't know," she told him. "Nobody knows. I do know most of the spacemen's fairy stories about what *might* happen."

"Once you start playing around with Time, anything might happen," he said. "The most important thing is to be able to take advantage of what happens."

She grinned. "I think I can guess what's flitting through your apology for a mind."

"Just an idea," he said. "Just an idea. But I'd like to have a talk with those saurian philosophers before I try to do anything about it."

"If we get there before that squadron," she said.

"If we don't, we may try out the idea before we're ready to. But I think we're still leading the field."

"What's that?" she demanded.

That was not a noise. *That* was something that is even more disturbing in any powered ship traversing any medium — a sudden cessation of noise.The buzzer that broke the tense silence was no proper substitute for the thin, high keening of the Mannschenn Drive.

It was the officer of the watch, calling from Control. "Commodore, sir, O.O.W. here. Reporting breakdown of interstellar drive."

Grimes did not need to be told. He had experienced the uncanny sensation of temporal disorientation when the precessing gyroscopes slowed, ceased to precess. He said, "Don't bother the engineers — every second spent answering the telephone means delay in effecting repairs. I'll be right up."

"Looks as though our friends might beat us to Stree after all," remarked Sonya quietly.

"That's what I'm afraid of," said Grimes.

XVI

The breakdown of *Freedom's* Mannschenn Drive unit was a piece of bad luck — but, Grimes admitted, the luck could have been much worse.

The ship had made her re-entry into the normal continuum many light-years from any focal point and well beyond the maximum range of the radar installations of the enemy war vessels. She had space — or, at any rate, a vast globe of emptiness — all to herself.

The odds had been in favor of her finding herself in just this situation — but, as an amateur of naval history, Grimes knew full well what an overly large part is played by sheer, blind mischance in warfare. Far too many times a hunted ship has blun-

dered into the midst of her pursuers when all on board have considered themselves justified in relaxing their vigilance — not that vigilance is of great avail against overwhelming firepower. And firepower, whether it be the muzzle-loading cannon of the days of sail or the guided missiles and laser beams of today, is what makes the final decision.

But, so far, there was no need to worry about firepower. A good lookout, by all available means, was of primary importance. And so, while *Freedom* fell — but slowly, slowly, by the accepted standards of interstellar navigation — toward the distant Stree sun, the long fingers of her radar pulses probed the emptiness about her and, in the cubby hole that he shared with the naked canine brain that was a poor and untrained substitute for his beloved Lassie, Mayhew listened, alert for the faintest whisper of thought that would offer some clue as to the enemy's whereabouts and intentions.

After a while, having received no reports from the engineers, Grimes went along to the Mannschenn Drive Room. He knew that the engineroom staff was working hard, even desperately, and that the buzz of a telephone in such circumstances can be an almost unbearable irritation. Even so, as captain of the ship he felt that he was entitled to know what was going on.

He stood for a while in the doorway of the compartment, watching. He could see what had happened — a seized bearing of the main rotor. That huge flywheel, in the gravitational field of an Earth-type planet, would weigh at least five tons. Even with *Freedom* falling free, it still possessed considerable mass. Its spindle had to be eased clear of the damaged bearing — and great care had to be taken that it did not come into contact with and damage the smaller gyroscopes surrounding it.

Finally Bronson, the Chief Engineer, pausing to wipe his sweating face, noticed the Commodore and delivered himself of a complaint.

"We should have installed one of our own units, sir."

"Why, Commander?"

"Because ours have a foolproof system of automatic lubrication, that's why. Because the idiots who built this ship don't seem to have heard of such a thing. They must rely on their sense of smell to warn them as soon as anything even starts to run hot."

"And that's possible," murmured Grimes, thinking that the mutants had not been intelligent long enough for their primitive senses to become dulled. Then he asked, "How long will you be?"

"At least two hours. At least. That's the best I can promise you."

"Very good." He paused. "And how long will it take you to modify the lubrication system, to bring it up to our standards?"

"I haven't even thought about that, Commodore. But it'd take days."

"We can't afford the time," said Grimes, as much to himself as to the engineer. "Just carry on with the repairs to the main rotor and let me know as soon as the unit is operational. I shall be in Control." As he turned to go he added, half serious-

ly, "And it might be an idea to see that your watchkeepers possess a keen sense of smell."

Back in the control room he felt more at home, even though this was the nerve center of a crippled ship. Officers sat at their posts, and there was the reassuring glow from the screens of navigational instruments — the chart tank and the radarscopes. Space, for billions of miles on every hand, was still empty, which was just as well.

He went to stand by Sonya and Williams, told them what he had learned.

"So they beat us to Stree," commented the Executive Officer glumly.

"I'm afraid that they will, Commander."

"And then what do we do?"

"I wish I knew just what the situation is on Stree," murmured Grimes. "*They* don't seem to have taken over, as they have on the other Rim Worlds. Should we be justified in breaking through to make a landing?"

"Trying to break through, you mean," corrected Sonya.

"All right. Trying to break through. Will it be a justified risk?"

"Yes," she said firmly. "As far as I can gather from Mayhew, our rodent friends are scared of Stree and its people. They've made contact, of course, but that's all. The general feeling seems to be one of you leave us alone and we'll leave you alone."

"I knew the Streen," said Grimes. "Don't forget that it was I that made the first landing on their planet, when I opened up the Eastern Circuit to trade. They're uncanny brutes — but, after all, mammals and saurians have little in common, psychologically speaking."

"Spare us the lecture, John. Furthermore, while you were nosing around in the engineroom, Mayhew rang control. He's established contact with the squadron bound for Stree."

"What! Is the man mad? Send for him at once."

"Quietly, John, quietly. Our Mr. Mayhew may be a little round the bend, like all his breed, but he's no fool. When I said that he had made contact with the enemy I didn't mean that he had been nattering with the officer commanding the squadron. He's made contact with the underground."

"Don't talk in riddles!"

"Just a delaying action, my dear, to give you time to simmer down. I didn't want you to order that Mayhew be thrown out of the airlock without a spacesuit. The underground, as I have referred to it, is made up of the human brains that our furry friends use as psionic amplifiers."

"But it's still criminal folly. *They* will employ telepaths as psionic radio officers, just as we do. And those telepaths will read the thoughts of their amplifiers, just as Mayhew reads the thoughts of *his* dog's brain in aspic."

"But will they? Can they? Don't forget that *our* telepaths employ as amplifiers the brains of creatures considerably less intelligent than

Man. Whoever heard of a dog with any sort of mental screen? *They* will be using the brains of humans who have been unlucky enough to be born with telepathic ability. And any human telepath, any trained human telepath, is able to set up a screen."

"But why should *They* use human brains? The risk of sabotage of vital communications —"

"What other brains are available for their use? As far as *They* are concerned, both dogs and cats are out, repeat out."

"Why?"

"Far too much mutual antipathy."

"Wouldn't that also apply in the case of themselves and human beings?"

"No. I doubt if they really hate us. After all, we have provided their ancestors with food, shelter and transportation for many centuries. The rats would have survived if they hadn't had the human race to bludge upon, but they wouldn't have flourished, as they have, traps and poisons notwithstanding. Oh, all right. With the exception of the occasional small boy with his albino pets, every human being has this hatred of rats. But hate isn't the only mainspring of human behavior."

"What do you mean?"

"Look at it this way. Suppose you're a telepath, born on one of the Rim Worlds in this continuum. By the time that your talent has been noted, by the time that you're . . . conscripted, you will have come to love your parents and the other members of your family. You will have made friends outside the family circle. Without being overly precocious you may even have acquired a lover."

"I think I see. Play ball, or else."

"Yes."

"Then why should the poor bastards risk the 'or else' now?"

"Because Mayhew's peddled them a line of goods. Very subtly, very carefully. Just induced dreams at first, just dreams of life as it is on the Rim Worlds in *our* Universe — but a somewhat glamorized version."

"I can imagine it. Mayhew's a very patriotic Rim Worlder."

"First the dreams, and then the hints. The whisper that all that they have dreamed is *true*, that all of it could become the way of life of their own people. The story of what actually happened to *Freedom* and to the escaped slaves. The message that *we* have come to help them — and the request for help for ourselves."

"But I don't understand how he could have done all this in so short a time."

"How long does a dream take? It is said that a man can dream of a lifetime's happenings in a few seconds."

Already Grime's active mind was toying with ideas, with ruses and stratagems. Deceit, he knew, has always been a legitimate technique of warfare. Not that legalities counted for overmuch in this here-and-now. Or did they? If the Federation got dragged into the mess, he and his people might well find themselves standing trial for piracy. It was unlikely — but, bearing in mind the

Federation's pampering of various unpleasant nonhuman races on his, Grimes's, time track, possible.

He grinned. The legal aspects of it all were far too complicated — and, at the moment, far too unimportant.

He said, "Send for Mr. Mayhew immediately."

XVII

Grimes went into conference with Mayhew and certain others of his officers. There was Sonya, of course, and there was Williams, and there was Dangerford, the Chief Reaction Drive Engineer. Also present was one Ella Kubinsky, who held the rank of Lieutenant in the Rim Worlds Volunteer Naval Reserve. She was not a spacewoman. She was a specialist officer, and in civilian life she was an instructor at the University of Lorn, in the Department of Linguistics. Looking at her, Grimes could not help thinking that she was ideally suited for the part that she would be called upon to play. Her straggling hair was so pale as to be almost white, her chin and forehead receded sharply from her pointed nose. Her arms and legs were scrawny, her breasts meager. She had been nicknamed The White Rat.

To begin with, Grimes and Sonya questioned Mayhew closely, with Sonya playing the major part in the interrogation. They wished that they could have subjected the bodiless human telepaths aboard the enemy ships to a similar interrogation — but that, of course, was impossible. However, Mayhew said that they were sincere in their desire to help. And sincerity is almost impossible to simulate when you have thrown your mind open to another skilled, trained intelligence.

Then other, less recondite matters were discussed with Williams and Dangerford. These concerned the efficacy of various detergents and paint removers and, also, the burning off from the hull plating of certain lettering and its replacement with other letters, these characters to be fabricated in the Engineers' workshop by Dangerford and his juniors who, of course, were not involved in the repair work to the Mannschenn Drive unit. Mayhew was called upon to supply the specifications for these characters.

And then tapes were played to Ella Kubinsky. These were records of signals received from the mutants' ships. She repeated the words, imitating them in a thin, high, squeaking voice that exactly duplicated the original messages.

Even Sonya expressed her satisfaction.

While this was being done, Mayhew retired to his cabin for further consultations with his fellow telepaths. There was so much that they could tell him. There was so much that they knew, as all psionic signals had to pass through their brains. When he came back to Grimes's cabin he was able to tell the Commodore what name to substitute for both *Freedom and Distriyir* when these sets of characters had been removed from the forward shell plating.

While Williams and his working party were engaged outside the ship, and Dangerford and his juniors were fabricating the new characters, Grimes, Sonya and Ella Kubinsky accompanied Mayhew to his quarters. It was more convenient there to rehearse and to be filled in with the necessary background details. It seemed, at times, that the disembodied presences of the human psionic amplifiers were crowded with them into the cramped compartment, bringing with them the mental stink of their hates and fears.

It has been said that to know is to love. But very often to know is to hate. Those brains, bodiless, naked in their baths of nutrient solution, must know their unhuman masters as no intelligence clothed in flesh and blood could ever know them. And Grimes found himself pitying Mayhew's own psionic amplifier, the brain of the dog that possessed neither the knowledge nor the experience to hate the beings who had deprived it of a normal existence.

Bronson had finished the repairs to the Mannschenn Drive before Williams and Dangerford were ready. He was glad enough to be able to snatch a brief rest before his machinery was restarted.

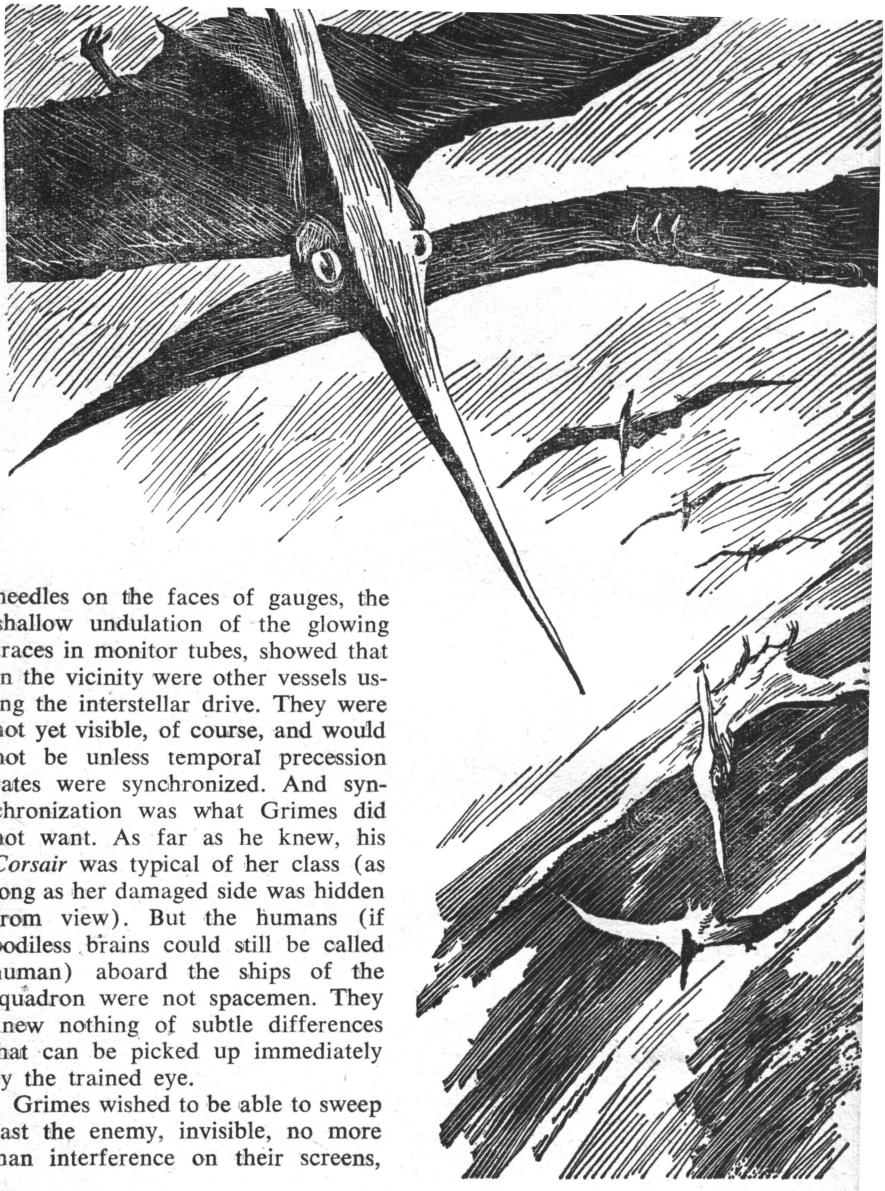
And then the new name was in place.

Grimes, Sonya and Williams went back to Control where, using the public address system, the Commodore told his ship's company of the plan for the landing on Stree. He sensed a feeling of disappointment. Carter, the Gunnery Officer, and the Major and his Marines had been looking forward to a fight. Well, they could be ready for one — but if all went as planned they would not be getting it.

Cirsir — *Corsair* — as she had been renamed set course for the Stree sun. The real *Corsair* had been unable to join the squadron, being grounded for repairs on Tharn. The real *Corsair's* psionic amplifier knew, by this time, what was happening, but would not pass on the information to the unhuman psionic radio officer who was his lord and master. And the psionic amplifiers aboard the other ships would let it be known that *Corsair* was hastening to join the blockade of Stree.

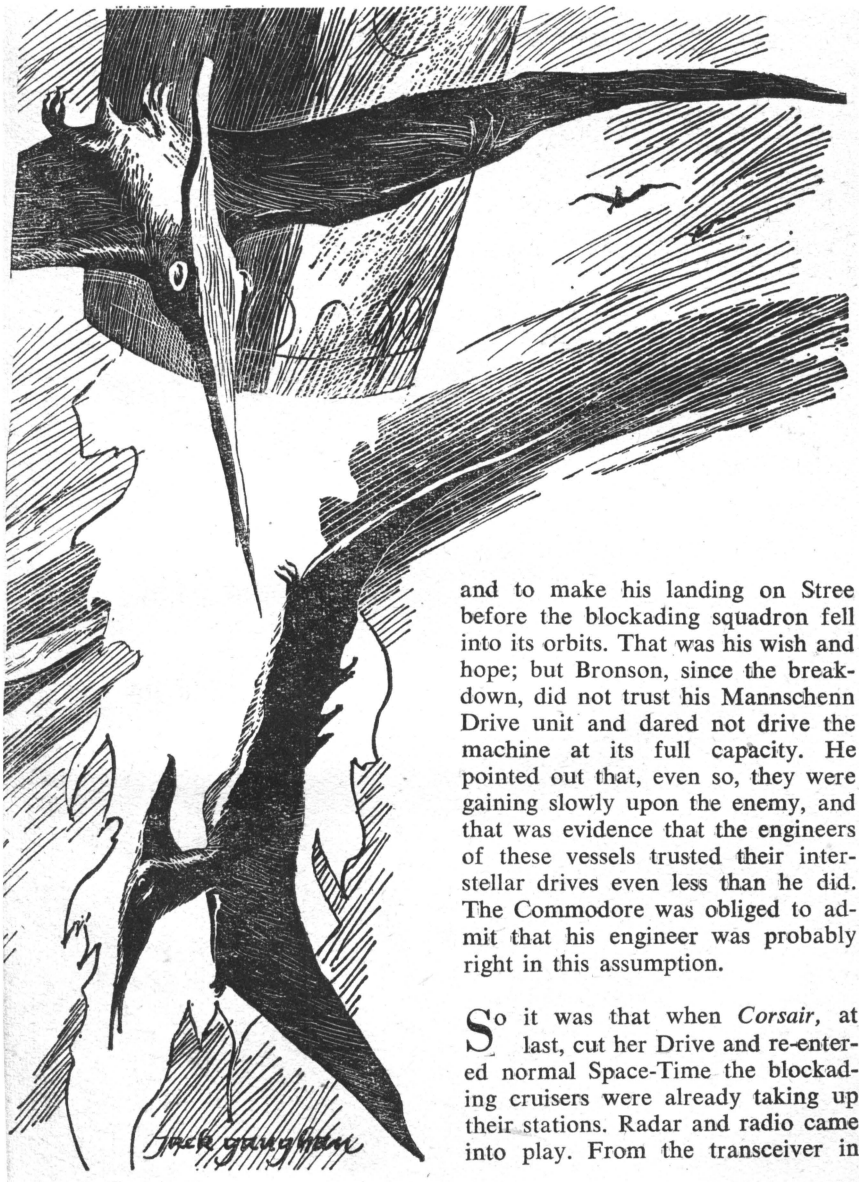
It was all so simple. The operation, said Sonya, was an Intelligence Officer's dream of Heaven — to know everything that the enemy was thinking, and to have full control over the enemy's communications. The pseudo-*Corsair* was in psionic touch with the squadron that she was hurrying to overtake. Messages were passing back and forth, messages that, from the single ship, were utterly bogus and that, from the fleet, were full of important information. Soon Grimes knew every detail of tonnage, manning and armament — and knew that he must avoid any sort of showdown. There was enough massed firepower to blow his ship into fragments in a microsecond, whereupon the laser beams, in another microsecond, would convert those fragments into puffs of incandescent vapor.

As *Corsair* closed the range the squadron ahead was detected on her instruments. The slight flickering of



needles on the faces of gauges, the shallow undulation of the glowing traces in monitor tubes, showed that in the vicinity were other vessels using the interstellar drive. They were not yet visible, of course, and would not be unless temporal precession rates were synchronized. And synchronization was what Grimes did not want. As far as he knew, his *Corsair* was typical of her class (as long as her damaged side was hidden from view). But the humans (if bodiless brains could still be called human) aboard the ships of the squadron were not spacemen. They knew nothing of subtle differences that can be picked up immediately by the trained eye.

Grimes wished to be able to sweep past the enemy, invisible, no more than interference on their screens,



and to make his landing on Stree before the blockading squadron fell into its orbits. That was his wish and hope; but Bronson, since the breakdown, did not trust his Mannschenn Drive unit and dared not drive the machine at its full capacity. He pointed out that, even so, they were gaining slowly upon the enemy, and that was evidence that the engineers of these vessels trusted their interstellar drives even less than he did. The Commodore was obliged to admit that his engineer was probably right in this assumption.

So it was that when *Corsair,* at last, cut her Drive and re-entered normal Space-Time the blockading cruisers were already taking up their stations. Radar and radio came into play. From the transceiver in

Corsair's control room squeaked an irritable voice — "*Heenteer tee Ceerseer, Heenteer* tee *Ceerseer,* teeke eep steeteen ees eerdeered."

Ella Kubinski, who had been thoroughly rehearsed for just this situation, squeaked the acknowledgment.

Grimes stared out of the viewports at the golden globe that was Stree, at the silver, flitting sparks that were the other ships. He switched his regard to Williams, saw that the Executive Officer was going through the motions of maneuvering the ship into a closed orbit — and, as he had been ordered, making a deliberate botch of it.

"*Heenteer* tee *Ceerseer.* Whee ees neet yeer veeseen screen een?"

Ella Kubinski squeaked that it was supposed to have been overhauled on Tharn, and added some unkind remarks about the poor quality of humanoid labor. Somebody — Grimes was sorry that he did not see who it was — whispered unkindly that if Ella did switch on the screen it would make no difference, anyhow. The ugly girl flushed angrily, but continued to play her part calmly enough.

Under Williams' skilled handling the ship was falling closer and closer to the great, expanding globe of the planet. But this did not go unnoticed for long. Again there was the enraged squeaking, but in a new voice. "Thees ees thee Eedmeereel. Wheet thee heel eere yee plee-eeng et, *Ceerseer*?"

Ella told her story of an alleged overhaul of reaction drive controls and made further complaints about the quality of the dockyard labor on Tharn.

"Wheere ees yee Ceepteen? Teel heem tee speek tee mee."

Ella said that the Captain was busy at the controls. The Admiral said that the ship would do better by herself than with such an illegitimate son of a human female, handling her. Williams, hearing this, grinned and muttered, "I did not ride to my parents' wedding on a bicycle."

"Wheere ees thee Ceepteen?"

And there was a fresh voice. "*Heeveec* tee *Heenteer.* Wheere deed shee geet theet deemeege?"

"All right," said Grimes. "Action stations. And get her downstairs, Williams, as fast as Christ will let you!"

Gyroscopes whined viciously and rockets screamed, driving the ship down to the exosphere in a powered dive. From the vents in her sides puffed the cloud of metallic particles that would protect her from lasers — until the particles themselves were destroyed by the stabbing beams. And her launching racks spewed a covey of missiles, each programmed for random action, and to seek out and destroy any target except their parent ship. Not that they stood much chance of so doing — but they would, at least, keep the enemy laser gunners busy.

Corsair hit the first, tenuous fringes of the Streen atmosphere, and her internal temperature rose fast. Too fast.

Somehow, using rockets only, taking advantage of her aerodynamic

qualities, such as they were, Williams turned her, stood her on her tail. Briefly she was a sitting duck — but Carter's beams were stabbing and slicing, swatting down the swarm of missiles that had been loosed at her.

She was falling then, stern first, falling fast but under control, balanced on her tail of incandescence, the rocket thrust that was slowing her — that would bring her to a standstill (Grimes hoped) when her vaned landing gear was only scant feet above the surface of the planet.

She was dropping through the overcast — blue-silver at first, then gradually changing hue to gold. In the overcast there was no pursuit, although when she entered regions of denser atmosphere she was escorted, surrounded by great, shadowy shapes that wheeled about them on wide wings and glared redly at them through the control room ports.

Grimes recognized them. After all, in his own Continuum he had been the first human to set foot on Stree. They were the huge flying lizards, not unlike the pterosauria of Earth's past — but in Grimes's Space-Time they had never behaved like this. They had avoided spaceships and aircraft.

These showed no inclination towards doing so. Just one of the huge brutes colliding with the ship, tipping her off balance, could easily produce a situation beyond even Wiliams's superlative pilotage to correct.

But they kept their distance, more or less, and followed *Corsair* down, down, through the overcast and through the clear air below the cloud blanket. And beneath her was the familiar landscape — low, rolling hills, broad rivers, lush green plains that were no more than wide clearings in the omnipresent jungle.

Yes, it was familiar. The Commodore could make out the site of his first landing — one of the smaller clearings that, by some freak of chance or nature, had the outline of a great horse.

Inevitably, as he had been on the occasion of his first landing, Grimes was reminded of a poem that he had read as a young man, that he had tried to memorize — *The Ballad of the White Horse,* by Chesterton. How did it go?

For the end of the world was long ago
And all we stand today
As children of a second birth
Like some strange people left on Earth
After a Judgment Day.

Yes, the end of their world had come for the Rim colonists, in this Universe, long ago.

And could Grimes and his crew of outsiders reverse the Judgment?

XVIII

Slowly, cautiously *Corsair* dropped to the clearing, her incandescent rocket exhaust incinerating the grass-like vegetation, raising great, roiling clouds of smoke and steam. A human-built warship would have been fitted with nozzles from which, in these circumstances, a fire-smother-

ing foam could be ejected. But *Corsair's* builders would have considered such a device a useless refinement. Slowly she settled, then came to rest, rocking slightly on her tripedal landing gear. Up and around the control room ports billowed the dirty smoke and the white steam, gradually thinning. Except for a few desert areas the climate of Stree was uniformly wet, and nothing would burn for long.

Grimes asked Mayhew to — as he phrased it — take psionic soundings, but from his past experience of this planet he knew that it would be a waste of time. The evidence indicated that the Streen practiced telepathy among themselves but that their minds were closed to outsiders. But the saurians must have seen the ship land, and the pillar of cloud that she had created would be visible for many miles.

Slowly the smoke cleared, and those in the control room were able to see, through the begrimed ports, the edge of the jungle, the tangle of lofty, fernlike growths with, between them, the interlacing entanglement of creepers. Something was coming through the jungle, its passage marked by an occasional eruption of tiny flying lizards from the crests of the tree ferns. Something was coming through the jungle and heading towards the ship.

Grimes got up from his chair and accompanied Sonya down to the airlock. He smiled with wry amusement as he recalled his first landing on this world. *Then* he had been able to do things properly, had strode down the ramp in all the glory of gold braid and brass buttons, had even worn a quite useless ceremonial sword for the occasion. *Then* he had been accompanied by his staff, as formally attired as himself. *Now* he was wearing scanty, dirty rags and accompanied by a woman as nearly naked as he was. (But the Streen, who saw no need for clothing, had been more amused than impressed by his finery.)

The airlock door was open, and the ramp was out. The Commodore and his wife did not descend at once to the still slightly smoking ground. One advantage of his dress uniform, thought Grimes, was that it had included half Wellington boots. The couple watched the dark tunnel entrance in the cliff of solid greenery that marked the end of the jungle track.

A Streen emerged. He would have passed for a small dinosaur from Earth's remote past, although the trained eye of a paleontologist would have detected differences. There was one difference that was obvious even to the untrained eye — the cranial development. This being had a brain, and not a small one. The little, glittering eyes stared at the humans. A voice like the hiss of escaping steam said, "Greetings."

"Greetings," replied the Commodore.

"You come again, man Grimes." It was a statement of fact rather than a question.

"I have never been here before," said Grimes, adding, "Not in this spacetime."

"You have been here before. The last time your body was covered

with cloth and metal, trappings of no functional value. But no matter."

"How can you remember?"

"I cannot, but our Wise Ones remember all things. What was, what is to come, what might have been and what might be. They told me to greet you and to bring you to them."

Grimes was less than enthusiastic. On the occasion of his last visit, the Wise Ones had lived not in the jungle but in a small, atypical patch of rocky desert, many miles to the north. Then he had been able to make the journey in one of *Faraway Quest's* helicopters. Now he had no flying machines at his disposal, and a spaceship is an unhandy brute to navigate in a planetary atmosphere. He did not fancy a long, long journey on foot, or even riding one of the lesser saurians that the Streen used as draught animals, along a rough track partially choked with thorny undergrowth. Once again he was acutely conscious of the inadequacy of his attire.

The native cackled. (The Streen were not devoid of a sense of humour.) He said, "The Wise Ones told me that you would not be clad for a journey. The Wise Ones await you in the village."

"Is it far?"

"It is where it was when you came before, when you landed your ship in this very place."

"No more than half an hour's walk —" began Grimes, addressing Sonya, then fell suddenly silent as an intense light flickered briefly, changing and brightening the green of the jungle wall, the gaudy colors of the flowering vines.

Involuntarily he looked up, but the golden overcast was unbroken. There was another flare behind the cloud blanket, blue-white, distant, and then, belatedly, the thunder of the first explosion drifted down, ominous and terrifying.

"Missiles," whispered the Commodore. "And my ship's a sitting duck."

"Sir," hissed the saurian, "you are not to worry. The Wise Ones have taken adequate steps for your — and our — protection."

"But you have no science, no technology!" exclaimed Grimes, realizing the stupidity of what he had said when it was too late.

"We have science, man Grimes. We have machines to pit against the machines of your enemies. But our machines, unlike yours, are of flesh and blood, not of metal — although our anti-missiles, like yours, possess only a limited degree of intelligence."

"These people," explained Grimes to Sonya, "are superb biological engineers."

"I know," she said. "And I have little doubt that their air umbrella of pterodactyls will last longer than our furry friends' supply of missiles. So I suggest that we leave them to it and go to see the Wise Ones." She looked dubiously at the jungle, then turned to call to a woman inside the ship, "Peggy! Bring us out a couple of machetes!"

"You will not need them," commented the Streen, "even though your skins are too soft."

They did need them, even though their guide went ahead like a tank clearing the way for infantry.

The vines and brambles were springy, reaching out with taloned tentacles as soon as the saurian had passed.

Grimes and Sonya slashed until their arms were tired. But even so their perspiration smarted painfully in the fresh scratches all over their bodies. They were far from sorry when they emerged into another clearing, a small one, almost completely roofed over with the dense foliage of the surrounding trees.

There were the usual huts, woven from still-living creepers. There was the steaming compost pile that was the hatchery. There were the domesticated lizards, large and small, engaged in their specialized tasks — digging the vegetable plots, weeding and pruning. There were the young of the Streen, looking absurdly like plucked chickens, displaying the curiosity that is common to all intelligent beings throughout the galaxy, keeping a respectful distance from the visitors, staring at them from their black, unwinking eyes. There were the adults, equally curious, some of whom hustled the community's children out of the path of the humans, clearing a way to the door of a hut that, by Streen standards, was imposing. From the opening drifted blue eddies of smoke — aromatic, almost intoxicating. Grimes knew that the use of the so-called sacred herbs, burned in a brazier and the smoke inhaled, was confined to the Wise Ones.

There were three of the beings huddled there in the semi-darkness, grouped around the tripod from the top of which was suspended the cage in which the source of the smoke smouldered ruddily.

The Commodore sneezed. The vapor, as far as he could gather, was mildly euphoric and, at the same time, hallucinogenic. But to human beings it was only an irritant to the nasal membranes. In spite of his efforts to restrain himself he sneezed again, loudly.

The Streen around the tripod cackled thinly. The Commodore, his eyes becoming accustomed to the dim lighting, could see that they were old, old, their scales shabby and dulled with a lichenous growth, their bones protuberant beneath their armored skins. There was something familiar about them — sensed rather than visually recognized. One of them crackled, "Our dream smoke still makes you sneeze, man Grimes."

"Yes, Wise One."

"And what do you here, man Grimes? Were you not happy in your own here-and-now? Were you not happy with the female of your kind whom you have acquired since last we met, otherwhen-and-where?"

"You'd better say 'yes' to that!" muttered Sonya.

Again the thin cackling. "We are lucky, man Grimes. We do not have the problems of you mammals, with your hot blood." A pause. "But still we love life, just as you do. And we know that out there, falling about our world, are those who would end our lives, just as they would end yours. *Now* they have not the power — but it is within their grasp."

"But would it matter to you?" asked Sonya. "I thought that you were — how shall I put it? — co-

existent with yourselves in all the alternative universes. You must be. You remember John's first landing on this planet — but that was never in *this* here-and-now."

"You do not understand, woman Sonya. You cannot understand. But we will try to explain. Man Grimes. In *your* here-and-now what cargoes do your ships bring to Stree?"

"Luxuries like tea and tobacco, Wise One. And books."

"What sort of books, man Grimes?"

"History. Philosophy. Novels, even —" then, as an afterthought — "poetry."

"And your poets say more in fewer words than your philosophers. There is one whom I will quote to you.

And he who lives more lives than one
More deaths than one shall die.

Does that answer your question, woman Sonya?"

"I can *feel* it," she murmured. "But I can't understand it."

"It does not matter. And it does not matter if you do not understand what you are going to do — as long as you understand how to do it."

"And what is that?" asked Grimes.

"To destroy the egg before it hatches," was the reply.

XIX

Anybody meeting the seemingly primitive Streen for the first time would never dream that these saurians, for all their obvious intelligence, are engineers. Their towns and villages are, to the human way of thinking, utterly innocent of machines. But what is a living organism but a machine — and engine that derives its motive power from the combustion of hydrocarbons in an oxygen atmosphere? On Stree a variety of semi-intelligent lizards perform the tasks that on man-colonized worlds are performed by mechanisms of meal and plastic.

Yes, the Streen *are* engineers, biological and psychological engineers of no mean calibre.

In their dim hut, the little light was even further obscured by the acrid fumes from the brazier, the Wise Ones talked, and Grimes and Sonya listened. Much of what they were told was beyond them — but there was emotional rather than intellectual acceptance. They would not altogether understand, but they could *feel*. And, after all, the symbiosis of flesh-and-blood machine and machine of metal and plastic was not too alien a concept. Such symbiosis, to a limited extent, has been known ever since the first seaman handled the first ship, learning to make that clumsy contraption of wood and fiber an extension of his own body.

Then, convinced although still not understanding, the Commodore and his wife returned to the ship. With them — slowly, creakingly — walked Serressor, the most ancient of the Wise Ones, and ahead of them their original guide did his best, as before, to clear a way for them through the spiny growths.

They came to the clearing, to the charred patch of ground already speckled with the pale green shoots of new growth. And already the air

ferns had begun to take root upon protuberances from the ship's shell plating, from turrets and sponsons and antennae; already the vines were crawling up the vaned tripod of the landing gear. Williams had a working party out, men and women who were hacking ill-humoredly at the superfluous and encroaching greenery.

From the corner of his eye the Executive Officer saw the approach of the Commodore, ceased shouting directions to his crew and walked slowly to meet his superior. He said, "The game's crook, Skipper. What with lianas an' lithophytes we'll be lucky to get off the ground. An' if we do — we've had it, like as not."

"Why, Commander Williams?"

"Mayhew tells me that *They* have cottoned on to what their psionic amplifiers have been doing. So — no more psionic amplifiers. Period."

"So we can't give them false information through their own communications system," said Sonya.

"You can say that again, Mrs. Grimes."

Serressor croaked, "So you depend upon misdirection to make your escape from our world."

"That is the case, Wise One," Grimes told him.

"We have already arranged that, man Grimes."

"You have?" Williams looked at the ancient saurian, seeing him for the first time. "*You* have? Cor stone the bleedin' lizards, Skipper, what *is* this?"

"This, Commander Wiliams," said Grimes coldly, "is Serressor, Senior Wise One of the Streen. He and his people are as interested in disposing of the mutants as we are. They have told us a way in which it may be done, and Serressor will be coming with us to play his part in the operation."

"An' how will you do it?" demanded Williams, addressing the saurian.

Serressor hissed, "Destroy the egg before it is hatched."

Surprisingly, Williams did not explode into derision. He said quietly, "I'd thought o' that myself. We could do it — but it's iffy, iffy. Too bloody iffy. There're all the stories about what happens when the Drive gets out o' kilter — but nobody's ever come back to tell us if they're true."

"If we're going to use the Drive as Serressor suggests, it will have to be fitted with a special governor."

"That makes sense, Skipper. But where're we gettin' this governor from?"

"We have it — or him — right here."

"Better him than me. There're better ways o' dyin' then bein' turned inside out." He shifted his regard to the working party, who had taken the opportunity to relax their efforts. "Back to yer gardenin', yer bunch o' drongoes! I want this hull clean as a baby's bottom!"

"Shouldn't you have said 'smooth', Commander?" asked Sonya rather sweetly.

Before an argument could start Grimes pulled her up the ramp and into the ship.

Following them slowly came the aged and decrepit saurian.

Grimes and his officers were obliged to admit that the Streen had planned well and cunningly. When *Corsair* was ready for blasting off, a veritable horde of the winged lizards assembled above her, most of them carrying in their talons fragments of metal. Obedient to the command of their masters — the Streen were telepathic, but only insofar as their own kind were concerned — the pterosaurs grouped themselves into a formation resembling a spaceship, flapped off to the eastward. To the radar operators of the blockading squadron it would appear that *Corsair* had lifted, was navigating slowly and clumsily within the planetary atmosphere.

There were missiles, of course.

Some were intercepted by the suicidal air umbrella above the decoys; some, whose trajectory would take them into uninhabited jungle regions, were allowed to continue their fall to the ground. They had been programmed to seek and to destroy a spaceship. Winged lizards, even metal-bearing lizards, they ignored.

Meanwhile — but cautiously, cautiously, with frequent and random shifts of frequency — *Corsair's* radio was probing the sky. It seemed that the mutants' squadron had swallowed the bait. Ship after ship broke from her orbit, recklessly expending her reaction mass so as to be advantageously situated when *Corsair*, the pseudo-*Corsair*, emerged from the overcast into space.

And then the way out was as clear as ever it would be. The mutants' cruisers were hull down, dropping below the round shoulder of the world. Aboard *Corsair* all hands were at their stations, and the firing chambers were warmed up in readiness.

Grimes took her upstairs himself. With a deliberately dramatic flourish he brought his hand down to the keys, as though he were smacking a ready and willing steed on the rump.

It was more like being fired from a gun than a conventional blastoff. Acceleration thrust all hands deep into the padding of their chairs. The Commodore was momentarily worried by a thin, high whistling that seemed to originate inside the ship rather than outside her hull. Then, had it not been for the brutal downdrag on his facial muscles, he would have smiled. He remembered that the Streen, normally coldly unemotional, had always expressed appreciation of a trip in a space-vessel and had enjoyed, especially, violent maneuvers such as the one that he was now carrying out. If Serressor was whistling, then he was happy.

Corsair whipped through the cloud blanket as though it had been no more than a chiffon veil, and harsh sunlight beat through the control room viewports like a physical blow. From the speaker of the transceiver came a shrill gabble of order and counter-order. Evidently some alert radar operator had spotted the breakout. But *Corsair* was out of laser range from the blockading squadron, was almost out of missile range. And by the time the enemy was able to close her she would be well clear of the planet's Van Allens, would be falling into and through

the dark, twisted dimensions created about herself by her own interstellar drive.

It was time to get Serressor along to the Mannschenn Drive room.

Grimes handed over to Williams, waited until he saw the Commander's capable hands resting on his own control panel and then, slowly and painfully, levered himself out of his seat. He found it almost impossible to stand upright under the crushing pseudo- gravity — but speed had to be maintained, otherwise the ship would be englobed by her enemies. Already Carter was picking off the first missiles with her laser. The Commodore watched two burly Marines struggle to get the aged saurian to his feet. They were big men and strong, but the task was almost beyond them.

Then, with every shuffling step calling for an almost superhuman effort, Grimes led the way to the interstellar drive compartment. There — and how long had it taken him to make that short journey? — he found Bronson, Chief Interstellar Drive Engineer, with his juniors. And there was the ship's Doctor, and the telepath Mayhew. Extending from the complexity of rotors, now still and silent, was a tangle of cables, each one of which terminated in a crocodile clip.

The wall speaker crackled. "Commander to M.D. room. Calling the Commodore."

"Commodore here, Commander."

"Clear of Van Allens. No immediate danger from enemy fire."

"Then carry on, Commander. You know what you have to do."

"Stand by for free fall. Stand by for course correction."

The silence, as the rocket drive was cut, fell like a blow. Then, as the whining directional gyroscopes took over, the doctor, assisted by Bronson's juniors, began to clip the cable ends to various parts of Serressor's body. The old saurian hissed gently, "You cannot hurt me, man Doctor. My scales are thick." And then it was Mayhew's turn, and a helmet of metal mesh was fitted over his head. The telepath was pale, frightened-looking. Grimes sympathized with him and admired him. Like every spaceman, he had heard all the stories of what happened to those trapped in the field of a malfunctioning Drive. Even though this would be (the Commodore hoped) a controlled malfunction, it would be a malfunction nonetheless. When the situation had been explained to him, the telepath had volunteered. Grimes hoped that the decoration for which he would recommend him would not be a posthumous one.

The gentle, off-center gravitational effect of centrifugal force abruptly ceased, together with the humming of the directional gyroscopes. Then the ship trembled violently and suddenly, and again. A hit? No, decided the Commodore, it was Carter firing a salvo of missiles. But the use of these weapons showed that the enemy must be getting too close for comfort.

Williams's voice from the bulkhead speaker was loud, with a certain urgency.

"On course for Lorn, Skipper!"

"Mannschenn Drive on remote control," ordered Grimes. "Serressor will give the word to switch on."

Already the doctor and the junior engineers had left the Mannschenn Drive room, making no secret of their eagerness to be out of the compartment before things started to happen. Bronson was making some last, finicking adjustments to his machinery, his heavily bearded face worried. "Hurry up, Commander," Grimes snapped.

The engineer grumbled, "I don't like it. This is an interstellar drive, not a time machine."

Again came the violent trembling, and again, and again.

Bronson finished what he was doing, then reluctantly left his domain. Grimes turned to Serressor, who now looked as though he had become enmeshed in the web of a spider. He said, "You know the risk."

"I know the risk. If I am . . . everted, it will be a new experience."

And not a pleasant one, thought the Commodore, looking at Mayhew. The telepath was paler than ever, and his prominent Adam's apple wobbled as he swallowed hard. Not a pleasant one. And how could this . . . this non-human philosopher, who had never handled a metal tool in his long life, be so sure of the results of this tampering with, to him, utterly alien machinery? Sure, Serressor had read all the books (or his other-self in Grimes's own continuum had read all the books) on the theory and practice of Mannschenn Drive operation. But book knowledge is a poor substitute for working experience.

"Good luck," said Grimes to the saurian and to Mayhew.

He left the compartment, carefully shut the door behind him.

He heard the whine, the wrong-sounding whine, as the Drive started up.

And then the dream-filled darkness closed about him.

XX

It is said that a drowning man relives his life in the seconds before final dissolution.

So it was with Grimes. But he relived his life in reverse, experienced backwards the long history of triumphs and disasters, of true and false loves, of deprivations and shabby compromises, of things and people that it was good to remember, of things and people that it had been better to forget.

It was the very unreality of the experience, vivid though it was, that enabled him to shrug it off. It left him badly shaken but in full command of his faculties when the throbbing whine of the ever-precessing gyroscopes ceased at last.

The ship had arrived.

But where?

When?

Ahead in space and astern in time — that was the principle of the Mannschenn Drive. But never full astern — or, never *intentionally* full astern. Not until now. And what of the governors that had been fitted to the machine, the flesh-and-blood governors — the human telepath and the saurian philosopher, with his intuitive grasp of complexities that had baffled the finest mathematical brains of mankind?

Had the governors broken under the strain?

And what of himself, Grimes? (And what of Sonya?)

He was still Grimes, still the Commodore, with all his memories (so far as he knew) intact. He was not a beardless youth (his investigatory hand verified this). He was not a puling infant. He was not a tiny blob of protoplasm on the alleyway deck. He opened the door.

Serressor was still there, still entangled in the shining filaments. But his scales gleamed with the luster of youth, his bright eyes were unfilmed. His voice, as he said, "Man Grimes, we were successful!" was still a croak, but no longer a senile croak.

"We did it!" confirmed Mayhew, in an oddly high voice.

The telepath was shrunken. The rags that had been his loin clout were in an untidy bundle about his bare feet. No, shrunken was not the word. He was smaller, younger. Much younger.

"That was the hardest part," he said. "That was the hardest part — to stop the reversal of biological time. Serressor and I were right in the field, so we were affected. But the rest of you shouldn't be changed. You still have your long, gray beard, Commodore."

But my beard wasn't gray, thought Grimes, with the beginning of panic. *Neither was it long.* He pulled a hair from it, wincing at the sudden pain, examined the evidence (still dark brown) while Serressor cackled and Mayhew giggled.

"All right," he growled. "You've had your joke. What now?"

"We wait," Mayhew told him. "We wait, here and now, until *Sundowner* shows up. Then it's up to you, sir."

Sundowner, thought Grimes. *Jolly Swagman. Waltzing Matilda.* Names that belonged to the early history of the Rim Worlds. The battered star tramps of the Sundowner Line that had served the border planets in the days of their early colonization, long before secession from the Federation had been even dreamed of, long before the Rim Worlds government had itself become a shipowner with the Rim Runners fleet.

Sundowner Grimes remembered his history. She had been the first ship too bring a cargo of seed grain to Lorn. And that was when this alternative universe, this continuum in which Grimes and his people were invaders, had run off the historical rails. *Sundowner.* Serressor knew his history too. The Wise One had planned this rendezvous in Space and Time, so that Grimes could do what, in *his* universe, had been accomplished by plague or traps or, even, cats or terrier dogs.

"I can hear her," murmured Mayhew distantly. "She is on time. Her people are worried. They want to get to port before their ship is taken over by the mutants."

"In this here-and-now," said Serressor, "she crashed — will crash? — in the mountains. Most of the mutants survived. But go to your control room, man Grimes. And then you will do what you have to do."

They were all very quiet in the control room, all shaken by the period of temporal disorientation through which they had passed. Grimes went first to Williams, hunched in his co-pilot's chair. He said softly, "You are ready, Commander?"

"Ready," answered the Executive Officer tonelessly.

Then the Commodore went to sit beside his wife. She was pale, subdued. She looked at him carefully, and a faint smile curved her lips. She murmured, "You aren't changed, John. I'm pleased about that. I've remembered too much, things that I thought I'd forgotten, and even though it was all backwards it was . . . shattering. I'm pleased to have you to hold on to, and I'm pleased that is *is* you, and not some puppy."

"I shouldn't have minded losing a few years in the wash," grunted Grimes.

He looked at the officers at their stations — radar, gunnery, electronic radio. He stared out of the ports — at the Lorn sun, its brightness dimmed by polarization, at the great, dim-glowing galactic lens. Here, at the very edge of the universe, the passage of years, of centuries was not obvious to a casual glance. There were no constellations in the Rim sky that, by their slow distortions, could play the part of clocks.

"Contact," announced the radar officer softly.

The Commodore looked into his own repeater screen, saw the tiny spark that had appeared in the blackness of the tank.

The radio officer was speaking in-

to his microphone. "*Corsair* to *Sundowner. Corsair* to *Sundowner*. Do you read me? Over."

The voice that answered was that of a tired man, a man who had been subjected to considerable strain. It was unsteady, seemed on the edge of hysteria. "I hear you, whoever you are. What the hell did you say your name was?"

"*Corsair*. This is *Corsair,* calling *Sundowner*. Over."

"Never heard of you. What sort of name is that, anyhow?" And there was another, fainter voice, saying, "*Corsair*? Don't like the sound of it, Captain. Could be a pirate."

"A pirate? Out here, on the Rim? Don't be so bloody silly. There just aren't the pickings to make it worthwhile." A pause. "If she is a pirate, she's welcome to our bloody cargo."

"*Corsair* to *Sundowner. Corsair* to *Sundowner*. Come in, please. Over."

"Yes, *Corsair*. I hear you. What the hell do you want?"

"Permission to board."

"Permission to board? Who the bloody hell do you think you are?"

"R.W.C.S. *Corsair*."

"R.W.C.S.?" It was obvious that *Sundowner's* Captain was addressing his Mate without bothering either to switch off or to cover his microphone. "What the hell is *that,* Joe?"

"Haven't a clue," came the reply.

Grimes switched in his own microphone. He did not want to alarm *Sundowner,* did not want to send her scurrying back into the twisted continuum generated by her Mannschenn Drive. He knew that he could blow the unarmed merchantman to a puff of incandescent vapor and that such an action would have the desired result. But he did not want to play it that way. He was acutely conscious that he was about to commit the crime of genocide — and who could say that the mutated rats were less deserving of life than the humans whom, but for Grimes's intervention, they would replace? He did not wish, also, to have the murder of his own kind on his conscience.

"Captain," he said urgently, "this is Commodore Grimes speaking, of the naval forces of the Rim Worlds Confederacy. It is vitally important that you allow us to board your ship. We know about the trouble you are having. We wish to help you."

"You wish to help us?"

"If we wished you ill," said Grimes patiently, "we could have opened fire on you as soon as you broke through into normal space-time." He paused. "You have a cargo of seed grain. There were rats in the grain. And these rats have been multiplying. Am I correct?"

"You are. But how do you know?"

"Never mind that. And these rats — there are mutants among them, aren't there? You've been coming a long time from Elsinore, haven't you? Mannschenn Drive breakdowns . . . and fluctuations in the temporal precession fields to speed up the rate of mutation."

"But, sir, how do you *know?* We have sent no messages. Our psionic radio officer was killed by the . . . the mutants."

"We know, Captain. And now may we board?"

From the speaker came the faint

voice of *Sundowner's* Mate. "Rim Ghosts are bad enough — but when they take over Quarantine it's a bit rough."

"Yes," said Grimes. "You may regard us as Rim Ghosts. But we're solid ones."

XXI

His big hands playing over his console like those of a master pianist, Williams, with short, carefully timed bursts from the auxiliary jets, jockeyed *Corsair* into a position only yards from *Sundowner,* used his braking rockets to match velocities.

Grimes and his people stared out through the ports at the star tramp. She was old, old. Even now, at a time that was centuries in the past of *Corsair's* people, she was obsolescent. Her hull plating was dull, pitted by years of exposure to micrometeorites. Two of the embossed letters of her name had been broken off and never replaced, although somebody had replaced the missing U and W with crudely painted characters. Grimes could guess what conditions must be like on board. She would be one of these ships in which, to give greater lift for cargo, the pile shielding had been cut to a minimum, the contents of her holds affording, in theory, protection from radiation. And her holds were full of grain. And this grain supported pests that, through rapid breeding and mutation, had become a menace rather than a mere nuisance.

"Boarders away, sir?" asked the Marine officer.

"Yes, Major. Yourself and six men should do. I and Mrs. Grimes will be coming with you."

"Side arms, sir?"

"No. That crate'll have paper-thin bulkheads and shell plating, and we can't afford any playing around with lasers."

"Then knives and clubs, sir?"

"It might be advisable. Yes."

Grimes and Sonya left Control for their quarters. There, helping each other, they shrugged into their modified spacesuits. These still had the tail sheaths and helmets designed to accommodate a long-muzzled head. This had its advantages, providing stowage for a full beard. But Grimes wondered what *Sundowner's* people would think when they saw a party of seeming aliens jetting from *Corsair* to their airlock. Anyhow, it was their own fault. They should have had their vision transmitter and receiver in order.

The boarding party assembled at the main airlock which, although it was cramped, was big enough to hold all of them. The inner door slowly closed and then, after the pumps had done their work (*Corsair* could not afford to throw away atmosphere) the outer door opened. Grimes could see, then, that an aperture had appeared in the shell plating of the other ship, only twenty feet or so distant. But it was small. It must be only an auxiliary airlock. The Captain of *Sundowner,* thought Grimes, must be a cautious man, must have determined to let the boarding party into his ship one by one instead of in a body. *And he'll be more cautious still,* thought

Grimes, *when he sees these spacesuits.*

He shuffled to the door sill. He said into his helmet miscrophone, "There's room for only one at a time in that airlock of theirs. I'll go first."

He heard the Major acknowledge, and then he jumped, giving himself the slightest possible push-off from his own ship. He had judged well and did not have to use his suit reaction unit. Slowly, but not too slowly, he drifted across the chasm between the two vessels, extended his arms to break his fall and, with one hand, caught hold of the projecting rung above *Sundowner's* airlock door.

As he had assumed, the compartment was large enough to hold only one person — and he had to act quickly to pull his dummy tail out of the way of the closing outer valve. There were no lights in the airlock — or, if there were lights, they weren't working. But after a while he heard the hissing that told him that pressure was being built up.

Suddenly the inner door opened and glaring light blinded the Commodore. He could just see two dark figures standing there, with what looked like pistols in their hands. Through his helmet diaphragm he heard somebody say, "What did I tell you, Captain? A bleeding kangaroo in full armor, no less. Shall I shoot it?"

"Wait!" snapped Grimes. He hoped that the note of authority would not be muffled from his voice. "Wait! I'm as human as you."

"Then prove it, mister!"

Slowly the Commodore raised his gloved hands, turning them to show that they were empty. He said, "I am going to remove my helmet — unless one of you gentlemen would care to do it for me."

"Not bloody likely. Keep your distance."

"As you please." Grimes manipulated fastenings, gave the regulation half turn and lifted. At once he noticed the smell — it was like the stink that had hung around his own wardroom for days after the attempted interrogation of the prisoner.

"All right," said one of the men. "You can come in."

Grimes shuffled into the ship. The light was out of his eyes now, and he could see the two men. He did not have to ask who or what they were. Uniform regulations change far more slowly than do civilian fashions, especially when uniforms are worn as much for function as for appearance. He addressed the grizzled, unshaven man with the four tarnished gold bars on his shoulder boards, "We have already spoken with each other by radio, Captain. I am Commodore Grimes."

"Of the Rim Worlds Confederacy's Navy. But what's the idea of the fancy dress, *Commodore*?"

"The fancy dress?" Then Grimes realized that the man was referring to his spacesuit, so obviously designed for a non-human. What would be his reaction to what Grimes was wearing underneath it — the scanty rags and the rank marks printed on to his skin? But it was of no importance. He said, "It's a long story,

Captain, and I haven't time to tell it now. What I am telling you is that you must not, repeat not, attempt a landing on Lorn until I have given you clearance."

"And who the hell do you think you are, Mister so-called Commodore? We've had trouble enough this trip. What is your authority?"

"My authority?" Grimes grinned. "In my own space and time, the commission I hold, signed by the President of the Confederacy."

"What did I say?" demanded the Mate. "And I'll say it again. He's some sort of bloody pirate."

"And, in the here-and-now," continued Grimes, "my missile batteries and my laser projectors."

"If you attempt to hinder me from proceeding on my lawful occasions," said the tramp Master stubbornly, "that will be piracy."

Grimes looked at him, not without sympathy. It was obvious that this man had been pushed to the very limits of human endurance. The lined face and the red-rimmed eyes told of many, too many, hours without sleep. And he had seen at least one of his officers killed. By this time he would be regarding the enemies infesting his ship as mutineers rather than mutants and, no longer quite rational, would be determined to bring his cargo to port come Hell or High Water.

And that he must not do.

Grimes lifted his helmet to put it back on. In spite of the metal with which he was surrounded he might be able to get through to Williams in *Corsair's* control room, to Williams and to Carter, to give the order that would call a laser beam to slice off *Sundowner's* main venturi. But the Mate guessed his intention, swung viciously with his right arm and knocked the helmet out of the Commodore's hand. He growled to his Captain, "We don't want the pirate callin' his little friends, do we, sir?"

"It is essential that I keep in communication with my own ship," said Grimes stiffly.

"So you can do somethin' with all the fancy ironmongery you were tellin' us about!" The Mate viciously swatted the helmet which, having rebounded from a bulkhead, was now drifting through the air.

"Gentlemen," said Grimes reasonably, looking at the two men and at the weapons they carried, automatic pistols, no more than five millimeter calibre but deadly enough. He might disarm one — but the other would fire. "Gentlemen, I have come to help you."

"More of a hindrance than a bloody help," snarled the Mate. "We've enough on our plates already without having to listen to your fairy stories about some non-existent Confederacy." He turned to the Master. "What say we start up the reaction drive an' set course for Lorn? This bloke's cobbers'll not open fire so long as he's aboard."

"Yes. Do that, Mr. Holt. And then we'll put this man in irons."

So this was it, thought Grimes dully. So this was the immutability of the Past, of which he had so often read. This was the inertia of the flow of events. He had come to

where and when he could best stick a finger into the pie — but the crust was too tough, too hard. He couldn't blame the tramp Captain. He, as a good shipmaster, was displaying the utmost loyalty to his charterers. And — Grimes remembered his Rim Worlds history — those consignments of seed grain had been urgently needed on Lorn.

And, more and more, every word was an effort, every action. It was as though he were immersed in some viscous fluid, fathoms deep. He was trying to swim against the Time Stream — and it was too much for him.

Why not just drift? After all, there would be time to do something after the landing at Port Forlorn. Or would there? Hadn't somebody told him that this ship had crashed in mountainous country?

He was aroused from his despairing lethargy by a sudden clangor of alarm bells, by a frightened, distorted voice that yammered from a bulkhead speaker, "Captain! Where are you, Captain? They're attacking the control room!"

More as the result of years of training than of conscious thought he snatched his drifting helmet as he followed the Captain and his Mate when they dived into the axial shaft, as they pulled themselves hand over hand along the guidelines to the bows of the ship.

XXII

"They're attacking the control room!"

The words echoed through Grimes' mind. *They* must be Sonya and the Major and his men. They must have breached the ports. So far there was no dimunition of air pressure — but even such a sorry rustbucket as *Sundowner* would have her airtight doors in reasonably good working order. All the same, he deemed it prudent to pause in his negotiation of the axial shaft to put his helmet back on. Luckily the rough treatment that it had received at the hands of the Mate did not seem to have damaged it.

Ahead of him, the two *Sundowner* officers were making rapid progress. It was obvious that they were not being slowed down by emergency doors and sphincter locks. The Commodore tried to catch up with them; but he was hampered by a spacesuit, and they were not.

Then, faintly through his helmet diaphragm, he heard the sounds of a struggle, a fight. There were shots — by the sharpness of the cracks fired from small caliber pistols such as the Captain and his Mate had been carrying. There were shouts and screams. And there was a dreadful, high squeaking that was familiar, too familiar. He thought that he could make out words — or the repetition of one word only.

"Kill! Kill!"

He knew then who *They* were and pulled himself along the guideline with the utmost speed of which he was capable. Glancing ahead, he saw that *Sundowner's* Master and his second in command were scrambling through the open hatch at the end of the shaft, the hatch that must give access, in a ship of

this type, to Control. He heard more shots, more shouts and screams. He reached the hatch himself, pulled himself through, floundered wildly for long seconds until his magnetized boot soles made contact with the deck.

They ignored him at first. Perhaps it was that they took him — in his tailed suit with its snouted helmet — for one of their own kind, although, by their standards, a giant. They were small, no larger than a terrier dog, but there were many of them. They were fighting with claws and teeth and pieces of sharpened metal that They were using as knives. A fine mist of blood fogged the faceplate of Grimes's helmet, half blinding him. But he could see at least two human bodies, obviously dead, their throats torn out, and at least a dozen of the smaller corpses.

He did not give himself time to be shocked by the horror of the scene. (That would come later, much later.) He tried to wipe the film of blood from his visor with a gloved hand, but only smeared it. But he could see that the fight was still going on. In the center of the control room a knot of spacemen was still standing, still struggling. They must either have lost their pistols or exhausted their ammunition; there were no more shots.

Grimes joined the fight, his armored fists and arms flailing into the mass of furry bodies, his hands crushing them and pulling them away from the humans, throwing them from him with savage violence. At first his attack met with success — and then the mutants realized that he was another enemy. Their squeaking rose to an intolerable level, and more and more of them poured into the control room. They swarmed over the Commodore, clinging to his arms and legs, immobilizing him. *Sundowner's* officers could not help him. They, too, were fighting a losing battle for survival.

There was a scratching at Grimes's throat. One of his assailants had a knife of sorts, was trying to saw through the fabric joint. It was a tough fabric, designed for wear and tear — but not such wear and tear as this. Somehow the man contrived to get his right arm clear, managed, with an effort, to bring it up to bat away the knife wielder. He succeeded — somehow. And then there was more scratching and scraping at the joint at his armpit.

He was blinded, helpless, submerged in a sea of furry bodies, all too conscious of the frantic scrabblings of their teeth and claws and knives. His armor, hampering his every movement even in ideal conditions, could well contribute to his death rather than saving his life. He struggled still — but it was an instinctive struggle rather than one consciously directed, no more than a slow, agonized shrugging, a series of laborious contortions to protect his vulnerable joints from sharp teeth and serrated blades.

Then there was a respite, and he could move once more.

He saw, dimly, that the control room was more crowded than ever, that other figures, dressed as he was, had burst in, were fighting

with deadly efficiency, with long, slashing blades and bone-crushing cudgels. It was a hand-to-hand battle in a fog — and the fog was a dreadful cloud of finely divided particles of freshly shed blood.

But even these reinforcements were not enough to turn the tide. Sooner or later — and probably sooner — the mutants would swamp the humans, armored and unarmored, by sheer weight of numbers.

"Abandon ship!" somebody was shouting. It was a woman's voice, Sonya's. "Abandon ship! To the boats!" And then the cry — fainter this time, heard through the helmet diaphragm rather than over his suit radio — was repeated. It is no light matter to give up one's vessel. But now, after this final fight, *Sundowner's* people were willing to admit they they were beaten.

Somehow the armored Marines managed to surround the crew — what was left of them. The Captain was still alive, although only half conscious. The Mate, apart from a few scratches, was untouched. There were two engineers and an hysterical woman with Purser's braid on her torn shirt. That was all. They were hustled by *Corsair's* men to the hatch, thrust down the axial shaft. Grimes shouted his protest as somebody pushed him after them. He realized that it was Sonya, that she was still with him. Over their heads the hatch lid slammed into its closed position.

"The Major and his men," he managed to get out. "They can't stay there, in that hell!"

"They won't," she told him. "They'll manage. Our job is to get these people clear of the ship and to do it immediately."

"And then?"

"Who's in charge of this bloody operation?" she asked tartly. "Who was it who told the Admiral that he was going to play this whole thing by ear?"

Then they were out of the axial shaft and into a boat bay. They watched the Mate help the woman into the small, torpedó-like craft, then stand back to allow the two engineers to enter. He tried to assist the Captain to board — but his superior pushed him away weakly, saying, "No, Mister. I'll be the last man off *my* ship, if you please." He noticed Grimes and Sonya standing there. "And that applies to you, too, Mr. Commodore whoever you say you are. Into the boat with you — you and your mate."

"We'll follow you, Captain. It's hardly more than a step across to our own ship."

"Into the boat with you, damn you. I shall be . . . the . . . last . . . "

The man was obviously on the verge of collapse. His Mate grasped his elbow. "Sir, this is no time to insist on protocol. We have to hurry. Can't you hear Them?"

Through his helmet Grimes, himself, hadn't heard them until now. But the noise was there, the frenzied chittering, surely louder with every passing second. "Get into that bloody boat," he told the Mate. "We'll handle the doors."

"I . . . insist . . ." whispered the Captain. "I shall . . . be . . . the last . . . to leave . . ."

"You know what to do," Grimes told the Mate.

"And many's the time I've wanted to do it. But not in these circumstances." His fist came up to his superior's jaw. It was little more than a tap, but enough. The Master did not fall, could not fall in these conditions of zero gravity. But he swayed there, anchored to the deck by his magnetic boot soles, out on his feet. The two engineers emerged from the lifecraft, lugged the unconscious man inside.

"Hurry!" ordered Sonya.

"Make for your ship, sir?" asked the Mate. "You'll pick us up?"

"No. Sorry — but there's no time to explain. Just get the hell out and make all speed for Lorn."

"But . . ."

"You heard what the Commodore said," snapped Sonya. "Do it. If you attempt to lay your boat alongside we open fire."

"But . . ."

Grimes had removed his helmet so that his voice would not be muffled by the diaphragm. "Get into that bloody boat!" he roared. And in a softer voice, as the Mate obeyed, "Good luck."

He replaced his helmet and, as he did so, Sonya operated the controls set into the bulkhead. A door slid shut, sealing off the boat bay from the rest of the ship. The outer door opened, revealing the black emptiness of the Rim Sky. Smoothly and efficiently the catapult operated, throwing the boat out and clear. Intense violet flame blossomed at her blunt stern, and then she was away, diminishing into the distance, coming around in a great arc on to the trajectory that would take her to safety.

Grimes didn't watch her for long. He said, "We'd better get back to Control, to help the Major and his men. They're trapped in there."

"They aren't trapped. They're just waiting to see that the boat's escaped."

"But how will they get out?"

"The same way that we got into this rustbucket. We sent back to the ship for a laser pistol, burned our way in. Luckily the airtight doors were all in good working order."

"You took a risk."

"It was a risk we had to take. And we knew that *you* were wearing a spacesuit. But it's time we weren't here."

"After you."

"My God! Are you going to be as stuffy as that Captain?"

Grimes didn't argue, but pushed her out of the boat lock. He jumped after her, somersaulting slowly in the emptiness. He used his suit reaction unit to steady himself and found himself facing the ship that he had just left. He saw an explosion at her bows, a billowing cloud of debris that expanded slowly — broken glass, crystallizing atmosphere, a gradually separating mass of bodies, most of which ceased to move after a very few seconds.

But there were the larger bodies, seven of them, spacesuited — and each of them sprouted a tail of incandescence as the Marines jetted back to their own ship. The Major had used his laser pistol to break out through the control room ports.

All the mutants would not be dead. There would be survivors, sealed off in their airtight compartments by the slamming of the emergency doors.

The survivors could be disposed of by *Corsair's* main armament.

XXIII

"We were waiting for you, Skipper," Williams told Grimes cheerfully as the Commodore re-entered his own control room.

"Very decent of you, Commander," Grimes said, remembering how the Mate of *Sundowner* had realized his long standing ambition and clobbered his Captain. "Very decent of you."

He looked out of the viewports. The grain carrier was still close, at least as close as she had been when he had boarded her. The use of missiles would be dangerous to the vessel employing them. Even lasers might touch off a mutually destructive explosion.

"You must still finish your task, man Grimes," Serressor reminded him.

"I know. I know." But there was no hurry. There was ample time to consider ways and means.

"All armament ready, sir," reported Carter.

"Thank you. To begin with, Commander Williams, we'll open the range . . ."

Then, suddenly, the outline of *Sundowner* shimmered, shimmered and faded. She flickered out like a candle in a puff of wind.

Grimes cursed. He should have foreseen this. The mutants had access to the Mannschenn Drive machinery — and how much, by continuous eavesdropping, had they learned? How much did they know?

"Start M.D.," he ordered. "Standard precession."

It took time — but not too long a time. Bronson was already in the Mannschenn Drive room, and Bronson had been trained to the naval way of doing things rather than the relatively leisurely procedure of the merchant service. (Himself a merchant officer, a reservist, he had always made it his boast that he could beat the navy at its own game.) There was the brief period of temporal disorientation, the uncanny feeling that time was running backwards, the giddiness, the nausea. Outside the ports the Galactic Lens assumed the appearance of a distorted Klein flask, and the Lorn sun became a pulsing spiral of multicolored light.

But there was no sign of *Sundowner.*

Grimes was speaking into the telephone. "Commander Bronson! Can you synchronize?"

"With *what?*" Then — "I'll try, sir. I'll try."

Grimes could visualize the engineer watching the flickering needles of his gauges, the undulant traces in his oscilloscopes, making adjustments measured in fractions of microseconds to his controls. Subtly the keening song of the spinning, pressing gyroscopes wavered. And as it did so the outlines of the people and instruments in the control

room lost their sharpness, while the colors of everything momentarily dulled and then became more vivid.

"There's the damned ship!" shouted Williams.

And there she was, close aboard them, a phantom ship adrift on a sea of impossible blackness, insubstantial, quivering on the very verge of invisibility.

"Fire at will!" ordered Grimes.

"But, sir," protested one of the officers. "If we interfere with the ship's mass while the Drive is in operation. . . ."

Fire at will!" repeated the Commodore.

"Aye, aye, sir!" acknowledged Carter happily.

But it was like shooting at a shadow. Missiles erupted from their launchers, laser beams stabbed out at the target — and nothing happened. From the bulkhead speaker of the intercom Bronson snarled, "What the hell are you playing at up there? How the hell can I hold her in synchronization?"

"Sorry, Commander," said Grimes into his microphone. "Just lock on, and hold her. Just hold her, that's all I ask."

"An' what now, Skipper?" demanded Williams. "What now?"

"We shall use the Bomb," said Grimes quietly.

"We shall use the Bomb," he said. He knew, as did all of his people, that the fusion device was their one hope of a return to their own Space and Time. But *Sundowner* must be destroyed; the Time Stream must, somehow, be diverted. Chemical explosives and destructive light beams were, in these circumstances, useless. There remained only the Sunday Punch.

The ships were close, so close that their temporal precession fields interacted. Even so, it was obvious why all the weapons so far employed had failed. Each and every discharge had meant an appreciable alteration of *Corsair's* temporal precession rate, so that each and every missile and beam had missed in Time rather than in Space. Had *Corsair* been fitted with one of the latest model synchronizers her gunnery might have been more successful — but she was not. Only Bronson's skill was keeping her in visual contact with her prey.

Getting the Bomb into position was not the same as loosing off a missile. Slowly, gently, the black-painted cylinder was eased out of its bay. The merest puff from one of its compressed air jets nudged it away from *Corsair* towards the target. It fell gently through the space between the two ships, came finally to rest against *Sundowner's* scarred hull.

At an order from Grimes the thick, lead shutters slid up over the control room ports. (But the thing was close, so close, too close. Even with the radar on minimum range, the glowing blob that was *Sundowner* almost filled the tank.) Carter looked at Grimes, waiting for the order. His face was pale — and it was not the only pale face in Control. But Serressor — that blasted lizard! — was filling the confined space with his irritating whistling.

Sonya came to sit beside him.

She said quietly, "You have to do it. We have to do it."

Even her presence could not dispel the loneliness of command. "No," he told her. "*I* have to do it."

"Locking," came Bronson's voice from the bulkhead speaker. "Locking. Holding."

"Fire," said Grimes.

XXIV

Time had passed.

How long, Grimes did not know, nor would he ever know. (Perhaps, he was often to suspect later, this was the next time around, or the time after that.)

He half opened his eyes and looked at the red-haired woman who was shaking him back to wakefulness — the attractive woman with the faint scar still visible between her firm breasts. What was her name? He should know. He was married to her. Or had been married to her. It was suddenly of great importance that he should remember what she was called.

Susan . . .?

Sarah . . .?

No . . .

Sonya . . .?

Yes, Sonya. That was it.

"John, wake up! Wake up! It's all over now. The Bomb blew us back into our own Continuum, back to our own Time, even! We're in touch with Port Forlorn Naval Control, and the Admiral wants to talk to you personally."

"He can wait," said Grimes, feeling the fragments of his prickly personality click back into place.

He opened his eyes properly, saw Williams sitting at his controls, saw Serressor, near by, still youthful, and with him the gangling adolescent who was Mayhew.

For a moment he envied them. They had regained their youth — but at a dreadful risk to themselves. Even so, they had been lucky.

And so, he told himself, had been the human race — not for the first time, and not for the last.

He thought, I hope I'm not around when our luck finally does run out.

END

IN THE BONE

by GORDON R. DICKSON

Illustrated by FINLAY

He came off the deadliest war fleet in history to do battle with naked hands — and brain!

I

Personally, his name was Harry Brennan.

Officially, he was the *John Paul Jones,* which consisted of four billion dollars worth of irresistible equipment — the latest and best of human science — designed to spread its four thousand-odd components out through some fifteen cubic meters of space under ordinary conditions — designed also to stretch across light-years under extraordinary conditions (such as sending an emergency messenger-component home) or to clump into a single magnetic unit in order to shift through space and explore the galaxy. Both officially and personally — but most of all personally — he represents a case in point.

The case is one having to do with the relative importance of the made thing and its maker.

It was, we all know, the armored horseman who dominated the early wars of the Middle Ages in Europe.

But, knowing this, it is still wise to remember that it was not the iron shell that made the combination of man and metal terrible to the enemy, — but rather the essentially naked man inside the shell. Later, French knights depending on their armor went down before the cloth-yard shafts of unarmored footmen with bows, at Crecy and Poitiers.

And what holds true for armor holds true for the latest developments of our science as well. It is not the spacecraft or the laser on which we will find ourselves depending when a time of ultimate decision comes, but the naked men within and behind these things. When that time comes, those who rank the made thing before its maker will die as the French knights died at Crecy and Poitiers. This is a law of nature as wide as the universe, which Harry Brennan, totally unsuspecting, was to discover once more for us, in his personal capacity.

Personally, he was in his mid-twenties, unremarkable except for two years of special training with the *John Paul Jones* and his superb physical condition. He was five-eleven, a hundred seventy-two pounds, with a round, cheerful face under his brown crew-cut hair. I was Public Relations Director of the Project that sent him out; and I was there with the rest to slap him on the back the day he left.

"Don't get lost, now," said someone. Harry grinned.

"The way you guys built this thing," he answered, "if I got lost the galaxy would just have to shift itself around to get me back on plot."

There was an unconscious arrogance hidden in that answer, but no one marked it at the time. It was not the hour for suspicions.

He climbed into the twelve-foot tall control suit that with his separate living tank were the main components of the *John Paul Jones* and took off. Up in orbit, he spent some thirty-two hours testing to make sure all the several thousand other component parts were responding properly. Then he left the solar system.

He clumped together his components, made his first shift to orbit Procyon — and from there commenced his explorations of the stars. In the next nine weeks, he accumulated literally amazing amounts of new information about the nearby stars and their solar systems. And — this is an even better index of his success — located four new worlds on which men could step with never a spacesuit or even a water canteen to sustain them. Worlds so like Earth in gravity, atmosphere and even flora and fauna, that they could be colonized tomorrow.

Those were his first four worlds. On the fifth he encountered his fate — a fate for which he was unconsciously ripe.

The fact was the medical men and psychologists had overlooked a factor — a factor having to do with the effect of Harry's official *John Paul Jones* self upon his entirely human personal self. And over nine weeks this effect changed Harry

without his ever having suspected it.

You see, nothing seemed barred to him. He could cross light-years by touching a few buttons. He could send a sensing element into the core of the hottest star, into the most poisonous planetary atmospheres or crushing gravities, to look around as if he were down there in person. From orbit, he could crack open a mountain, burn off a forest or vaporize a section of icecap in search of information just by tapping the energy of a nearby sun. And so, subtly, the unconscious arrogance born during two years of training, that should have been noted in him at take-off from Earth, emerged and took him over — until he felt that there was nothing he could not do; that all things must give way to him; that he was, in effect, master of the universe.

The day may come when a man like Harry Brennan may hold such a belief and be justified. But not yet. On the fifth Earthlike world he discovered — World 1242 in his records — Harry encountered the proof that his belief was unjustified.

II

The world was one which, from orbit, seemed to be the best of all the planets which he had discovered were suitable for human settlement; and he was about to go down to its surface personally in the control-suit, when his instruments picked out something already down there.

It was a squat, metallic pyramid about the size of a four-plex apartment building; and it was radiating on a number of interesting frequencies. Around its base there was mechanical movement and an area of cleared ground. Further out, in the native forest, were treaded vehicles taking samples of the soil, rock and vegetation.

Harry had been trained for all conceivable situations, including an encounter with other intelligent, space-going life. Automatically, he struck a specific button, and immediately a small torpedo-shape leaped away to shift through alternate space and back to Earth with the information so far obtained. And a pale, thin beam reached up and out from the pyramid below. Harry's emergency messenger component ceased to exist.

Shaken, but not yet really worried, Harry struck back instantly with all the power his official self could draw from the GO-type sun, nearby.

The power was funnelled by some action below, directly into the pyramid itself; and it vanished there as indifferently as the single glance of a sunbeam upon a leaf.

Harry's mind woke suddenly to some understanding of what he had encountered. He reached for the controls to send the *John Paul Jones* shifting into the alternate universe and away.

His hands never touched the controls. From the pyramid below, a blue lance of light reached up to paralyze him, select the controlsuit from among the other components and send it tumbling to the plane-

tary surface below like a swatted insect.

But the suit had been designed to protect its occupant, whether he himself was operative or not. At fifteen hundred feet, the drag chute broke free, looking like a silver cloth candle-snuffer in the sunlight; and at five hundred feet the retrorockets cut in. The suit tumbled to earth among some trees two kilometers from the pyramid, with Harry inside bruised, but released from his paralysis.

From the pyramid, a jagged arm of something like white lightning lashed the ground as far as the suit, and the suit's outer surface glowed cherry-red. Inside, the temperature suddenly shot up fifty degrees; instinctively Harry hit the panic button available to him inside the suit.

The suit split down the center like an overcooked frankfurter and spat Harry out; he rolled among the brush and fernlike ground cover, six or seven meters from the suit.

From the distant pyramid, the lightning lashed the suit, breaking it up. The headpiece rolled drunkenly aside, turning the dark gape of its interior toward Harry like the hollow of an empty skull. In the dimness of that hollow Harry saw the twinkle of his control buttons.

The lightning vanished. A yellow lightness filled the air about Harry and the dismembered suit. There was a strange quivering to the yellowness; and Harry half smelled, half tasted the sudden, flatbite of ozone. In the headpiece a button clicked without being touched; and the suit speaker, still radio-connected with the recording tank in orbit, spoke aloud in Harry's voice.

"Orbit . . ." it said. ". . . into . . . going . . . "

These were, in reverse order, the last three words Harry had recorded before sighting the pyramid. Now, swiftly gaining speed, the speaker began to recite backwards, word for word, everything Harry had said into it in nine weeks. Faster it went, and faster, until it mounted to a chatter, a gabble, and finally a whine pushing against the upper limits of Harry's auditory register.

Suddenly, it stopped.

The little clearing about Harry was full of silence. Only the odd and distant creaking of something that might have been a rubbing branch or an alien insect, came to Harry's ears. Then the speaker spoke once more.

"Animal . . ." it said flatly in Harry's calm, recorded voice and went on to pick further words from the recordings, ". . . beast. You . . . were an animal . . . wrapped in . . . made clothing. I have stripped you back to . . . animal again. Live, beast . . ."

Then the yellowness went out of the air and the taste of ozone with it. The headpiece of the dismembered suit grinned, empty as old bones in the sunlight. Harry scrambled to his feet and ran wildly away through the trees and brush. He ran in panic and utter fear, his lungs gasping, his feet pounding the alien earth, until the earth, the trees, the sky itself swam about him from exhaustion;

and he fell tumbling to earth and away into the dark haven of unconsciousness.

When he woke, it was night, and he could not quite remember where he was or why. His thoughts seemed numb and unimportant. But he was cold, so he blundered about until he found the standing half-trunk of a lighting-blasted tree and crept into the burned hollow of its interior, raking frill-edged, alien leaves about him out of some half-forgotten instinct, until his own body-warmth in the leaves formed a cocoon of comfort about him; and he slept.

From then on began a period in which nothing was very clear. It was as if his mind had huddled itself away somehow like a wounded animal and refused to think. There was no past or future, only the endless now. If now was warm, it had always been warm; if dark — it had always been dark. He learned to smell water from a distance and go to it when he was thirsty. He put small things in his mouth to taste them. If they tasted good he ate them. If he got sick afterwards, he did not eat them again.

Gradually, blindly, the world about him began to take on a certain order. He came to know where there were plants with portions he could eat, where there were small creatures he could catch and pull apart and eat and where there was water.

He did not know how lucky he was in the sheer chance of finding flora and fauna on an alien world that was edible — let alone nourishing. He did not realize that he had come down on a plateau in the tropical highlands, with little variation in day and night temperature and no large native predators which might have attacked him.

None of this, he knew. Nor would it have made any difference to him if he had, for the intellectual center of his brain had gone on vacation, so to speak, and refused to be called back. He was, in fact, a victim of severe psychological shock. The shock of someone who had come to feel himself absolute master of a universe and who then, in a few short seconds, had been cast down from that high estate by something or someone inconceivably greater, into the state of a beast of the field.

But still, he could not be a true beast of the field, in spite of the fact his intellectual processes had momentarily abdicated. His perceptive abilities still worked. His eyes could not help noting, even if incuriously, the progressive drying of the vegetation, the day-by-day shifting in the points of setting and rising of the sun. Slowly, instinctively, the eternal moment that held him stretched and lengthened until he began to perceive divisions within it — a difference between *now* and *was,* between *now* and *will be.*

III

The day came at last when he saw himself.

A hundred times he had crouched by the water to drink and, lowering his lips to its surface, seen color and


Virgil
Finlay

shape rising to meet him. The hundredth and something time, he checked, a few inches above the liquid plane, staring at what he saw.

For several long seconds it made no sense to him. Then, at first slowly, then with a rush like pain flooding back on someone rousing from the anesthesia of unconsciousness, he recognized what he saw.

Those were eyes at which he stared, sunken and dark-circled under a dirty tangle of hair. That was a nose jutting between gaunt and sunken cheeks above a mouth, and there was a chin naked only because once an ultrafine laser had burnt out the thousand and one roots of the beard that grew on it. That was a man he saw — *himself*.

He jerked back like someone who has come face-to-face with the devil. But he returned eventually, because he was thirsty, to drink and see himself again. And so, gradually, he got used to the sight of himself.

So it was that memory started to return to him. But it did not come back quickly or all at once. It returned instead by jerks and sudden, partial revelations — until finally the whole memory of what had happened was back in his conscious mind again.

But he was really not a man again.

He was still essentially what the operator of the pyramid had broken him down into. He was still an animal. Only the memory and imaginings of a man had returned to live like a prisoner in a body that went on reacting and surviving in the bestial way it had come to regard as natural.

But his animal peace was broken. For his imprisoned mind worked now. With the controlsuit broken up, — he had returned to the spot of its destruction many times, to gaze beastlike at the rusting parts — his mind knew he was a prisoner, alone on this alien world until he died. To know that was not so bad, but remembering this much meant remembering also the existence of the someone or something that had made him a prisoner here.

The whoever it was who was in the pyramid.

That the pyramid might have been an automated, mechanical device never entered his mind for a moment. There had been a personal, directed, living viciousness behind the announcement that had condemned him to live as a beast. No, in that blank-walled, metallic structure, whose treaded mechanical servants still prospected through the woods, there was something alive — something that could treat the awesome power of a solar tap as a human treated the attack of a mosquito — but something *living*. Some being. Some Other, who lived in the pyramid, moving, breathing, eating and gloating — or worse yet, entirely forgetful of what he had done to Harry Brennan.

And now that he knew that the Other was there, Harry began to dream of him nightly. At first, in his dreams, Harry whimpered with fear each time the dark shape he pursued seemed about to turn and show its face. But slowly, hatred came to grow inside and then outside his fear. Unbearable that Harry

should never know the face of his destroyer. Lying curled in his nest of leaves under the moonless, star-brilliant sky, he snarled, thinking of his deprivation.

Then hate came to strengthen him in the daylight also. From the beginning he had avoided the pyramid, as a wild coyote avoids the farmyard where he was once shot by the farmer. But now, day after day, Harry circled closer to the alien shape. From the beginning he had run and hidden from the treaded prospecting machines. But now, slowly, he grew bolder, standing close enough at last to touch them as they passed. And he found that they paid no attention to him. No attention at all.

He came to ignore them in turn, and day by day he ventured closer to the pyramid. Until the morning came when he lay, silently snarling, behind a bush, looking out across the tread-trampled space that separated him from the nearest copper-colored face of the pyramid.

The space was roughly circular, thirty meters across, broken only by a small stream which had been diverted to loop inwards toward the pyramid before returning to its original channel. In the bight of the loop a machine like a stork straddled the artificial four-foot-wide channel, dipping a pair of long necks with tentacle-clustered heads into the water at intervals. Sometimes Harry could see nothing in the tentacles when they came up. Occasionally they carried some small water creature which they deposited in a tank.

Making a perfect circle about the tramped area, so that the stork like machine was guarded within them, was an open fence of slender wands set upright in the earth, far enough apart for any of the machines that came and went to the forest to pass between any two of them. There seemed to be nothing connecting the wands, and nothing happened to the prospecting machines as they passed through — but the very purposelessness of the wands filled Harry with uneasiness.

It was not until after several days of watching that he had a chance to see a small native animal, frightened by something in the woods behind it, attempt to bolt across a corner of the clearing.

As it passed between two of the wands there was a waveriness in the air between them. The small animal leaped high, came down and lay still. It did not move after that, and later in the day, Harry saw the indifferent treads of one of the prospecting machines bury it in the trampled earth in passing.

That evening, Harry brought several captive, small animals bound with grass up to the wand line and thrust them through, one by one at different spots. All died.

The next night he tried pushing a captive through a small trench scooped out so that the creature passed the killing line below ground level. But this one died also. For several days he was baffled. Then he tried running behind a slow-moving machine as it returned and tying a small animal to it with grass.

For a moment as the front of

the machine passed through, he thought the little animal would live. But then, as the back of the machine passed the line, it, too, died.

Snarling, Harry paced around outside the circle in the brush until the sun set and stars filled the moonless sky.

In the days that followed, he probed every gap in the wand-fence, but found no safe way through it. Finally, he came to concentrate on the two points at which the diverted stream entered and left the circle to flow beneath the storklike machine.

He studied this without really knowing what he was seeking. He did not even put his studying into words. Vaguely, he knew that the water went in and the water came out again unchanged; and he also wished to enter and come out safely. Then, one day, studying the stream and the machine, he noticed that a small creature plucked from the water by the storklike neck's mass of tentacles was still wriggling.

The evening, at twilight, while there was still light to see, he waded up the two-foot depth of the stream to the point where the killing line cut across its watery surface and pushed some more of his little animals toward the line underwater.

Two of the three surfaced immediately, twitched and floated on limply, to be plucked from the water and cast aside on the ground by the storklike machine. But the third swam on several strokes before surfacing and came up living to scramble ashore, race for the forest and be killed by wands further around the circle.

Harry investigated the channel below the killing line. There was water there up to his mid-thigh, plenty to cover him completely. He crouched down in the water and took a deep breath.

Ducking below the surface, he pulled himself along with his fingertips, holding himself close to the bottom. He moved in as far as the tentacled ends. These grabbed at him, but could not reach far enough back to touch him. He saw that they came within a few inches of the gravel bottom.

He began to need air. He backed carefully out and rose above the water, gasping. After a while his hard breathing stopped, and he sat staring at the water for a long while. When it was dark, he left.

The next day he came and crept underwater to the grabbing area of the storklike machine again. He scooped out several handfuls of the gravel from under the place where the arms grabbed, before he felt a desperate need for air and had to withdraw. But that day began his labors.

IV

Four days later the bottom under the grasping tentacles was scooped out to an additional two feet of depth. And the fifth twilight after that, he pulled himself, dripping and triumphant, up out of the bend of the diverted stream inside the circle of the killing wands.

He rested and then went to the

pyramid, approaching it cautiously and sidelong like a suspicious animal. There was a door in the side he approached through which he had seen the prospecting machines trundle in and out. In the dimness he could not see it; and when he touched the metallic side of the structure, his fingers, grimed and toughened from scrabbling in the dirt, told him little. But his nose, beast-sensitive now, located and traced the outline of the almost invisible crack around the door panel by its reek of earth and lubricant.

He settled down to wait. An hour later, one of the machines came back. He jumped up, ready to follow it in; but the door opened just before it and closed the minute it was inside — nor was there any room to squeeze in beside it. He hunkered down, disappointed, snarling a little to himself.

He stayed until dawn and watched several more machines enter and leave. But there was no room to squeeze inside, even with the smallest of them.

During the next week or so he watched the machines enter and leave nightly. He tied one of his small animals to an entering machine and saw it pass through the entrance alive and scamper out again with the next machine that left. And every night his rage increased. Then, wordlessly, one daytime after he had seen a machine deep in the woods lurch and tilt as its tread passed over a rock, inspiration took him.

That night he carried through the water with him several canteloupe-sized stones. When the first machine came back to the pyramid, in the moment in which the door opened before it, he pushed one of the rocks before the right-hand tread. The machine, unable to stop, mounted the rock with its right tread, tilted to the left and struck against that side of the entrance.

It checked, backed off and put out an arm with the grasping end to remove the rock. Then it entered the opening. But Harry was already before it, having slipped through while the door was still up and the machine, busy pulling the stone aside.

He plunged into a corridor of darkness, full of clankings and smells. A little light from the opening behind him showed him a further, larger chamber where other machines stood parked. He ran toward them.

Long before he reached them, the door closed behind him, and he was in pitch darkness. But the clanking of the incoming machine was close behind him, and the adrenalinized memory of a wild beast did not fail him. He ran, hands-outstretched, directly into the side of the parked machine at which he had aimed and clambered up on it. The machine entering behind him clanked harmlessly past him and stopped moving.

He climbed cautiously down in the impenetrable darkness. He could see nothing; but the new, animal sensitivity of his nose offered a substitute for vision. He moved like a hunting dog around the chamber, sniffing and touching; and slowly a clear picture of it and its treaded occupants built up in his mind.

He was still at this when suddenly a door he had not seen opened almost in his face. He had just time to leap backwards as a smaller machine with a boxlike body and a number of upward-thrusting arms entered, trundled to the machine that had just come back and began to relieve the prospecting machine of its sample box, replacing it with the one it carried itself.

This much, in the dim light from the open door, Harry was able to see. But then, the smaller machine turned back toward the doorway; and Harry, waking to his opportunity, ducked through ahead of it.

He found himself in a corridor dimly lit by a luminescent strip down the center of its ceiling. The corridor was wide enough for the box-collecting machine to pass him; and, in fact, it rolled out around him as he shrank back against one metal wall. It went on down the corridor, and he followed it into a larger room with a number of machines, some mobile, some not, under a ceiling lit as the corridor had been with a crossing transluscent strip.

In this area all the machines avoided each other — and him. They were busy with each other and at other incomprehensible duties. Hunched and tense, hair erect on the back of his neck and nostrils spread wide, Harry moved through them to explore other rooms and corridors that opened off this one. It took him some little time; but he discovered that they were all on a level, and there was nothing but machines in any of them. He found two more doors with shallow steps leading up to them, but these would not open for him; and though he watched by one for some time, no machine went up the steps and through it.

He began to be conscious of thirst and hunger. He made his way back to the door leading to the chamber where the prospecting machines were parked. To his surprise, it opened as he approached it. He slipped through into darkness.

Immediately, the door closed behind him; and sudden panic grabbed him, when he found he could not open it from this side. Then, self-possession returned to him.

By touch, smell and memory, he made his way among the parked machines and down the corridor to the outside door. To his gratification, this also opened when he came close. He slipped through into cool, fresh outer air and a sky already graying with dawn. A few moments later, wet but free, he was back in the woods again.

From then on, each night he returned. He found it was not necessary to do more than put any sizeable object before a returning machine. It would stop to clear the path, and he could enter ahead of it. Then, shortly after he was inside, a box-collecting machine would open the inner door.

Gradually, his fear of the machines faded. He came to hold them in a certain contempt. They always did the same thing in the same situation, and it was easy to trick or outmaneuver them.

But the two inner doors of the

machine area with the steps would not open to him; and he knew the upper parts of the pyramid were still unexplored by him. He sniffed at the cracks of these door, and a scent came through — not of lubricating medium and metal alone, but of a different musky odor that raised the hairs on the back of his neck again. He snarled at the doors.

He went back to exploring minutely the machine level. The sample boxes from the prospecting machines, he found, were put on conveyorbelt-like strips that floated up on thin air through openings in the ceiling — but the openings were too small for him to pass through. But he discovered something else. One day he came upon one of the machines taking a grille off the face of one of the immobile devices. It carried the grille away, and he explored the opening that had been revealed. It was the entrance to a tunnel or duct leading upward; and it was large enough to let him enter it. Air blew silently from it; and the air was heavy with the musky odor he had smelled around the doors that did not open.

The duct tempted him, but fear held him back. The machine came back and replaced the grille; and he noticed that it fitted into place with a little pressure from the outside, top and bottom. After the machine had left he pressed, and the grille fell out into his hands.

After a long wait, he ventured timorously into the tube — but a sudden sound like heavy breathing mixed with a wave of a strong, musky odor came at him. He backed out in panic, fled the pyramid and did not come back for two days.

When he came back, the grille was again neatly in place. He removed it and sat a long time getting his courage up. Finally, he put the grille up high out of reach of the machine which had originally removed it and crawled into the duct.

He crept up the tube at an angle into darkness. His eyes were useless, but the musky odor came strongly at him. Soon, he heard sounds.

There was an occasional ticking, then a thumping or shuffling sound. Finally, after he had crawled a long way up through the tube, there was a sound like a heavy puffing or hoarse breathing. It was the sound that had accompanied the strengthening of the musky odor once before; and this time the scent came strong again.

He lay, almost paralyzed with terror in the tube, as the odor grew in his nostrils. He could not move until sound and scent had retreated. As soon as they had, he wormed his way backward down to the lower level and freedom, replaced the grille and fled for the outside air, once again.

But once more, in time, he came back. Eventually returned to explore the whole network of tubes to which the one he had entered connected. Many of the branching tubes were too small for him to enter, and the biggest tube he could find led to another grille from which the musky-smelling air was blasted with force.

Clearly it was the prime mover for the circulation of air through

the exhaust half of the pyramid's ventilating system. Harry did not reason it out to himself in those intellectual terms, but he grasped the concept wordlessly and went back to exploring those smaller tubes that he could crawl into.

These, he found, terminated in grilles set in their floors through which he could look down and catch a glimpse of some chamber or other. What he saw was mainly incomprehensible. There were a number of corridors, a number of what could be rooms containing fixed or movable objects of various sizes and shapes. Some of them could be the equivalent of chairs or beds — but if so, they were scaled for a being plainly larger than himself. The lighting was invariably the low-key illumination he had encountered in the lower, machine level of the pyramid, supplied by the single translucent strip running across the ceiling.

Occasionally, from one grille or another, he heard in the distance the heavy sound of breathing, among other sounds, and smelled more strongly the musky odor. But for more than a week of surreptitious visits to the pyramid, he watched through various grilles without seeing anything living.

V

However, a day finally came when he was crouched, staring down into a circular room containing what might be a bed shape, several chair shapes and a number of other fixed shapes with variously spaced and depthed indentations in their surfaces. In a far edge of the circular room was a narrow alcove, the walls of which were filled with ranked indentations, among which several lights of different colors winked and glowed.

Suddenly, the dim illumination of the room began to brighten. The illumination increased rapidly, so that Harry cringed back from the grille, lifting a palm to protect his dimness-accustomed eyes. At the same moment, he heard approaching the sound of heavy breathing and sniffed a sudden increase in the musky odor.

He froze. Motionless above the grille, he stopped even his breathing. He would have stopped his heart if he could, but it raced, shaking his whole body and sounding its rapid beat in his ears until he felt the noise of it must be booming through the pyramid like a drum. But there was no sign from below that this was so.

Then, sliding into sight below him, came a massive figure on a small platform that seemed to drift without support into the room.

The aperture of the grille was small. Harry's viewpoint was cramped and limited, looking down directly from overhead. He found himself looking down onto thick, hairless brown-skinned shoulders, a thick neck with the skin creased at the back and a forward-sloping, hairless brown head, egg-shaped in outline from above, with the point forward.

Foreshortened below the head and shoulders was a bulging chinline with something like a tusk showing;

it had a squat, heavy, hairless, brown body and thick short forearms with stubby claws at the end of four-fingered hands. There was something walruslike about the tusks and the hunching; — and the musky odor rose sickeningly into Harry's human nostrils.

The platform slid level with the alcove, which was too narrow for it to enter. Breathing hoarsely, the heavy figure on it heaved itself suddenly off the platform into the alcove, and the stubby hands moved over the pattern of indentations. Then, it turned and heaved itself out of the alcove, onto the flat, bed surface adjoining. Just as Harry's gaze began to get a full-length picture of it, the illumination below went out.

Harry was left, staring dazzled into darkness, while the heavy breathing and the sound of the figure readjusting itself on the bed surface came up to his ears. After a while, there was no noise but the breathing. But Harry did not dare move. For a long time he held his cramped posture, hardly breathing himself. Finally, cautiously, inch-by-inch, he retreated down the tube, which was too small to let him turn around. When he reached the larger tubes, he fled for the outside and the safety of the forest.

The next day, he did not go near the pyramid. Or the next. Every time he thought of the heavy, brown figure entering the room below the grille, he became soaked with the clammy sweat of a deep, emotional terror. He could understand how the Other had not heard him or seen him up behind the grille. But he could not understand how the alien had not *smelled* him.

Slowly, however, he came to accept the fact that the Other had not. Possibly the Other did not have a sense of smell. Possibly . . . there was no end to the possibilities. The fact was that the Other had not smelled Harry — or heard him — or seen him. Harry was like a rat in the walls — unknown because he was unsuspected.

At the end of the week, Harry was once more prowling around back by the pyramid. He had not intended to come back, but his hatred drew him like the need of a drug addict for the drug of his addiction. He had to see the Other again, to feed his hate more surely. He had to look at the Other, while hating the alien, and feel the wild black current of his emotions running toward the brown and hairless shape. At night, buried in his nest of leaves, Harry tossed and snarled in his sleep, dreaming of the small stream backing up to flood the interior of the pyramid, and the Other drowning — of lighting striking the pyramid and fire racing through it — of the Other burning. His dreams became so full of rage and so terrible that he woke, twisting and with the few rags of clothing that still managed to cling unnoticed to him, soaked with sweat.

In the end, he went back into the pyramid.

Daily he went back. And gradually, it came to the point where he was no longer fearful of seeing the Other. Instead, he could barely endure

the search and the waiting at the grilles until the Other came into sight. Meanwhile, outside the pyramid in the forest, the frill-edged leaves began to dry and wither and drop. The little stream sank in its bed — only a few inches, but enough so that Harry had to dig out the bottom of the streambed under the killing barrier in order to pass safely underwater into the pyramid area.

One day he noticed that there were hardly any of the treaded machines out taking samples in the woods any more.

He was on his way to the pyramid through the woods, when the realization struck him. He stopped dead, freezing in midstride like a hunting dog. Immediately, there flooded into his mind the memory of how the parking chamber for the treaded machines, inside the base of the pyramid, had been full of unmoving vehicles during his last few visits.

Immediately, also, he realized the significance of the drying leaves, the dropping of the water level of the stream. And something with the urgency of a great gong began to ring and ring inside him like the pealing of an alarm over a drowning city.

Time had been, when there had been no pyramid here. Time was now, with the year fading and the work of the collecting machines almost done. Time would be, when the pyramid might leave.

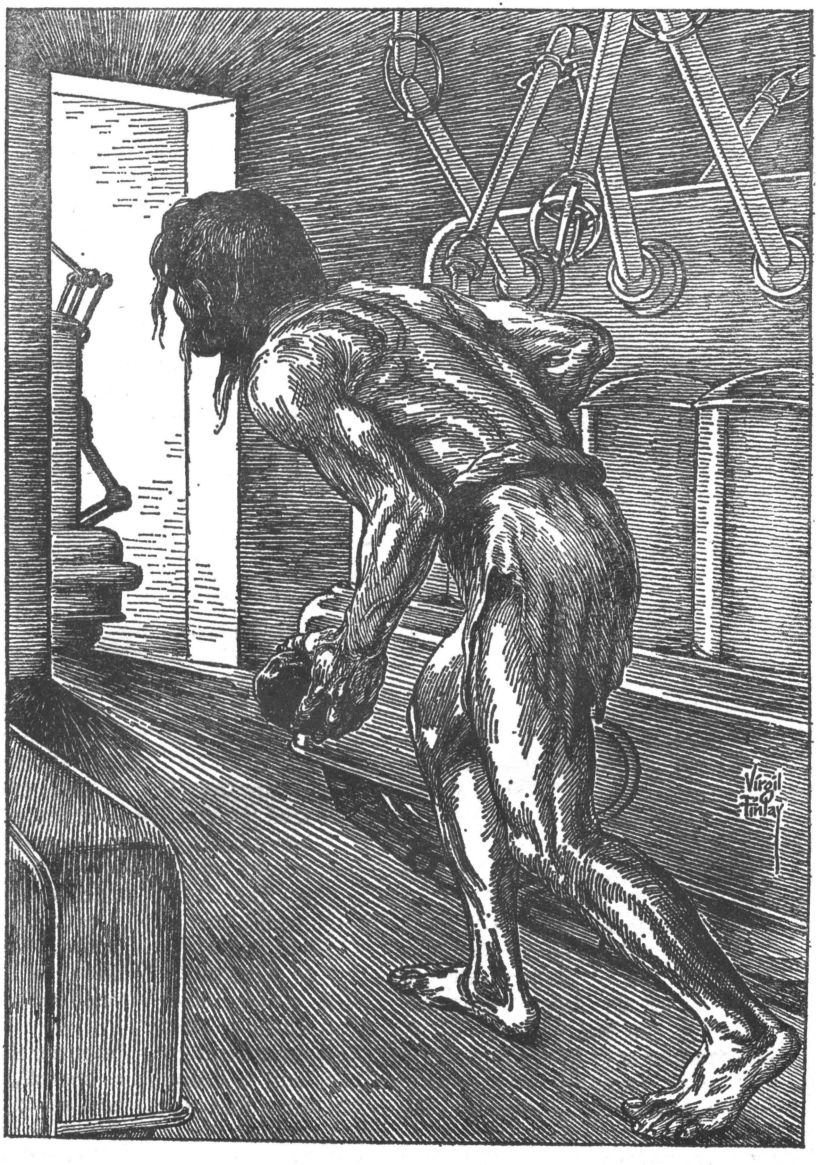
Taking with it the Other.

He began to run, instinctively toward the pyramid. But, when he came within sight of it, he stopped. For a moment he was torn with indecision, an emotional maelstrom of fear and hatred all whirling together. Then, he went on.

He emerged a moment later, dripping, a fist-sized rock in each hand, to stand before the closed door that gave the machines entrance to the pyramid. He stood staring at it, in broad daylight. He had never come here before in full daylight, but his head now was full of madness. Fury seethed in him, but there was no machine to open the door for him. It was then that the fury and madness in him might have driven him to pound wildly on the door with his stones or to wrench off one of the necks of the storklike machine at the stream and try to pry the door open. Any of these insane things he might have done and so have attracted discovery and the awesome power of the machinery and killing weapons at the command of the Other. Any such thing he might have done if he was simply a man out of his head with rage — but he was no longer a man.

He was what the Other had made him, an animal, although with a man locked inside him. And like an animal, he did not rave or rant, any more than does the cat at the mousehole, or the wolf waiting for the shepherd to turn in for the night. Instead, without further question, the human beast that had been Harry Brennan — that still called himself Harry Brennan, in a little, locked-away, back corner of its mind — dropped on his haunches beside the door and hunkered there, panting lightly in the sunlight and waiting.

Four hours later, as the sun was


Virgil
Finlay

dropping close to the treetops, a single machine came trundling out of the woods. Harry tricked it with one of his stones and, still carrying the other, ran into the pyramid.

He waited patiently for the small collecting machine to come and empty out the machine returned from outside, then dodged ahead of it, when it came, into the interior, lower level of the pyramid. He made his way calmly to the grille that gave him entrance to the ventilating system, took out the grille and entered the tube. Once in the system, he crawled through the maze of ductwork, until he came at last to the grille overlooking the room with the alcove and the rows of indentations on the alcove walls.

When he looked down through the grille, it was completely dark below. He could hear the hoarse breathing and smell the musky odor of the Other, resting or perhaps asleep, on the bed surface. Harry lay there for a number of slow minutes, smelling and listening. Then he lifted the second rock and banged with it upon the grille.

For a second there was nothing but the echoing clang of the beaten metal in the darkness. Then the room suddenly blazed with light, and Harry, blinking his blinded eyes against the glare, finally made out the figure of the Other rising upright upon the bed surface. Great, round, yellow eyes in a puglike face with a thick upper lip wrinkled over two tusks stared up through the grille at Harry.

The lip lifted, and a bubbling roar burst from the heavy fat-looking shape of the Other. He heaved his round body off the bed surface and rolled, waddling across the floor to just below the grille.

Reaching up with one blunt-clawed hand, he touched the grille, and it fell to the floor at his feet. Left unguarded in the darkness of the ductwork, Harry shrank back. But the Other straightened up to his full near six-and-a-half feet of height and reached up into the ductwork. His blunt clawed hand fastened on Harry and jerked. Off balance, Harry came tumbling to the floor of the chamber.

A completely human man probably would have stiffened up and broken both arms, if not his neck, in such a fall. Harry, animal-like, attempted to cling to the shape of the Other as he fell, and so broke the impact of his landing. On the floor, he let go of the Other and huddled away from the heavy shape, whimpering.

The Other looked down, and his round, yellow eyes focused on the stone Harry had clung to even through his fall. The Other reached down and grasped it, and Harry gave it up like a child releasing something he has been told many times not to handle. The Other made another, lower-toned, bubbling roar deep in his chest, examining the rock. Then he laid it carefully aside on a low table surface and turned back to stare down at Harry.

Harry cringed away from the alien stare and huddled into himself, as the blunt fingers reached down to feel some of the rags of a shirt that still clung about his shoulders.

The Other rumbled interrogatively at Harry. Harry hid his head. When he looked up again, the Other had moved over to a wall at the right of the alcove and was feeling about in some indentations there. He bubbled at the wall, and a second later Harry's voice sounded eerily in the room.

". . . You are . . . the one I . . . made a beast . . ."

Harry whimpered, hiding his head again.

"You can't . . ." said Harry's voice, ". . . even speak now. Is . . . that so . . ."

Harry ventured to peek upward out of his folded arms, but ducked his head again at the sight of the cold, yellow eyes staring down at him.

". . . I thought . . . you would be . . . dead by now," said the disembodied voice of Harry, hanging in the air of the chamber. ". . . Amazing . . . survival completely without . . . equipment. Must keep you now . . ." The eyes, yellow as topaz, considered Harry, huddled abjectly on the floor, ". . . cage . . . collector's item. . ."

The alien revolved back to the indentations of the wall a little way from the alcove. The broad, fleshy back turned contemptuously on Harry, who stared up at it.

The pitiful expression of fear on Harry's face faded suddenly into a soundless snarl. Silently, he uncoiled, snatched up the rock the Other had so easily taken from him, and sprang with it onto the broad back.

As he caught and clung there, one arm wrapped around a thick neck, the stone striking down on the hairless skull, his silent snarl burst out at last into the sound of a scream of triumph.

The Other screamed too — a bubbling roar — as he clumsily turned, trying to reach around himself with his thick short arms and pluck Harry loose. His claws raked Harry's throat-encircling arm, and blood streamed from the arm; but it might have been so much stage make-up for the effect it had in loosening Harry's hold. Screaming, Harry continued to pound crushingly on the Other's skull. With a furious spasm, the alien tore Harry loose, and they both fell on the floor.

The Other was first up; and for a second he loomed like a giant over Harry, as Harry was scrambling to his own feet and retrieving the fallen rock. But instead of attacking, the Other flung away, lunging for the alcove and the control indentations there.

Harry reached the alcove entrance before him. The alien dodged away from the striking rock. Roaring and bubbling, he fled waddling from his human pursuer, trying to circle around the room and get back to the alcove. Half a head taller than Harry and twice Harry's weight, he was refusing personal battle and putting all his efforts into reaching the alcove with its rows of indented controls. Twice Harry headed him off; and then by sheer mass and desperation, the Other turned and burst past into the alcove, thick hands outstretched and grasping at its walls. Harry leaped in pursuit, landing and clinging to the broad, fleshy back.

The other stumbled under the added weight, and fell, face down. Triumphantly yelling, Harry rode the heavy body to the floor, striking at the hairless head . . . and striking . . . and striking . . .

VI

Sometime later, Harry came wearily to his senses and dropped a rock he no longer had the strength to lift. He blinked around himself like a man waking from a dream, becoming aware of a brilliantly lit room full of strange shapes — and of a small alcove, the walls of which were covered with rows of indentations, in which something large and dead lay with its head smashed into ruin. A deep, clawing thirst rose to take Harry by the throat, and he staggered to his feet.

He looked longingly up at the dark opening of the ventilator over his head; but he was too exhausted to jump up, cling to its edge and pull himself back into the ductwork, from which he could return to the stream outside the pyramid and to the flowing water there. He turned and stumbled from the chamber into unfamiliar rooms and corridors.

A brilliant light illuminated everything around him as he went. He sniffed and thought he scented, through the musky reek that filled the air about him, the clear odor of water. Gradually, the scent grew stronger and led him at last to a room where a bright stream leaped from a wall into a basin where it pooled brightly before draining away. He drank deeply and rested.

Finally, satiated, he turned away from the basin and came face-to-face with a wall that was all-reflecting surface; and he stopped dead, staring at himself, like Adam before the Fall.

It was only then, with the upwelling of his returning humanness, that he realized his condition. And words spoken aloud for the first time in months broke harshly and rustily from his lips like the sounds of a machine unused for years.

"My God!" he said, croakingly. "I've got no clothes left!"

And he began to laugh. Cackling, cackling rasping more unnaturally even than his speech, his laughter lifted and echoed hideously through the silent, alien rooms. But it was laughter all the same — the one sound that distinguishes man from the animal.

He was six months after that learning to be a complete human being again and finding out how to control the pyramid. If it had not been for the highly sophisticated safety devices built into the alien machine, he would never have lived to complete that bit of self-education.

But finally he mastered the controls and got the pyramid into orbit, where he collected the rest of his official self and shifted back through the alternate universe to Earth.

He messaged ahead before he landed; and everybody who could be there was on hand to meet him as he landed the pyramid. Some of the hands that had slapped his back on leaving were raised to slap him

again when at last he stepped forth among them.

But, not very surprisingly, when his gaunt figure in a spare coverall now too big for it, with shoulder-length hair and burning eyes, stepped into their midst, not one hand finished its gesture. No one in his right senses slaps an unchained wolf on the back; and no one, after one look, wished to risk slapping the man who seemed to have taken the place of Harry.

Of course, he was still the same man they had sent out — of *course* he was. But at the same time he was also the man who had returned from a world numbered 1242 and from a duel to the death there with a representative of a race a hundred times more advanced than his own. And in the process he had been pared down to something very basic in his human blood and bone, something dating back to before the first crude wheel or chipped flint knife.

And what was that? Go down into the valley of the shades and demand your answer of a dead alien with his head crushed in, who once treated the utmost powers of modern human science as a man treats the annoyance of a buzzing mosquito.

Or, if that once-mighty traveller in spacegoing pyramids is disinclined to talk, turn and inquire of other ghosts you will find there — those of the aurochs, the great cave bear and the woolly mammoth.

They, too, can testify to the effectiveness of naked men.

END

Dear Editor:

I think *If* had a great year in '65! In my opinion, the serials decide whether a mag will fly or flop, and *If*'s really airborne. Here are the four serials rated in order.

1. *Skylark DuQuesne* — I have to admit that before I read this yarn, I was a little leary. I had never read any of Doc Smith's works before, and I was wondering how I would take to the five parter (thank God it turned out good!). All I have to say is that if this is space opera, I like it.

2. *Retief's War* — This light adventure by Mr. Laumer deserves quite a hand. His characters are unique and I praise his fertile imagination. Some parts were strictly from Robin Hood, but as a whole I found it very entertaining. I'm really looking forward to more of Retief.

3. *Star Child* — This was a very good serial, though my interest lagged in spots. I'm glad to hear that another Reef story is in the making. This is one of the better series that I've read.

4. *Altar at Ascone* — I had to rate this fourth, mostly because it wasn't long enough. I enjoy longer serials and would like to have seen it in three parts. I'm glad to see that he has a short novel in the March 66 issue.

I like your policy of one new writer in each issue. I was about to put in a plea in this letter for some articles on story writing, fandom, etc., until I got my April issue. I really enjoyed Lin Carter's piece on fandom.

Do you think it would be possible to reproduce If and Galaxy covers? And thinking of covers, I couldn't believe my eyes when I found out that Morrow did the April cover. It's just not his style. Then I really got a shock when I saw the illos for Earthblood. They look the work of Morrow or Wood.

I haven't gotten down to Heinlein's new novel yet, but I'm hoping it will be a Hugo winner. Looks like another good year.

Finally, do you read all the manuscripts yourself, or do you have first and second readers? — Mike Buchta, 5821 W. Adler, Milwaukee, Wisconsin 53214.

● I read them all myself — all 4,000 a year of them. That's why they call me Blinky.—*Editor.*

* * *

Dear Editor:

I have been reading your magazine for about a year now and think it is the best one on the market today. Your June issue was excellent with *Mandroid* being one of the best complete short novels I have read.

Thanks for the *Our Man in Fandom features.* I'm learning things about it I never knew existed before.

Earthblood is the best novel I have read for a long time although I have not read all of it yet. I think it is even better than *The Moon Is a Harsh Mistress.* Laumer and Brown make a very good team. The description of the beautiful Terran park was wonderful. I found myself walking around it without a care in the world.

In your Sept. '65 issue you published a story by E. Clayton McCarty called *The Planet Player.* I've read it about a dozen times now. Let's see more of him.

I'm glad to see that no science articles will appear in your mag, I like them but it would spoil *If* as they are not suitable for it.

Is there any special address for back issues? I want to get back issues of *W.O.T.* (another excellent mag.) and *If.*

Congratulations on getting the Doc Smith Skylark award. You deserved it. — Nick Grimshawe, RR-#2, Alliston, Ontario, Canada.

● Back issues of all our magazines are available from: Back Number Department, Galaxy Publishing Corp., 421 Hudson Street, New York City 10014. Specify date and magazine. 50c each, U. S., postpaid.

— *Editor*

* * *

Dear Editor:

Toys for Debbie by David A. Kyle rang the bell for me. What a story! And what toys! ALL the stories were well worth reading — the illustrations were wonderful — your "letters" department was fine!

If I sound extra enthusiastic it's because I AM! I'm a lover of "different" stories from way back. I'm pushing 70 now. My birthday is January 19, hubby's is January 18 — do we have any "birthday twins" among your readers?

My hubby and I have one entire room lined with weird and fantastic books and magazines. We were intimate friends of the late author of the weird and uncanny, H. P. Lovecraft. We spent many pleasant nighttime hours with this fantastic man, listening to him read his manuscripts aloud under flickering gaslight. This was in the early '20s, when everybody didn't have electricity in their homes! Nights seemed darker, then . . . and as H. P. L. loved darkness, we three reveled in it, as we pictured monsters, hobgoblins, shapeless creatures of his own imagination and witches steeped in witchcraft, while Lovecraft nibbled on a chicken leg and enjoyed our hospitality!

I could ramble on and on about our association with this master of the weird. We visit his grave often, and we have many pictures of H. P. L. and even one of his parents! We revere his memory and in his honor we peruse all "different" publications on the newsstands. Yours wins top honors with us! Also your cover appealed greatly to me, and it illustrated your feature story, a corker — *The Moon Is a Harsh Mistress,*

by Robert A. Heinlein — beautifully. You've got yourself a steady *If* reader! — Mrs. Muriel E. Eddy, President, R. I. Writers' Guild, 688 Prairie Avenue, Providence, Rhode Island 02905.

* * *

Dear Editor:

In your June, 1966 issue of *If* there appears an article entitled *A Relativistic Dilemma* in which you present the complications connected with relativistic mass and energy conservation, wherein you invite the ambitious reader to come up with a solution.

I spend most of my time reading science fiction and I study a little nuclear physics on the side, so I figured I was well enough equipped to tackle the problem. Here's what I came up with:

The Lorentz contraction theory states that, as the velocity of a body increases, its diameter in the direction of the acceleration decreases proportionately. Hence at the speed of light one not only has an infinite mass but also a two-dimensional mass.

However, the infinite mass concept seems somewhat odd, because as you mentioned in your article light is composed of particles (photons) which indeed do travel at the speed of light, and yet possess no infinite mass.

I propose a new theory. When a mass reaches the speed of light it is converted to light itself, and the light has an energy equivalent to the mass according to $e=mc^2$. This might also account for the dimensional problem. How many dimensions does energy have? Certainly not three. — Jim Murray, 150 Harrison Avenue, Jersey City 4, New Jersey.

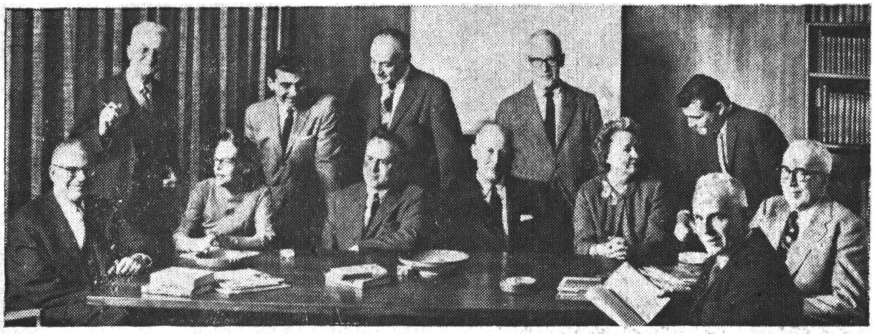
* * *

Dear Editor:

I have just finished your May '66 issue and, to be euphemistic, I think the art work on the cover is atrocious. For one thing, it is terribly unscientific, since it is probably unlikely that a creature, such as the one pictured, with three-digited claws for hands, lack of binocular vision and apparent lack of ears and nose, would be technically advanced enough to be flying around in spaceships. But this is a flyspeck. What bothered me was that in no way could I stretch my imagination enough to make it jibe with *Silkies in Space*, which it was supposed to represent. But never fear. Like all know-it-alls, I have a solution to this problem.

First, you could give the axe to all your cover artists and simply reprint Picasso's nightmares on the cover. This would remove your every cover from the realm of science and put them in the realm of art, where anything goes. No problem of representation, because they could represent anything you say and no one could refute you.

Or you could reprint the covers from the old pulp magazines, which, I am told, characteristically showed a horny green grasshopper-man abducting some sexy babe clad in a transparent space suit. At least this made sense. Almost. Well, anyway, it certainly would improve the cover. By the way, *Earthblood* is excellent. —John T. Sanner, 715 East Ann, Ann Arbor, Michigan, 48104.



Seated: Bennett Cerf, Faith Baldwin, Bergen Evans, Bruce Catton, Mignon G. Eberhart, John Caples, J. D. Ratcliff. Standing: Mark Wiseman, Max Shulman, Rudolf Flesch, Red Smith, Rod Serling.

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By Gordon Carroll

Director, Famous Writers School. Former editor, *Reader's Digest, Time, Inc., Coronet*

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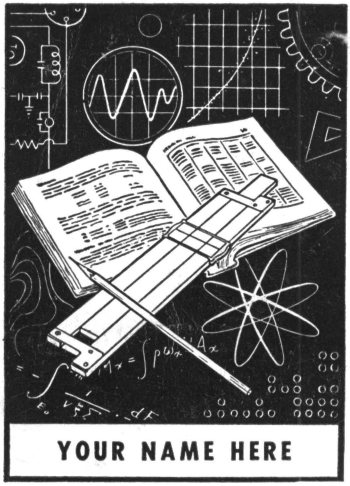

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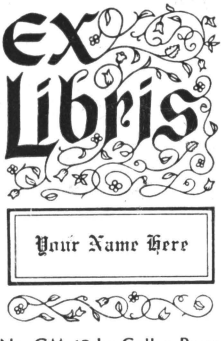

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