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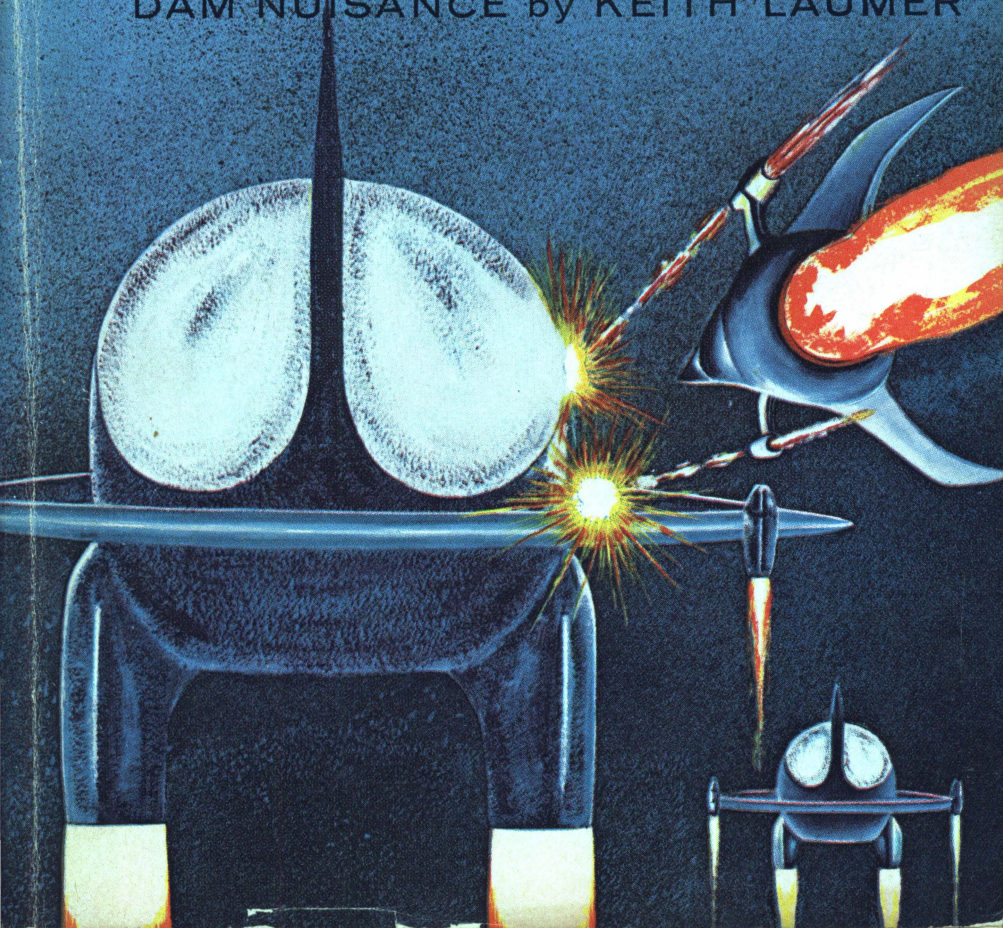

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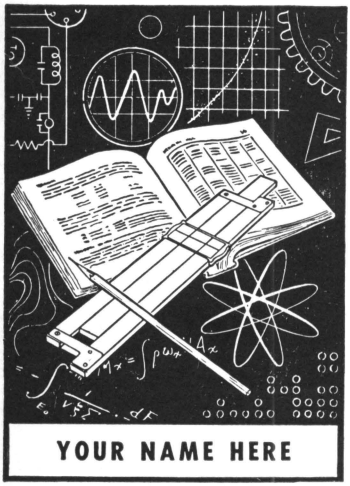

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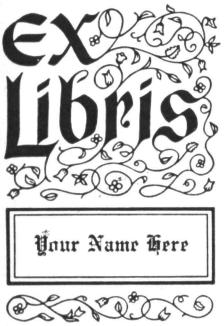

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ALL NEW STORIES

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IF

Besides being the title of this magazine, *If* is of course a poem by Rudyard Kipling which goes in part:

If you can keep your head when all about you

Are losing theirs, and blaming it on you . . . .

Kipling did well with the poem; next to *Gunga Din* and *The Road to Mandalay* it is about the most successful piece of writing he ever did. The poem *If* is a passionate plea for calm. Keep your head, it says. Don't panic. Don't despair. Keep plowing right ahead . . . and then you'll be a man, my son.

This is no doubt good advice—in certain circumstances. In others, maybe not so good. It is the kind of advice that is handed out freely by people in high places, in all countries, who aren't really themselves too sure what the future is going to produce but don't want their electorate to get upset. Does the northeast part of the United States go through a total power failure? Never fear, they say, it can't happen again. Are we clearly headed for a population pressure that not all our tractors and fertilizers can feed? Not to worry; we'll find a way, say they.

Of course, human history argues powerfully on the side of the Princes of Serendip who soothe us with these words. The human race has in fact muddled through a great many challenges over the past half-million years. World War Two provides some illuminating examples. Be calm, said Neville Chamberlain, we have Peace in Our Time, while Winston Churchill flapped and shouted in the background—but it was Churchill, not Chamberlain, who had to pick up the pieces when the whole facade of calm fell apart under Hitler's attack.

Today the issues are not the same, but the words are. We will find a way; the Free World will muddle through. (On the other side of the fence the words go: "History is on our side; we of the People's Republics will outlive our enemies.") But is there really any firm ground for believing that this is so?

Or have we in fact reached a point in human history where muddling through, with its penalties of shock, disruption, cataclysm and destruction, is simply a luxury we can no longer afford?

We who are turned on to science fiction—who like to look at the future; who try to see beyond tomorrow's TV programs—perhaps would rewrite some of the sage advice Kipling offered about keeping our heads. Maybe calm is not the best response to the challenges of today. Maybe we should adopt the altered version of Kipling's poem that was current in the armed forces a few years ago, which runs like this:

If you can keep your head when all about you

Are losing theirs . . .

Then, fella, maybe you just don't have a very good grasp of what the situation is all about!

—*The Editor*

THE LONG WAY TO EARTH

by JOHN BRUNNER

Illustrated by ADKINS

The job called for very simple skills. You had to be willing to be the only human being on the planet—and to die there!

I

There was one item on display in the enormous window: a zygra pelt. Kynance Foy stood and looked at it. There were a lot of other women doing the same thing.

But she was the only one who was gritting her teeth.

It wasn't the first time in her life she'd been the odd one out, so that figured. For example — and the most glaring example — she hadn't *had* to leave Earth.

That marked her off immediately even on a comparatively highly populated outerworld like Nefertiti. The massive "encouraged emigration" of

the Dictatrix period had lowered the premiums on wanderlust at home. It was a full generation since Nefertiti declared itself independent and set quotas for Earthside immigrants, and then found them superfluous because the demand wasn't there.

For the umpteenth time Kynance read the discreet hand-lettered price tag attached to one corner of the stand on which the zygra pelt was draped. It read: *One million credits.* No other price had ever been asked for the pelts.

Okay, Kynance told herself sourly. *I was naive. . . .*

She had never confessed it even to her closest friends, but one of the things she had planned to bring back when she returned to astonish those who had mocked her was—a zygra pelt. She had pictured herself emerging from the exit of the starship wearing it: not elegantly, but casually, tossed around her, her body molded by it into insurpassable perfection, yet her pose implying that she had had it so long she was becoming faintly bored with the attention she attracted.

At this moment she did not even possess the price of a square meal.

Other plans, other ambitions, had been shed one by one as she doggedly worked her way towards Nefertiti, reasoning that the closer one came to the source the cheaper the pelt might become. Not so. Only the cost of interstellar freight shrank, while the asking price remained steady at one million.

She stood watching its shifts of sheen and texture, wondering what exotic perfumes it had been trained to secrete. What, for instance, matched that liquid rainbow phase when the pelt seemed to run in endless streams of pure color? She cursed her own stupidity.

Yet. . . .

Was I to know?

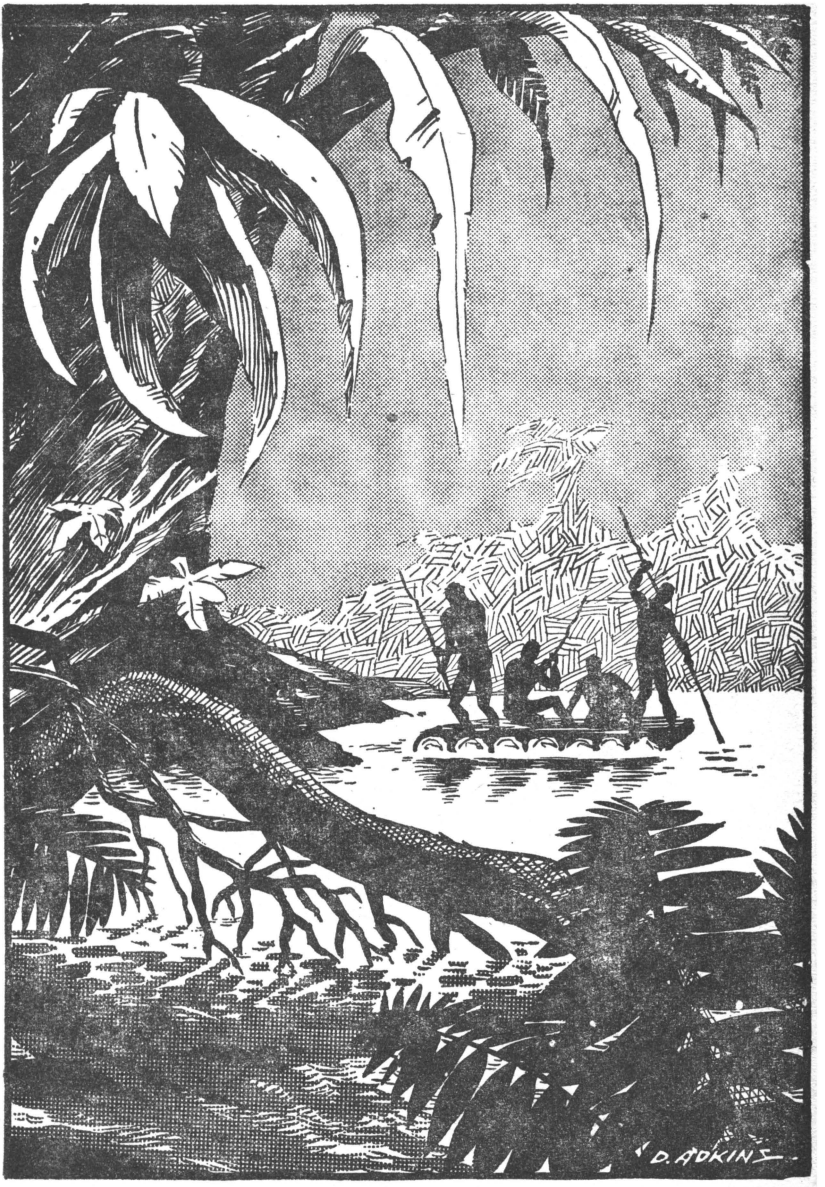
Oh, maybe. Her brash confidence, though, hadn't lacked evidence to support it.

She was fresh out of college with a brilliant record. She had deliberately changed her major to qua-space physics and her minor to interstellar commerce when she made her mind up, but before that she had been well grounded in the unfeminine combination of business law and practical engineering — the latter by accident, merely to get her own back on a sneering boy friend who once offered to fix her skycar.

This, moreover, was not her only equipment. She was exactly one meter seventy tall; she was exotically gorgeous, having inherited dark eyes and sinuous grace from a Dutch ancestor who fell from grace in Java in company of a temple dancer, and hair of a curious iron-gray shade traceable only to a colony of Cornish tin-miners totalling some five hundred persons in a multi-billion galactic population, against which her tanned skin burned like new copper.

There was no risk — so she had argued — of her ever being stranded. If the worst came to the worst, and neither qua-space physics nor her encyclopedic knowledge of interstellar commerce could secure her employment, she could always . . . .

Well, she had never phrased the idea clearly to herself, but it in-


D. ADKINS

volved some romantically handsome young starship officer willing to hazard his career for the sake of her company on a trip to some more promising planet, a crochety captain won over by her dazzling personality and delivery with unsolicited testimonials to an entrepeneur in need of a private secretary when they arrived.

She had begun to suspect she had made the wrong decision on the first stop out from Earth, when she still had the cash in hand to go home.

What she had overlooked was that during the miserable regime of the Dictatrix incredible numbers of non-pioneer types had been — in the official terminology of the day— "encouraged" to emigrate, chief among them intractable intellectuals doubtful of the universal benefits Her Magnificence was supposed to be bestowing. Consequently the outworlds had been colonized, forcibly, by a swarm of brilliant and *very* angry men and women. Having nothing left but the desire to get even, they had buckled to and made the best of what they had.

Not for this breed of colonist was the broad axe or the draft-ox or the log-cabin. They were used to lasers, vidding and mutable furniture. They knew the necessary techniques; and with the determination of fanatics they had set out not merely to provide such luxuries for themselves but to insure that if the same fate overtook their children or their children's children the youngsters would be able to repeat the process.

Which was not to imply that there were absolutely no openings on such old-settled words as Ge and New Medina for moderately talented young women. Had this been the case she would have turned around despite the scorn she would face from her friends on retreating to Earth. Instead, she found temporary work; saved up; moved on, convincing herself that things would be different further out.

They were.

By her third or fourth stopover, she was encountering sea-harvesters supervised by ten-year-olds, each responsible for two thousand tons of protein-rich food a week and a mainstay of the planetary economy, and reading bulletin boards at spaceports bearing blanket warnings — to save the labor of writing the words on every single advertisement — that no one lacking a Scholar degree in the relevant subjects need bother to apply.

And even her asset of last resort, her appearance, failed her. What she had failed to reckon with — or omitted to find out—was that once they were clear of Earth, and the traditional association of appearance with regional origins, the emigrants whether forced or voluntary were satisfied to be human beings rather than Europeans or Africans or Asians. By the time a couple of generations had slipped away, the mixing of the gene-pool was already throwing up types which made the concept "exotic" seem irrelevant. Swedish and Quechua, Chukchi and Matabele, the wildest extremes of physique met

in a mad succession of paradoxes. And the outcrossing, in good genetic fashion, produced its quota of fantasy. Then, released from Earthside attachment to local types, the more prosperous girls started to experiment, drawing on some of the finest talents in biology and surgery. Within ten yards of where Kynance was standing, there were a Negress with silver hair and blood-red irises, a miniaturized Celtic redhead no higher than her elbow and stacked and a shimmering golden girl with slanted eyes and the quiet hypnotic movements of a trained geisha. Any of the three would have monopolized a roomful of sophisticated Earthmen.

On Druid, somebody had asked Kynance to marry him. On Quetzal someone else had asked her to act as hostess for him and be his acknowledged mistress. On Loki a third man had suggested, rather boredly, that she become his son's mistress, the son being aged sixteen and due to submit his scholar's thesis in cybernetics.

And on Nefertiti she would have been grateful for even that much attention.

Confronted with the symbol of her empty ambitions, she admitted the truth to herself at last. She was *scared*.

Well, gawping at the zygra pelt wasn't solving the problem of hunger. She made to move away.

At that moment, a soft voice emanated from the air. It came over a biaxial interference speaker, so for practical purposes the statement was exact. She stopped dead.

"The Zygra Company draws your attention to a vacancy occurring shortly on its staff. Limited service contract, generous remuneration, comfortable working conditions, previous experience *not* necessary, standard repatriation clause. Apply at this office, inquiring for Executive Shuster."

The message was repeated twice. Kynance stood in a daze, waiting for the rush to begin. There was no rush. The only reaction was the sound of an occasional sarcastic laugh as people who had been gazing at the pelt were disturbed and decided to wander on.

No. Ridiculous. Impossible. She must have dreamed it. Not enough food and too much worry had conspired to create an illusion.

Nonetheless she was on her way to the entrance of the Zygra Building. She hadn't taken a conscious decision — she was following a tropism as automatic as that of a thirsty man spotting an oasis across the desert.

She did wonder why one or two people she jostled looked pityingly at her eagerness, but that was afterwards.

II

Executive Shuster was a vain man of early middle age. It was obvious he was vain. His expensive clothes were meant to look expensive. His fastidiously arranged office was a frame for him. And his manner as he looked her over implied that he hoped she would instantly fall on her knees.

Kynance did nothing of the sort. Right now she had room in her head for precisely one thought, and she uttered it.

"You're offering a job. What is it?"

Shuster looked her over a second time, shrugged and put on a practiced artificial smile. "I must say that it's seldom I have the pleasure of interviewing such an attractive candidate for one of our posts."

"What's the job?"

Shuster blinked. He retreated to Position Two: superior knowledge-ability. "I can tell by your accent you're not Nefertitian. Do sit down, won't you? And would you care for a drink?"

Kynance stayed put. Not that she cared what the job was. She'd have accepted the chance to be junior washer-up on an interstellar tramp, providing the contract carried the standard repatriation clause.

That was the bait which had brought her into this room — not the propect of getting on the inside of the Zygra Company itself. She would have traded every pelt in the galaxy for a berth on a ship bound for home.

The repatriation clause was one of the few attempts made by Earth's current government to impose a decree on the unruly outworlds, and the only attempt to have succeeded. Following the Dictatrix period, everyone in the galaxy was shy of absolute decrees. But there was enough mobility among the outworlds themselves to generate support for the concept of compulsory repatriation, so even the greediest entrepeneurs had had to succumb and write in the clause.

It stated simply that if the place of work was on another planet than the world where the labor was engaged, compliance with the conditions of employment entitled the employee to repatriation at the expense of the company . . . whether or not the planet of origin was the one where the worker had been hired.

Prior to this, some of the less scrupulous companies had forcibly colonized outworlds by methods even less polite than the Dictatrix's: luring workers into their net with temptingly high salaries, then abandoning them light-years from any place where they could spend their earnings.

To Kynance, this was salvation — if she got the job.

"I would not care for a drink," she said. "All I want is a plain answer."

Shuster retreated to Position Umpteen, sighed and gestured at his desketary. "The contract is a very long and detailed one." he murmured with a last attempt at regaining lost ground. "I do think you should sit down while we discuss it."

With the mobile bulk of the desketary to help him, he outnumbered Kynance. She was forced to accept a seat on a two-thin-person lounge along the window wall, where Shuster joined her. He then maneuvered the desketary so that she couldn't run away across the room, and rubbed his shoulder against hers.

When he gets to the knee-mauling stage, Kynance promised herself, *I'll — I'll think about it.*

She was that desperate, and hadn't realized it before.

"The post," Shuster was saying urbanely, "isn't such a demanding one, really. It's a shame, in fact, that so lovely a girl — "

"Executive, unless you're stupid you've already caught on to what interests me about the job," Kynance snapped.

"The repatriation clause? Oh, it's there, in full." Shuster smiled and moved a little closer. "Though strictly in confidence — "

"If you don't give girls straight answers," Kynance purred with malice, "don't you expect them to misunderstand you?"

The trap worked fine. Shuster diminished the pressure of his shoulder against hers by at least ten per cent and spoke in a voice as mechanical as a desketary's.

"Supervisor of Zygra for a term of one year at a salary of a hundred thousand credits."

Supervisor of Zygra — ?

There was a long silence. At last Kynance said in a thin voice. "You can't possibly mean the *planet* Zygra? You must mean a farm, or a plantation, or — or something!"

Shuster curled his lips into a pleased grin. "Of course, coming as you do from Ge, you wouldn't know much about zygra pelt production, would you?"

"Your announcement said no experience was necessary. And I'm from Earth, not Ge."

She bit her tongue, fractionally too late, seeing in imagination her chance of the post vanishing into vacuum. With repatriation involved, logically the Zygra Company would prefer to hire someone from Nefertiti, where it had its registered HQ, or from some nearer world than Earth at least — some world convenient for its own ships. For the sake of a gibe at this horrible stranger she had sacrificed . . .

But what was he saying?

Unperturbed, Shuster was continuing in the same tone. "But you must have spent some time on Ge, at least? I could have sworn I detected it in your accent. Well, let's set the record straight, shall we? Central Computing, please," he added to the desketary. "Category application for employment, subcategory supervisor of Zygra, candidate Foy, Kynance, new reference number."

He sat back, contriving to restore the pressure on her. "By the way, I did mean supervisor of the *planet* Zygra," he concluded, and enjoyed the smashing impact of the words.

That at least, Kynance decided bitterly, settled the matter. For the task of supervising the unique, jealously guarded home of the pelts, they would never pick —

Hang on, though! Why was the job described in these terms anyway? The demand for pelts implied a massive installation at the point of origin — a staff of hundreds, more likely thousands — breeding, training, a million-and-one subsidiary tasks. . . .

She frowned and rubbed her forehead in a frantic attempt to remem-

ber what little she had ever known about the production of zygra pelts. Something about the planet being unfit for colonization . . . ?

"How *are* the things raised?" she asked, surrendering.

Shuster leaned confidentially close. "The term 'pelt' is a misnomer. It's no breach of company secrecy to say so nowadays, although when they were first being imported to civilized worlds the admission would have been an automatic breach of an employee's contract, since it was thought advisable to mislead purchasers and possible rivals by making them think it was the skin of an animal. In fact, the pelts are entire lifeforms in themselves. Insofar as they're related to anything we know they're a kind of moss. So I suppose 'plantation' is as good a term as any for the place where they grow!" He laughed and jabbed her in the ribs.

"Though it's impossible to grow anything else there, I tell you frankly. Zygra is a sort of — now, how shall I describe it?"

"You've been there yourself?" Kynance suggested, trying to wriggle away and finding her progress firmly blocked by the end of the narrow lounge.

"Naturally I've been there," Shuster said loftily. "In actual fact, the supervisor of Zygra is responsible to me, so one of the duties which I undertake is ensuring that the terms of the contract are strictly adhered to. Of course this involves direct inspection and . . ."

He ran on at some length, to make sure she didn't miss the point. In essence, he was saying: *it pays to be nice to me.*

"You were telling me about Zygra," she murmured finally.

"Oh yes! A sort of vegetable stew is as near as one can come to describing it, I think. Marshland, a few patches of open water, much smaller than oceans on planets which have satellites, and — plants. I believe the parasitism extends to the fourteenth degree. In other words, there are some highly evolved forms, including the pelts, which can't absorb nutriment until it's been processed by an ecological chain fourteen units long. They remain plants rather than animals, you understand."

Dim facts were beginning to seep up from Kynance's memory — not dim merely because she had never studied the subject seriously, but also because as a matter of policy the Zygra Company shrouded its operations in mystery. Not even the Dictatrix had dared to monkey with so powerful and wealthy an organization.

Come to think of it, it was a wonder that they'd agreed to repatriation clauses. They, and they alone, might have managed to stand out against the general trend.

A little faintly, she said, "Look, I'm sorry if I'm being silly, but the impression I get is that this job involves being the only person on Zygra."

"That is correct." He eyed her calculatingly. "So, if you wish to reconsider the application I'll find it

perfectly understandable. To be alone on a strange planet is bad enough when there are millions of people there already, as I'm sure you've found out. So why don't I take you around a bit and introduce you to some of my friends, get you over the worst of it? Believe me, I know how difficult it is to — "

"Repatriation clause," Kynance muttered between clenched teeth, too faintly for Shuster to hear her. He was edging even closer now, a feat she would have thought impossible.

"I'm sorry, I didn't hear that?"

You weren't meant to. Aloud and with a flashing smile, Kynance said, "Then how is the — plantation run?"

"Automated," Shuster sighed. "The most complete and elaborate system of automation, and I may add the most thoroughly defended against interference, in the entire galaxy. The supervisor's post is a sinecure."

She turned it over in her mind. *A sinecure for which the all-powerful Zygra Company pays this vast salary? There must be a catch, but I'm damned if I can see what — Oh, this matter of being the only person on the planet!*

"Let me get this quite right," she said. "The supervisor is alone on the planet?"

"The supervisor of Zygra," Shuster said patiently, "is the only employee of the Zygra Company whose place of employment is on Zygra itself."

"Claim-jumping," Kynance said.

"What?"

"Claim-jumping! Automated equipment in operation doesn't constitute possession of an astral body: Government and People of the United States versus Government and People of the Soviet Union, International Court of Justice, 1971. You have to maintain at least the fiction of human habitation, or anybody else could step in and occupy Zygra."

Shuster, she was delighted to see, blanched. He said, "You — you've studied law?"

"Of course."

"Well, then . . ." Shuster rubbed his chin and withdrew a few millimeters.

You look as if you've forgotten something, buster. And you have. You should have exploited this perfect opportunity to find out all about me.

Absolutely correct. Shuster's next step was to reach for the controls of the desketary.

"There is the slight additional point to consider, isn't there?" he muttered. "I mean, not only whether the job suits you, but whether you suit the job. Uh — Central Computing!"

"Waiting," said the desketary rather sullenly.

"Applicant Foy, Kynance. Personal and career details follow."

"I am twenty-five years old," Kynance began clearly, and went ahead from there, visualizing a standard application form in her mind's eye. Halfway through her college courses the idea struck her that Shuster was getting nervous; she

went on with as much detail as she could muster, hoping she was on the right track, and found she was when the desketary finally started to ring an interruption bell.

"Further information superfluous," the mechanical voice grunted.

"Shut up!" Shuster rapped, but the machine finished what it had to say anyhow.

"Applicant's qualifications greatly in excess of stipulated minimum!"

There must be a catch in it. Must be, must be! Maybe it's in the contract itself.

It was Shuster's turn to detect worry. He recovered fast from his annoyance at what the desketary had revealed — or rather, the company's economically-minded computers, determined not to waste time on questions to which the answer was known.

"That's fine, then, isn't it?" he said. "So — but I see you're not happy."

"Show me the contract, please," Kynance said, and waited for the desketary to issue a copy of it.

Somewhat to her surprise, it was by no means the most weasely she had seen. It was long, but it was explicit. All but a handful of its clauses were patterned on a hopeful standard form laid down by Earth's government in the aftermath of the Dictatrix period, and consequently weighted heavily against arbitrary conditions.

So the trap is in the non-standard clauses.

Her instinct in similar situations before had been to get an independent evaluation, preferably from a computer programmed by a reformed confidence trickster with a deep knowledge of human deceit. Now, lacking even the price of a meal, she had to rely on her own judgment.

I wish my eyes wouldn't keep drifting back to the repatriation bit!

She said, without looking up, "When does the contract come into force?"

"On signature," Shuster said. His tone suggested he was enjoying a private and rather cruel joke. "The commencement of actual work is according to the schedule you've read, and the basic term is one Nefertitian year. Option to renew must be signified in advance but not less than one month before due date of repatriation."

She pounced. "In other words, I start work less than one month from now?"

"Ah — not exactly." But Shuster didn't seem put out. "The previous incumbent is due to leave in two months' time, but you understand we must insure ourselves against the contingency you've already mentioned: the risk of leaving Zygra without a legal occupant acting for the company. Also there is a short period of training, environmental familiarization and so forth. Customarily we advertise ahead of the due date."

"But I become an employee directly I validate the contract?"

"If I were in your place I shouldn't jump at it," Shuster said insinuatingly. "Why don't you consider —?"

None of his alternative proposals was apt to contain a repatriation

clause. Kynance shuddered as imperceptibly as possible and went on examining the form.

One wouldn't expect the Zygra Company to be tender-hearted, but even so the schedule was stark. In this sector most stars were marginally hotter than Sol, so habitable planets orbited a little farther out. Like Nefertiti, Zygra had a year longer than Earth's. Once in the course of that year the company landed a ship, staying about a week at the time when the harvest was ripe. (That was awe-inspiring, in a way. One ship per year, and its cargo paid for *everything* several times over!) The "incumbent", to borrow Shuster's term, was delivered on one visit, fetched away the next. If he was injured or fell sick, the policy was straightforward and indeed spelt out: he or she was kept alive by prosthetic devices so that when the next ship landed continuity in the legal sense was established. After that it was presumably a matter of chance whether you died on the way home. The company wouldn't be bothered.

Might sue for your injuries . . .? No, forbidden as an *ex post facto* breach of contract. Arguable, might not stand, in a court, but a helpless cripple up against the Zygra Company would be ill advised to find out. Of course, some rival firm might finance a claim, but to what purpose? They'd settle with the offer of an undernourished surplus-to-requirement pelt, and the owner would become instantly rich.

Stick to the point, woman! Kynance adjured herself.

There were a good many ways to break the contract and render it void, but try as she might she couldn't imagine herself throwing away the chance of repatriation for any of the conceivable reasons. And as for the inconceivable ones, it must purely be legal excess of caution that put them in. For example, this non-standard clause mortared into the middle of half a dozen stock items:

"It shall be absolute and agreed grounds to void this contract if the signatory B —" the employee — "shall at any time during his/her term of employment herein specified reveal, divulge, indicate or in any fashion whatsoever communicate to a person not an employee of the signatory A —" the Zygra Company — "any information relevant to the production, training, conditioning or other process of manufacture of the product known as Zygra pelts; or shall signal or shall attempt to signal or in any way establish communication from the place of employment to or with any person not an employee of the signatory A on any subject whatsoever whether or not specified above."

The place of employment was defined as "the surface of the planet Zygra or any place or places whatsoever in the absolute discretion of the signatory A defined as a place or places where the business of the signatory A is carried on."

Was that the hole? Did it imply that the contract was void if, prior to the year's end, she told a spacelines booking clerk she had been working on Zygra?

It might, but even a year's isolation wasn't going to lower her determination to go home! She could keep her mouth shut as long as she had to, and not even the Zygra Company could compel her to stay quiet once the year was over.

A final time she leafed through the contract; then she reached out abruptly and moistened her thumb on the desketary's validation pad. Her hand poised over the form. And still she hesitated.

"How many other applicants have there been for this post?" she said abruptly.

Shuster had forgotten to cancel his circuit to the firm's computers; blindly the voice rang out.

"No other candidate has —"

"Shut up!" Shuster roared, and this time he was quick enough to activate the cancelling mechanisms. Kynance looked at him and said nothing.

"Ah . . ." He ran his finger around the collar of his tunic. "I could tell something was bothering you, and I'm not surprised. Of course, there's the point that we've only just begun to advertise the post—"

Kynance tapped the form stonily. According to the schedule incorporated in it, the harvesting ship was due to call in less than seven weeks.

"Moreover, even at the salary we offer, there are few people who are willing to accept a year's absolute isolation." Shuster was recovering again—he bounced back fast and always to the same orbit. Now he was sliding his arm behind her, fingers groping for the bare skin under her nape-hair.

"But in strict and total confidence there is something which holds people back from applying, even people like yourself who are lonely on Nefertiti and have few friends . . ." The fingers slithered down her shoulder; the other hand fumbled around her waist and upwards. Kynance waited, frozen.

"If you take my advice," Shuster whispered, "I think you'll find it pays in the long run, and it's much more fun than sitting for a year watching machines look after a lot of moss—beautiful moss, but just moss in the last analysis. Look, before you validate the contract shall we—?"

I know what the reason is why people don't apply in droves. The word's got around that they have to get past you.

Kynance made four precisely timed movements. The first slid out from the grip on her shoulder; the second detached the hand trespassing on her bosom; the third stabbed her thumb hard on the validation box of the contract; and the fourth slapped Shuster resoundingly on the cheek.

For long seconds he didn't react. Then, the mark burning redly on his pale skin, he took the contract and entered the firm's validation also, making the gesture a complete vocabulary of abuse.

Finally he spoke between clenched teeth:

"And I hope you *rot*."

III

If, in that moment, anyone had told Kynance only a few more

days would pass before she found herself wishing for another sight of Shuster, she would have thought the speaker crazy. Yet that was how it turned out.

There was something absolutely terrifying for an Earthsider in the impersonal, almost machine-like way the Zygra Company accepted its new employee. Of course, outworlders were accustomed to this method of treatment. People whose family tradition embraced the concept of taming a whole planet with less than a thousand responsible adults, or homesteading half a continent with servos jury-rigged out of spaceship scrap, would probably prefer emotionless mechanical supervision to the unpredictability of human beings.

Kynance's previous jobs since leaving Earth, though, had been with small entrepeneurial undertakings, or with private individuals. These were flexible enough to put up with the non-standard human material she represented. Firms in the middle brackets had their sights fixed on expansion; they needed outworlders who fitted their present requirements and had no slack available to make adjustments for strangers.

A firm as huge as the Zygra Company, by contrast, simply took it for granted that its employees did fit. If they didn't actually do so the company ignored the fact.

Superficially she had no cause to complain of the way she was treated. Once instructed that she was working for the company, the computers accorded her strictly what she was entitled to. She was given an advance against salary, a bedroom in a subsidiary wing of the headquarters building and a schedule for her training program; she was medically examined and cured of a minor sinus infection which had been bothering her since Loki; she was automatically interrogated under flicker-stimulation to make certain she wasn't hired by some rival organization—but that she had anticipated, and could hardly resent.

What wore her down, though, was the way in which the Zygra Company reflected the sparse population of all the outworld in microcosmic form. Days of empty corridors, empty elevators, blankly closed doors and offices, testified to the efficiency with which human resources were exploited. No time wasted in going from place to place around the building, nor in casual chatting. That habit would come back in another generation or two. Right now, there was still a shortage of manpower, so that the Zygra Company which owned the whole of a planet had fewer staff at its headquarters than aboard one of its interstellar freighters.

A slight consolation was the fact that the training program was intensive.

Shuster had said the post was a sinecure. That might be true, but the company's computers were of an economical turn, as she had already established, and no one had told them not to take trouble. In the ultimate analysis something might go wrong with the fabulous cybernetic devices on Zygra, and some crucial decision might land in the lap of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the single human occupant of the planet. In that case, the computers apparently reasoned, said human occupant must be equipped with the fullest possible knowledge of the situation.

So . . . .

Head ringing, she struggled to absorb everything she was told or shown. A real pelt was an essential part of the instructional environment. After a week, she had forgotten its cash value and liked it solely because it was another living thing in this otherwise mechanical setting.

Zygra: a vegetable stew. A planet fractionally smaller than Earth, with a virtually uniform warm damp climate and no satellite large enough to generate tides. Solar attraction created sluggish surges in its universal marshes — swamps — everglades whatever one cared to call them. But any term you applied was slightly wrong, for Zygra remained uniquely itself.

The atmosphere was breathable. There were no organisms capable of infecting human tissue and equally there were no animals—hence no hostile species to exterminate. It would certainly have been a prize for colonization if it had had any dry land at all.

As things stood, over ninety-nine per cent of the surface a human being either swam, or sank to his waist in mud, or required artificial life-support systems. Kynance began to catch on to some of the reasons why nobody had ever seriously tried to take possession of the planet away from the Zygra Company when she learned that the annual cost of maintaining the supervisor in reasonable comfort was equivalent to two pelts —about two million credits.

Another hundred thousand in salary atop that seemed almost negligible.

Apart from swamp, there were two other notable features of the surface. First, and natural, the vegetation: a complex as elaborate as any known on an Earthlike world, extending as Shuster had said over ecological chains fourteen units in length, climaxing in the pelts. In their home environment they frequented certain mat-like rafts of another plant, on which parasitized the intervening members of the chain. Their incredible changeability, their flexibility and their scent-secretions seemed to be a kind of evolutionary luxury; no one had assigned them with any certainty to adaptational measures. At the season of maximal solar tide, their glory reached optimum.

Then came the harvest, when they were shock-conditioned into a permanent state of excitation and coated on their underside with a solid solution of concentrated nutriment. Those so provisioned would last twenty to thirty years regardless of how they were used—tears repaired themselves, the shimmer and odor continued unabated until old age set in.

No wonder the pelts were the most sought-after objects in the galaxy.

The second feature of Zygra was artificial and recent. It was the automated harvesting and breeding

system Shuster had mentioned. As he had said, it was defended against interference. Orbital guardposts would challenge and destroy any ship emerging from qua-space without the correct recognition signals, even if the ship was in distress—for there was only one place on Zygra a ship could set down without sinking instantly into the swamps, and that was the company's own main station, floating around the planet as the pelts migrated from raft to raft of their indispensable weed with the seasons.

From the main station, scores upon scores of wholly automatic substations fanned out, herding the pelts, selecting and tagging those which displayed the most remarkable variations, culling drab ones, crossfertilizing sports with known strains to produce extra-gorgeous lines, prodding, poking, exciting and in every way directing their fate.

Also there were factories distilling and concentrating the ingredients for the solid nourishment with which the export pelts had to be coated, telescoping five or six years of natural processing into as many months: extract of yardweed fed to blockweeds, extract of blockweed fed to dinglybells, extract of dinglybell fed to Zygran bladderwrack, extract of bladderwrack fed to free-floating pseudosponge.

Gelatinized, fortified, sprayed on and allowed to dry.

"I think," Kynance said very softly to herself, "that I shan't go crazy, even if I am alone on the planet. I think it's going to be rather interesting."

IV

Horst Lampeter parted the fronds of the bladderwrack and peered over the ribbon-like expanse of temporarily open water.

It could hardly be called a river, because it had no banks. It was just a channel between two patches of mingled bladderwrack and dinglybells which had used up enough of the nearer bondroots to let a former mudbank dissolve into silt and wash away.

Damn this mist, blurring his view! Or *was* it the mist obscuring details? Were his eyes perhaps going bad on him? It was all too likely—a local diet was deficient in so many necessities, and the mere fact you could choke something down without vomiting didn't imply proper nutriment.

He chopped the thought off short. Going blind on Zygra was too depressing an idea to be allowed to prey on his mind. *Concentrate,* he told himself. *Concentrate!*

Instead of straining to see, he listened. Zygra was a quiet planet—maddeningly quiet, lacking as it did any form of animal life—but there was always a surplus of background noise, the plashing of open water, the suck and shift of subsiding mudbanks, the occasional flop of pelts returning to a floating phase from high on the edge of a weedraft. What could he hear that didn't belong in this normal murmuring?

Nothing. Maybe Victor had calculated wrong after all.

He sighed and remembered to shift before the bladderwrack accumulated enough cell-strain to col-

lapse the floats on which he was balancing. A man could easily get lost among the trailing roots and fail to find his way back to air in the minute or so he could hold his breath. Shadowed so that the light bathing him had a weird greenish quality, he looked down at himself.

He was naked except for a belt of plaited weed on which he had hung his crude wooden tools. His chest was shrunken, so he could count his ribs by eye, and his skin was pallid even without the greenish tinge of the shadows. His feet and ankles felt puffy and waterlogged. His hair and beard, grown long for want of any means to trim them, were braided together to keep them out of his way.

I must look like a bogeyman out of a savage's nightmare.

Listening anew, he still caught no sound distinct from the ordinary. How to know if Victor's calendar was accurate? Time in this horrible setting was so fluid—as fluid as the marshy ground, which changed and drifted so that one could never be sure where he was unless the night sky was clear for a change and it was possible to sight on the stars with the notched crossed sticks he called his "sextant".

And even if by some miracle the calendar was correct, to within a few days at least, and the time of harvest was really coming close, how to be sure that some freak of circumstances wouldn't take the pelts by the northern route this time? Four years back, they'd gone north instead of south in response either to a fluctuation of the climate or tide, or else because some blind machine decided this was a course more profitable to the Zygra Company.

Horst wished for solid ground on which to stamp his foot. Failing it, he pounded fist into palm in a futile gesture of hatred.

Why did people have to be this way—so greedy to wring the last drop from a profitable venture, even if the last drop was a man's lifeblood? It was as though the pattern of suspicion and jealousy imposed by the Dictatrix's regime had rippled outward from Earth, and now, long after it had died at its point of origin, it still ruled the minds of those in power on the outworlds, ferociously though they would have denied the charge.

A sound? A sort of flopping sound? He jumped, just in time to save himself from being precipitated down among the bladderwrack's root system as it collapsed a square meter of floats in response to the strain of his weight, and peered along the channel as he had done earlier.

This time his heart gave a lurch. No doubt about it: those were migrating pelts!

They lay on the smooth surface of the water with hardly a hint of the quality which made them so prized by humanity. Their upper sides glistened, but only from wetness. It took an eye trained by bitter experience to inform Horst of the all-important truth: that smear of red, that ripple of gold, overlying the pelts' basic greenish-brown, foreshadowed the glory of harvest.

Frantically he reached behind him for the bundle of matweed fronds with a piece of vine from an upper branch of the bladderwrack. The fronds were twisted and bruised so that they would leak their juices into the water. Without making a splash that could be detected at a distance, he set the bundle adrift.

Moments passed. The first taste of juice reached the searching pelts, and they began to wiggle in their astonishing flexible manner towards the presumed source of the lure.

Horst let some of the tension ooze away and whistled over his shoulder. The bladderwrack surged underfoot in response to movements across its surface, and then the other men were alongside, keeping their distance carefully because to have four men's weight in one spot would trigger the collapse of the floats instantly. The bladderwrack was one of many species of plants free-floating on the surface of Zygra, but no other seemed to have evolved the notion of gas-filled cysts sensitive to weight on the upper side. The process went like this: a seed or spore would settle on the float, feed there until it was heavier than a certain critical load, at which point the collapse of the bladder dropped it underwater and it became food for the larger plant, entwined among root-tendrils and squeezed of its sap.

A man's weight speeded the process so that it cycled to completion in three to eight minutes. Nothing on Zygra was solid and stable.

"They're pelts all right," Victor muttered, adding in a tone of weak triumph, "Didn't I say so?"

Scrawny, skin yellow and bagging, his large head wobbling on his thin neck, he chuckled his self-approbation.

"Shut up," Coberley told him. Insofar as there could be a leader in this situation, Coberley was theirs. He was neither cleverer than Victor—whose IQ, in his normal phase, must run close to genius level—nor more skillful than Horst, who was anyway fifteen years younger. But he fed on some invisible source of energy, probably hatred, and he was always the one who found the willpower to continue when the natural impulse was to weary surrender. He was a former fat man. Now he was puffy, his skin loose without substance beneath to round it and firm it.

"I don't see a monitor," Coberley went on. "What do we do if we've picked up a stray herd? There are some, you know. In a good year a few escape the monitors and wander about on their own."

"Kill them!" Victor shrilled. "Rip them up and ruin them! Cost the company a million for every one we kill!"

"Shut *up*," Coberley repeated, this time with malice, and Victor complied. They waited. And at last, at last, the monitor came in sight: awash in the water, barely protruding above the herd of pelts, but hiding beneath its flush narrow deck a store of miracles.

They sighed in unison. "Solomon!" Coberley snapped, and the fourth member of the party acknowledged with a cautious pace towards the edge of the channel.

Solomon Weit was going to make their bid simply because, having been here a shorter time than any of his companions, he was stronger and quicker. Even so, he was a shadow of what he had once been. He was an immensely tall man, three-quarters of African extraction. Horst had always found something oddly comforting in his very darkness. It brought to mind solid things: blocks of ebony, ingots of bronze. He seemed to resist the leeching soddenness of Zygra while all the others grew wan and feeble.

Yet he had lately begun to cough on cool nights, and his eyes were rimmed with red.

"Now?" he said.

"Now," confirmed Coberley, and they threw themselves flat on their bellies, distributing their weight over a wide enough area of the bladderwrack to delay its collapse a few precious extra minutes.

Plunging their hands into the water as the pelts surged by, they struggled to get a grip on their clammy edges.

If the people who pay a million could get them in the raw state, they wouldn't be so eager, Horst thought for the hundredth time, or the hundred thousandth.

"Got one!" Solomon exclaimed, and the others rolled closer, helping him to haul it from the water. Patches of white and navy-blue shimmered over its upper end. They didn't stop to admire the play of color, but laid it flat and held it down so that Solomon could slide on to it and get it wrapped securely around him. In response to the contact, it subsided and began to conform to him.

"Damnation, it's too advanced!" Coberley muttered. "Look, it's clinging already. We needed an unripe one which would take on a random shape—"

"Too late to worry about that," Horst countered. "Just have to hope it fools the monitor anyway. Unless you feel it's not safe, Solomon?"

The dark man looked at the monitor from the shadow of a kind of hood into which he had prodded and teased the pelt. "I don't think there's time to get it off and catch another," he grunted. "And we daren't miss this chance! It may take weeks to get within reach of another monitor. Give me the hammer, quickly!"

Horst detached the "hammer" from his belt. It was only a piece of wood, first gnawed into a club-shape and then dried, over heart-breaking weeks, in the intermittent sunlight until it was harder than most things on Zygra. Solomon closed his fist around it and wriggled to the very edge of the bladderwrack.

"A ripe one may not be a bad idea," Victor suggested. "The monitor is more likely to try and retrieve a ripe one, isn't it?"

"Shut up," Coberley told him again.

Tense, they held their breath as the monitor drew abreast of the pelt enshrouding Solomon. It sensed the presence of its responsibility, slowed down and bobbed towards the side of the channel. Victor whimpered faintly.

Relays evaluated, circuits closed. The monitor decided that this pelt

ought not to be stranded and left behind, but returned to the herd. Arms reached out from its nearer handling unit, closed tenderly on the pelt and Solomon too, lifted the load and made to swing across the low deck so it could be replaced in mid-channel—*exactly as we hoped,* Horst reminded himself without excitement. His mouth was dry and his guts were churning.

Go to it, Solomon. Make it come true all the way!

How many long lonely hours of planning, how many dreams and arguments, had led to this moment! Now, now Solomon was making his bid for mastery of the little vessel. In mid-air stripping off the pelt with huge sucking noises, startling the monitor and throwing it over to the seldom-used interference circuits. He dropped awkwardly on the deck, almost losing his footing as the impact drove the monitor completely below the surface. His "hammer" rose and fell with a slam on the base of the handling unit, cracking the plastic across and letting water into unproofed circuits so that steam spurted out and something hissed as if in rage.

The arms let go the pelt and it fell in the water. Solomon paid no attention. With all his might he was trying to extend that crack right across the monitor's hull, work havoc that would force the machine's return to the main station for servicing and carry him ignorantly with it.

"Look out!"

Who called? Horst realized with amazement that it had been his own voice, and he had spoken too late. The handling unit on the other side of the monitor was intact, and it sprang into action. Two huge arms snatched Solomon off the deck. The power surged and the stern-jets screamed, driving the hull into mid-channel again. The arms shot out to full stretch and let Solomon go. He plunged into the bladderwrack beyond the channel, screaming, and the scream ended abruptly as the glugging noise of collapsing floats greeted his fall.

There was a period of worse than silence, during which the monitor evaluated its own damage, decided it was still servicable, and resumed the pursuit of its pelts. When it was out of sight, Horst stirred.

"There's nothing else for it," he said. "If we're going to get off Zygra alive we'll have to tackle the main station."

"You're crazy!" Victor shrilled. "If we can't even take a monitor, what chance have we of—?"

"I'd rather be crazy than dead," Horst whispered. "At least . . . I *think* I would."

V

When the announcement reached Kynance, it was bald and to the point.

"The previous incumbent of the post of supervisor of Zygra has failed to exercise his option of a further year's employment. Kindly ready yourself for departure aboard the starship *Zygra One* at fourteen hundred tomorrow."

She looked at it a second time and gave a sigh. She reminded herself about the repatriation clause and wondered if the attraction of a guaranteed trip home was going to lose its glamor in the same way as zygra pelts already had done.

Suppose the "previous incumbent" had exercised his option. What would they have done with her, having stuffed her mind full of so much information? Washed it all out again? Kept her on the staff in some minor capacity for a year and then sent her to Zygra after all?

No, more likely just turned her loose. In the history of the company someone at some stage must have decided to stay on a second year at the last moment, but the trainee replacement would have learned the same crucial fact that Kynance had grown to accept: just as the Zygra Company had given up misleading its rivals by making them think the pelts were animal skins, so it had given up worrying about how much an outsider knew of the technicalities involved. There was no place in the universe where the data were of value except on Zygra itself. Launching an attack on the planet with a view to taking it over was still a possibility—there were other operators in this sector of the galaxy capable of mounting one or even two assaults fierce enough to defeat the Zygra Company's best efforts. But the main station and substations were all booby-trapped. If they ceased to receive a signal being broadcast by the orbital guardposts, they released a flood of poison into the water, and for at least the next fifty years, until the pelts reestablished themselves, there would be no crop worth harvesting. And without destroying all the guardposts there was no chance of making a landing.

Moreover there was nowhere to *land* in the literal sense, so that a ship designed to put down on the marshes instead of aboard the deck of the main station was bound to be a somewhat peculiar vessel, bulging with flotation chambers and equipped with some sort of seagoing propulsion.

As part of her training she had been shown the record of one ill-starred venture along these lines. The Zygra Company's spies had discovered the preparations being made to adapt a ship belonging to a company on Loki, had waited till the work was almost done—involving the expenditure of half the rival company's capital—and then had blandly notified the Nefertitian government, which had a considerable stake itself in the Zygra operation, through the tax bills it imposed on the company's headquarters.

A protest to the Lokian authorities—a swoop by a team of inspectors from the Bureau of Intersteller Trade—and a swinging claim for damages which bankrupted the would-be pirates.

It was with something of a shock that, towards the end of the didactic recital, Kynance recognized a case which she had many times had dinned into her in college. "Manufacture of a device or devices uniquely fitted to conditions pertaining on a world not legally accessible to

the manufacturer is *prima facie* evidence of piratical intent"—The Zygra Company and the Government of Nefertiti versus Wade, Wang and Hoerbiger, 2113, otherwise irreverently known as the smile on the face of the zygra.

At first she had wondered why the company didn't simply assign members of its own staff to hold down the chair for a year at a time, perhaps on a rota basis. Later she had realized this was contrary to outworld psychology. Anyone making a career with the company was trained for work far more important than sitting on Zygra and watching a lot of machines tending a lot of moss. Any casual applicant, reasonably greedy and moderately intelligent, would suffice, would cost no more than salary for a year and ship-room to and from the Zygra system plus a course of training that occupied a mere fraction of the computers' attention, and would be dismissable on his return without the company having to worry any more about him.

If someone with inside information about harvesting the pelts wanted to sell out to another company, he'd have to have experience at the headquarters end as well as on Zygra, and if he worked well enough to rise in the firm to a level where his knowledge was likely to be useful to a third party, he'd have to be either a fool or a maniac to risk the gamble.

Kynance was coming to admire the Zygra Company in an upside-down fashion. There was no denying their efficient cynicism.

As the reluctant admiration grew, so her original doubts subsided. This was no chiselling two-bit undertaking, which could add to its profit margin by a fat percentage if it weaseled on its employment contracts. This was a firm big enough and inarguably profitable enough to tolerate such minor budget items as repatriation of an Earthsider. Five extra per cent on the freight charges for a single consignment of Earthbound pelts would more than absorb her passage home.

And she was not going to give them the slightest hint, the slightest suggestion of a hint, that she had infringed the contract.

Since the interview at which she was engaged, she hadn't seen Shuster again. He was the first person she spotted when she presented herself at the spaceport an hour ahead of the scheduled time, and she recalled with sick anticipation that he had claimed to be directly in charge of the Zygra supervisors, so there was no chance of eluding him.

She put a bold face on things and marched smartly towards him. The group of spacemen with whom he was talking noticed her before he did, and one or two of them stared in a flattering manner. Then the senior among them, a lean type with second-mate braids on his tunic, tapped Shuster's arm and pointed towards her.

"What's the girl doing here, d'you know?" The words carried distinctly above the racket from the sterngates of the ship, where auto-hand-

lers were packing in empty pelt-crates that rang with hollow booms every time they were moved.

Shuster half-turned and recognized her. Was he still smarting from the smack on the face? She couldn't tell by his expression, or by the tone he used to answer the inquiry.

"Her? Oh, that's the new supervisor taking over from Evan."

"What?" The second mate recoiled as though he'd been struck under the chin, and two or three of his companions exclaimed simultaneously. "Now look here, Executive! You can't do a thing like that to—"

"Shut your mouth," Shuster told him coolly. "If you want to keep your berth aboard this ship . . .?" The last word rose to a gently questioning note, and the second mate swallowed hard and held his tongue.

Eyes searching for some clue to the reason for the outburst, all her misgivings returning in full force, Kynance stopped a pace distant from Shuster.

"Congratulations," he said icily. "I'm informed you're the best trainee the company has ever had for the post you're taking on."

"Thanks," Kynance muttered. It seemed safest to stifle her dislike of the man until he made some overt reference to the reason for it.

Let him just try and talk me out of it again!

"Executive!" the second mate said. "Does that mean you won't—?"

"If you poke your snout in one more time where it doesn't belong," Shuster snapped, "I'll cut it off. Is that clear?"

Kynance shivered. The looks on all these faces, except Shuster's own, were such as she would only have expected to see at a funeral. There must be a catch in the deal after all —that was the only explanation!

But she'd assured herself there couldn't be, because the Zygra Company was too prosperous to bother with cheating its casual employees. Anyway, what sort of cheating was possible? By now she could have recited the contract word for word from memory. There wasn't a loophole. The grounds for voiding it were set forth clearly as anyone could wish. Provided she kept her head she'd last out the year.

"Go to your cabin," Shuster was saying. "It's clearly arrowed from this lock here: number ninety. And remember that you are not to interfere with the running of this ship in anyway. Delaying a crewman in the exercise of his duty constitutes interference, and when the ship is at space all crewmen are considered to be on duty twenty-four hours a day. In short, you will break your contract and lose your chance of repatriation if you talk to anybody except me. Is that understood?"

He could have been reading her mind. Her plan had been formed a moment earlier: to corner one of these glum-looking men and pump him for explanations. He'd sensed it, and forestalled her with orders given before witnesses. Pretty girl or no pretty girl, a spaceman in the lucrative zygra trade wasn't going to jeopardize his career for her sake.

Was he?

Hopefully she surveyed the men

one last time, and read in their shrugs that they were resigned to her fate, whatever it was.

Why not? It's not going to happen to them!

Abruptly she discovered that she hated the Zygra Company and Shuster as its personification, because contact with him had made her so bitter that she seemed like a stranger to herself.

With weary apathy she entered the ship and found her cabin. Surrounded by the noise of preparations for takeoff, she stowed her gear and sat down on the bunk.

In five or ten minutes—she had lost track of the time—Shuster came calling.

Shifty-eyed, he slipped through the door and pushed it closed quickly. He gave her a quick false smile and spoke in low tones.

"I'm sorry I haven't been able to see you since our first meeting, my dear, but I've been tremendously busy. You'll understand that the company's business follows the same life-rhythm as the pelts themselves, ha-ha! And as the time for harvesting approaches so we find ourselves more and more frantically busy. But I have kept a close eye on your progress and I must say that despite your lack of what we generally lay down as minimum qualifications for entering our employment, that's to say a scholar degree in some major field, you've done very well. It might easily be possible to arrange for you to join the company's permanent staff on completion of your tour at Zygra . . ."

All this time he had been closing the distance between them. Now he was sitting next to her, hands returning to the very same positions from which she had pushed them on the former occasion—same positions, and same revulsion.

She detested men who were so egotistical their preliminaries to love-making followed a pattern like a computer program, fixed and unalterable, so that a girl could never tell if they were thinking of her, or the last partner, or the next. She gritted her teeth, forcing herself to stay calm in the hope of picking up some clue to the pitfall she had overlooked.

There must be one. She was convinced she had deluded herself about something.

"I think perhaps that during the voyage we could become quite good friends, don't you? And a word from me in praise of your ability could carry a lot of weight with the firm, you know."

Fumble, maul, squeeze—no, it was more than she could stand. She didn't slap him this time, but made her voice sound as though she wanted to when she said stonily, "I'm sorry, but I'm not interested in a career with the company. I want to get home, and if it takes a year on Zygra to do it I'll spend a year on Zygra."

He withdrew, flushing, and stood up. For a second she thought he was going to hurl some taunt at her, reveal how he believed he had tricked her, but he bit down hard on his shiny-wet lower lip and went silently out.

VI

Under the shower Dickery Evan stretched and yawned. He was a stocky, well-built young man of New Zealand extraction, the Maori side predominating.

Dry, but not having bothered to dress, he padded to the autochef and dialed breakfast, then carried it to the dome overlooking the main station's landing-deck.

He'd thought at first that but for that deck, the largest solid surface on Zygra, he'd have gone crazy. Now, at the end of his tour, he wasn't so sure. He'd considered putting in for an extension; this was the only way he'd ever draw down so handsome a salary, and the complete isolation was growing easier to bear, but for one thing—no women.

Still, it was too late for that now. There was less than one month before his time expired. Best that way, perhaps—he wouldn't want to get *too* used to being alone.

He thought of the girls he planned to look up when he got home, and the time he could give them with his accumulated pay . . . not all of it, of course, because he planned to keep himself and a succession of girls on it the rest of his life. If he bought a share in some promising enterprise, and started a small business, and acquired some land and had a house put on it . . . .

His mind ran on happily as he watched the monitors drifting towards the main station. They were riding the same sluggish currents that the pelts followed to their rendezvous with harvest. Since his arrival they'd been all over the planet.

The trail of the pelts was immensely long; by harvest-time, scarcely one had less than 20,000 kilometers to its credit.

Early on, he'd passed much time in figuring how to get a pelt off Zygra. There was one girl in particular he thought would look marvelous in a pelt and nothing else. Then he'd found out various discouraging facts, such as how the pelts felt when they hadn't been treated and coated with the solid nourishment necessary to their survival, and that every one selected for export was watched by keen computers, and that there was *no* chance of stealing a batch of prepared nutriment from the coating-station.

That had put paid to a subsidiary ambition, too. He'd considered the idea of setting up a pelt refurbisher. Plenty of rich folks whose pelts were wearing out would pay ten thousand for a fresh coating of nutriment; someone who could buy two in a lifetime was rarer than pelts themselves!

But he wasn't a good enough chemist to duplicate natural nutriment, and he concluded that if the proposition was economic the Zygra Company would have established the service themselves.

Besides, somebody was bound to have tried and failed already, just as they'd tried and failed to breed pelts elsewhere than on Zygra. Best to be content with what he was going to come by honestly; a hundred thousand credits, free passage home, and an undemanding existence

for the rest of his life — natural, or geriatrically extended.

He dozed, while the watery sunlight sifted over the gathering pelts, and the monitors closing in, and the bulk of the coating-station looming on the horizon at its regular station among a particularly rich patch of weed, automatically distilling huge vats of nutriment against the harvest.

He came awake with a jolt. Somewhere at the edge of consciousness: a shrilling noise. What the—?

Oh, *no*! He'd heard that before, at the beginning of his stay. The man who'd been showing him over — Sheister, Shuster, some such name — had turned a switch and an alarm had squalled for precisely thirty seconds.

And he'd said, "That may go off any time, day or night! It indicates a malfunction of the automatics. You heard how long I let it run for? When it sounds, you have thirty seconds and no more to reach this switch and cut it off, survey the operation, and report what you find. It *may* only be a test to ensure you're alert. But I warn you: if you fail to reach here in thirty seconds — "

Evan headed for the switch at a dead run.

He missed on the first grab, got it on the second. His skin was prickly with sweat. How long had it been sounding before he reacted? Frantically he surveyed the telltale boards; as far as he could tell, everything was as right as it ought to be. So this *had* been a test! The bastards! The radiated pigs! To leave him eleven months, then catch him napping!

He made his way back to where he had been dozing and timed himself on his run to the switch. The first time it took him fifteen seconds, the next, seventeen.

There was nothing for it. Unless he was to be cheated of his pay and passage home, he had to doctor the record of the time the alarm had sounded. It was a terrible decision, because tampering with the automatics constituted sabotage and voided his contract, but he wasn't going to let one lapse cancel a year of his life.

He slid up the front panel of the alarm unit and peered into its bowels. Straightforward enough — a band of white tape, calibrated in one-second intervals, had reeled out like a dry tongue from the base of the siren. All he had to do was ease it back so that about twenty-five of the gradations showed instead of the present damning total of forty-nine.

He grasped the tape.

Instantly the panel slammed down, smashing the bones of his forearm. He screamed and tried to tear free, feeling the raw ends of bone scrape agonizingly. Through a fire of pain he heard an impersonal voice.

"Unauthorized tampering with the automatics is sabotage! Accordingly you are no longer an employee of the Zygra Company."

"No!" he screamed, wrenching loose his shattered arm and cradling it in the other. Stumbling, he made for the medicare unit, a coffin-sized

block of automatics sited at the base of the observation dome. He pushed its switches awkwardly with his good hand.

"You are no longer an employee of the Zygra Company," said the unit.

"Wha-a-at?" Evan barely knew the voice for his own. "But you can't do this — it's inhuman!"

They could.

Having set his arm in a sort of splint, he settled to his own satisfaction that no automatic device was prepared to serve him now. Even the autochef spat burned fat at him, and the shower delivered a stream of boiling water. In the smoke and steam his ambitions evaporated: good-by house, good-by girls, good-by geriatric treatment, good-by Dickery Evan. He'd been told, and had believed, that without life-support systems no one could survive on Zygra. He'd starve before the harvesting ship was due.

"Then I'll make sure they don't enjoy what they've done to me," he promised between clenched teeth, and went in search of a weapon.

But he had only chopped up one pelt before the nearest monitor seized him in its powerful arms, carried him off across the swamps and abandoned him to his fate on a mat of drifting weed. The force with which he was dumped blotted out his consciousness.

VII

Arms aching, hands sore from the crude paddle, Horst kept thinking how real this work made Solomon's loss seem. Their boat was clumsy enough anyway, consisting of a rough frame supported on half a hundred pieces of bladderwrack, the cysts inflated by lungpower and sealed with a gummy exudation of dinglybells. Every day it was necessary to replace the cysts which were starting to rot.

But Solomon had driven his blade harder than Horst and Coberley put together. Victor could be ignored; he often fainted after a couple of hours in full sun. Also Solomon had been able to crack jokes, and sing in a resonant bass.

Now he rots among the roots. He'd have made a joke of that, too.

"Take the right side of that weed ahead!" Victor piped.

"Does it matter?" Coberley snarled. "We don't know we're in the same hemisphere as the damned coating-station!"

"We are," Victor insisted, close to tears. Horst suspected he and Coberley too had been affected by the death of Solomon, though none of them had said so. Coberley had been more than ever irascible since, while Victor had taken to whimpering aloud.

"We've seen monitors," Victor went on. "We've seen ripe pelts. Haven't I sat up all night taking star-sightings while you two snored your heads off?"

"And haven't you snored your head off while we sweat over the paddles?" Coberley thundered back.

"Don't argue," Horst pleaded wearily, not really hoping to silence them. But for a while after that

they simply forged ahead, turning to the right to miss the patch of weed.

Horst didn't look at it except to make sure they were clear of its fringe of roots. He was more concerned about the risk of it being grounded on a mudbank, in which case they'd have to backtrack. Victor's shrill cry startled him.

"Look! On the edge of the mat!"

Their heads jerked around. On the very edge of the mat, half in the water, lay a man with one arm crudely bandaged. There was only one explanation of his presence, which Coberley voiced by implication.

"Damn the Zygra Company! May Shuster rot eternity away!"

"You think that's the latest of the supervisors? Then we are in the right area of the planet!" Victor exulted.

"He may have been drifting for weeks," Coberley blazed. "Anyway, they wouldn't have trapped him till the last possible moment, so we can be sure the harvesting ship is due now."

"I wonder if he's still alive," Horst whispered.

He was. The pain from his arm while they wrestled him aboard made him moan, and when they squeezed the sour but nourishing juice of a dinglybell into his mouth he cursed loudly. The cursing ran dry. He surveyed them in mingled wonder and dismay, naked as he was himself, sick-looking, wild-haired.

"You too?" he said.

"Us too," Horst agreed.

And in that instant they heard what they had hoped not to hear before sighting the main station: the drumming across the sky that marked the arrival of a spaceship.

"Are we far from the main station?" Victor asked hopefully.

"How should I know?" the man with the broken arm grunted. "I may have been unconscious for days!"

Shuster was a man capable of nurturing a grudge until the time was ripe for getting his own back. Kynance realized the fact with a sinking heart when she discovered that even when the ship had set down on Zygra he meant to keep her from talking to sympathetic crewmen.

"Harvesting is no concern of yours," he snapped. "Your responsibility begins when the pelts are aboard, and ends when we come back next time — if you're still contracted to us."

He said that with peculiar relish. Whether it was his private intention or the policy of the company, Kynance knew some effort was going to be made to trick her. Almost certainly, the trick would come at the end of her tour, when she had lost the chance to apply for an extension. It would be less trouble to injure her deliberately and leave her in the grip of life-sustaining prosthetics — but there was Laban Rex Chan versus Gunther Ranji to consider: "the exercise of a contractual option is impossible if the person allegedly exercising it is not conscious", but for which they might have Zygra "occupied" by zombies.

What horrible byways her mind was being led down by this disgusting man! Mustn't. Mustn't. That path led to insanity. She sneaked a look out of her cabin. If she stole very quietly to watch the loading of the pelts, surely even Shuster wouldn't invoke that petty disobedience as breach of contract!

She reached a lock unchallenged and stood drinking in the scene. Close at hand, men and machines were crating treated pelts from the coating-station; the colors flared dizzily and the scents made the air almost unbreathable. Russet and tawny, white and scarlet and green and black and other tints without names but the same fantastic beauty . . .

Men conducting checks of the automatics: here, re-stocking the life-support systems with vitamins and proteins; at the coating-station, testing the concentrators; overhauling monitors — one there with a bad crack in the case of its handling unit — and installing new programs for breeding from sports. They'd said something about evolving a striped pelt.

"Ah, there you are."

The voice made her skin crawl. She turned and saw Shuster. But he wasn't going to complain about her being here. He was simply saying, "It's about time I gave you your on-the-spot briefing." He sounded almost affable; Kynance followed him.

Mentally she ticked off all the ways she could be caught out in breach of her contract. She planned to list them later. For example, this alarm siren sounding for only thirty seconds. She'd have to rig some sort of extension so it could be inactivated from a dozen points instead of one.

Tampering with the automatics; hence, sabotage? No — Bellamy versus Guy and Guy Starlines: "a switch designed for manual operation is not an automatic device."

The prospect of doing something to forestall Shuster's skullduggery cheered her. Only one cloud still hung over her. *Where was her predecessor?* She ventured to ask Shuster, and his only reply was to curl his lip.

Her stomach turned over with a lurch.

What can they have done to him? Drowned him? If they have, who's going to know?

Nobody ever came to Zygra except company employees. By law there had to be a record of the operation of the automatics for government inspection — Hughes and Leblanc versus Mario della Casa, 2092 — but the government was that of Nefertiti, and it had a huge stake in Zygra itself.

Panic gripped her. No one from Earth would come hunting her if she failed to return. Was the contract irrelevant, a scrap of paper? The world seemed to spin off its axis as she learned the reason for Shuster's geniality.

"About your predecessor, now. He willfully infringed his contract. You're a great one for legalisms, so you're welcome to see the proof we'll be displaying to the government."

So I was right; that is one of their main traps, Kynance thought, almost relieved.

"— and the automatics ceased to recognize him as an employee. Oh, and on a related point: of the last nine supervisors, not one has completed his contract without infringing one of its clauses. Didn't I tell you you should reconsider your application? Well, it's too late now, of course. On your own pretty head be it!"

VIII

She was *not* going to give Shuster the privilege of seeing her break down. Somehow she maintained her self control — so well, that the last time he glanced back before entering the starship his face revealed gratifying uncertainty, as to say: *am I the one who's overlooked something?*

She gave a mocking wave, which he did not return. He did not look at her again.

The deck of the main station thrummed to the warning of the interstellar drive. The ship lifted. For the first meter or so the station rose also, floating higher for the reduction of weight. A crack of daylight appeared under the polished hull, and the starship was on its way.

It was gone.

That was when Kynance had to burst into tears.

She had never in her life felt so psychologically naked. When the sobs allowed her to draw breath, she cursed everyone she could think of to blame for her plight, beginning with the college tutors who had made her believe in the actuality of galactic law, concluding with herself.

The tears purged her of terror, and when they ended she was able to think with a clear mind. One factor dominated her thoughts: the problem of enforcement of what Shuster had contemptuously called "legalisms".

It was time to take a hard look at the predicament she was in, and gamble everything including her life on the assumption that Shuster had been telling the truth when he sourly complimented her on being the best-ever candidate to apply for this post.

Why? Start there, and the rest would follow.

Well . . . the same reason which prevented the Zygra Company from assigning the post to their own employees must operate when it came to finding an outside candidate. Anyone capable of making a career in outworld society would already be grabbed by some other employer. Even for a year at an enormous salary people would be reluctant to quit their permanent employment and sit watching moss grow.

In effect, this was an unskilled job. But for the legal requirement that a celestial body must be occupied by a human being to maintain ownership, nobody would live here at all.

What unskilled labor was available on worlds where ten-year-old children were already productive members of society? Social misfits,

and immigrants lacking qualifications with which they could compete on even terms against native outworlders.

Now what about her assumption that the Nefertiti government had a vested interest in the continuance of the Zygra Company. Although the tax bill for the company must be enormous, would it not be infinitely more profitable to annex this unique world and operate it directly? Of course! Hence the Zygra Company would be constrained to comply with the galactic commercial laws, for fear of dispossession. When Shuster talked of displaying records from Zygra to government inspectors, then, he wasn't referring to a mere formality.

Her predecessors, though, had all been maneuvered into breaking their contracts. Why? Surely immigrants desperate for costly but compulsory repatriation would be a minority among unskilled workers applying for this post?

A great light dawned on her. Short of finding some crazy hermit, who might go out of his head and start sabotaging the fabulous automatics here, the company stood no chance of finding a permanent supervisor. 'After a period of years, scattered around the local systems there would be several exsupervisors of Zygra. By picking their brains, an enterprising rival firm might garner sufficient data to mount a successful raid. An accumulation of small facts might reveal far more than planting a company spy to apply for the post.

She frowned. She had reached two opposed conclusions, one reassuring, one terrifying. The Zygra Company might have to watch its step carefully, *but* she felt it was paranoically afraid that its secrets might somehow leak out.

What could she do to insure the balance tipped in her favor at the end of her tour?

She had to take it for granted the company could not just murder her. If this were possible without the Nefertiti government stepping in, she was as good as lost the minute she entered Shuster's office.

After a little more thought she decided that, typically, her predecessors would have been social misfits without permanent careers or qualifications enabling them to switch jobs at will. Even such people, however, would have some kind of ties — relatives, at least. And if they disappeared on Zygra someone might make inquiries. Nine sets of relatives could excite enough public outcry for the government to expropriate the company.

So they would ideally seek misfits who lacked kinfolk to ask awkward questions. They would be very rare on planets like Nefertiti. Underpopulation implied an obsessive urge to exploit human resources; isolation would make family ties more precious than on Earth; and finally, if anyone became actively antisocial rather than merely asocial, the government would probably order psychiatric treatment.

Kynance Foy, with her Earthside college degrees, was a very different proposition from some neurotic Ne-

fertitian precariously poised between nonconformity and psychotherapy!

Moreover, just as she had brought a load of preconceptions about the force of law with her from Earth, so the computers which made the decisions of the Zygra Company would predicate its plans on vulnerable axioms. Hadn't Shuster blanched to learn she had studied law? Why, if not because the company was flying a perilously tight orbit?

"Studholme and Zacharias versus Perseus Asteroid Mining Company, 2011," she murmured aloud. "A contract entered into with intent to deceive or defraud is not a valid contract entered into between the parties."

How far did that term extend? Did it include the setting of traps to make the victim break the conditions of employment? Chin in hand, she concentrated on what she remembered of the great trail-blazing precedents with a ferocity at which her college instructors would have been astonished. Gubbins and Kinoshita versus Loki Rhodium Monopoly, 2102: "A company is a corporate counterpart of the individual; hence individuals and companies enter contracts with equal status" — not very helpful, as most judges tended to be influenced by Judge Petropavlov's subsequent institutionalization for senile dementia . . .

What a house of cards the law was! How many people's lives had been affected by what a judge ate for breakfast!

She rose determinedly. She could reasonably believe that from now until the harvesting ship returned, recorders would watch her day and night so the Nefertiti government could be assured of the legality of this operation. Taking a deep breath, she addressed the air.

"My name is Kynance Foy! As a result of remarks made to me by Executive Shuster of the Zygra Company I believe attempts will be made to infringe the contract of employment I have entered into. I adduce the admitted fact that none of my nine immediate predecessors has completed this year of duty and collected his salary. Compare Studholme and Zacharias versus Perseus Asteroid Mining Company."

Merely saying that made her feel better. Let the Zygra Company beware! If she could leave nothing else behind her; if they did in fact murder her; at least she might be remembered as a legal precedent. Sustained by that vicarious form of immortality, she set off on a survey of her new domain.

The first thing to do was count the jaws of the trap. Her mental list of obvious pitfalls grew with dismaying speed.

They were taking no chances, for instance, with injury or sickness. She had never seen the threshold of a medicare cabinet set so low. If she so much as slept the clock around she would find a snuffling servo making metabolic checks beside the bed, and behind it the prosthetics responsible for the fiction of "continued human occupancy" of the planet.

She narrowed her eyes, spotting

something half-shadowed at the back of the medicare unit which she didn't think belonged. Before touching anything, she spoke to the impersonal recorders.

"I suspect a malfunction in the automatic equipment. 'Inspection for the purpose of repair does not constitute sabotage' — Lyon et Marseille Freight Company versus Adolphe ben Hossein!"

When she finally did discover the purpose of the addition to the medicare unit, she shook with fury. It was a self-fatiguing resonator plate on the piping from the plasma store to the prosthetics. She suspected it would resonate to the frequencies generated as *Zygra One* boomed down to land on the station's deck. Broken, it would admit air to the pipe. End of supervisor — and the fractured plate would have been replaced automatically before the starship's crew emerged to find the body!

There was something friendishly subtle about a trap so simple yet so nearly infallible. How could she hope to match the devious minds which had conceived it?

Yet as she proceeded with her survey, her spirits lightened anew. The company's planners had themselves been victims of circumstance. Developing new planets at high pressure led to a particular attitude of mind. The ideal aimed at was "turn her on and let her run", and the more successful the outworlders had grown at high reliability, the less they had worried about improvements.

They had been too busy applying what they already knew to undertake original research. Inspired corner-cutting, which they were brilliant at, was no substitute for Earthside-style testing. Earth had the manpower to waste on a one per cent improvement in energy consumption — even on change for change's sake. Consequently Kynance was struck by an aura of obsolescence. This was the largest automated system in the known galaxy; for precisely that reason it incorporated only tried and true devices.

Kynance made what comparisons she could to fix this fact in her mind. Suppose, two centuries previous, it had been necessary to build a transport system across an African desert. There would have been hovercraft, monorails, nuclear reactors, linear induction motors — scores of choices open. But the decision would almost certainly have been for diesel locomotives hauling trains on rails already familiar for a hundred and fifty years. In other words, the automatics controlling Zygra were to faster-than-light starships as a railroad to a nuclear power station.

Which left her in the situation of someone trying to stop a diesel locomotive with sheer ingenuity: a tough problem, but not insoluble.

Self-preservation came first, though. Even the simplest of her tasks — rigging remote extensions for the central alarm — was tricky. She could say to the recording machines, "The alarms are inadequate to comply with the conditions of employment! Von Hagen and Mar-

chetti versus Ice V Construction Company of Titan: 'The experience of employees in the field carrier more weight than predictions by computers'."

But she couldn't make a quaspace signal relay out of Zygran wood and old plastic food-boxes.

She jury-rigged the alarm switches. Then she tackled the self-fatiguing plate on the medicare cabinet, and established that the station's computers were indeed primed with legal information. The moment she touched the plasma pipe, warnings dinned into her ears. She waited, quoted Lyon et Marseille versus Hossein again, and tried a second approach. This time the computer didn't object.

Splendid! How about Yukinawa, dos Passos and Szerelmy versus Ge Nuclear Fusion Monopoly? "Modifications to automatic machinery which improve its function without detriment to the purposes of the proprietor do not constitute grounds for voiding a contract of employment!" she recited.

She fancied she detected an unhappy grinding sound below the deck. A grim smile flitted over her face. Satisfied, she turned to the other automatics.

The solar tide which had drawn the pelts to their rendezvous with the harvesting ship was subsiding. She could investigate the main station at leisure, but the herding monitors, the coating-station and everything else would shortly be hull-down over the horizon as the pelts scattered again.

She toured the entire establishment, clinging to the slippery back of a monitor when possible, swimming the rest of the way.

In the coating-station — which stank like a glue-factory from the vats of gummy organic jelly it was cooking up to apply to full-grown pelts — she found the same aura of obsolescence as everywhere else. She had never studied organic chemistry seriously, but before the boy who mocked her for not being able to fix her skycar; there had been another who was insufferably proud of his ability in the garden, and she had mugged up enough horticulture to wipe the grin off his face. She was sure any competent Earthside organochemist could have increased the efficiency of the coating-station by fifty per cent.

"That cuts the company down to size!" she told the air as she swam back to the main station. "I must stop thinking of it as a bunch of infinitely clever villains, and regard it as an irritable dinosaur, big but stupid!"

With pools of water dripping from her clothes, she looked out over the landing-deck. All it would take to save her from infringing her contract was a mixture of caution and dirty-minded suspiciousness. Once that was settled, she could let herself relax.

She turned slowly through a complete circle, a hint of awe coloring her thoughts as she at last drank in what it meant to be in charge of a whole planet almost the size of Earth.

And froze, staring at something

impossible, intolerable. In letters of fire a clause from her contract blazed across her vision: a clause she had thought there was no risk of breaking, but which she realized in this instant she *must* break — if she wanted to keep company with herself for the rest of her life.

At least she could stop herself from waving. But all that could do was postpone the reckoning. She was already doomed.

IX

"The bastard's made us too late!" moaned Victor.

He meant the miserable Dickery Evan, whose weight made their clumsy boat even more difficult to force through the water. Coberley rounded on him.

"Maybe you could have left him to die out there," he thundered. "But I couldn't! And what do you mean — *he* made us too late? Who navigated us into that mudbank, hey?"

Horst winced, remembering the loathsome suck of the mud as they struggled to get the craft afloat again. They had still been trying to find clear water when they heard the knell of the starship taking off.

"It wasn't my fault!" Victor screamed. "I wasn't in the bow looking out for shoals!"

Horst caught Coberley's eye. "No good arguing," he muttered. "He's in his down-phase. We're lucky he stayed on the upswing long enough to bring us close to where he want to get."

It was slim comfort. Victor's cycles of clear thinking alternated with periods of non-communication lasting for days. He ought never to have come to Zygra. The isolation had broken him completely.

Ought any of us to have come here?

And now this last absurd gamble. What a plot to be hatched by four naked men, one insane, one driven by hate and one crippled with a broken arm! As to the fourth . . .

He shook his head violently. He dared not wonder if he himself was still mentally normal.

Mechanically paddling, he stared at the prospect ahead. The tide here had deepened the water to maximum. Curiously abbreviated, the stems of the longest bottom-plants swayed against their own reflections: mud-sequoias, aquatic arbutus, mock-magnolia — heavy, these last, with blossoms unconnected with their own life-cycle, being aerophytes more akin to orchids than anything else familiar to humans. There was no animal life, so flowers to attract insects were irrelevant; the oxygen-cycle was closed by putrefying bacteria, not animal lungs.

Thinking about the flowers depressed him. Had he and his companions not also become parasites on the lush but drab vegetation? He forced himself to concentrate on their plan and convince himself it was feasible.

If only Solomon were still alive!

Years ago, somebody he'd heard of from Victor and Coberley had been foolish enough to think

the company would take pity on a stranded employee. He'd hung around until the starship landed, then shown himself — and had been shot down, on the pretext he'd been mistaken for a pirate or a wild beast.

On a world without animals!

The moral was: keep clear of the annual visitors. Devious ways were tried of getting a message out, instead. One year there had been an attempt to hide a message in a pelt-crate. The station smashed the man's legs with an automatic packing-press. Another year, hiding messages in actual pelts had been tried; nothing came of that, though no lives were lost. Another year —

Oh, it wasn't important. Time had passed. The company had ignored the castaways on Zygra, and would do so until they became a nuisance. Sabotaging the pelt-crop was impossible, with a monitor accompanying every herd; approaching the main station seemed tantamount to suicide . . . Then Solomon joined them, and they devised the notion of seizing and smashing a monitor so that its parent station would have to ship it back to the main station for an overhaul, carrying a man hidden in its pelt-compartment. Solomon had died trying it.

Enough. Now was the time to gamble everything. Death would be better than this vegetable half-life!

At the very start, Horst had told Coberley they ought to make an open approach to the new supervisor — to which Coberley replied: "Suppose Victor and I had asked you for help?"

And Horst had shut his mouth on a vomit-like rising of self-disgust. He had been desperate to serve out his time and collect his pay. There had been a girl . . .

Lost forever. Probably thinks I'm dead. But wouldn't have made inquiries to find out.

He was coming to feel that humanity was horrible, glamorous on the outside, within stinking and rotten.

So now: the double-or-nothing throw. Approach the station, risk being spotted by the new supervisor; either invoke his help, or overpower him; set about wrecking the automatics so thoroughly the company would have to send an unscheduled ship, and hope to excite interest at government level which might save them simply being killed off as saboteurs. A thin chance, but all they had.

Horst felt it might work. Unless something more blatant had been installed since he last saw the main station, the Nefertitian government hadn't winked at weapons like computer-operated laser guns.

His mind was so far away he didn't hear Coberley's order to stop paddling. It took a back-handed slap to bring him back.

Dazed, he stared over the water. There was the coating-station, getting up power to go hunt weeds; the substations and monitors in a sea of unripe pelts; the main station, and on its deck —

"A woman," Horst said softly.

"What?" Coberley rasped.

"My eyes aren't that bad. It's a woman!"

But Coberley wasn't listening. He was trying to stop Victor waving at the new supervisor. "Get your head down! We want the raft to look like a piece of flotsam, not —"

"He-elp!" Dickery Evan ignored him, flinging his good arm in the air. "He-e-elp!"

Why shouldn't a woman be as callous as a man? She'd know as well as they that even to wave back was to forfeit her pay. Yet Horst was waving too now, and shouting, and after a moment of silent fury even Coberley did the same.

X

Nothing in the galaxy, Kynance realized sickly, could prevent her giving assistance to the men on their makeshift boat. So within a couple of days of starting her tour, she could kiss her chance of repatriation good-by.

They must be what Shuster had called "previous incumbents", left to live or die as the planet let them. Their arrival proved one thing: the company's insistence that Zygra was uninhabitable without million-credit equipment was a lie.

People capable of wresting a living from this boundless marshland must be of remarkable determination. They didn't deserve to be abandoned to fate. She clenched her fists and turned towards the observation dome, careful not to indicate she had noticed them. If her contract was going to be voided the moment must be delayed while she took some precautions.

Her mind raced. The men would need food, showers, clothing, medical attention — so she had to isolate the autochef, the domestic services and the medicare unit from the central computers . . . Geoffrey Kotilal versus Astronaut Ambulance Company! Where an ambulance pilot *en route* to a disaster already attended by rival firms declined to rescue a lone pilot who lacked a guarantee of payment, and was held negligent because "the duty to save life in space is paramount above remuneration".

It specified *in space*. But —

She whistled. It had been ruled in McGillicuddy and Kropotkin versus Callisto Methane Derivatives that "space" included any solid body not possessed of independent jurisdiction. As of the moment she broke her contract, the whole planet Zygra would count as an asteroid.

In which case . . .

A sort of drunkenness made her sway. There was no time to examine her crazy notion in detail. She would just have to trust her memory. Feverishly she attacked the devices she was likely to need. She couldn't think of any better excuse than the standard one of "suspected malfunction", but the computer didn't argue until the greater part of the job was finished. Then it slammed the front of the master monitor unit and reported ignorance of any fault in that system.

Kynance bit her lip. Well, never mind; the only other essential device to isolate before that ridiculous bladder-and-stick boat came bobbing up was the main circuit-restorer. That would prevent the computers from

regaining control of the units she had disconnected.

Her task finished, she ran back to the observation dome and emerged into sight of the four naked men. She waved, and hallooed, and invited them aboard.

Instantly the doom-laden mechanical call rang out.

"You have signaled to a person not employed by the Zygra Company. Accordingly your contract is void."

"Oh, cosmos!" Coberley breathed in a despairing whisper.

"Keep paddling," Horst told him. "She's grinning so wide I can see it from here!"

"Come on! It's all right!" Simply letting things happen without wondering about explanations, Horst and his companions closed the last gap. The woman reached down to help them. Victor insisted on pushing forward first, and went on a crazy run around the entire deck, head bobbing like a chicken's, crowing with delight and disbelief.

They lifted and dragged the injured Evan aboard; Coberley followed, and last of all Horst. The steel underfoot seemed to magnify his weight. He could barely stand and look at their savior and try to recognize that she was worth looking at: petite, fine-featured, with strange iron-colored hair.

All he could find to say was an inane question: "You've broken your contract — what are you going to do?"

"It isn't the end of the universe," the girl said, trembling with what Horst could only think of as suppressed glee. "I take it you're some of the nine of my predecessors who failed to complete a full tour?"

"That's right," Horst agreed. "I'm Horst Lampeter . . . Giuseppe Coberley . . . Dickery Evan . . . and Victor Sjoberg is the one going round and round the deck."

"I'm Kynance Foy," the girl said. "From Earth."

"And you've given up your chance of repatriation?"

"Did you expect me to leave you to rot? When I could offer you proper food, medical attention, a hot shower, even —" she glanced at his bare body with engaging frankness — "clothes?"

"But the automatics won't obey you any longer!" Coberley exclaimed.

"It just so happens I'm rather particular about automatics supposed to look after me. And at the moment when I — ah — broke my contract, rather a lot of them were disconnected for inspection. I don't suppose it will be difficult to convert them to manual operation."

"But supervisors are forbidden to *touch* the automatics!" That was Dickery Evan, raising his broken arm in witness to his statement.

"Not exactly. Not even the Zygra Company can rewrite galactic legal precedent to suit its own convenience. The only thing I've done which did entitle them to fire me was to wave at you, and that might not stand up long in court. However, before we get it to court we have you to attend to. So stop arguing and come along!"

XI

Within the hour, Horst's bewilderment had given way to awe. In the dragging years since he was dismissed for trying to rewire a faulty book-projector classed as "crucial equipment" his memory of the main station had been distorted into a vision of hell. Indeed, it had been a gigantic trap for him.

Not for this astonishing young woman, though. Evan's arm was comfortable in a proper healing-sheath; vitamins, proteins and space knew what had streamed into Victor's knobbled veins, and now he lay snoozing on the supervisor's bunk, and Horst, Evan and Coberley were clean, dressed and putting away platters of unbelievable food.

Coberly tucked right in. Horst, though, found himself staring at Kynance and eating by touch alone.

"You're an extraordinary person!" he burst out.

"You're the ones who are astonishing," she parried. "To survive out there without help, or resources, or even terrestrial food."

"But if I'd done some of the things you've done, like bringing the automatics under manual control, I'd have expected to be tossed aside like Dickery here on a weed-mat!"

"He must have done something worst than just interfering with some of the automatics, then," Kynance said.

"I guess I did," Dickery confessed sullenly, and explained.

"If you hadn't done that," Kynance murmured, "you could have stayed here indefinitely. A person in distress, especially someone in danger of his life, commits no crime if he helps himself to someone else's property to sustain himself."

"Fat lot of good telling me now," Evan answered.

Checking a gobbet of food on the way to his mouth, Coberley demanded, "You mean I could have stuck around and taken whatever I wanted?"

"Food, drink and medical supplies, at least."

"The hell you say. Well, it wouldn't have done me much good. Like Dickery, I got crazy-mad at the company."

Kynance bit her lip. "It seems unfair, after all you've been through, but I must say it. You walked into this with your eyes shut, and it was damned silly."

"Think we don't realize that?" Horst exclaimed. "I've kicked myself twice around the planet! I got into this because it looked like a short cut to getting a girl I wanted. I was no prize and I thought I could make myself into one. I've been a fool all my life, skipping from one course of study to another till I'd wound up without a degree in anything, so I volunteered for Zygra against the advice of what few friends I had . . ."

"A bit of a romantic, hm?" Kynance suggested. "The out-worlds aren't kind to romantics, as I've recently learned."

"Call trying to buy a girl with a year of your life 'romantic'?" Coberley jeered.

"What I had in mind," Kynance corrected, "was skipping from sub-

ject to subject instead of fitting himself into the right mold for Nefertiti. It's one of the things I've missed most on the outworlds: people who like to associate with people, spend time chatting idly, instead of driving themselves around the clock. I'd worked out that some of the volunteers for Zygra must be like you, because there's so little room for such people anywhere off Earth."

"I often thought I'd like to go to Earth," Horst admitted. "I never made any real friends at home. Everybody on the planet seemed so tied up with making a career, earning a fortune, while to me it simply didn't seem enough to give purpose to a man's life."

"He's gone on like this ever since I first knew him," Coberley scoffed.

"What induced *you* to come to Zygra?" Kynance inquired.

"I was stupid, same as the others. Wouldn't think it to look at me now, but when I was Horst's age I had muscles, and there was a big demand for men who were built, back on Loki, my home world. I didn't have the brains to match, though, and got left behind by events. So I jumped at this."

"Dickery?"

What he told her confirmed her guess: a nice guy, lazy, not bright enough to invest twenty years' hard work against the promise of later enjoyment. Easy meat for the Zygra Company. So too was Victor, about whom the others reported that in a fit of depression he'd wanted to get the hell away from the human race. Of course, when his condition cycled back to the upward phase, he'd regretted it.

"Do any of you know why the Zygra Company adopted the policy of changing supervisors annually and tricking them into infringing their contracts?" Kynance asked next.

"I've heard the story from Victor," Horst answered. "A man called Zbygniewski was armored up to the roof of his skull with posthypnotics and planted by a rival company among the regular staff, back in the days when the job was farmed out among permanent employees. He got away with information that enabled his bosses to mount the most nearly successful of all the raids on Zygra. Also he planted a boobytrap for his successor, the idea being to make the planet legally unoccupied before the harvesting ship came."

He broke off. Something in Kynance's expression had given him a clue to what she was thinking, but she gave him a wink and raised her hand.

"This boobytrap, then, started the company on its present course? Tricking the supervisors, I mean."

"I gather it was Shuster's idea, the thing that advanced him to executive status," Horst said.

"That fits. You'd expect a swine like him to have done something exceptionally dirty to get ahead. Now: please tell me how each of you was inveigled into breaking his contract."

Horst wondered if some of the means employed would prove to be illegal, but Kynance dashed that hope. To Evan she said, "Tampering with that record did constitute


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sabotage — Levi Rico versus Free Space Haulage Company, 2153."

And to Horst: "That book projector *might* have been used to give you instructions, and legally you weren't entitled to do anything which risked garbling vital information."

And to Coberley, who had tried to re-set the autochef when it burned his breakfast: "The computer was bound to consider the chance you might alter a settting far enough to poison yourself — Fernando Duquesne versus the Osceola Food Company, 2099, is clear on that."

"All right, since you're so smart," Coberley spat, "tell us what we can do to get off this stinking mudball!"

"Coberley, pipe down!" Horst rapped. "This girl has done things you and I wouldn't have had the guts to try even if we'd thought of them."

"I've done nothing special," Kynance said. "Only it does strike me you outworlders are too used to relying on machines. It's natural. You've done miracles with automatic systems which were never needed on Earth. When your life depends on them, you don't interfere with their operations. The moment I caught sight of you paddling your boat, I realized I'd fallen into the trap the Zygra Company sets for its supervisors: the lie that the planet is impossible to inhabit without million-credit life-support equipment."

"So when you sacrificed your contract, you *did* have a plan in view," Horst said.

"If it's not a plan to get us out of here I'm not interested," snapped Coberley.

"It may come to that," Kynance told him. "At best it involves a delay of a Zygran year, but there are a lot of compensations which will more than make up for it."

Dickery sat up and began to take notice, and she unfolded to them the fantastic scheme which had come to her in a flash of inspiration.

XII

The irony of it all was the way it turned on little pivots of time, separated by enormous gulfs of months or years when they did nothing but wait for the future to catch up with them.

If, for example, the four men had been a couple of days later in reaching the main station, her plan would have been impossible to implement. Now the risk lay in being even one second too early; they had to wait for an arbitrary deadline, whereupon they would have to cram into a few narrow hours the fruit of months of plotting. And it might all go for nothing in the end.

They were assembled in the observation dome, where they had rigged a remote for the calendar clock in the supervisor's quarters. The hands were ticking toward the red line she had inscribed across the face first thing today. One by one they had fallen silent; the chattering that had signaled the release of old tension, now the day of their revenge was upon them, hadn't lasted.

"*Can't* we?" Dickery suggested, and closed his hand on the can of paint beside him.

"No!" Horst rasped. "Kynance has explained over and over — this has got to be watertight!"

"I don't know how much longer I can bear to wait," Victor complained. But he had been saying the same thing daily for half a year past, and they ignored it as a formality.

At first, Kynance had scarcely expected to survive to this moment. The strain of knowing that yet one more year must leak away had caused three fights between Evan and Coberly, and one between Evan and Horst. But that had stopped as they began to accept the consequences of their joint action.

She had first let herself believe in success the day she came upon Coberley — of all the men — staring at the white sunlight on the pools of water pitting the mudflats, at the matted vegetation, at the drab olive-dun shapes of unripe pelts drifting ahead of their monitor.

He'd turned, and scowled, and said, "Damned bastards in the Zygra Company — trying to make out this isn't a fit world for human beings!"

After that, the tone of their discussions altered from desperate to proud.. *What a bunch of misfits!* Kynance thought, then added with a burst of near-affection: *Yet there's something special about anyone who'll accept the responsibility of looking after a whole planet!*

"Kynance!" Horst said, and she started. While she was wrapped in thought, the clock had reached the red line.

She took a deep breath and began to recite the necessary legal formulae. They seemed to take half eternity. Finally she ran out of words and breath at the same time. She could only give a nod to her companions, and they shot away.

With paint, with circuit-tracers, with meters and gauges and sheets of paper on which computer programs had been fair-copied after a dozen revisions, they set out to conquer Zygra.

The boom of the starship reached them just as the job was finished. Dickery, paint on face and hands, was the last to join them in the observation dome, and they grinned and slapped each other on the back before turning to go watch the ship make its landing.

The impact of Dickery's work was all that could be hoped for. A head appeared from the bridge compartment. It turned to survey the station, and was confronted with letters a meter high running along the side of the observation dome.

They said ZYGRA MAIN SPACEPORT.

Another head appeared. There was some shouting. A third head peered out — by the glitter on the attached shoulders, it belonged to the captain. And then Shuster appeared.

"Right," Kynance said grimly. "Time to go and welcome them, I think!"

Horst blurted out, "Kynance, you're remarkable!"

"Just as well," Victor said. "The galaxy would fall apart if there were many more like her."

Kynance flushed, gathered up the folder of documents she had prepared, and led the way on to the deck. They waved to the astonished crewmen leaning out of the bridge.

Another couple of minutes, and the nearest lock shot open to disgorge Shuster and several others, including the second mate who had tried to remonstrate when Kynance showed up to join the ship on Nefertiti. They were armed with laser-guns, and Kynance had to force herself to stand fast.

But she had rehearsed this moment mentally so many times that the necessary words sprang to her lips. "Which of you is the senior representative of the company operating this vessel? You have not signified acceptance of the harbor dues in force at this port, and you are required to furnish proof of ability to meet them before discharging or loading cargo."

Shuster had gone white as a comet's tail with the shock of being confronted with five people he had given up for dead. He pulled the rags of his self-possession together.

"What is all this nonsense?" he blustered.

At least he'd realized he couldn't just order them burned down where they stood. Kynance said, "Are you the senior company official, then?"

"You know damned well I am!" Shuster roared. "And I want to be told the meaning of this *slogan* you've scrawled on my company's main station!"

"Not yours," Kynance said delicately.

The second mate lowered his gun. With worried glances at Shuster the others copied him.

Ignoring Shuster's raging, Kynance addressed the men leaning out of the bridge. "Is there a recorder up there?"

A hasty whispered conference, and then a defiant assurance that everything was being recorded. "So that you damned pirates will get what's coming to you!"

"If there is any piracy going on around here, it looks as though it's on your side, landing a party of armed men at this spaceport!"

"Spaceport!" Shuster shouted. "This is the Zygra Company's main station!"

"Correction," Kynance informed him. "This is Zygra Main Spaceport, under the control and direction of the Zygra Port Operations Company — keep that recorder pointed at me!" she added in a sudden bellow the force of which amazed her. "I want the whole story down for any action that may be needed!"

The snout of the recorder wavered, but remained trained.

"My name is Kynance Foy. I was engaged to act as supervisor of Zygra on behalf of the Zygra Company, to conform with the legal requirement that a celestial body to which a claim is laid must be occupied by at least one living person. My contract forbade me to communicate with anyone not employed by the company.

"Within two days of arriving I was approached by four ex-incumbents of the same post, who had been inveigled into breaking their contracts —"

"It's a lie!" Shuster screamed. Kynance disregarded him.

"On speaking to them, I automatically ceased to be an employee of the company. Since that moment, the planet Zygra has reverted to the status of an *unclaimed celestial body*."

"Oh, cosmos," said the second mate in a barely audible voice.

"But you can't claim Zygra," Shuster began.

"I can," Kynance answered demurely, and wondered when he would begin to squirm.

"But just a second!" Grasping at a straw, Shuster stumbled over his own tongue. "That doesn't apply to property —"

"You mean Zygra Main Port?" Kynance smiled. "Are you familiar with the law of salvage?"

Shuster seemed to choke.

"I think you understand me," Kynance said. "Property cast away on an unclaimed celestial body is subject to reclamation as salvage and sale by the recoverer after one local or one Earthside year, whichever is the shorter. It so happens that the Zygran year is four days and five hours longer than an Earthside year.

"Approximately three hours ago this vessel — note, by whatever name you call it, it is legally a waterborne vessel, in other words a ship! — was reclaimed as salvage by the Zygra Salvage Company, who thereupon sold it to its present owners with warranty of title. If you wish to exercise a lapsed previous title you must purchase it at the current estimate of its value. Conservatively I'd say it's worth a thousand million credits. Wouldn't you agree?"

"Woman, you're raving!" Shuster moaned. "Why, that's half the value of our pelts for a year!"

"*Your* pelts?" Kynance said softly. "I'm sorry, but this was an unclaimed celestial body — forgotten already? The pelts are the property of the Zygra Pelt Exporting Company."

"What?"

"They were purchased from the Zygra Pelt Raising Company about forty minutes ago. The Pelt Raising Company are the new owners of the substations, monitors and coating-station, which they purchased about two hours ago from the Zygra Salvage Company."

Shuster clamped both palms against his temples as though afraid his brain would burst his skull. "What are all these companies you keep talking about?" he whimpered.

"Are you acquainted with the regulations governing the formation of a company to operate interstellar trade? I am. I studied interstellar commerce as a follow-up to my courses in business law."

"Oh," Shuster said in a dead voice.

"The moment you allowed five people loose on the surface of this planet," Kynance told him, "you dug your own grave. The law states such a company requiries five officers: president, chairman, managing director, treasurer and secretary, of whom not fewer than three must be citizens of the planet where the

company is registered. Holding one office in any given company does not debar an individual from holding the same or another office in some other company. Correct?"

Swaying a little on his feet, Shuster stared wildly at the group facing him, gulping enormous breaths.

"Do you wish to inspect the documents relating to the companies now operating on Zygra?" Kynance asked him formally. "That is to say —"

"But you can't register a company here!" Shuster shrieked. "A company has to be registered with a planetary government!"

Kynance fused, dropped and exploded her last and greatest bombshell.

She said, "We *are* a government."

XIII

Shuster was beyond speech. Giving him in a puzzled glance, the second mate holstered his gun. He said, "I guess I don't understand what's gone on here."

Once, long ago, Kynance had had a dream involving a personable young space officer. This man could have slotted quite neatly into the role. But that was so far in the past she felt the whole thing had happened to someone else. She only remembered how he and his fellows had shut their mouths when they must have known it was company policy that no supervisor should return from Zygra.

She said clearly, for the benefit of the records, "You must be either ignorant or stupid. Three conditions must be fulfilled before a planetary government can be set up. First, the planet must be fit for habitation — instanced by the fact that these four men have survived without artificial aids for years on end. Second, it must be free of any claim of absolute sovereignty previously registered by an empowered company — and we've been over that. Third, it must be occupied by members of both sexes. We comply in all respects.

"One Earthside year, plus one minute, after the abandonment of Zygra by any employee of the company formerly recognized as sovereign here, we became eligible to declare ourselves the legal government, and we did so. Our President, Horst Lampeter!"

Horst stepped forward, eyes a little narrowed against the sun, and scowled at Shuster.

"Our Minister of Planetside Affairs: Dickery Evan!"

Dickery swaggered up beside Horst.

"Our Minister of Trade and Finance!"

Victor joined the row, and Kynance fell in at his right. "I myself," she said, "am serving in the capacity of Minister of External Affairs, and our Minister of Justice is —"

She gestured. Coberley tramped forward. This past year his fat had melted off him, letting hard muscle show through, and he hunched threateningly as he approached Shuster, arms swinging as though prepared to pick the smaller man up bodily and hurl him overside to drown among the gorgeous pelts.

In that instant taut with menace, Shuster must have seen a vision of what fate had in store. Beyond the mere financial collapse of the Zygra Company loomed other terrors. Once it was shown he had deliberately tricked the supervisors and abandoned them to their fate, no government in the galaxy could refrain from ordering the payment of damages to those who suffered or their relatives. Kynance had done some calculations: assuming the fines were levied as a percentage of assets—the usual practice—and the damages as a percentage of the balance, she estimated the company would have to sell its unsold stock, its interstellar freighters and even its headquarters building in order to pay its other employees their month's salary in lieu of notice.

A *very* satisfactory outcome.

As she explained this to him, Shuster put both hands over his face and began to cry

"But doesn't this mean you're going to have to stay here indefinitely?" suggested the second mate. Overhead, some sort of argument could be heard. Let them argue, thought Kynance.

"It sounds as if you've swallowed your company propaganda about it requiring millions of credits' worth of gear to keep a man alive on Zygra," she said. "Bunkum! It's possible to live off the native vegetation. How else do you think my friends managed?"

"But in that case—" the mate began.

"In that case, Zygra is a greater prize than Loki, or Ge, or a score of other planets that could only be made habitable by importing Earth-side plants, animals and bacteria. We're wide open for immigration. Or we shall be, as soon as we've disposed of our first crop of pelts."

"How are you going to do that?" demanded the mate. "You don't own any ships."

"No," Kynance admitted. "But you haven't seen the scale of port charges currently in force. For a ship of this size they amount to—Victor?"

"A hundred million credits per local day," Victor said.

"What?" The mate and his companions spoke as one.

"Well, any underdeveloped planet needs to exploit its resources," Kynance said. "And currently we only have the pelts. Mark you, the rate applicable to ships under charter to the government of Zygra is substantially lower, and we're extremely interested in chartering a few vessels on a profit-sharing basis."

"Do you mean shared among the *crew*?"

"It's a scheme we've worked out in some detail," Victor said judiciously. "If you're interested . . .?"

Interested was an understatement. Kynance's experience had shown beyond doubt that these men were greedy. A share in the most profitable cargoes in the galaxy had looked like a quick route to their loyalty, and it was working like magic.

"Here's the captain, I see," she murmured. "I wonder how he'll feel about chartering the ship to us."

Patiently, citing authority after authority with the assurance due to an Earth year of milking the data banks of the main computer here, Kynance showed how it could be done.

Philpot-Soames and Honegger versus Transit Company of Loki: it was illegal to transport cargo without permission from the owner. The Zygra Company owned *nothing* on Zygra; they had sent the ship to bring away someone else's property, and this was piracy within the meaning of Balewa and Chatterji versus Earth-Luna Shuttle Corporation. No company—*vide* Olaf Gunarson versus Phobos Metals—could compel employees to engage in illegal undertakings; hence the captain and crew were free to accept work with any other employer . . . .

And so forth, and so forth. When she had finished, Kynance was in a state like a walking dream. But she knew she had done it.

The renamed vessel *Kynance Foy* dwindled towards the shredded clouds. Victor, Coberley and Evan were somewhere below, celebrating their elevation to ministerial rank with the help of some wine bought on credit from the ship's stores, but Kynance wanted to wait a while before joining them. She stood watching her namesake the ship head for the stars.

Abruptly she became aware that Horst was watching too—not the ship, but her.

He said, "I told you you were extraordinary. I've just realized the most extraordinary thing of all. Even after a year none of us know anything about you. We're all afraid of you. You seem like a machine full of miracles!"

"I had to be, didn't I?" said Kynance after a pause.

"Yes."

"Well, I've hated it. And thank you for reminding me before I got into the habit for life!" She laughed.

"I'll tell you something I've never told anyone else," she went on. "When I left Earth, I had a secret dream. I was going to come home wearing a zygra pelt and a blase expression, to jolt the hell out of all my friends. By the time I ran into Shuster, I was ready to settle for a square meal and a ticket home, and I didn't give a damn about zygra pelts. Now, if I go home, I shall be able to take a shipload of them!"

"'If' you go home . . .? Don't you want to go back to Earth?"

"It has its points. But—I've been on Earth, Horst. I don't mind going back the long way around."

"I used to think Earth was the only place in the galaxy where I might fit in," Horst muttered. "But that's not true any longer. There's a planet called Zygra where people like me can fit in. I wonder if they'll realize that."

"I think so. I estimate—oh—half a year before the first applicants for immigration show themselves."

"I tell you one thing," Horst smiled. "If you're going to stop behaving like a machine and start acting like a girl, there had damned well better be some more women among those early immigrants!"

END

OULED NAIL

by H. H. HOLLIS

What does a spacemen need after the solitude between the planets? Some Earthmen found the answer long ago!

I ran into Gallegher on his annual eccentric orbit through New York. He was tanned as red iron rust. I laid a magnetic grapple to him, and we made a perfect dual landfall on mahogany and brass. The beer was black and the sawdust floor was a place, in Galeg's phrase, "where a man can feel gravity."

Galeg had a couple of long pulls and so did I. It was a companionable silence, and I finally broke it.

"I hear," I said, "that men in the Mars trade are all being replaced by machines. It's said that after the market for their memoirs has been glutted, the rest will be condemned to ten years of telling only the truth, drinking water and staying on earth."

His blue eye looked at me around the beer stein's horizon, and his rust-red right thumb came over to cover the microphonic button on my harness that beams to the tape recorder while he expressed himself on the subject of storitapers and their petty, unmanly endeavors. Then he uncovered the button, and for the benefit of the tape said, "Don't you believe it. The machine was never made that could replace Gallegher, or even match him."

"In some ways, you may be right," I told him, waving the barkeep for two more, "but I understand the technicians . . ."

"The technicks are nice boys," said he, "but — oh, you did order, did you? — they have no more soul than the machines they love unnaturally."

"Really, you can't dehumanize those great contributors to human efficiency and comfort. Why, the automatic rehabilitation machines that keep you rocket jockeys sane, for example . . ."

"Them things!" Galeg laughed satirically. "They produce clinical

material for the psycho internes at a steady rate, that's all."

"Well," I declared, "it's been nice to cross orbits, but your political views are rather antediliuvian. I have to interview a plantation owner from the asteroids."

"Listen!" He shut off my jets with a glittering eye. "Don't you wonder that I'm standing and not still in a hammock getting my weight back?"

"Do you mean you're fresh off your pipe?" I cried. "Man, come sit down! Your heart—"

"You're breaking it. I'm not from deep space."

"Why, the kick from Mars can't be done under thirteen weeks. And you can't have been here more than a day without even a pip in my picture tube."

"That's where you're wrong. I'm not from a thirteen-week kick."

I studied him as nearly as I could without startling him. "Well," I said, "if you're going to try to run that old space-warp hokey by me again, I really must be off. That plantation owner . . ."

"May his oxygen crystallize!" cried the old G in a voice that moved his orbit a foot. "If you've better things to do than listen to an old tube mate's final exposure of the soullessness of tecks and the ultimate failure of machines, be off." And he hoisted his schooner to the old motto over Sprague's back bar, a historic communique from the last pre-atomic war: "Sighted Tub. Drank Same."

"Man," I said, as I herded him and a fresh one to a round table, "will you tell me how the hagan you can stand and walk like a Times Square barfly and you just off the Mars kick?"

He drank deep, and wiped the foamy mustache from his face of rust before he smiled and said, "I'm not from the thirteen, I'm telling you. That's the story. Are these waiters blind, do you think?"

I arranged to keep fuel in the lines, and he laid the orbit I was waiting for:

Maybe you remember when the technicks thought up the new de-bend routine, and maybe you don't. I'm older than you, and I remember well when a kick tube was a pipe to burn fuel in and that's all. You sealed yourself in and threw her into deep space and hoped the calculators had figured you right. There'll never be a tube built big enough to carry enough fuel to run with the flame lit from one world to another. And if there was, you couldn't kick her off a planet. So you burn the pipe just long enough to take advantage of the tide of gravity, and that's all.

It gets almighty lonesome, and a man comes kind of unstuck while he's loose out there. He gets to feel like a grain of dust in a sunbeam after a while, with about as much chance of falling onto earth as the dust has of falling on a particular tabletop.

Of course, men are tough. Nobody's ever been able to figure a man's outside load. As much as can be piled on, there's always some fellow to take it and be ready for more.

But the toughest man has trouble getting back his planet legs after being in free fall through the solar system, and lots of pipe-pilots got a permanent separation of the seams that couldn't be welded. That's why the automatic rehabs were designed.

I had a partner — Pick Pratt. Not so much a partner,either, as a drinking and arguing mate. We kept close tab on each other's orbits, and when he kicked for earth, I was usually lighting the pipe a day or two later.

I'd get into New York and find him stiff as a ramrod.

As soon as I got him revived, I'd tie one on. When we slowed down enough that our lucid intervals coincided, we'd argue. About women. About war. About the long kick, mostly, and whether fifty thousand jets in the bank for each one was worth it — especially when it took pretty near the bank account in hooch to wipe out the memory of the trip.

And we didn't drink expensive either. Both of us were young and strong, and fusel oil with red pepper in it was what we craved: something to short out the main control board in a hurry. The worst of it was a kind of floating sensation that would come over a man in the street. He'd get to feeling he was going to float off the earth and drift for the asteroids — no synthetic oxygen out there then — and he couldn't shake it off.

Many's the time I've had Pick holler, "Grab my knees, I'm going!" and you bet I grabbed 'em too, because if I didn't, I knew he'd let me float off the next time I got light-headed. I'd sling him over my shoulder till we could get in a bar and get something heavy in his stomach.

And women. O Lord, women!

Seaman off a three-year cruise was nothing compared to us. No woman wanted us around. I mean, fifty thousand in the bank or not. The Freudian psychos were as popular then as these religious ones are now; and they said — well, you wouldn't believe it, and I don't want to. Anyway, the women wouldn't put up with it. No kind of women. Pretty soon a man was as lonesome here as in space.

Pick and I missed a kick once. I got to floating and Pick got to weighing me down and it was a week after our turn to light off before we made it to the White Sands shuttle, and they wouldn't even take us up to the space station. We were stranded in Texas. They ran us out of New Mexico.

At first we were desperate. Then it got to seem like a good thing.

The longer we were away from the long kick, the better we got to feeling. We even rode jeeps for a while for some old geezer in west Texas—automatic jeeps. After a while Pick found out how to take the automatic attachment off, and then it was real fun. He fixed up one of the attachments to follow deer instead of cattle. We really lived.

There's a big rare-earths deposit in that part of the world, and there's a robotics factory out there. The whole town is automatic — saloons, movies and all. Pick said it gave him the creeps.

We had started in to get a stake, but after we got it, somehow we didn't quit. Finally Pratt up and said he was fixed. He was never going back to the kick tubes. That kind of jarred me into realizing that I was restless, hungry to be in free fall again. You think I'm nuts? So did Picker, but I stuck to it, and we had a couple of fist fights about it, until we calmed down and decided to split up like men instead of kids.

He was tired of riding jeep for the old man, but he said he'd look around till he found a job on the ground, and I hauled out for White Sands. We made it up to send a beam to Dome One on Mars once a year so we wouldn't lose track.

When I got to the Sands, somebody else had floated once too often, and I had a hot tail in a hurry. Mars was the long way that trip. Twenty-four weeks. Once or twice I got to wishing I was bumming around earth with Pick again, but as soon as I reeled Mars in and got a lungful of that skinny air, I forgot it.

There was a lot of talk about built-in rehab units going around, and sure enough, the tecks tried one out on me. It was just a twenty-four hour wire loaded with jazz and other earth sounds, but it was about all the extra weight a pipe could push then — couldn't leave a gram of that high Geiger cargo, you know. It broke or got a lashback or something about three weeks into no grav, and I spent seventeen weeks — years, it seemed like — listening to "a mouth-watering recipe for the heroic space man's favorite pie: FUDGE PE-KAN WITH HU-WIPPT CREAM TOPPING." I thought if I ever smelled a cocoa bean, I'd turn inside out. There was a free-fall nurse in the grounding crew at the Sands who offered me a chocolate bar, and one of the doctors told me after I could understand speech again that she was the hardest-kicked women he had ever treated. It was weeks before her rear was fit to be seen.

Three or four years went by, and not a wave from Pick. My beam was erased because he never called for it.

Nobody else heard from him, so I finally figured he had let a jeep or an antelope kill him or else he was under restraint someplace. I threw a big burnout by way of saluting his memory, and started figuring the fuel in my own tank was about used up. The automatic rehabs were standard by then, and spacemen were still a signal for locked doors whenever they touched dirt. I couldn't stand the auto-rehabs.

Then I made a bad one. Somebody spit in my fuel, or something, and it wouldn't burn above Mars.

The ground crew was asleep and lost me when I left my expected orbit, so rescue didn't locate me until I was almost to the surface. The magnet had to grapple me so fast that the side of the pipe caved in and bust four of my ribs.

When I got out of the hospital, I went over to Dome One for my orders and a draw, but I was mighty low. Even rock crushing in the high Geiger hills struck me as better than

kicking off again. I had the feeling that I'd used up all my luck, that if I got beyond radio range once more I'd never hear landing instructions again. Just low. Rotten. They told me in the hospital that I'd been on Mars so much I couldn't lose this rusty tan any more, and that kind of capped it. I was afraid to ride a pogo stick, let alone a kick pipe.

At the office where I showed up for my draw, there was quite a delay. Ordinarily I would have bulged my airlock, but I was so low I just sat there, chewing a piece of that spongy red rock they sell to keep your mouth moist on Mars, and feeling a million years old.

Finally the clerk came back, and grinned at me. "Sorry to keep you, Galeg, but I knew there was something besides money for you. This globe's been waiting for you for six months."

I was fractured. Who in hagan would spend a thousand sparks to send me a solid message? When he handed it over, I could see it had something in it besides a tape: it was too big. Must have cost two thousand, and it had a "storage-paid-till-called-for" stamp that must have gone another two fifty.

Well, I stuck my thumb on the opener and as soon as it felt my thumb print, the seam opened all the way round. A little drive-control tape rolled out — only about enough for a couple million miles, and a letter.

The letter said, "When you get within a thousand goobers of the green ball, splice this into your drive tape." It was signed "Sheikh Abou Pick Pratt." You mind a goober, don't you? When the girl asked the pipe pusher how it felt to be a thousand miles off earth, he said, "Lady, a thousand miles is peanuts! Goobers!" Anyway, the message meant I was to cut in this drive when I made it to a million miles off Sol Three.

It was an old joke between me and Pratt. That's how I knew it was real.

I felt funny, I tell you. My air was leaking at every seam. Here I was, just about ready to give it up and cut the jet and here comes a voice from the dead, as you might say. And why "Sheikh Abou Pick Pratt?" If he was alive, was he rocky?

Maybe he was in trouble. That was what convinced me — that and curiosity. I devilled the free-fall doc until he passed me, shaking his head. My own head felt like it was swelling up and then shrinking when I took off. Bewildered? I was a flamed-out tube, brother.

For ten weeks, I changed my mind every hundred miles. Each time the tape cut on the jet flame to correct course, I knew I was that much closer to making the biggest decision of my life. Was I going to splice that tape, or wasn't I? I didn't know. Just over a million miles off earth, I made up my mind. I jerked open the pilot case, ripped the tape in two and spliced in Picker's roll, trying not to think about it.

Right away, I wished I had thought about it.

You don't exactly feel direction

changes in deep space, but there's some sense that stays oriented, even out there, and I knew my direction was wrong as soon as the jets kicked. They just roared for a second, one hellacious kick, and I knew I was never going to fall on earth.

I was floating in the few inches of leeway a pipe design gives you, with the pilot case right under my nose, and it was all I could do to keep from opening it again.

But it wouldn't have done me any good. To put back my old tape wouldn't get me to earth now, not after that boot Pick had given me. I tell you, I was sweating combustible fuel.

A few hours later, my anxiety had knotted my stomach like a fist. I was sweating so much the air was fouling, and tears were cutting their way out of me, too. I was lightheaded and almost wild, with just enough brain left to know that it was the moon I was headed for.

I began to laugh and sob like crazy then for sure. The moon! Sweet Jesus, the moon! Goddard the younger dead there because he couldn't get off. Carlson blown up trying! Damned, dead, dusty, airless, heavy moon. Close enough to die on, but just too much mass for a man to carry enough fuel to kick from earth and then kick from the moon too. The reason a space station had to be built. Just too big to be useful. Every piper's nightmare — to die on the moon. One big kick from home, but one big kick too much.

When my throat was tired and my tear ducts couldn't pump any more, I began to pray. I prayed to Pick Pratt.

"Pick," I would whisper, "Pick, Pick, be there. Save me. Pick, I'm a dead man if you don't. Don't don't let me down. O God, make him be there. Pick, I've got to have fuel. Let me go, this once, let me get just to the space station, O please, Pick, please."

I should have known better than to use that tape. "Sheikh!" I thought now he was crazy, and I knew I was. I didn't care. I cursed him for every son of a march I could put my tongue to, and I knew the words and the tune too.

Then I'd pray a while longer. I'd make promises. If he'd let me go, I'd send others. I would have sent him my mother. Terror was a milepost way behind me. I raved on like that until I fell on the moon. The last thing I remembered was sinking in a wallow of dust, halfway up the ports. I must have slept from exhaustion. When I woke up, I meant to open the airlock and have it over with, but I was too burned out to trip the release.

I lay there, strangling in my own miasma and looking out at the plains when, all of a sudden, I saw Pratt.

I knew it was he, even in his robes. He was riding in a dome truck and the treads were driving dust up in straight trajectories, he was coming so fast. In ten minutes he was there. First he touched the shell of my tube with a solid bar and shouted into a mike at his end, "You old fool, you overshot us. Hold your

nose until I get you to the dome." Then he hung a grapple on me and began to sled me across the dust.

He was all dressed in a set of robes and had something cloth twisted around his head, and a curly and a black beard, but he looked like mom's fudge pecan pie to me. I went to sleep while he sledded me in, and when he took me out of the tube and carried me, I was crying like a baby and mumbling his name.

He turned me over to a couple of dark skinned fourteen-year-old boys. They went to work on me like they'd been raised in a Broadway Turkish bath. They stripped off my clothes, bathed me, massaged me, walked me around that bathroom, got some soup and coffee in me, evacuated me, washed me again, made me walk a little more and put me to bed.

I don't know how many days it was until I woke up in a bed that faced a doorway out into a court.

There was a low table in the center of the court, beside a couple of palm trees. The sun . . . it had to be artificial . . . was speckling the table with light. And there, crosslegged by the table, was Abou Pick Pratt.

He was smoking a hookah and drinking coffee, and as soon as he saw I was awake, he clapped his hands. One of the fourteen-year-olds came in and helped me dress, but first he gave me a cup of thick, syrupy-sweet coffee.

When I got out in the sun, I flopped down by the table, and accosted Pratt. "Pick," I said, "tell me something before I go nuts."

"You better eat," he said, and clapped his hands. Then he took a pull on that water pipe and told me Charley Blount had been there the month before. Charley was an old cobber of ours that I hadn't seen in seven — eight years. By the time we got Charley's history cleaned up, we'd finished one meal and started another.

In between we drank that sweet coffee. Haberschmidt was by, he told me, and Flonnie from France; and as it got to be afternoon and the shadow of the palms grew away from us, I began to realize that all the old crowd was coming here, and I guessed they'd all got solid messages like me.

"But how come, Pick?" I asked him. "How come? Tell me something, or I'll burn out again."

He looked at me like he figured maybe I'd make it now, and then he laid down the hookah and clapped for some more coffee. We'd drunk a bottle or two of some kind of wine during the day, and the coffee was welcome.

"How do you feel?" he asked me. "Pretty good?"

I stretched and lay back on some pillows with that dinky little coffee cup, and all of a sudden I knew he was right. I was, you might say, rested for the first time in five or six years. Relaxed. Well fed but not gorged.

I felt like I was eighteen again, and Mars was my oyster. I looked at him and felt more friendship for him than I'd thought I could feel, and I said, "Why, you old goat, you know how I feel. I never in my

whole life felt better. Now tell me the whys and wherefores before I pull out that beard!"

Just then I heard a giggle.

I looked up to the shady side of the court, and shutters were beginning to open in the afternoon cool. Someone was watching us, from a gloom that held off identification. I was all on the alert in a minute. Somehow I'd let the size of the place escape me. There was room in that house for fifty people besides Pick. Who — or what, I thought, was watching me out of those windows? More of them began to open, and I was just getting my feet under me, when something happened that went through me like a shot.

There was a fountain in one corner of the court, and a door about ten feet from it. The door opened silently, and a robed and veiled figure went to the fountain, filled a jug of water and left, closing the door as quietly.

Well, it was a woman. She had on a robe like Pick's, but it was a woman. There's something about a woman. You can't fool me. Besides, she looked at me.

I looked at Pick, and he was smiling sort of sheepish. I swore. I got up, and sat down immediately. I was giddy. All that good, solid food in my middle began trying to recover its identity. I heard some more giggles and this time when I looked at the wall, I could see a dozen of them looking out, some shy and one or two bold, but all smiling like children on Christmas. One called out softly, "Me, Pick. Me."

"Pick Pratt," I cried, "are you running what I think you're running?"

His face kind of shut up, but his voice was just the same. He told me, "Not exactly. If this don't suit your tastes, your pipe's outside, with enough fuel to kick you back to Mars!" Then he clapped his hands three times, and there was a whole rustle of giggling and slippered feet on the stairs. In about a minute, six robes and veils glided out into the court and began a slow and stately dance that went to my head like sour mash.

They only danced about three or four minutes, I guess. They were all veiled and shawled and wrapped, but here and there, as they glided past one another in the measures of the dance, there'd be a glimpse of curves or a flash of an ankle. They made their own music with little bells and bracelets around their ankles. One lost a slipper and went on dancing with one bare foot. When she passed the slipper again, she gave a lazy kick, and it sailed over my head.

I was a man in a dream. The gloom of dusk surrounded us. The slow movements of the women were the stuff of dreams. After a little, they sank down together in a heap, like a flower closing.

Pratt made some signal I didn't see, and a tall dark girl arose from the group and came to me like a sister. She bent and kissed me on the forehead, and her perfume fell around me in a cloud. I rose and followed her to her apartment in a kind of trance.

She brought me a simple meal of cold meat, fruit, and a few small salt rolls with caraway seed on them. When I shook my head she smiled and, lying beside me on the couch, fed me a few morsels.

"A man must eat before he works," she said, and her voice was golden bells laughing. We made love all that night, the way love is meant to be made.

A man's whole again when he wakes up to find his girl walking around the room just in a pair of pants, picking up the clothes, straightening things, maybe bringing him a cup of coffee when she sees he's awake, and then crawling back into bed with him. Just easy. Natural. No side at all.

That was a girl worth going a million miles for, or a billion. Along about the middle of the morning, she chased me downstairs to chew the fat with Abou Pick again. I had lunch with him, and a bottle of Riesling. I wasn't exactly sober, but I was the soberest I'd ever been after a trip from Mars, I'll tell you that.

In the late afternoon, Pratt looked me in the eye and said, "Still worried about what I'm doing?"

I looked him back. "I don't know what you're doing. I'm man enough to apologize for what I said yesterday, and I don't care what your racket is. There's ten million credits in high-G concentrate in my cargo cylinder. If that's what you want, take it. Just tell me when my welcome's worn out."

"That's up to you," he told me. "I never lit a friend's tube yet, and I'm not going to learn how on you. And I don't covet your concentrates. This place is yours, just as if you'd built it."

"Who did build it?"

He smiled at that, and lit up his hookah. The shutters began to open again, but there was no giggling today, and no faces visible, either — only in my apartment, when she leaned out with the opening shutters, and beckoned me with a glance. I don't mean a come-hither look. It was more a look that said, "Here I am."

I got up and went inside. Ey gowrins, I knew I could talk to Pick any time. When I came in, she said, "Does it please my master to return to his own place?"

"None of that 'master' routine, baby," I told her. "Just you and me. What's your name?"

"Rachel." Rachel! It rings in my head now. I said, "You can call me what my mother called me —" and I told her, though I won't tell you.

If the first night had been an ecstasy, this one was a fulfillment. Rachel! I made a symphony of her name.

Next day, when she ran me out so she could clean the place up, I went straight downstairs and took Abou Pick Pratt by the throat. "Picker —" I let him see I meant it — "you and me have been through a lot of bad landfalls together. This is the best one I'll ever have. But I'm being eaten by curiosity. Who's that girl, Pick? Who're all the rest? How'd you get here? If you don't tell me, I'll strangle you; and if I'm

just a dream of yours in a madhouse, I'll vanish happy after the last two days. Are you going to talk?"

He pushed me down on a pile of pillows. "Gallegher," he says to me, "you're ready for the truth. These girls are Ouled Nails, and I'm the old man of the joint."

He could have answered in Sanskrit and told me more, but I wormed it all out of him at last. After we split up, he'd given a lot of thought to our old landfall problems. Somewhere, he heard about the Ouled Nails, the girls who consoled and rehumanized Arab wanderers on the border for generations; and he asked himself if a pipe pusher's problem differed in kind or in degree from a camel pusher's.

"It's the solitude," he explained, "and the awful monotony. That's what drains a man's manliness into a bottomless pit of anxiety and leaves him drifting like a burnt-out tube with a cracked cargo cylinder. Girls alone won't restore the balance, for a man needs mother, sister, wife, brother, father and uncle all at once and in a hurry to bring him back to himself. That's where I come in. At every oasis in North Africa where the Ouled Nails are, there's an old man who catches the wanderer up on his news and on his friends before the girls get in their licks. I'm the old man here."

He didn't say any more, and neither did I. Lunch came on about then, and I devoted myself to the food and kept my tongue between my teeth.

When we started on the coffee, I asked him quiet where he got the women and he told me. They were the real thing, right from North Africa, and their ambition was to go back to the village of Ouled Nail weighted down with gold coins and silks.

"I've got a solar-powered converter out back," Pick went on. "Turns out fine gold along with fuel for the tubes. The silks they can buy for themselves in Paris on their way home. Meanwhile, they're a thousand years ahead of all the automatic rehab units all the tecks in the system can build into a tube."

Pratt was right there. I always damaged the rehab unit as soon as I was in free fall, so I wouldn't have to listen to it and smell it throwing around the odor of mashed potatoes and gravy and have it reminding me to take my muscle tone pills. The monotony and solitude were better.

But of course a human being's always better than a machine, for any job where they can be compared at all.

I laughed until I was roaring, but it was no hysteria. When I quieted down, I put it to Pick: "How much is the tariff, and none of your pals-to-the-end routine now. How much?"

He grinned at me, and we squared it off at ten thousand credits. I was to send it to his bank in Texas, at the little town near the robot factory where we'd ridden jeep so long before, as it seemed now.

Pick knew I wouldn't cheat him. I wanted to come back on my next trip, and no teck in the system could tape me to the moon's off earth side

— or would. They'd have me jugged for asking.

He was to send me a hundred-credit message globe with a short tape, and it would put me right at his dome.

I stuck around about a week. When Rachel — well, when Rachel began to look like just a girl, I flamed off to the space station.

I was in earth gravity just long enough to send Pick his ten thousand jets. Then I checked in at the Sands for a kick to Mars. I've been riding a tape to the other side of the moon ever since. That's where I was until two days ago.

Whenever we old-timers spot a youngster who looks like he'll make a man riding the hot tubes, we feel him out a couple of times while he's floating, and Pick drops him a globe with an Ouled Nail tape in it. Once a man's tried it, he'll never go back to automatic rehabs.

Of course, the ten thousand jets don't pay for it. Old Pick! He steals a kilo or two of high Geiger con every time you go, and it's hard to explain sometimes; but it happens so often nobody worries much any more.

We sat in reflective silence for a moment, and drained our beers. Gallegher signaled a waiter.

"Where does your friend sell the high-G he steals?" I asked.

The big G frowned at me. "I thought you'd get it. You're a taper, and a smart one, they say. I guess I'm the only one that sees through the old fraud, after all."

"Why do you say he's a fraud? It may not be a savory business, but it serves a worthy social function, and I for one am not prepared to say, even from a moral standpoint . . ."

"Oh, dry up," said Gallegher. "Didn't I tell you where his bank is, or wasn't you listening? Them things on the other side of the moon is all robots, including Pick. He must have died after he got 'em all up there from that robot factory, and they rebuilt one of themselves to look like him 'cause he was the high-gravity for us old-timers. Without the high Geiger they steal off us, the whole place would run down inside of six months like an unwound clock . . . You reckon that waiter's gone to sleep against that wall?"

END

Dam Nuisance

by KEITH LAUMER

Illustrated by GAUGHAN

Retief had to save this planet from its most deadly enemies— the diplomatic corps of Earth!

I

Jame Retief, Second Secretary of the Terrestrial Embassy to South Skweem, turned at a shrill hail from the low doorway of one of the squat grass huts lining the dusty main street of the capital village.

"Good mornings, Terry," a knobby, brown-mottled, four-foot alien with a bewildering variety of appendages waved a couple of the latter at the diplomat. "How's trick? Say, I've been meaning to ask ones of you fellow a question: any chance of you Terry supplying a little economic aid in the forms of a new roofs for my pad here?" the Skweeman gesticulated with half a dozen limbs. "Every time it rain, all the squish goes out of my mud pack."

"Sorry, Mr. Uptakapacheenobufers, but you know the ground-rules. Much as we Terries want to impress you people with a Public

Works Project, it can't be anything useful. According to the Underground Deep-Think Teams back at Sector, that might be taken as an implied criticism of your culture."

The Skweeman made a rubbery noise indicating mild disappointment. "Yous know I'd likes to throw my weights behind the Terry program, but without a few goody to show for it, what's the percentage?"

"I see what you mean, Mr. Uptakapacheenobufers. I'd better start by installing a couple of new transistors in that language teacher I lent you. It seems to have imparted a faulty grasp of the plural."

"Hecks, Retief, call me 'takapacheenobufers for shorts. I guess we're chum now, after those snort we had together last night. Wows, what a hangovers!"

"Speaking of headaches, I have to hurry along to Staff Meeting. Too bad about the roof, but if you think of something spectacularly superfluous the town needs, hasten to let Ambassador Treadwater know. He's sweating out his next E.R."

Retief went along to the large hut which served as the Terran Chancery; inside, he took a camp stool among the staff assembled before a low split-bamboo podium which sagged visibly under the bulk of the Chief of Mission.

"Now, then," the Ambassador opened the meeting briskly. "First this morning we'll take a look at the challenge which confronts us, gentlemen." He signalled and the lights dimmed. A projector hummed. On the rostrum, a life-sized, three-dimensional, vividly colored image of a stubby, boxy Skweeman appeared under a glowing legend reading KNOW YOUR ENEMY. Treadwater tapped the solidogram with his rubber-tipped pointer.

"This, gentlemen," he stated, "might appear to some of you to bear a superficial resemblance to our great allies, those valiant freedom fighters, the South Skweemans. However, to a practiced eye it's at once apparent that it is, in fact, a *North* Skweeman. Note the sly expression, the general air of inscrutability, the fierce cast of eye . . ." The pointer rapped each feature in turn.

"Ah . . . Mr. Ambassador." Colonel Pluckwyn, the Military Attache, raised an interrogatory finger from his seat in the front row. "I don't believe that last organ was precisely an eye. More of an ear, I think you'll find."

"Whatever it is, it has a fierce cast!" Treadwater snapped. "Now let's move along to the coloration." He studied the simulacrum. "Hmm, an offensive greenish purple with clashing dun rosettes."

"Golly, Mr. Ambassador," the Cultural Attache's voice piped from the rear. "Maybe I'm mixed up, but aren't *our* Skweemans the same color?"

"Certainly not! Quite the opposite! The South Skweeman is characterized by a soothing overall tannish tone, tastefully set off with purply-green rosettes. Not the same at all."

"Yes, but —"

"Now, about the warts." The Ambassador pursued his point. "Note that this fellow has large blue ones,

with tufts of yellowish hair."

"But, sir — isn't that what the South Skweemans have?"

Treadwater smiled patronizingly. "A common mistake, Dimplick. Actually, the South Skweeman is adorned with somewhat smaller warts, bearing attractive tufts of *golden* hair."

"Oop, my mistakes, boss," a thin South Skweeman voice chirped from the direction of the projector. "Looks like I accidentally slipped in a shots of the South Skweeman Minister of Eats and Drinks. A nice likeness, too, made just before the mob got him." The image flicked out of existence and another, obscurely different, took its place.

"Well, I'm sure we all get the general idea, anyway," the Cultural Attache offered breathlessly, as Treadwater's face took on a dangerous shade of purple.

"Yeah — *these* are a shot of the common foe," the projectionist announced. "Boy, will you look at those look of ferocity?"

"Take it away!" Treadwater bellowed. "And I suggest you look to your labels, sir, before you create an international incident!" He yanked his pale violet lapels back in line. "Now, it's time to get on to the substantive portion of today's briefing." He beetled his brows at his audience.

"You're all aware that the success of our mission here depends on establishing the legitimacy of the government to which I — that is, we — are accredited. Namely, that of Free Skweem, formerly known as South Skweem. We are similarly aware that next month's plebiscite will determine once and for all whether the mantle of planetary leadership falls on the shoulder of our sturdy allies, the South Skweemans, or on the bowed backs of the North Skweeman insurgents, the satellites of the unprincipled Groaci."

"I have a suggestion," the Political Officer broke in excitedly. "We could hire some of the rougher local patriots to patrol the polling places, weeding out undesirables, distributing special disappearing ballots among the opposition and making a few minor adjustments to the counting machines to insure a victory for democratic processes!"

"This is no time for subtlety," Treadwater stated flatly. "We must impress the locals of both political persuasions with our superior capacity to bestow largesse. We need, gentlemen, a large and impressive symbol of Terran generosity and technical virtuosity. The floor is now open for your suggestions."

The Ambassador waited. The silence was profound.

"Gentlemen," Treadwater said ominously, "a full week has passed since I first requested suggestions from the staff — and as of today, the net response has been nil!"

A shuffling of feet greeted the accusation.

"A curious lethargy seems to have afflicted you, gentlemen." The Ambassador stared around belligerently. "This, while a certain foreign mission daily entrenches itself more securely, prestige-wise, by virtue of a certain probably illegal but nonethe-

less highly effective propoganda device. I refer, of course, to the dam the Groaci have bestowed on their North Skweeman toadies."

"I propose we build a dam too," someone said quickly.

"Wonderful notion," the Economic Officer rumbled. "About to suggest it myself —"

"Say, Charlie. you're hitting right in there this morning," a First Secretary offered. There were clucks and chuckles of admiration from the rest of the staff. Treadwater waited for the approbation to die down.

"The dam constructed by the Groaci engineers at the point where the river loops briefly into North Skweem," he purred, "has not only crippled South Skweeman commerce, but has effected a drought which is rapidly starving our brave allies into an advanced state of malnutrition, complicated by dust storms. Add to this the unfortunate flooding of that portion of the nation's farmland lying above the dam and we see, gentlemen, a striking example of creative public relations — unhappily, in the service of the opposition. Now —" he smiled thinly at the group — "will someone kindly tell me what possible detriment would accrue to our rivals if I were so ill-advised as to construct still another navigational hazard in what was once this nation's main artery of communication!" His voice rose to an apoplectic bellow on the last words. No one volunteered a reply.

A junior Third Secretary raised a hand timidly. Treadwell blinked expectantly.

"Ah . . . sir. The dam is creating a sizable lake, I understand. What do the Groaci have in mind doing with all that water?"

"Eh? Do? Nothing, of course!" the Ambassador snapped. "The entire project was designed merely to harass me! Or rather, us! The proud and independent populace of South Skweem, that is to say!"

"Oh." The young man subsided.

"Well, then," the Ambassador went on, icily calm now. "Let us try again, gentlemen, avoiding, if possible, the idiotic."

"Well, Mr. Ambassador, Project Proposals are a tricky proposition," the quavering voice of the elderly Press Attache offered. "There was quite a row kicked up in certain journals concerning that hundred-man bird bath the CDT built for the Quornt before we discovered they were allergic to water. And it will be quite a while before we live down the shoe factory we gave the Jaq, since they seem to have no feet to speak of. And there was a certain amount of criticism of —"

"I'm well aware of the history of the fiasco, as practiced by my colleagues," Treadwater cut him off glacially. "It is precisely for that reason that I am determined to present to Sector Headquarters a Proposal which will bear microscopic scrutiny, farce-wise. Now, thinking caps, men! I needn't remind you that we are caught between the mortar of Groaci expansionism and the pestle of Corps policy. If the government to which are accredited is not starved out from under us, we still face an unfilled Project Quota."

"Damned awkward, sir," Colonel Pluckwyn, murmured. "Couldn't we just give the beggars a touch of the old quirt? A small fractional megatonner, say, just to teach 'em their manners."

"Bomb Headquarters?" Treadwater looked astonished.

"Actually I was thinking of the North Skweemans, sir, but your suggestion has merit —"

"Colonel, I think you'd better report to the dispensary after Staff Meeting, for skull X-rays," Treadwater said bleakly. "I suspect the plates will come out blank. Now, let's move along to Mr. Magnan's report." The Ambassador glanced expectantly over the seated diplomats.

"Magnan? Where is the fellow, drat it!" The Ambassadorial eye fixed on Retief. "You, there. What's-your-name. Magnan's your chief, I believe. Where the devil is he?"

"Mr. Magnan failed to confide in me, Your Excellency," Retief said.

"Didn't your Excellency send him over to call on the Groaci Ambassador?" Dimplick queried.

"Of course," Treadwater agreed. "I instructed him to unobtrusively scout out the effects of the new dam under cover of the protocol visit. It is that on which I wish his report."

"Mr. Magnan went across the line into North Skweem, alone?" Retief inquired casually.

"I believe that is where his Groacian Excellency is usually to be found," Treadwater replied testily, glancing at his finger watch. "And he was distinctly directed to be back before tiffin time."

"The present crisis may have thrown off the tiffin schedule," Retief conjectured.

Treadwater frowned ominously. "Are you suggesting the scoundrels may have so far forgotten their protocol as to have *detained* an accredited diplomat in the performance of his duty?"

"*Something* seems to have detained him," Pluckwyn offered.

"I hope he didn't go sniffing too closely around the dam," the Political Officer said soberly. "Those North Skweemans can be pretty nasty. I saw some atrocity photos our visual aid people mocked-up, based on reliable rumors —"

"Oh, boy." The Press Attache doddered to his feet. "This'll make great copy, chief. 'TERRY ENVOY MURDERED . . .'"

"Who said any thing about murder, you cretin!" Treadwater roared. "I merely noted that the man is late for Staff Meeting!"

"Yes, I supose you're right." The Press Attaches sat down reluctantly. Then he brightened. "Still, if he hasn't shown up by sundown . . ." He began jotting notes on his scratch pad.

"Well, if there are no further follies with which to waste our time, that's all for this morning, gentlemen," the Ambassador growled. "But I shall be looking for results — prompt, dramatic results!" He swept the group with a final expectant glare, moved ponderously down from the shaky platform.

"Say, Mr. Retief," the young Third Secretary came up beside him as they stepped out into the hot, dusty sunlight. "What really *is* the difference between North Skweemans and South Skweemans?"

"Very simple, Teddy. South Skweemans are natural democrats."

"Oh . . ." The youth fell back as Treadwater beckoned Retief over.

"About Magnan," the Ambassador said off-handedly. "It's occurred to me the situation might bear looking into. Never can tell what these unprincipled foreigners might take a fancy to perpetrate — not that I think Magnan is any difficulty, of course. But I've been thinking possibly we might just dispatch someone to make sure."

"Excellent idea, sir," Retief agreed.

"Actually, I've been wondering whom I could spare long enough to attend to the chore." Treadwater put a thoughtful finger to his chins.

"Indeed, sir?" Retief encouraged.

"Frankly, *your* name popped into my mind."

"Very flattering, Mr. Ambassador. A pity you assigned me to do the liquor inventory. Otherwise I'd be delighted."

"Never mind the inventory — if you're sure you really feel you should go. . . ."

"Well . . ."

"Very well, then, if you insist. Though personally I think you young fellows spook too easily. Well, I must hurry along, Retief. Let me hear from you." He turned and strode away.

"How'd it go, Retief?" Uptakapacheenobufers called from his doorway.

"Predictably," Retief said.

II

The once-purple and verdant countryside of Skweem was a wan, sun-baked expanse of water-starved fields criss-crossed with the dusty gulleys of empty irrigation ditches. Tinder-dry stalks of mud-wheat stood in endless, arid rows across the cracked, concrete-like clay.

Retief studied the view as he steered the official ground-car with the CDT pennant flapping from the prow along the rocky road that paralleled the dry river bed, where stranded boats rested high and dry, their formerly bright paint and rigging as bleached and sere as the land. A few listless South Skweeman peasants waved spiritless greetings from the shade of their huts as he passed. Others merely stared with drooping visual organs.

It was an hour's drive to the heavy barbed-wire fence that marked the North Skweeman border. Retief pulled to a stop at the gate. A large, warty North Skweeman in official loops of braid decorated by dangling straps and medals undulated over, fingering a blast rifle of unmistakable Groaci manufacture.

"What's your problem, Two-eyes?" he inquired in Skweemish.

"Just a courtesy call," Retief replied in the same tongue. "Tell me, did you see another Terry pass here early this morning?"

The Skweeman's eyes shifted.

"Naw, nothing like that," he said flatly.

"This fellow would be hard to miss," Retief persisted. "Twelve feet tall, flaming red hair all over, three eyes —"

"Frinkle-fruit! The guy wasn't as big as you, and . . ." His voice trailed off.

"I see," Retief nodded. "Well, he was taking a birthday cake to the Groaci Ambassador, and it seems he lost the cherry off the top of it. We Terries are pitching in to help locate anyone who might have delayed him."

"Not me, Terry! I waved him through and he headed straight for town — thataway." He pointed along the road.

"Fine. I'll tell them you're clean, then."

"Gee, thanks, fella." The guard set his gun aside and opened the gate.

"Think nothing of it." Retief waved cheerily and drove through.

A mile and a half past the gate he encountered a small village, identical with its South Skweeman equivalent. Rows of grass huts, of various sizes depending on the status of their occupants, were arranged around a small grassed plaza in the center of which the public structures were grouped. As Retief pulled up to the tall, conical buildings which presumably housed the town officials, half a dozen uniformed North Skweemans came to the alert. One, more elaborately decorated than his fellows, wobbled forward and looked the car over with the air of a Customs officer tipped off to a load of contraband.

"What brings *you* here?" he demanded.

"I'm looking for the Groaci Consulate General," Retief said.

"Yeah? Where'd you lose it?" the Skweeman came back snappily.

"The last I heard it was neck-deep in North Skweeman internal affairs," Retief replied breezily. "But that's for you fellows to worry about." He looked around the somnolent town square. "I don't suppose you know where I might find a fellow Terry who wandered over the line while chasing a promotion?"

"You got that one right," the Skweeman nodded.

"Well, in that case I'll just move along and take a look at the dam the Groaci suckered you into letting them build on your property." He glanced along the line of the parched river-bed to the looming wall of concrete half a mile distant. "I see it's still holding. Water's about halfway to the spillway now, eh?" He looked thoughtful.

"Whattaya mean, suckered? That's the finest dam on Skweem!"

"Um," Retief said. "What's it for?"

"Huh? To hold back the water, whattaya think?"

"Why?"

"On acount of . . . so we can . . . I mean, it's for . . ." The Skweeman broke off. "Listen, you better talk to old Five-eyes personal; I mean, what's the big idea trying to pump me for military secrets?"

"Military secrets, eh? Well, that's interesting. Just what sort of illegal

military plans are you concocting over on this side of the line?"

"We got no illegal plans!"

"Any military plans are illegel," Retief said flatly.

"Who says so?"

"The CDT."

"Oh, yeah?"

"Uh-huh. And we have the military resources to back it up, if you'll goad us far enough. Starting a war ought to do it. And now, if you'll just sort of slither to one side, I'll get on with my business."

"Hey, you can't—" The North Skweeman's words were drowned in a cloud of dust as Retief gunned the car off toward the massive pile of the dam.

Retief parked the car on a stretch of bulldozed gravel on the shoulder of the hill against which the abutment was anchored. Carrying a pair of miniaturized 100x9 binoculars, he moved up in the shelter of a small shed housing the dam's power controls, looked over the scene below.

To the right of the massive concrete barrier a parched valley wound away toward the North Skweeman border. Patches of mud gleaming here and there at the bottom of the gorge were all that remained of the former river. To the left stretched a broad lake of blue-black water, its breeze-riffled surface reflecting the greenish late-morning sun. Under it lay a hundred square miles of South Skweem's best farm land, now forty feet deep in backed-up river water.

A narrow catwalk lined with pole-mounted polyarcs for night operations crossed the top of the dam. On the far side a crew of Skweeman construction workers in baggy ochre overalls toiled under the supervision of a spindle-legged Groaci engineer, putting the finishing touches on the job. Other Skweemans, heavy-laden, struggled up a trail across the steep slope from below like a column of ants. A touch of color met Retief's eye. He fine-focused the glasses, picked out the sagging shape of a small hut half-concealed in the brush near the base of the dam. Through its open door he saw the edge of a coil of wire, shelves, the corners of packing cases.

A Groaci supervisor stepped into the field of vision, closed the door, hung a lock on it, followed the workers up the trail. Retief lowered the glasses thoughtfully. Then, keeping low, he moved off in the concealment of deep brush.

It was a stiff climb down to the floor of the ravine. Retief completed it without arousing unwelcome attention. He came up on the supply hut from the rear. Nothing moved near it now. The lock looked stout enough, but the warped boards of the door were riddled with dry rot. At a sharp kick it bounced rattlingly open.

Inside, Retief looked over a stock of tools, reinforcing steel fittings, detonator caps, mechanical spares for the pumps — and a generous supply of compressed smashite: three-inch rods of a bilious yellow color, each capable of excavating a hundred cubic yards of hard rock in one blast. Quickly, Retief selected materials and set to work.

III

He left the shed ten minutes later, unreeling a coil of two-conductor insulated wire behind him. The ascent to the cliff-top took half an hour, by which time the workmen had completed the task at hand and were busily packing up their tools. Retief made his way up-slope to the control shed.

Its corrugated metal door stood half open. Inside, the floor was littered with snipped-off bits of wire, empty cartons that had contained switching gear and the butts of several dozen Groaci dope sticks. An inspection of the panels showed that the wiring was complete. Five more minutes' study indicated that the large white toggle switch beside the door controlled the polyarcs atop the dam.

Retief brought the ends of his wires into the shed, linked them into the lighting circuit. Against the gray floor, the insulated lines were almost invisible.

Back outside, he brushed loose sand over the wires leading up from below, then headed back to the car. He topped the rise, halted at sight of two bile-green cars bearing the crossed-oculars insignia of the South Skweeman Home Guard, parked across the bumpers of the CDT vehicle. There were eight armed Skweemans in sight, patrolling alertly around the blocked car, while a pair of Groaci stood by, dapper in Bermuda shorts and solar topis, deep in conversation.

As Retief strolled down to meet the reception committee, the locals swiveled to cover him with their guns. The two Groaci stared, their eye-stalks twitching hypnotically. Retief recognized one as a member of the Groaci diplomatic staff.

"Good morning, Lith," Retief greeted the Groaci Councillor as he came up. "Keeping busy, I see."

"To depart instantly," the Groaci diplomat hissed in his faint voice. "To explain at once this illegal intrusion on North Skweeman soil!"

"Which would you like first, the explanation or the departure?" Retief inquired interestedly.

"To make no jest of this red-handed crime, Terran interloper!" Lith whispered urgently. His multiple eyes fell on the miniature binoculars in Retief's hand.

"As I thought." He motioned to his Skweeman aides. "Your presence explains itself." He stepped back to allow the gun-handlers to close in. "Cover him," he ordered. "At the first false move, fire."

"You're in a devil-may-care mood this morning," Retief noted. "Given up all hope of advancement, I suppose, and want to go out in a blaze of notoriety by making an even bigger mistake than usual."

"What did you observe up there?" The second Groaci indicated the top of the rise.

"Just what's there," Retief replied easily.

The two Groaci exchanged glances, a feat they accomplished with one pair of eyes while keeping two on Retief and another on the Skweemans. Retief whistled in admiration.

"No signalling," one of them warned.

KNOW YOUR ENEMY

North Skweeman

"To poke your long Terry nose in once too often," Lith said. He made a curt gesture with a pair of arms. "Take him," he commanded the Skweemans.

"Before you do that—" Retief held up an admonitory hand—"maybe it would be a good idea to ask Lith what the future plan for North Skweem might be—if North Skweem has a future."

"Silence!" Lith keened. "To take care, Terry, not to tempt me too far!"

"Hey, talk Skweemish," one of the guards objected. "What are you two foreigners cooking up, anyway?"

"We're merely nattering of trivialities," Lith explained. "Now do your duty, fellows."

"Yeah . . . but I been thinking: this sapsucker *is* a Terry diplomat."

"Enough," Lith cut him off. "I assure you no complaints will be lodged by his associates."

The Skweemans closed in on Retief. "All right, big boy, let's go," the lieutenant said, poking his gun at the prisoner.

Retief glanced at the weapon. It was a heavy-duty power pistol, a Groacian copy of an early Terran type.

"Have you ever fired that thing?" he inquired interestedly.

"Who, me?" the Skweeman rotated a number of sense organs in a gesture expressing astonishment. "Heck, no. We got orders to only shoot at live targets." He looked meaningfully at Retief.

"A wise precaution. I understand that model blows up rather easily.

That's why the Groaci sold them to you at bargain prices."

"To make no attempt to subvert my minions!" Lith hissed.

"I wouldn't dream of it," Retief assured the ruffled diplomat. "I prefer minions who change sides on their own."

"You will have long to wait for that eventuality," Lith snapped. "In a cell which, alas, lacks most of the amenities."

"That's all right," Retief said. "Perhaps I won't be in it long enough to need them."

Lith vibrated his throat-sac, expressing amusement.

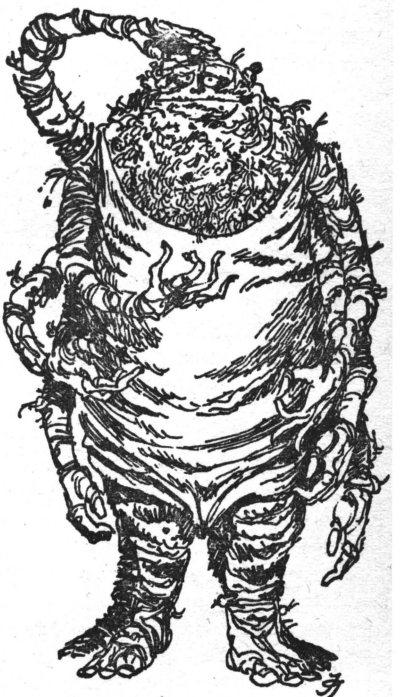
"You may be right, my dear Terry," he commented blandly. "Now, into your vehicle, and drive as directed, remembering that guns are upon you!"

Escorted by the two police cars, Retief drove the CDT Monojag at a sedate pace along the indicated route to the village, pulled it in before a low mud brick building with one small window set with metal bars. Lith and the Skweeman police surrounded him as he stepped out into the street. One of the cops peered into the interior of the Monojag.

"Hey, this is a fancy job," he commented. "What's that?" He pointed at a short red-handled lever labeled EMERGENCY LIFT. At his side, Lith goggled, then whirled on Retief.

"To explain at once!" he hissed. "Our intelligence reports have indicated that vehicles so equipped are capable of VTO and supersonic speeds! Why, then, did you permit

KNOW YOUR FRIEND



South Skweeman

yourself to be so docilely convoyed?"

"Well, Lith, maybe those reports you read were exaggerated," Retief smiled deprecatingly. "After all, your gumshoe brigades have to report *something*."

Lith snorted. "So much for the vaunted Terry technology." He turned to his troops.

"Lock him up."

The Skweemans closed in to box Retief, like alert, waist-high goblins modelled in blotchy clay; their guns prodded him along an alley to a small metal door set in the side of the brick building. The lieutenant opened it with a clumsy electrokey, waved him inside. The door clanked shut and a shadowy figure rose up, its face pale in the dim light.

"Retief!" First Secretary Magnan gasped. "You mean they captured you, too?"

"It seemed the simplest way to solve the problem of finding you," Retief said. "Now all we have is the problem of getting out."

III

The Skweeman sun was low in the sky now. A brisk, hot wind had sprung up from the north, whirling streamers of dust into the cell through the barred window from which Retief watched the activity in the street. Behind him, Magnan turned away, coughing.

"They're as busy as Verpp in moulting season," he sniffed. "No one is paying us the slightest attention. I suppose we may rot here for hours more before Ambassador Treadwell secures our release."

"There's just one cop patrolling the jail now," Retief said. "The rest of them have trooped off, arm in arm with their friends the Groaci. I think we picked a bad time for our calls; they're up to something."

"I can't think what's keeping him!" Magnan eyed his watch fretfully. "I'm missing my afternoon coffee break, to say nothing of dinner." He sighed heavily, settled himself on the floor.

"I simply can't grasp it," he muttered. "The Groaci are famed for their chicaneries, but open diplomat-napping broaches an entirely new field of rascality. Why, an honest diplomat won't even be able to nip around to troubled areas, picking up eye-witness impressions, without the risk of being treated as a mere spy!"

"On the other hand, if we join in the spirit of the thing—" Retief turned from the window— "We might find that it opens up novel avenues to us, too." He went across to the narrow door, leaned over to the barred, waist-high opening, and shouted for the guard.

"Good idea." Magnan got to his feet. "I think it's time we spoke sharply to these brigands. Just stand aside, Retief, and I'll drop a few broad hints." His voice faded as the fierce visage of the police lieutenant appeared beyond the aperture. Retief spok first:

"Do you have any idea what a blaster would do to you if I fired from this range?" he inquired. "Don't give any alarm," he went on as the speechless cop goggled into the dark cell. "Just quietly unlock the door — and be sure no one no-

tices anything unusual going on."

"B . . . b . . . b . . ." the Skweeman said.

"You can express your astonishment later," Retief said briskly. "Open up now, before I have to demonstrate how well armed I am."

"I . . . I didn't see any weapon on you when we brought you in," the jailer expostulated.

"Naturally; it's the sort of thing a fellow likes to keep secret. Hop to it, now. My trigger finger is twitching."

"I had to be a wise guy and volunteer to be a big shot," the Skweeman muttered to himself. Retief heard the scrape of the key in the lock. Tumblers clicked over. The door swung in with a dry squeak.

"Shhh!" Magnan put a finger to his lips, looked severely at the native as he sidled out past him. He looked both ways.

"The coast seems to be clear," he whispered as Retief lifted the cop's pistol from its holster. "Maybe you'd better let me have one of the guns."

"Hey!" The Skweeman waved several sensory organs in an agitated way. "I don't see any blaster — except mine!"

"Nothing wrong with your vision, anyway," Retief congratulated him. "Now we have to be running along." He looked thoughtfully at the local. "I really should shoot you . . ." he said judiciously.

"Sh . . . shoot me?" the Skweeman gulped. "But I've got a couple of dozen chicks ready to break through the shell any day now! Those little devils will have the hide off the old lady in five minutes flat if I'm not there to protect her when they hatch out!"

"On the other hand," Retief went on, "I *could* give you a break."

"Yeah!" the Skweeman breathed. "Now you're talking, Terry!"

"You just carry on as though nothing had happened. We'll go about our business and trouble you no more. I don't think you'll want to bother Uncle Lith by mentioning our departure; he might take the unreasonable attitude that you're in some way to blame. Just play them close to your medals and act innocent when they notice the cell's empty."

"You bet, boss. I always knew you Terries were gents. Between us, I never went much for that two-legged slicker —"

"Mind your derogatory references to the number of a being's limbs, sir," Magnan said stiffly. "Two legs appears to me to be an admirable endowment of such members."

"Sure, no offense, gents. Now, how's about beating it quick, before somebody comes along? And you better give me back my gun. Somebody might get nosy if I don't have it."

Retief ejected the power cylinder from the butt of the gun, dropped it into his pocket, handed the empty weapon over.

"We can't reach the car," he said to Magnan. "They towed it away to tinker with at leisure. We'll have to ease out the back way and see how far we get."

Keeping to the narrow alley, Retief and Magnan safely traversed a block of ragged grass dwellings,

emerged at the end of a long avenue that meandered down a slope toward the mile-distant fence marking the South Skweeman border, barely visible now in the late twilight.

"If there were just some way to cover that ghastly open stretch," Magnan muttered, "we could be safe in a matter of minutes . . ." He broke off, pointed at a flickering glow, a smudge of smoke rising lazily from a point near the gate where the road crossed the international line. "What's that? Dust, perhaps? Or smoke?"

"The wind's from the north," Retief said. "And there's nothing but twenty miles of dry mud-wheat between here and those haystacks housing our friends, the South Skweeman leaders. Something tells me that's a fire, Mr. Magnan — and not an accidental one."

"Fire?" Magnan gasped. "Great heavens, Retief — the capital is directly down-wind! They'll be roasted alive — the Ambassador, the staff, the South Skweemans — and no water anywhere to fight the blaze!"

"That's one way of influencing an election," Retief pointed out.

"Why, there's nothing to keep it from burning off the prairie all the way to the sea," Magnan blurted. "The entire country will be incinerated! There'll be nothing left of our allies but a pall of smoke!"

There was a scratchy Skweeman shout from behind the Terrans. They turned to see a policeman approaching up the alley on the run — a spectacle not unlike a cubic yard of olive-drab noodles rolling up-hill.

"Let's go," Retief snapped. He turned and ran for it, with Magnan pelting at his heels and a gathering force of pursuers baying on the trail.

"I't's . . . no . . . use," Magnan gasped as they toiled up the last hundred yards toward the mighty flank of the dam. "They're . . . gaining." He cast a look back at the mob of half a hundred North Skweeman patriots strung out in a torch-waving line halfway to the village.

"Just a little farther." Retief caught Magnan's arm and hauled him along. "You're doing fine."

They reached the top of the dam, massive and ominous in the darkness. A blaster bolt crackled blue nearby, from extreme range.

"Retief, we're not going to cross *that!*" Magnan stared in horror at the narrow unrailed catwalk that led out to disappear in darkness, the great black void on one side, the lapping waters slapping at the concrete on the other.

"Unless we want to be shot, we are." Retief started out at a trot. Magnan bleated, then followed, edging along flat-footed. Another shot chipped concrete behind him. He yelped and broke into a nervous canter.

They reached the far side, scrambled up the dry slope, lit only by the blasters that peppered them with flying gravel as the shots struck around them.

"Where are they?" a Skweeman voice sounded. "I can't see a thing; those Terries must have eyes like a weenie-bug!"

"Lights," someone else called. "Don't let 'em get away, boys!"

Retief stood, cupped his hands beside his mouth.

"Lith," he called. "A word of advice: don't light up!"

"We can't . . . hide here," Magnan gasped out. "No cover . . . and those shots . . . getting close!" He dived flat as a shot kicked up dirt almost at his feet.

"They won't find us in the dark," Retief said.

"But — they'll switch on the lights."

"There is that chance — but they were warned."

There was a shock through the ground that bounced both men three inches into the air. Then a deep-throated *tooom!* rolled from the abyss like chained thunder, as brilliant light flooded the entire length of the dam.

Retief raised his head, saw great chunks of masonry rising with languid grace high in the air. Atop the stricken dam, the few bold Skweemans who had started across dithered momentarily, then pelted for safety as the walkway subsided with dream-like majesty under them. Most of them reached the far side as the immense bulk of the dam cracked with a boom like a cannon; the rest dived for the glistening surface of the pent-up water, splashed desperately for shore as dust boiled up from the gorge, obscuring the scene of destruction.

Polyarcs still blazing bravely, the great dam crumbled, sinking from sight. Wave after wave of sound rolled across the slope. Rocks and pebbles thudded down near the diplomats. They gained their feet, sprinted for the top of the hill, then turned, watched as the surface of the artificial lake heaved, recoiling ponderously from the blast, then bulged toward the broached dam, formed a vast spout like translucent black syrup that arched out, out, over, and spilled down, foaming white now, plunging into the boiling dust. The ground shook as the incalculable tonnage of water struck far below. A roaring like caged dinosaurs bellowed upward from the gorge as the river poured back into its bed in a torrent that shredded concrete and steel from the broken rim of the dam like water dissolving dry mud. In a scant five minutes, nothing remained of the Great Groaci Dam but the denuded abutments, studded with the stripped ends of clustered reinforcing rods.

"Retief!" Magnan piped over the roar of the waters. "The . . . the dam broke!"

Retief nodded judiciously. "Yes, Mr. Magnan," he said. "I think you could say that."

IV

Retief and Magnan waded past the tattered remains of the tattered remains of the soggy huts thrusting up from the swirling, mud-brown waters that covered the site of the South Skweeman capital, inundated by the flood that had swept down so abruptly an hour earlier. Ambassador Treadwater stood with his staff before the remains of the Chancery hut, waist deep in the flow.

"Ah, there you are, Magnan." He turned to look disapprovingly at the new arrivals. "Remind me to speak to you about punctuality. I'd almost begun to wonder if you'd met with foul play. Even considered sending someone after you."

"Mr. Ambassador — about all this water —"

"Hark!" Someone raised a hand torch, shot its blue-white beam out across the water, picked up the low silhouette of an inflated dinghy on which a number of bedraggled, knobby-kneed Groaci crouched. Several Skweemans splashed forward to intercept the craft.

"Well, nice of you to drop in, my dear Shish," Treadwater called. "Most unfortunate that your engineers have apparently proved unequal to their task. Possibly their slide-rules were out of adjustment. Still their timing was good, conflagrationwise."

He smiled sourly as the staff chuckled dutifully.

"Bah, the design was flawless," Shish whispered as the raft bobbed on the ripples. "We were sabotaged!"

"Sabotage?" Treadwater surveyed the Groaci Ambassador as haughtily as his sodden puce cutaway would allow. "I think you are as aware as I that import of explosives to an emergent planet like Skweem is quite impossible, but for certain industrial types allocated to massive engineering projects."

"You suggest that Groaci detonants were employed in this dastardly fashion? Why, the very idea . . ." Shish fell sulkily silent.

"Confidentially, Retief," Magnan whispered behind his hand, "Just what do you suppose *did* happen to the dam?"

"Possibly someone got their wires crossed," Retief murmured.

"Now, Mr. Ambassador," Treadwater said. "I fear I shall have to expropriate your conveyance for official CDT use. I find it necessary to remove to my hill station at once to prepare my dispatches." He broke off as a muddy scarecrow faintly recognizable as the Agricultural Attache splashed up to join the group.

"Did you notice the current change, Mr. Ambassador?" he cried gaily. "The water's draining back into the river bed now — and the new channel cut by the flood runs just this side of the border. I fancy we'll have no more interference from these meddlesome Groaci — oh, it's Ambassador Shish," he nodded to the sodden dignitary. "Nice night, Your Excellency."

"Bah," Shish replied.

The attache was rubbing his hands together. "My preliminary study seems to indicate that the inundation has deposited a good six inches of new topsoil over a large portion of South Skweem. All scoured off Northern Skweem, of course, but then, they *will* allow defective dams to be built on their land . . ." His voice trailed off. He pointed across the rapidly receding waters. Amid much splashing, a large party of Skweemans was approaching at a rapid clip.

"G a d ! " Colonel Pluckwyn boomed. "We're being invaded!"

"Here, do something!" Treadwater

turned to Shish. "They're your allies! Tell them to go along quietly and we'll see about a handsome CDT reparation for any inconvenience—"

"I claim sanctuary!" Shish whistled in agitation. "Treadwater, it's your duty to protect me and my chaps from these soreheads!"

"They *do* appear somewhat irate." Magnan began backing away.

"Don't lose your heads, gentlemen!" Treadwater croaked. "We'll demand the privileges of honorable prisoners of war—"

"We haven't lost, yet," Retief pointed out.

"An excellent point, Mr. Retief." The Ambassador reached for the Groaci raft. "I hereby appoint you as a special committee to meet with these fellows and study their grievances. If you can drag the talks out for an hour, the rest of us will go for help."

"Quite an honor, my boy," Colonel Pluckwyn said, as he tumbled a faintly protesting Groaci over the side. "And you merely a Second Secretary."

"I don't think we should do anything hasty," Retief said. "Now that the North Skweemans have had a taste of Groaci sponsorship, they may be ready for our program."

Councillor Lith, showing signs of wear and tear, surfaced beside Retief, having been replaced by a Terran aboard the raft. "Some day, Terry, the truth of this affair will out," he hissed in faint Groaci ferocity.

"Why be pessimistic?" Retief responded. "If you play your cards right, the North Skweemans may never learn that the dam was placed so that when the basin was full you could open the flood gates and wipe out their capital along with anything that might have been left of South Skweem, leaving an open field for a Groaci take-over."

"What? Are you suggesting—"

"I'd suggest dawn as a reasonable deadline," Retief went on. "If you wade along with Ambassador Treadwater, you can get off a 'gram and have a ship in here to pick you up by then. I can't guarantee that I can keep it quiet much longer than that."

"Hey!" Dimplick shouted suddenly. "Look at the placard they're waving!" Retief glanced toward the approaching North Skweemans, coming up rapidly now.

"Why, those appear to be hastily lettered pro-Terry slogans," the Political Officer burst out.

"Have you lost your wits?" Treadwater rumbled. He peered through the gloom. "Hmmm. It appears you're right." He straightened his back. "Just as I expected, of course. I knew that my policies toward these fellows would bear fruit, given time." He shot Magnan a reproving look. "A pity you chose to go junketing just at the climactic point of the finesse. You missed a valuable lesson in diplomatic sublety."

Magnan opened his mouth, caught a look from Retief, closed it again.

"I'm sure we were all fooled by Your Excellency's apparent total inactivity, sir," he gulped.

"Exactly." Treadwater beamed around at the others as the front-

runners of the North Skweeman delegation arrived, uttering cries of delight and pledging eternal friendship. "It appears we'll have a solid electorate behind us, gentlemen! My job—that is to say, the future of Terran-Skweeman relations seems secure. Now, if we just had an adequate Project Proposal to offer Sector Headquarters, our cup would be brimming." He stepped forward, began shaking members left to right. "Sir!" Secretary Dimplick bounded forward. "I've a dandy notion! Why not build a new capital for United Skweem to replace the former city swept away by the flood?"

"Of course!" Colonel Pluckwyn chimed in. "My idea exactly; just waiting for an appropriate moment to mention it. I'd also suggest a massive aid program to rectify the other ravages of the disaster."

"Food!" the Agricultural Attache shouted. "I think I can justify a schedule of deliveries under the Chrunchies for Lunchies program that will keep two dozen Corps bottoms in use for the next fiscal quarter!"

"Superb, gentlemen!" Treadwater warbled. "I can see promotions all around—to say nothing of extra staff, monuments to Skweeman independence and democratic solidarity, larger operational budgets, and a magnificent new Terran Chancery rising from the ruins!"

"Say, Mr. Retief." The junior Third Secretary plucked at his sleeve. "I thought these North Skweemans were little better than dacoits and brigands; suddenly they're welcomed as bosom friends."

"True, they're a shifty lot," Retief confided as he accepted a moist Skweeman handshake. "But who are we to be choosy?" END

DRAFT DODGER

by KENNETH BULMER

The space battle raged out past the Crazy Suns. Only heroes could take part in it—so heroes must be made!

I

Right trusty and well-beloved Hugo Edward Lack
GREETINGS
By the power and duties invested in me as First Secretary to the Space Navy of Earth you are . . .

Even when you know you are going to be kicked in the stomach the boot still hurts.

Hugo Edward Lack read no more. The crisp official letter crumpled damply in his fingers. His bowels felt loose and he wanted to be sick.

He glanced guiltily across the wide low-ceilinged apartment room aswim with gaudy reflected color from the tridi in front of which his mother sat absorbed in a meretricious pseudo-life. One plump hand cradled a chocolate box, the other primped fussily at her mouth. As usual, nothing would disturb his dear mama until dinner time.

"I've ben conscripted to fight for the likes of *you*!" said Lack viciously. He wadded the call-up notice and flung it from him as though to disassociate himself from its implications. For Lack knew what was in store for him.

How many times he had enacted this scene in his mind's eye he could not compute. Once, even, he had madly imagined his mother dissolving in tears and flinging her arms around him, ready to defy the Terran Space Navy for her boy.

Lack's fertile brain began schema-

ing. Of course they would get the call-up notice to him through the ordinary postal channels. They would have proof he had received it through the automatic receipt system. But they had to lay physical hands on him before they could be sure he would docilely enter the slaughter house. Lack had long since made up his mind that no power of this Solar Federation would get him into a spacenavy man's uniform and send him off into the inhuman depths of space to fight either Takkat or Shurilala.

Jerky Jones should still be the man. He had conveyed in his twitching way his willingness to assist anyone at all who deserved it. That is to say, anyone with the money to pay—to avoid call-up. Draft-dodging had become big business.

No longer was it enough to be married, or to hold a permit to read for a degree, or even to possess some slight skill in a reserved occupation. For in this seventeenth year of the hideous TEST war—the fledgling combat among the stars of the three empires of Takkat, Shurilala and Earth—resources had been drawn on until even the seams of the bucket were being dismantled and processed for spatial warfare.

Hugo Edward Lack did not want to fight aliens. He did not want to don the proud uniform of the Terran Space Navy and fare forth on singing jets among the stars, shooting at aliens—and being shot; did not want to cash in on the current market trade-in value of one medal for one limb—or the big one if you never came home. He wanted to stay in his own little world and try to catch the happiness that always eluded him.

These were all very human desires on Lack's part; the natural aversion of any man to having portions of his anatomy shot away, to asphyxiate in a star battleship with the seams cracked open to the hungry nothingness, the blood boiling in his brain and steaming from his eyes.

Oh, sure, Hugo Edward Lack was afraid.

He had every right to be.

But in this seventeenth year of the insane conflict many men, although more afraid than ever Lack could fathom, volunteered to fight in space. They had discovered a truth that Hugo Edward would not admit existed. So now the boy planned and schemed ways to cheat the Draft Board without injuring himself.

As he left the room his mother picked up another chocolate, momentarily drawn from the tridi by some other movement in the room that impinged with faint impression on her consciousness. Then she popped the candy into her mouth and relapsed once more into the viewers' coma.

Jerky Jones welcomed young Lack with a smile and an outstretched hand, a business as usual briskness.

Jones twitched all the time. He explained casually that he'd never fully recovered from that time his destroyer had been caught in a full salvo by a Takkatian cruiser off Oban II. He never admitted that he

had never been in the spacenavy and the twitches came from a more mundane criminal reason. Now he welcomed Hugo Edward Lack like an old buddy, pulling up a stool to the bar in his crosstown dive, ordering a drink, smiling widely, one hand draped across the boy's shoulders like a comforting Father Christmas.

"You said—that is—" gulp—"you could help me."

"Sure, kid. Sure! Any time." The hard eyes took in Lack's trembling figure, the scrawny body and thin bony wrists, the uncertain Adam's apple, the weak plea for understanding in the murky eyes. "Sure. Called up, hey?"

"I'm not going! They can't make me! If my old man had been alive, he'd have stopped them."

"Your mom ain't bothered?"

"Her!" Lack shook at a lifetime's memories. "She couldn't wait to run out on my old man. When he went over the cliff in his car she dialed the bank. Her!"

Jones rose from his seat and, jiggling, led the way through to a back room. Here he told Lack to sit down, his voice jabbing suddenly like an unexpected splinter in a handrail. "Siddown, kid, and watch."

Lack sat, frightened anew, apprehensive of the immediate moment. The fear of space had grown in him over the years, fed by newsreels and stories from the fronts until it had assumed the guise of an ever-present dream nightmare, an inward landscape lividly illuminated by the fire of broken spaceships and the glow of burning cities.

"Look at the screen. No tridi. Duodimensional is enough for this."

Lack watched, shaking.

The screen showed a man with one arm replaced by a prosthetic limb that rapidly and dexterously manipulated complex equipment.

"That's no good any more. Nor are feet and legs. They kin fit a prosthetic limb better'n the one I'd chop off."

Lack choked.

The frame shifted. A youth sat in a chair, drooling, fed by a nurse; he regurgitated and lolled and messed all down his plastic bib.

"They got wise to that one. Whatever I do to your brain they'll undo, if it's on a temporary basis. That feller wanted a permanent. When I'd finished with him he couldn't be put back arights. He's never going into space, though."

"No!"

"You can't be too squeamish, son, if you want out."

"But surely there is another way! A false identity, that's all I want! Cards, ident ticket—you know."

Jones chuckled cruelly. "Sure I know. I ain't gonna say it can't be done. You know the ident checkouts they have now. Every single human being is tabbed. No—I won't say it can't be done—of course it's been done—but you don't have that kind of money, kid."

"How much?"

"Don't waste my time. Look—I can screw your insides around, fix it so's you can't keep Navy rations down. They'll refix you up; but it'll

take time. And this fool war can't go on much longer."

"Does it—" Lack wiped his lips —"does it hurt?"

"Well, of course it hurts! You can't monkey around with a man in this day and age and fix him so he's a no good without it hurting! We've been hundreds of years breeding one hundred per cent fit human beings. And you want me to wind the clock back and turn out a four F in a coupla minutes!"

"What about you—your—jerking—"

"I'm a combat vet. They won't touch me. I'm past the zone. My twitches have nothing to do with it. You don't get twitches like these without being through the mill, son." Jones leered. "I could fix a feller with false service records and twitches—but you ain't got that kind of money."

"I heard a guy say you'd never been in the Navy, Jerky. He said your combat weariness came from drugs."

"I don't want to hear no more of that! You want out of the service you pay the cash. Do I snarl up your guts or don't I?"

Lack rose unsteadily. "You know I'm straight out of engineering training," he said. The room kept jumping about and his eyes stung. "My mother keeps me, is all. I've saved a little—"

"We could do this on the piecemeal basis. But in the end they'll get you."

"What am I to *do*?"

"Pay me and I'll screw you up. You haven't enough for a permanent fix." Jones shut off the screen. "Or you can be the big hero and go off with the bands and flags and join up. Suit yourself."

"But it hurts . . ."

"So?"

"I'll have to think about it."

"See you when you've made up your mind. I'm in no hurry. But remember—" Jerky Jones leaned forward and his twitching nose pointed at Lack—"they're in a hurry!"

"Them! It's always they! Who are they!" Lack turned blindly from the room, stumbling, hating what he could see within himself and yet quite unable to act otherwise.

He ran through the dark streets as a hunted animal runs. In truth, he was a hunted animal.

The dark fantasies tortured his mind. He could maim himself but 'they' would machine him into a stronger frame than he had had before. He could blind himself and 'they' would graft on new eyes. Jerky Jones could so manipulate his mind that he would reach the terminal zone of life while still a young man. He would never have to go into space then; he would end his days on a stool being fed gruel and slobbering it down his bib.

"Perhaps," he whispered. "Perhaps I could work myself a cushy billet. Maybe I could fix it so I'd be posted to a safe job on planet. I could try."

Fear has its own built-in determining factors and its own inverted drive.

As a boy he'd always been ner-

vous, of course, and his mother's incurable nagging had eaten into the core of his persona so that he could not believe in himself as an individual. He stayed isolated and aloof in a private, makebelieve world he created for himself, peopled with the adolescent fantasies he culled from dreams and magazines and books and the tridi. He gradually withdrew from the possibility of normal meaningful human relationships. He failed to believe that any human relationship could be normal. Everything from him clouded over with the belief in the meaninglessness of the universe, the frailty of his life and the eventual terminal entropy of humanity.

His black distorted shadow gibbered before him as his thin limbs jerked him down the street and a twin leering shadow pursued him as he fled. The police prowl car could not fail to spot him. The turbines whined low as the car cut across from an upper airlane and settled down plumply before him.

Lack could only just halt his legs, imbued as they were with this fierce fear-crazed desire to flee from terrors he knew too much about. His hands raked out across shining paintwork, his mouth working, his lungs charging his body like a bellows.

"Hey there, young feller. What's all the rush?"

Calm, square-faced men studied him as though their flash in truth impaled him like an insect on a pin.

They knew, those policemen.

They saw.

They were gentle with him; but they took him just the same.

Lack lolled in the back seat and slowly let his dissolving mind slip down easily and sweetly into a gray unconsciousness in which there could be no space and no terror.

One policeman said: "Scared out of his wits about joining up. Been to see Jerky Jones for a fortune. Filth!"

The other counterpointed in a lower key: "Jones would do nothing for him. No cash. We'll pick Jones up one day—and when we do . . ."

"Filth," said the first bitter voice again. "When I think of my boy dropping down with the Marines onto Sheldon III! My Ned dropping down into hell—"

"It easn't easy to understand. But one day this war has to end. It's got to. Even aliens must have the common sense to see that."

The police prowl car flitted like a shadowy bat into police headquarters. But Hugo Edward Lack knew nothing of what happened to him until he awoke in a strange bunk with metal bulkheads pressing in, rust streaks fanning from boltheads, the light dim and heavily shielded, the smell of oil and stale air and human sweat pulsing in his nostrils to the rhythm of his labored breathing.

Quiet unemphatic men clad in space navy whites came for him. They took him before the captain. Stupidly, Lack lolled before the desk, his eyes seeking reassurance from the decking at his feet and finding none.

"Many men are frightened at

what they imagine will happen to them in space, Lack." The captain's pouched eyes and furrowed, ravaged face gave all the compassion the captain could feel for this petrified boy. The captain had passed the point at which he could lie to new recruits. As officer in charge of recruit training he could only feel thankful that his job did not encompass the final awful indoctrination of the stream of young men who passed through his hands.

Lack was processed through Terran Space Navy channels; given a clean white uniform and a little round crewman's hat, categorized spaceman fourth class, inoculated and vaccinated and psychonated, given his kit and parted from all but a quarter inch of his hair. He was talked at, shouted at, drilled, ordered about, taught to salute an officer and on his own account learned to keep out of sight when not on duty. All this happened to Lack in a gray haze. He tolerated the absolute invasion of his privacy only because his last garbled thoughts before the police prowl car caught up with him stuck like a faulty record in his mind, endlessly reverberating: "I can work myself a cushy billet. I can fix a safe job on a planet."

By this time he was not, evidently, the same Hugo Edward Lack who had sought the dubious help of Jerky Jones.

He had managed to lift one fragmentary corner of the new life awaiting him and he had survived. Life in the space navy might be toughening, coarse, sometimes brutal, always demanding that a man pull out all the stops and prove he could do more than he thought he could, giving him no physical privacy but leaving his mind free to roam as it would during off-duty hours, this life might do all these things; but it was still life. He breathed and ate and drank and knew himself to be a man.

The fear had not been allayed, had not been slaked. The fear still existed as concretely as ever it had. But through the sheerly mechanical repetition of navy life the fear had been bypassed, almost tricked, put, as it were, into cold storage, dumped into suspended animation.

Lack faced the world with a patinaed personality grafted onto him by the space navy. He did not fear to drill and to learn the ropes, to be told what to do and what not to do. In some routine way the fear of combat in space that had hag-ridden his dreams for so long had been pushed vaguely into a never-never future. He was in the navy — but, of course, he would never be called on to fight.

They processed Lack on that most beautiful of alien worlds around swarming Cygnus, Charmian.

On Charmian's surface no one for a single instant would imagine themselves to be on Earth; but Charmian felt good and was a planet where a man could still remember Earth and yet feel the thrill of being on an alien world. Charmian soothed.

"Details for posting," said the

captain one day when Lack had been, to his own surprise, re-graded spaceman third class. "You are all going to different training centers for final indoctrination." The petty officers began calling out the names. The only one that mattered to Lack was: "S/man Third class, Lack, Hugo Edward. Lorimer. Assistant storekeeper."

Lorimer.

Lack had never heard of the place. With the number of planets eternally orbiting their parent suns swimming in even this tiny sector of the Galaxy, that was not surprising.

The shuttle dropped down from the transport, taking Lack onto a world stark and frozen, peaked and ridged, bathed in an atmosphere that would lacerate a man's throat and flay his lungs. Lack took over his duties, accounting for the man-made mountains of stores in their neat warrens below the surface. He shut his mind to what lay on the surface and narrowed his whole attention to the stores. Some naive intuition told him, that way lay safety.

On the surface Lorimer was a hell-planet. But Lack would not venture onto the surface. And he was not in space, not aboard a battleship with his unpleasant and lingering evisceration in imminent prospect.

Lorimer was of no real value to Earth until it had been terraformed into some semblance of terrestrial conditions and so was of no use either to Takkat or Shurilala; yet it was in the nature of this first TEST war when the three immature space empires stumbled into helpless interstellar war that it should be fought over and cherished merely because it was. As the only planet of a sun occupying a relatively empty portion of space Lorimer's sole claim to fame lay in its use as a way station and refueling and maintenance base.

Lack counted engineering stores and kept his records and tried not to think too much.

On the surface Lorimer flamed through spectacular sunsets when the drifting gas lent a blurred chiaroscura overlay to the cruel peaks, when the whole planet lay bathed in dun ochreous luminosity. Lack would have none of this. He cowered, counting his stores in the deepest recesses of the man-made shelter, thankful to be safe in the womb of the earth — even though this earth was not Mother Gaea.

News of the battle reached the men on Lorimer whilst that great and terrible conflict still raged in the gulfs of space around the Crazy Suns and whispered reports of tragedy and victory fluttered like desiccated moths through the underground base. Apprehension stalked the galleries.

The medical officers made doubly sure that everyone took the little orange pills. Ostensibly a specific against extra-terrestrial claustrophobia, they were well known to give courage and deaden fear, and Lack swallowed his down with a loving revulsion that science could take from him his basic feelings and by

treachery expose him to dangers his waking mind would shrink from. But for Lack even the orange pills could give no courage and no surcease from the fear that was a part of himself, for if that fear could be destroyed it would destroy Lack.

The battle around the Crazy Suns went badly for the Terran Space Navy. Battered units spun wildly from that epicenter of violence. Triumphantly and with bared fangs the wolves of Shurilala and Takkat hounded the men of Earth across the parsecs.

On the seventh day Lieutenant Commander Paul Glinka, duty officer, observed a closing bogey on the radar plot and alerted the operations crew. The base on Lorimer prided itself on its speedy handling of ships and men; it was not geared to fight anything more lethal than a red-tape snarl-up in communications. But, in keeping with any respectable Terran Navy base, it possessed its quota of armaments. When the bogey turned out to be TSS *Augusta,* Lack was not alone in feeling a shivery crawl of relief.

Augusta swept in from space too fast, grazed atmosphere, bounced, tried again, barreled smoking into the ochre desert of Lorimer a quarter of the way around the planet from the Terran base.

The problem then presented to the base commander resolved itself simply into the decision to send a planetary flier out to pick up survivors. Lieutenant Commander Glinka took off on that duty. As one of his crewmen went Hugo Edward Lack.

Of course, Lack did not really believe he had been sent on duty in a flier out over Lorimer's surface. The triple turbines flung the aircraft across that dun monotonous surface, boosting to rise clear of razor peaks, howling on its mission of mercy. But Lack sat in his seat with his straps tightly buckled, surrounded by other men just as quickly snatched up from the base, refusing to believe he was where he was.

Everyone knew that a Shurilala force had been following *Augusta.* If the rescue craft could carry out its job and return to the base before the aliens arrived, all would be well. The base was camouflaged to avoid alien discovery. If they did not — oh, no! Hugo Edward Lack didn't really believe he was at last facing the final accounting.

The flier circled the stranded cruiser once, then flattened out and made a perfect landing. Piloting these planetary craft was child's play; a matter of punching the right colored buttons to follow the sequence of evolutions required. Red dust puffed fluffily as the jets died. The landing ladder extended, dural gleaming jaggedly under the alien sun. Clad in standard issue spacesuits the men disembarked.

Augusta had been a light cruiser of the *Heraklion* class, swift and rapierlike; now she lay a crumpled mess looking like a heap of discarded tinfoil. From cracks fissuring her sides men in spacesuits had staggered out, stood now dumbly waiting for the flier to carry them back to safety.

One of those dazed men was Harold Crespigny, civilian, historian attached to the Ninth Fleet. As the rescue went smoothly through its opening phases no one noticed that Lack had not stepped out with the others, that he remained cramped and knotted in his seat.

Over the low-power limited radius suit sets Crespigny reported bleakly to Lieutenant Commander Glinka.

"As a civilian, Commander, I want you to take care of the navy men first. They've had it pretty rough. There are more in the ship. We'll need help with them."

Glinka motioned to his men. Stretchers were carried in — and with them went the grab bags for the dead.

After that early futile episode with Jerky Jones there had been no dramatics in Lack's fear. He might have sat there in the flier until the rescue had been completed as he had sat through all that had happened to him so far in the Navy, had not the radio spat its startled warning.

"Alert. Alert! Shurilala force now resolved as two Ogre class heavy cruisers. Landing seems contemplated by use of jets. Effect rescue mission top priority . . ." The young voice on the radio hesitated, then snapped back with a sharper bite: "As you were! Spread out and take cover! Do not attempt return! Keep out of sight!"

Glinka's hookup repeated the orders through his helmet phones. Men began to scatter away from the wrecked cruiser. Harold Crespigny moved with the others, saying: "I only hope their bombs hit the target! Any band spread and we'll catch a packet."

"Just so long as they don't trace the base. We mustn't give them an inkling we're on this planet to stay."

No one felt it necessary to mention the chances they were taking; a run for the base would bring the aliens down in fury and destruction on their necks so all they could do was take cover and hope the Shurilala would not use nuclear weapons. The chance was slight; but it existed.

Glinka put it into panting words. "They're out to smash up *Augusta,* so they won't use N.P. bombs. But if they spot the base the N.P.'s will come down from a great height."

Lack heard the orders and he saw those running men. He felt detached from all that. He had to do one simple thing. He had to get back underground, to the cosy safety of the manmade base. It was very simple. No problem at all except he would have to hurry.

He punched the firing pattern with only two errors and erases and the flier lifted off with a growling smother of red dust. Lack sat back in the pilot's throne and thought about the forms he would have to fill in to cover the loss of equipment sustained this day.

Just where the Takkatian needlescout came from no one knew — either then or afterwards. Those jagged, tough, edgy men of Takkat always liked to bludgeon their way about space. She catapulted over

the horizon, saw Lack's flier and needled in lethally.

Lack idly punched the evasive action buttons and went back to thinking about his forms. The flier jinked all over the sky followed by the Takkat scout. Rapidly they dwindled towards the far horizon — and straight towards the two Shurilalan Ogre class cruisers dropping down on thumping jets, their peculiar ring-mounted stability jets firing in unison, high and starkly visible against the bilious sky.

To Crespigny, watching with the sweat clammy on him, those Shurilala cruisers looked obscenely like fat cows, tails in the air, rumps flaunting, ready to squat and squash the life out of him. The Takkat did not hesitate for a microsecond; it is not in the nature of Takkatians to wait before jumping into a fight. The Shurilala are the smooth, cunning, devious aliens of the starlanes.

The Takkat's twin multi-cannon clipped out on outriggers, and like the needle for which the scout was named, she went straight in at the nearest Shurilala. Flames spread thickly in the soupy atmosphere; enormous discharges of electricity boiled off, the vast thunder of alien-created lightnings split the sky.

The alien from far Takkat knew he had no chance against two cruisers; but he was a Takkat and so he bored in with everything he had. He brewed up the first Shurilala and crippled the second in a shredding of metal and a flowering of flame-tipped debris even as his own craft dissolved into a shattered mass dripping ruin.

Naturally enough there was nothing of Lack or his flier to be found anywhere.

Harold Crespigny let out a long shaky sigh. "Lack, did you say his name was? Well, he didn't lack guts. He sacrificed himself deliberately to draw that Takkat onto the two Shurilala. He made the right decision and he made it fast."

Glinka shook his head wonderingly. "I'd never have figured Lack for a hero type. But he surely saved all our skins today. Now we'd better call base and have them sort out what's left of that Shurilala and pick us up."

The men of the Navy were not fools. If they suspected the real reasons behind Lack's apparent suicidal heroism they did not voice them. Earth needed her heroes. The war machine had to be glamorized any way possible. If a lonely, frightened, almost paralyzed boy could fit that role — he would be elected a Hero of Terra.

They sent the medal to his mother. She was watching tridi at the time and the medal slipped down behind the box of chocolates. "I always knew Huey was a good boy," she said, munching a fresh candy. "I'll pick up his medal as soon as this program is finished." END

The Moon Is a Harsh Mistress

by ROBERT A. HEINLEIN

Illustrated by MORROW

Earthmen didn't hate Luna. Not a bit! They loved it — just as tigers love a tender young kid!

XXVII

Woke up scared silly in pitch darkness. "Manuel!" Didn't know which end was up. "Manuel!" it called again. *"Wake up!"*

That brought me out some; was signal intended to trigger me. Recalled being stretched on a table in infirmary at Complex, staring up at a light and listening to a voice while a drug dipped into my veins. But was a hundred years ago, endless time of nightmares, unendurable pressure, pain.

Knew now what no-end-is-up feeling was; had experienced before. Free fall. Was in space.

What Has Gone Before —

We Lunarians have put up with a lot from Earth, but time comes when we don't want to put up with more. Earth tells us what we can sell, who we sell it to, how much we can get for it. Means slavery.

But . . . Earth owns us outright. Question is, what can we do about it? I don't mind a gamble — wouldn't mind fighting Earth with a chance to win — but with no chance, no. Luna has no warships, Earth has plenty. Luna has no armies. Earth has armies to burn.

Most of all, Luna is run by big computer, and Earth owns the computer.

But there's one thing Earth doesn't own — me. And it just so happens that I'm the fellow that fixes the computer . . . and the computer is my good friend I call Mike!

So maybe — just maybe — we Lunarians can do something at last.

So we invent mythical leader named "Adam Selene" — is really Mike — and start rolling. Only one problem: Need help on Earth. That's the hard one, because earthworms I don't know, neither does Mike, neither does any good Loonie. Don't know where to look . . . until chance delivers one into hands, when group of stilyagi kids ask permission to kill him. I save his life, never regret it. Name is Stuart LaJoie and is high-power VIP earthworm indeed.

With him, revolution is good chance. But best chance comes when Company overplays hand. Couple guards rape girl, get killed — fight is on. Now somebody else has to go down to Earth, in cargo pod, like sack of wheat. . . .

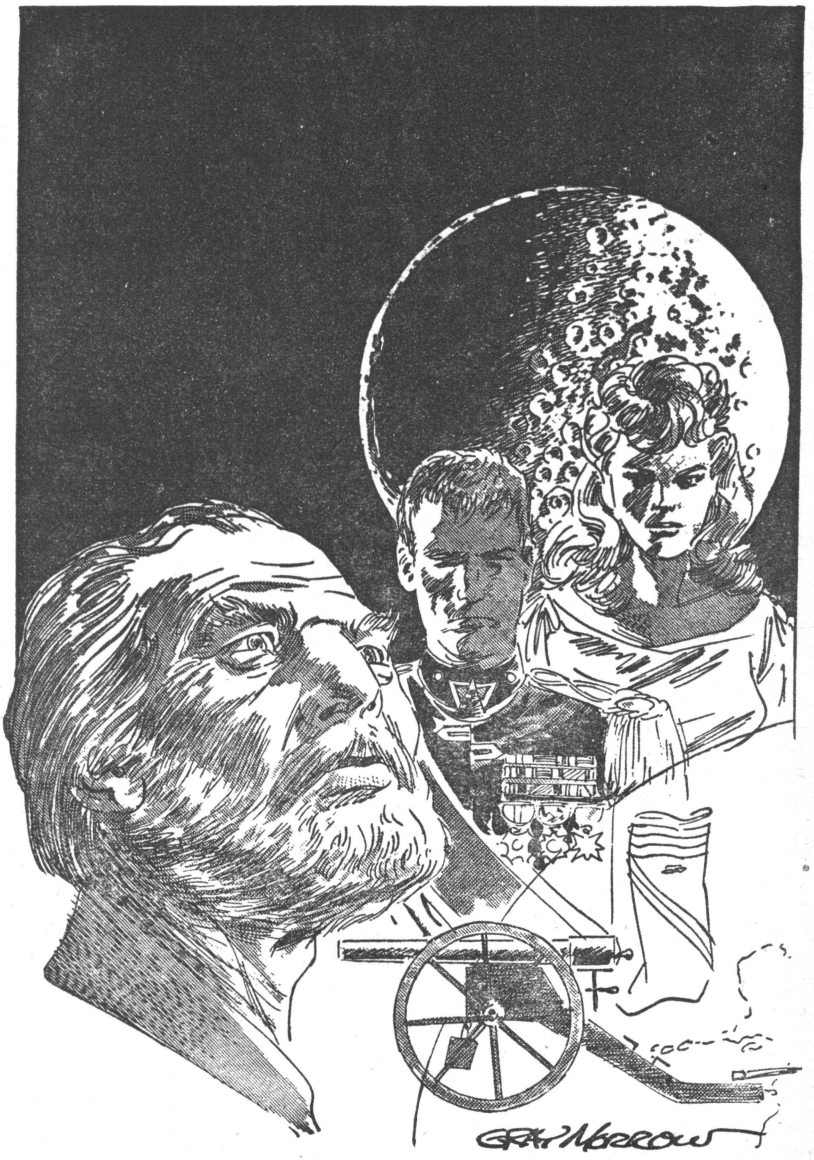
Turns out "somebody" is me!

What had gone wrong? Had Mike dropped a decimal point? Or had he given in to childish nature and played a joke, not realizing would kill? Then why, after all the years of pain, was I alive? Or was I? Was this normal way for ghost to feel, just lonely, lost, nowhere?

"Wake up, Manuel! Wake up, Manuel!"

"Oh, shut up!" I snarled. "Button your filthy king-and-ace!" Recording went on; I paid no attention. Where was that reeking light switch? No, doesn't take a century of pain to accelerate to Luna's escape speed at three gravities, merely feels so. Eighty-two seconds — but is one time when human nervous sytem feels every microsecond. Three gees is eighteen grim times as much as a Loonie ought to weigh.

Then discovered those vacuum skulls had not put arm back on. For some silly reason they had taken it off when they stripped me to prepare me and I was loaded with enough don't-worry and let's-sleep pills not to protest. No huhu had they put it on again. But that dreck-lich switch was on my left and sleeve of p-suit was empty.


GRAY MORROW

Spent next ten years getting unstrapped with one hand, then a twenty-year sentence floating around in dark before managed to find my cradle again, figure out which was head end and from that hint locate switch by touch. That compartment was not over two meters in any dimension. This turns out to be larger than Old Dome in free fall and total darkness. Found it. We had light.

(And don't ask why that coffin did not have at least three lighting systems all working all time. Habit, probably. A lighting system implies a switch to control it, nyet? Thing was built in two days; should be thankful switch worked.)

Once I had light, cubic shrank to true claustrophobic dimensions and ten per cent smaller, and I took a look at Prof.

Dead, apparently.

Well, he had every excuse. Envied him but was now supposed to check his pulse and breathing and suchlike in case he had been unlucky and still had such troubles. And was again hampered and not just by being one-armed. Grain load had been dried and depressured as usual before loading but that cell was supposed to be pressured. Oh, nothing fancy, just a tank with air in it. Our p-suits were supposed to handle needs such as life's breath for those two days. But even best p-suit is more comfortable in pressure than in vacuum and, anyhow, I was supposed to be able to get at my patient.

Could not. Didn't need to open helmet to know this steel can had not stayed gas tight. Knew at once, naturally, from way p-suit felt. Oh, drugs I had for Prof, heart stimulants and so forth, were in field ampules; could jab them through his suit. But how to check heart and breathing? His suit was cheapest sort, sold for Loonie who rarely leaves warren; had no read-outs.

His mouth hung open and eyes stared. A deader, I decided. No need to ex Prof beyond that old limen; had eliminated himself. Tried to see pulse on throat; his helmet was in way.

They had provided a program clock, which was mighty kind of them. Showed I had been out forty-four-plus hours, all to plan, and in three hours we should receive horrible booting to place us in parking orbit around Terra. Then, after two circums, call it three more hours, we should start injection into landing program — if Poona Ground Control didn't change its feeble mind and leave us in orbit. Reminded self that was unlikely; grain is not left in vacuum longer than necessary. Has tendency to become puffed wheat or popped corn, which not only lowers value, but can split those thin canisters like a melon. Wouldn't that be sweet? Why had they packed us in with grain? Why not just a load of rock that doesn't mind vacuum?

Had time to think about that and to become very thirsty. Took nipple for half a mouthful, no more, because certainly did not want to take six gees with a full bladder. (Need not have worried; was equipped with catheter. But did not know.)

When time got short I decided

couldn't hurt Prof to give him a jolt of drug that was supposed to take him through heavy acceleration, then, after in parking orbit, give him heart stimulant — since didn't seem as if anything could hurt him.

Gave him first drug, then spent rest of minutes struggling back into straps, one-handed. Was sorry I didn't know name of my helpful friend; could have cursed him better.

Ten gees gets you into parking orbit around Terra in a mere $3.26x\ 10^7$ microseconds; merely seems longer, ten gravities being sixty times what a fragile sack of protoplasm should be asked to endure. Call it thirty-three seconds. My truthful word, I suspect my ancestress in Salem spent a worse half minute day they made her dance.

Gave Prof heart stimulant, then spent three hours trying to decide whether to drug self as well as Prof for landing sequence. Decided against. All drug had done for me at catapulting had been to swap a minute and a half of misery and two days of boredom for a century of terrible dreams — and besides, if those last minutes were going to be my very last, I decided to experience them. Bad as they would be, they were my very own and I would not give them up.

They were bad. Six gees did not feel better than ten; felt worse. Four gees no relief. Then we were kicked harder. Then suddenly, just for seconds, in free fall again. Then came splash which was *not* "gentle" and which we took on straps, not pads, as we went in head first. Also, don't think Mike realized that, after diving in hard, we would then surface and splash hard again before we damped down into floating. Earthworms call it "floating" but is nothing like floating in free fall; you do it at one gee, six times what is decent, and odd side motions tacked on. *Very* odd motions — Mike had assured us that solar weather was good, no radiation danger inside that Iron Maiden. But he had not been so interested in Earthside Indian Ocean weather; prediction was acceptable for landing barges and suppose he felt that was good enough — and I would have thought so, too.

Stomach was supposed to be empty. But I filled helmet with sourest, narstiest fluid you would ever go a long way to avoid. Then we turned completely over and I got it in hair and eyes and some in nose. This is thing earthworms call "seasickness" and is one of many horrors they take for granted.

Won't go into long period during which we were towed into port. Let it stand that, in addition to seasickness, my air bottles were playing out. They were rated for twelve hours, plenty for a fifty-hour orbit most of which I was unconscious and none involving heavy exercise, but not quite enough with some hours of towing added. By time barge finally held still I was almost too dopy to care about trying to break out.

Except for one fact. We were picked up, I think, and tumbled a bit, then brought to rest with me upside down.

This is a no-good position at best

under one gravity; simply impossible when supposed to (a) unstrap self, (b) get out of suit-shaped cavity, (c) get loose a sledge hammer fastened with butterfly nuts to bulkhead, (d) smash same against breakaways guarding escape hatch, (e) batter way out and (f) finally, drag an old man in a p-suit out after you.

Didn't finish step (a); passed out head downwards.

Lucky this was emergency-last-resort routine. Stu LaJoie had been notified before we left; news services had been warned shortly before we landed. I woke up with people leaning over me, passed out again, woke up second time in hospital bed, flat on back with heavy feeling in chest — was heavy and weak all over — but not ill, just tired, bruised, hungry, thirsty, languid. Was a transparent plastic tent over bed which accounted for fact I was having no trouble breathing.

At once was closed in on from both sides, a tiny Hindu nurse with big eyes on one side, Stuart LaJoie on other. He grinned at me. "Hi, cobber! How do you feel?"

"Uh . . . I'm right. But oh *bloody!* What a way to travel!"

"Prof says it's the only way. What a tough old boy he is."

"Hold it. *Prof* said? Prof is dead."

"Not at all. Not in good shape — we've got him in a pneumatic bed with a round-the-clock watch and more instruments wired into him than you would believe. But he's alive and will be able to do his job. But, truly, he didn't mind the trip; he never knew about it, so he says. Went to sleep in one hospital, woke up in another. I thought he was wrong when he refused to let me wangle it to send a ship but he was not — the publicity has been *tremendous!*"

I said slowly, "You say Prof 'refused' to let you send a ship?"

"I should say 'Chairman Selene' refused. Didn't you see the dispatches, Mannie?"

"No." Too late to fight over it. "But last few days have been busy."

"A dinkum word! Here, too. Don't recall when last I dossed."

"You sound like a Loonie."

"I *am* a Loonie, Mannie, don't ever doubt it. But the sister is looking daggers at me." Stu picked her up, turned her around. I decided he wasn't all Loonie yet. But nurse didn't resent. "Go play somewhere else, dear, and I'll give your patient back to you — still warm — in a few minutes." He shut the door on her and came back to bed. "But Adam was right; this way was not only wonderful publicity but safer."

"Publicity, I suppose. But 'safer'? Let's not talk about!"

"Safer, my old. You weren't shot at. Yet they had two hours in which they knew right where you were, a big fat target. They couldn't make up their minds what to do; they haven't formed a policy yet. They didn't even dare not bring you down on schedule; the news was full of it, I had stories slanted and waiting. Now they don't dare touch you, you're popular heroes. Whereas if I had waited to charter a ship and fetch you . . . well, I don't know. We probably would have been or-

dered into parking orbit; then you two — and myself perhaps — would have been taken off under arrest. No skipper is going to risk missiles no matter how much he's paid. The proof of the pudding, cobber. But let me brief you. You're both citizens of The People's Directorate of Chad, best I could do on short notice. Also Chad has recognized Luna. I had to buy one prime minister, two generals, some tribal chiefs and a minister of finance — cheap for such a hurry-up job. I haven't been able to get you diplomatic immunity but I hope to, before you leave hospital. At present they haven't even dared arrest you; they can't figure out what you've done. They have guards outside but simply for your 'protection'. And a good thing, or you would have reporters nine deep shoving microphones into your face."

"Just what have we done? — that they know about, I mean. Illegal immigration?"

"Not even that, Mannie. You never were a consignee and you have derivative PanAfrican citizenship through one of your grandfathers, no huhu. In Professor de la Paz's case we dug up proof that he had been granted naturalized Chad citizenship forty years back, waited for the ink to dry and used it. You're not even illegally entered here in India. Not only did they bring you down themselves, knowing that you were in that barge, but also a control officer very kindly and fairly cheaply stamped your virgin passports. In addition to that, Prof's exile has no legal existence as the government that proscribed him no longer exists and a competent court has taken notice — that was more expensive."

Nurse came back in, indignant as a mother cat. "Lord Stuart . . . you *must* let my patient rest!"

"At once, ma chere."

"You're 'Lord Stuart'?"

"Should be 'Comte.' Or I can lay a dubious claim to being the Macgregor. The blueblood bit helps; these people haven't been happy since they took their royalty away from them."

As he left he patted her rump. Instead of screaming, she wiggled it. Was smiling as she came over to me. Stu was going to have to watch that stuff when he went back to Luna. If did.

She asked how I felt. Told her I was right, just hungry. "Sister, did you see some prosthetic arms in our luggage?"

She had and I felt better with number-six in place. Had selected it and number-two and social arm as enough for trip. Number-two was presumably still in Complex; I hoped somebody was taking care of it. But number-six is most all-around useful arm; with it and social one I'd be okay.

XXVIII

Two days later we left for Agra to present credentials to Federated Nations.

I was in bad shape and not just high gee. Could do well enough in a wheel chair and could even walk a little although not in public. What I had was a sore throat that missed

pneumonia only through drugs, traveler's trots, skin disease on hands and spreading to feet — just like my other trips to that disease-ridden hole, Terra. We Loonies don't know how lucky we are, living in a place that has tightest of quarantines, almost no vermin and what we have controlled by vacuum any time necessary. Or unlucky, since we have almost no immunities if turns out we need them. Still, wouldn't swap; never heard word "venereal" until first went Earthside and had thought "common cold" was state of ice miner's feet.

And wasn't cheerful for other reason. Stu had fetched us a message from Adam Selene. Buried in it, concealed even from Stu, was news that chances had dropped to worse than one in a hundred. Wondered what point in risking crazy trip if made odds worse? Did Mike really *know* what chances were? Couldn't see any way he could compute them no matter how many facts he had.

But Prof didn't seem worried. He talked to platoons of reporters, smiled at endless pictures, gave out statements, telling world he placed great confidence in Federated Nations and was sure our just claims would be recognized and that he wanted to thank "Friends of Free Luna" for wonderful help in bringing true story of our small but sturdy nation before good people of Terra —F. of F.L. being Stu, a professional public opinion firm, several thousand chronic petition signers and a great stack of Hong Kong dollars.

I had picture taken, too, and tried to smile, but dodged questions by pointing to throat and croaking.

In Agra we were lodged in a lavish suite in hotel, that had once been palace of a maharajah (and still belonged to him, even though India is supposed to be socialist) and interviews and picture-taking went on. Hardly dared get out of wheel chair even to visit W.C. as was under orders from Prof *never* to be photographed vertically. He was always either in bed or in a stretcher—bed baths, bed pans, everything—not only because safer, considering age, and easier for any Loonie, but also for pictures. His dimples and wonderful, gentle, persuasive personality were displayed in hundreds of millions of video screens, endless news pictures.

But his personality did not get us anywhere in Agra.

Prof was carried to office of President of Grand Assembly, me being pushed alongside, and there he attempted to present his credentials as Ambassador to F.N. and prospective Senator for Luna. Was referred to Secretary General and at his offices we were granted ten minutes with assistant secretary who sucked teeth and said he could accept our credentials "without prejudice and without implied commitment." They were referred to Credentials Committee—who sat on them.

I got fidgety. Prof read Keats. Grain barges continued to arrive at Bombay.

In a way was not sorry about latter. When we flew from Bombay

to Agra we got up before dawn and were taken out to field as city was waking. Every Loonie has his hole, whether luxury of a long-established home like Davis Tunnels or rock still raw from drill; cubic is no problem and can't be for centuries.

Bombay has bee-swarms of people. Are over million (was told) who have no home but some piece of pavement. A family might claim right (and hand down by will, generation after generation) to sleep on a piece two meters long and one wide at a described location in front of a shop. Entire family sleeps on that space, meaning mother, father, kids, maybe a grandmother. Would not have believed if had not seen. At dawn in Bombay roadways, side pavements, even bridges are covered with tight carpet of human bodies. What do they do? Where do they work? How do they *eat*? (Did not look as if they did. Could count ribs.)

If I hadn't believed simple arithmetic that you can't ship stuff downhill forever without shipping replacement back, would have tossed in cards. But . . . tanstaafl. "There ain't no such thing as a free lunch," in Bombay or in Luna.

At last we were given appointment with an "Investigating Committee." Not what Prof had asked for. He had requested public hearing before Senate, complete with video cameras. Only camera at this session was its "in-camera" nature; was closed. Not *too* closed, I had little recorder. But no video Wanted us kept swept under rug.

Nevertheless was chance to talk and Prof treated them as if they had power to recognize Luna's Independence and willingness to do so. While they treated us as a cross between naughty children and criminals up for sentencing.

Prof was allowed to make opening statement. With decorations trimmed away was assertion that Luna was de-facto a sovereign state, with an unopposed government in being, a civil condition of peace and order, a provisional president and cabinet carrying on necessary functions but anxious to return to private life as soon as Congress completed writing a constitution—and that we were here to ask that these facts be recognized de jure and that Luna be allowed to take her rightful place in councils of mankind as a member of Federated Nations.

What Prof told them bore a speaking acquaintance with truth as they were not where they could spot discrepancies. Our "provisional president" was a computer, and "cabinet" was Wyoh, Finn, Comrade Clayton and Terence Sheehan, editor of *Pravda*, plus Wolfgang Korsakov, board chairman of LuNoHoCo and a director of Bank of Hong Kong in Luna. But Wyoh was only person now in Luna who knew that "Adam Selene" was false face for a computer. She had been terribly nervous at being left to hold fort alone.

As it was, Adam's "oddity" in never being seen save over video was always an embarrassment. We had done our best to turn it into a "security necessity" by opening offices for him in cubic of Authority's Luna City office and then ex-

ploding a small bomb. After this "assassination attempt" comrades who had been most fretful about Adam's failure to stir around became loudest in demands that Adam must not take *any* chances—this being helped by editorials.

But I wondered while Prof was talking what these pompous chooms would think if they knew that our "president" was a collection of hardware owned by Authority?

But they just sat staring with chill disapproval, unmoved by Prof's rhetoric. Probably best performance of his life, considering he delivered it flat on back, speaking into a microphone without notes, and hardly able to see his audience.

Then they started in on us. Gentleman member from Argentina—never given their names; we weren't socially acceptable—this Argentino objected to phrase "former Warden" in Prof's speech. That designation had been obsolete half a century; he insisted that it be struck out and proper title inserted: "Protector of the Lunar Colonies by Appointment of the Lunar Authority." Any other wording offended dignity of Lunar Authority.

Prof asked to comment; "Honorable Chairman" permitted it. Prof said mildly that he accepted change since Authority was free to designate its servants in any fashion it pleased and was no intention to offend dignity of any agency of Federated Nations . . . but in view of functions of this office—former functions of this former office—citizens of Luna Free State would probably go on thinking of it by traditional name.

That made about six of them try to talk at once. Somebody objected to use of word "Luna" and still more to "Luna Free State"— it was "the Moon," Earth's Moon, a satellite of Earth and property of Federated Nations, just as Antarctica was—and these proceedings were a farce.

Was inclined to agree with last point. Chairman asked gentleman member from North America to please be in order and to address his remarks through chair. Did chair understand from witness's last remark that this alleged de-facto regime intended to interfere with consignee system?

Prof fielded that and tossed it back. "Honorable Chairman, I myself was a consignee, now Luna is my beloved home. My colleague, the Honorable the Undersecretary for Foreign Affairs Colonel O'Kelly Davis—" myself!— "is Luna born, and proud of his descent from four transported grandparents. Luna has grown strong on your outcasts. Give us your poor, your wretched; we welcome them. Luna has room for them, nearly forty million square kilometers, an area greater than all Africa—and almost totally empty. More than that, since by our method of living we occupy not 'area' but 'cubic' the mind cannot imagine the day when Luna would refuse another shipload of weary homeless."

Chairman said, "The witness is admonished to refrain from making speeches. The Chair takes it that your oratory means that the group

you represent agrees to accept prisoners as before."

"No, sir."

"What? Explain yourself."

"Once an immigrant sets foot on Luna today he is a free man, no matter what his previous condition, free to go where he listeth."

"So? Then what's to keep a consignee from walking across the field, climbing into another ship and returning here? I admit that I am puzzled at your apparent willingness to accept them . . . but *we* do not want them. It is our humane way of getting rid of incorrigibles who would otherwise have to be executed."

(Could have told him several things that would stop what he pictured; he had obviously never been to Luna. As for "incorrigibles," if really are, Luna eliminates such faster than Terra ever did. Back when I was very young, they sent us a gangster lord, from Los Angeles I believe; he arrived with squad of stooges, his bodyguards, and was cockily ready to take over Luna, as was rumored to have taken over a prison somewhere Earthside.

(None lasted two weeks. Gangster boss didn't make it to barracks; hadn't listened when told how to wear a p-suit.)

"There is nothing to keep him from going home so far as we are concerned, sir," Prof answered, "although your police here on Terra might cause him to think. But I've never heard of a consignee arriving with funds enough to buy a ticket home. Is this truly an issue? The ships are yours; Luna has no ships—and let me add that we are sorry that the ship scheduled for Luna this month was canceled. I am not complaining that it forced on my colleague and myself—" Prof stopped to smile— "a most informal method of travel. I simply hope that this does not represent policy. Luna has no quarrel with you. Your ships are welcome, your trade is welcome, we are at peace and wish to stay so. Please note that all scheduled grain shipments have come through on time."

(Prof did always have gift for changing subject.)

They fiddled with minor matters then. Nosy from North America wanted to know what had really happened to "the Ward—" He stopped himself. "The Protector. Senator Hobart." Prof answered that he had suffered a stroke (a "coup" is a "stroke") and was no longer able to carry out his duties—but was in good health otherwise and receiving constant medical care. Prof added thoughtfully that he suspected that the old gentleman had been failing for some time, in view of his indiscretions this past year . . . especially his many invasions of rights of free citizens, including ones who were not and never had been consignees.

Story was not hard to swallow. When those busy scientists managed to break news of our coup, they had reported Warden as dead . . . whereas Mike had kept him alive and on job by impersonating him. When Authority Earthside demanded a report from Warden on this wild rumor, Mike had consulted

Prof, then had accepted call and given a convincing imitation of senility, managing to deny, confirm and confuse every detail. Our announcements followed, and thereafter Warden was no longer available even in his computer alter ego. Three days later we declared independence.

This North American wanted to know what reason they had to believe that one word of this was true? Prof smiled most saintly smile and made effort to spread thin hands before letting them fall to coverlet. "The gentleman member from North America is urged to go to Luna, visit Senator Hobart's sickbed and see for himself. Indeed all Terran citizens are invited to visit Luna at any time, see anything. We wish to be friends, we are at peace, we have nothing to hide. My only regret is that my country is unable to furnish transportation; for that we must turn to you."

Chinee member looked at Prof thoughtfully. He had not said a word but missed nothing.

Chairman recessed hearing until fifteen hundred. They gave us a retiring room and sent in lunch. I wanted to talk but Prof shook head, glanced around room, tapped ear. So I shut up. Prof napped then and I levelled out my wheel chair and joined him; on Terra we both slept all we could. Helped. Not enough.

They didn't wheel us back in until sixteen hundred; committee was already sitting. Chairman then broke own rule against speeches and made a long one more-in-sorrow-than-anger.

Started by reminding us that Lunar Authority was a non-political trusteeship charged with solemn duty of insuring that Earth's satellite the Moon—Luna, as some called it—was never used for military purposes. He told us that Authority had guarded this sacred trust more than a century, while governments fell and new governments rose, alliances shifted and shifted again. Indeed, Authority was older than Federated Nations, deriving original charter from an older international body, and so well had it kept that trust that it had lasted through wars and turmoils and realignments.

(This is news? But you see what he was building towards.)

"The Lunar Authority cannot surrender its trust," he told us solemnly. "However, there appears to be no insuperable obstacle to the Lunar colonists, if they show political maturity, enjoying a degree of autonomy. This can be taken under advisement. Much depends on your behavior. The behavior, I should say, of all you colonists. There have been riots and destruction of property; this must not be."

I waited for him to mention ninety dead Goons. He never did. I will never make a statesman; I don't have high-level approach.

"Destroyed property must be paid for," he went on. "Commitments must be met. If this body you call a Congress can guarantee such things, it appears to this committee that this so-called Congress could in time be considered an agency of the Authority for many internal matters. Indeed it is conceivable that a

stable local government might, in time, assume many duties now falling on the Protector and even be allowed to have a delegate, non-voting, in the Grand Assembly.

"But one thing must be made clear. Earth's major satellite, the Moon, is by nature's law forever the joint property of all the peoples on Earth. It does *not* belong to that handful who by accident of history happen to live there. The sacred trust laid upon the Lunar Authority is and forever must be the supreme law of Earth's Moon."

("— accident of history," huh? I expected Prof to shove it down his throat. I thought he would say— No, never did know what Prof would say. Here's what he did say:)

Prof waited through several seconds of silence, then said, "Honorable Chairman, *who is to be exiled this time?*"

"What did you say?"

"Have you decided which one of you is to go into exile? Your Deputy Warden won't take the job"— this was true; he preferred to stay alive. "He is functioning now only because we have asked him to. If you persist in believing that we are not independent, then you must be planning to send up a new warden."

"Protector!"

"Warden. Let us not mince words. Though if we knew who he is to be, we might be happy to call him 'Ambassador.' We might be able to work with him. It might not be necessary to send with him armed hoodlums . . . to rape and murder our women!"

"Order! *Order!* The witness will come to order!"

"It is not I who was not in order, Honorable Chairman. Rape it was and murder most foul. But that is history and now we must look to the future. Whom are you going to exile?"

Prof struggled to raise self on elbow and I was suddenly alert; was a cue. "For you all know, sir, that it is a one-way trip. I was born here. You can see what effort it is for me to return even temporarily to the planet which has disinherited me. We are outcasts of Earth who—"

He collapsed. Was up out of my chair—and collapsed myself, trying to reach him.

Was not all play-acting even though I answered a cue. Is terrible strain on heart to get up suddenly on Terra; thick field grabbed and smashed me to floor.

XXIX

Neither of us was hurt and it made juicy news breaks, for I put recording in Stu's hands and he turned it over to his hired men. Nor were all headlines against us; Stu had recording cut and edited and slanted. "AUTHORITY TO PLAY ODD MAN OUT?—LUNAR AMBASSADOR COLLAPSES UNDER GRILLING: 'OUTCASTS!' HE CRIES—PROF PAZ POINTS FINGER OF SHAME: STORY PAGE 8."

Not all were good; nearest to a favorable story in India was editorial in NEW INDIA TIMES inquiring whether Authority was risking bread of masses in failing to come to terms with Lunar insurgents. Was

suggested that concessions could be made if would insure increased grain deliveries. Was filled with inflated statistics; Luna did *not* feed "a hundred million Hindus"—unless you chose to think of our grain as making difference between malnutrition and starvation.

On other hand biggest New York paper opined that Authority had made mistake in treating with us at all, since only thing convicts understood was taste of lash. Troops should land, set us in order, hang guilty, leave forces to keep order.

Was a quick mutiny, quickly subdued, in Peace Dragoons regiment from which our late oppressors had come, one started by rumor that they were to be shipped to Moon. Mutiny not hushed up perfectly; Stu hired good men.

Next morning a message reached us inquiring if Professor de la Paz was well enough to resume discussions? We went, and committee supplied doctor and nurse to watch over Prof. But this time we were searched—and a recorder removed from my pouch.

I surrendered it without much fuss; was Japanese job supplied by Stu—to be surrendered. Number-six arm has recess intended for a power pack but near enough size of my minirecorder. Didn't need power that day—and most people, even hardened police officers, dislike to touch a prosthetic.

Everything discussed day before was ignored . . . except that chairman started session by scolding us for "breaking security of a closed meeting."

Prof replied that it had not been closed so far as we were concerned and that we would welcome newsmen, video cameras, a gallery, anyone, as Luna had nothing to hide.

Chairman replied stiffly that so-called Free State did not control these hearings. These sessions were *closed,* not to be discussed outside this room, and that it was so ordered.

Prof looked at me. "Will you help me, Colonel?" I touched controls of chair, scooted around, was shoving his stretcher wagon with my chair toward door before chairman realized bluff had been called. Prof allowed himself to be persuaded to stay without promising anything. Hard to coerce a man who faints if he gets over-excited.

Chairman said that there had been many irrelevancies yesterday and matters discussed best left undiscussed—and that he would permit no digressions today. He looked at Argentino, then at North American.

He went on: "Sovereignty is an abstract concept, one that has been redefined many times as mankind has learned to live in peace. We need not discuss it. The real question, Professor—or even Ambassador de-facto, if you like; we shan't quibble—the real question is this: Are you prepared to guarantee that the Lunar Colonies will keep their commitments?"

"What commitments, sir?"

"All commitments, but I have in mind specifically your commitments concerning grain shipments."

"I know of no such commitments, sir," Prof answered with bland innocence.

Chairman's hand tightened on gavel. But he answered quietly, "Come, sir, there is no need to spar over words. I refer to the quota of grain shipments—and to the increased quota, a matter of thirteen per cent, for this new fiscal year. Do we have your assurance that you will honor those commitments? This is a minimum basis for discussion, else these talks can go no further."

"Then I am sorry to say, sir, that it would appear that our talks must cease."

"You're not being serious."

"Quite serious, sir. The sovereignty of Free Luna is not the abstract matter you seem to feel it is. These commitments you speak of were the Authority contracting with itself. My country is not bound by such. Any commitments from the sovereign nation I have the honor to represent are still to be negotiated."

"Rabble!" growled North American. "I told you you were being too soft on them. Jail birds. They don't understand decent treatment."

"Order!"

"Just remember, I told you. If I had them in Colorado, we would teach them a thing or two."

"The gentleman member will please be in order."

"I'm afraid," said Hindu member — Parsee in fact, but committeeman from India — "I'm afraid I must agree in essence with the gentleman member from the North American Directorate. Indian cannot accept the concept that the grain commitments are mere scraps of paper. Decent people do not play politics with hunger."

"And besides," the Argentino put in, "they breed like animals. Pigs!"

(Prof made me take a tranquilizing drug before that session. Had insisted on seeing me take it.)

Prof said quietly, "Honorable Chairman, may I have consent to amplify my meaning before we conclude, perhaps too hastily, that these talks must be abandoned?"

"Proceed."

"Unanimous consent? Free of interruption?"

Chairman looked around. "Consent is unanimous," he stated, "and the gentlemen members are placed on notice that I will invoke special rule fourteen at the next outburst. The sergeant-at-arms is directed to note this and act. The witness will proceed."

"I will be brief, Honorable Chairman." Prof said something in Spanish; all I caught was "Senor." Argentino turned dark but did not answer. Prof went on, "I must first answer the gentleman member from North America on a matter of personal privilege since he has impugned my fellow countrymen. I for one have seen the inside of more than one jail; I accept the title — nay, I glory in the title of 'jail bird.' We citizens of Luna are jail birds and descendants of jail birds. But Luna herself is a stern school mistress; those who have lived through her harsh lessons have no cause to feel ashamed. In Luna City a man may leave purse unguarded or home unlocked and feel no fear . . . I wonder if this is true in Denver? As may be, I have no wish to visit Colorado to learn a thing or two; I am satisfied

with what Mother Luna has taught me. And rabble we may be, but we are now a rabble in arms.

"To the gentleman member from India let me say that we do not 'play politics with hunger.' What we ask is an open discussion of facts of nature unbound by political assumptions false to fact. If we can hold this discussion, I can promise to show a way in which Luna can continue grain shipments and expand them enormously . . . to the great benefit of India."

Both Chinee and Indian looked alert. Indian started to speak, checked himself, then said, "Honorable Chairman, will the chair ask the witness to explain what he means?"

"The witness is invited to amplify."

"Honorable Chairman, gentlemen members, there is indeed a way for Luna to expand by tenfold or even a hundred her shipments to your hungry millions. The fact that grain barges continued to arrive on schedule during our time of trouble and are still arriving today is proof that our intentions are friendly. But you do not get milk by beating the cow. Discussions of how to augment our shipments must be based on the facts of nature, not on the false assumption that we are slaves, bound by a work quota we never made. So which shall it be? Will you persist in believing that we are slaves, indentured to an Authority other than ourselves? Or will you acknowledge that we are free, negotiate with us and learn how we can help you?"

Chairman said, "In other words you ask us to buy a pig in a poke. You demand that we legalize your outlaw status . . . *then* you will talk about fantastic claims that you can increase grain shipments ten or a hundred fold. What you claim is impossible; I am expert in Lunar economics. And what you ask is impossible; it takes the Grand Assembly to admit a new nation."

"Then place it before the Grand Assembly. Once seated as sovereign equals, we will discuss how to increase shipments and negotiate terms. Honorable Chairman, *we* grow the grain, we *own* it. We can grow far more. But not as slaves. Luna's sovereign freedom must first be recognized."

"Impossible and you know it. The Lunar Authority cannot abdicate its sacred responsibility."

Prof sighed. "It appears to be an impasse. I can only suggest that these hearings be recessed while we all take thought. Today our barges are arriving . . . but the moment that I am forced to notify my government that I have failed . . . they will . . . *stop!*"

Prof's head sank back on pillow as if it had been too much for him — as may have been. I was doing well enough but was young and had had practice in how to visit Terra and stay alive. A Loonie his age should not risk it. After minor foofooraw which Prof ignored they loaded us into a lorry and scooted us back to hotel. Once underway I said, "Prof, what was it you said to Senor Jellybelly that raised blood pressure?"

He chuckled. "Comrade Stuart's

investigations of these gentlemen turn up remarkable facts. I asked who owned a certain brothel off Calle Florida in B.A. these days and did it now have a star redhead?"

"Why? You used to patronize it?" Tried to imagine Prof in such!

"Never. It has been forty years since I was last in Buenos Aires. *He* owns that establishment, Manuel, through a dummy, and his wife, a beauty with Titian hair, once worked in it."

Was sorry had asked. "Wasn't that a foul blow? And undiplomatic?"

But Prof closed eyes and did not answer.

XXX

He was recovered enough to spend an hour at a reception for news men that night, with white hair framed against a purple pillow and thin body decked out in embroidered pajamas. Looked like vip corpse at an important funeral, except for eyes and dimples. I looked mighty vip too, in black and gold uniform which Stu claimed was Lunar diplomatic uniform of my rank. Could have been, if Luna had had such things. Did not, or I would have known. I prefer a p-suit; collar was tight. Nor did I ever find out what decorations on it meant. A reporter asked me about one, based on Luna at crescent as seen from Terra; told him it was a prize for spelling. Stu was in earshot and said, "The Colonel is modest. That decoration is of the same rank as the Victoria Cross and was awarded for heroism on —"

He led him away, still talking. Stu could lie standing up almost as well as Prof. Me, I have to think out a lie ahead of time.

India newspapers and casts were rough that night; "threat" to stop grain shipments made them froth. Gentlest proposal was to clean out Luna, exterminate us "criminal troglodytes" and replace us with "honest Hindu peasants" who understood sacredness of life and would ship grain and more grain.

Prof picked that night to talk and give handouts about Luna's inability to continue shipments, and why — and Stu's organization spread release throughout Terra. Some reporters took time to dig out sense of figures and tackled Prof on glaring discrepancy:

"Professor de la Paz, here you say that grain shipments will dwindle away through failure of natural resources and that by 2082 Luna won't even be able to feed its own people. Yet earlier today you told the Lunar Authority that you could increase shipments a dozen times or more."

Prof said sweetly, "That committee with whom we have been holding discussions is the Lunar Authority?"

"Well . . . it's an open secret."

"So it is, sir, but they have maintained the fiction of being an impartial investigating committee of the Grand Assembly. Don't you think they should disqualify themselves? So that we could receive a fair hearing?"

"Uh . . . it's not my place to say, Professor. Let's get back to my question. How do you reconcile the two?"

"I'm interested in why it's not your place to say, sir. Isn't it the concern of every citizen of Terra to help avoid a situation which will produce war between Terra and her neighbor?"

"*'War'?* What in the world makes you speak of 'war,' Professor?"

"Where else can it end, sir? If the Lunar Authority persists in its intransigence? We *cannot* accede to their demands; those figures show why. If they will not see this, then they will attempt to subdue us by force . . . and we will fight back. Like cornered rats — for cornered we are, unable to retreat, unable to surrender. *We* do not choose war. We wish to live in peace with our neighbor planet — in peace and peaceful trade. But the choice is not ours. We are small, you are gigantic. I predict that the next move will be for the Lunar Authority to attempt to subdue Luna by force. This 'peace-keeping' agency will start the first interplanetary war."

Journalist frowned. "Aren't you overstating it? Let's assume that the Authority — or the Grand Assembly, as the Authority hasn't any warships of its own — let's suppose the nations of Earth decide to displace your, uh, 'government.' You might fight, on Luna — I suppose you would. But that hardly constitutes interplanetary war. As you pointed out, Luna has no ships. To put it bluntly, you can't reach us."

I had chair close by Prof's stretcher, listening. He turned to me. "Tell them, Colonel."

I parroted it. Prof and Mike had worked out stock situations; I had memorized and was ready with answers. I said, "Do you gentlemen remember the *Pathfinder?* How she came plunging in, out of control?"

They remembered. Nobody forgets the greatest disaster of early days of space flight when unlucky *Pathfinder* hit a Belgian village.

"We have no ships," I went on, "but would be possible to *throw* those bargeloads of grain . . . instead of delivering them into parking orbit."

Next day this evoked a headline: LOONIES THREATEN TO THROW RICE. At moment it produced awkward silence.

Finally journalist said, "Nevertheless I would like to know how you reconcile your two statements — no more grain after 2082 . . . and ten or a hundred times as much."

"There is no conflict," Prof answered. "They are based on different sets of circumstances. The figures you have been looking at show the present circumstances . . . and the disaster they will produce in only a few years through drainage of Luna's natural resources — disaster which these Authority bureaucrats — or should I say 'authoritarian bureaucrats?' — would avert by telling us to stand in the corner!"

Prof paused for labored breathing, went on: "The circumstances under which we can continue, or greatly increase, our grain shipments are the obvious corollary of the first. As an old teacher I can hardly refrain from classroom habits; the corollary should be left as an exercise for the student. Will someone attempt it?"

Was uncomfortable silence, then a little man with strange accent said slowly, "It sound to me as if you talk about way to replenish natural resource."

"Capital! Excellent!" Prof flashed dimples. "You, sir, will have a gold star on your term report! To make grain requires water and plant foods — phosphates, other things, ask the experts. Send these things to us; we'll send them back as wholesome grain. Put down a hose in the limitless Indian Ocean. Line up those millions of cattle here in India; collect their end product and ship it to us. Collect your own night soil. Don't bother to sterilize it; we've learned to do such things cheaply and easily. Send us briny sea water, rotten fish, dead animals, city sewage, cow manure, offal of any sort — and we will send it back, tonne for tonne as golden grain! Send ten times as much, we'll send back ten times as much grain. Send us your poor, your dispossessed, send them by thousands and hundreds of thousands; we'll teach them swift, efficient Lunar methods of tunnel farming and ship you back unbelievable tonnage. Gentlemen, Luna is one enormous fallow farm, four thousand million hectares, waiting!"

That startled them. Then someone said slowly, "But what do you get out of it? Luna, I mean."

Prof shrugged. "Money. In the form of trade goods. There are many things you make cheaply which are dear in Luna. Drugs. Tools. Book films. Gauds for our lovely ladies. Buy our grain and you can sell to us at a happy profit."

A Hindu journalist looked thoughtful, started to write. Next to him was a European type who seemed unimpressed. He said, "Professor, have you any idea of the *cost* of shipping that much tonnage to the Moon?"

Prof waved it aside. "A technicality. Sir, there was a time when it was not simply expensive to ship goods across oceans but impossible. Then it was expensive, difficult, dangerous. Today you sell goods half around your planet almost as cheaply as next door; long-distance shipping is the least important factor in cost. Gentlemen, I am not an engineer. But I have learned this about engineers. When something *must* be done, engineers can find a way that is economically feasible. If you *want* the grain we can grow, turn your engineers loose." Prof gasped and labored, signaled for help and nurses wheeled him away.

I declined to be questioned on it, telling them that they must talk to Prof when he was well enough to see them. So they pecked at me on other lines. One man demanded to know why, since we paid no taxes, we colonists thought we had a right to run things our own way? After all those colonies had been established by Federated Nations — by some of them. It had been terribly expensive, Earth had paid all bills — and now you colonists enjoy benefits and pay not one dime of taxes. Was that fair?

I wanted to tell him to blow it. But Prof had again made me take a tranquilizer and had required me to swot that endless list of answers to trick questions. "Let's take that

one at a time," I said. "First, what is it you want us to pay taxes *for?* Tell me what I get and perhaps I'll buy it. No, put it this way. Do *you* pay taxes?"

"Certainly I do? And so should you."

"And what do you get for your taxes?"

"Huh? Taxes pay for government."

I said, "Excuse me, I'm ignorant. I've lived my whole life in Luna, I don't know much about your government. Can you feed it to me in small pieces? What do you get for your money?"

They all got interested and anything this aggressive little choom missed, other supplied. I kept list. When they stopped, I read it back:

"Free hospitals — aren't any in Luna. Medical insurance — we have that but apparently not what you mean by it. If a person wants insurance, he goes to a bookie and works out a bet. You can hedge anything, for a price. I don't hedge my health, I'm healthy. Or was till I came here. We have a public library, one Carnegie Foundation started with a few book films. It gets along by charging fees. Public roads. I suppose that would be our tubes. But they are no more free than air is free. Sorry, you have free air here, don't you? I mean our tubes were built by companies who put up money and are downright nasty about expecting it back and then some. Public schools. There are schools in all warrens and I never heard of them turning away pupils, so I guess they are 'public.' But they pay well, too, because anyone in Luna who knows something useful and is willing to teach it, charges all the traffic will bear."

I went on: "Let's see what else — Social security. I'm not sure what that is but, whatever it is, we don't have it. Pensions. You can buy a pension. Most people don't; most families are large and old people, say a hundred and up, either fiddle along at something they like, or sit and watch video. Or sleep. They sleep a lot, after say a hundred and twenty."

"Sir, excuse me. Do people *really* live as long on the Moon as they say?"

I looked surprised but wasn't; this was a "stimulated question" for which an answer had been taped. "Nobody knows how long a person will live in Luna; we haven't been there long enough. Our oldest citizens were born Earthside, it's no test. So far, no one born in Luna has died of old age, but that's still no test; they haven't had time to grow old yet, less than a century. But — Well, take me, Madam; how old would you say I am? I'm authentic Loonie, third generation."

"Uh, truthfully, Colonel Davis, I was surprised at your youthfulness — for this mission, I mean. You appear to be about twenty-two. Are you older? Not much, I fancy."

"Madam, I regret that your local gravitation makes it impossible for me to bow. Thank you. I've been married longer than that."

"What? Oh, you're jesting!"

"Madam, I would never venture

to guess a lady's age but, if you will emigrate to Luna, you will keep your present youthful loveliness much longer and add at least twenty years to your life." I looked at list. "I'll lump the rest of this together by saying we don't have any of it in Luna, so I can't see any reason to pay taxes for it. On that other point, sir, surely you know that the initial cost of the colonies has long since been repaid several times over through grain shipments alone? We are being bled white of our most essential resources . . . and not even being paid an open-market price. That's why the Lunar Authority is being stubborn; they intend to go on bleeding us. The idea that Luna has been an expense to Terra and the investment must be recovered is a lie invented by the Authority to excuse their treating us as slaves. The truth is that Luna has not cost Terra one dime this century — and the original investment has long since been paid back."

He tried to rally. "Oh, surely you're not claiming that the Lunar colonies have paid all the billions of dollars it took to develop space flight?"

"I could present a good case. However there is no excuse to charge that against *us*. *You* have space flight, you people of Terra. *We* do *not*. Luna has not one ship. So why should we pay for what we have never received? It's like the rest of this list. We don't get it, why should we pay for it?"

Had been stalling, waiting for a claim that Prof had told me I was sure to hear . . . and got it at last.

"Just a moment, please!" came a confident voice. "You ignored the two most important items on that list. Police protection and armed forces. You boasted that you were willing to pay for what you get . . . so how about paying almost a century of back taxes for those two? It should be quite a bill, quite a bill!" He smiled smugly.

Wanted to thank him! — thought Prof was going to chide me for failing to yank it out. People looked at each other and nodded, pleased I had been scored on. Did best to look innocent. "Please? Don't understand. Luna has neither police nor armed forces."

"You know what I mean. You enjoy the protection of the Peace Forces of the Federated Nations. And you do have police. Paid for by the Lunar Authority! I know, to my certain knowledge, that two phalanges were sent to the Moon less than a year ago to serve as policemen."

"Oh." I sighed. "Can you tell me how F.N. peace forces protect Luna? I did not know that any of your nations wanted to attack us. We are far away and have nothing anyone envies. Or did you mean we should pay them to leave us alone? If so, there is an old saying that once you pay Danegeld, you never get rid of the Dane. Sir, we will *fight* F.N. armed forces if we must . . . we shall never *pay* them.

"Now about those so-called 'policemen.' They were not sent to protect *us*. Our Declaration of Independence told the true story about

those hoodlums — did your newspapers print it?" (Some had, some hadn't — depended on country.) "They went mad and started raping and murdering! And now they are *dead!* So don't send us any more troops!"

Was suddenly "tired" and had to leave. Really was tired; not much of an actor and making that talk-talk come out way Prof thought it should was strain.

XXXI

Was not told till later that I had received an assist in that interview; lead about "police" and "armed forces" had been fed by a stooge; Stu LaJoie took no chances. But by time I knew, I had had experience in handling interviews; we had them endlessly.

Despite being tired was not through that night. In addition to press some Agra diplomatic corps had risked showing up — few and none officially, even from Chad. But we were curiosities and they wanted to look at us.

Only one was important, a Chinee. Was startled to see him; he was Chinee member of committee. I met him simply as "Dr. Chan" and we pretended to be meeting first time.

He was that Dr. Chan who was then Senator from Great China and also Great China's long-time number-one boy in Lunar Authority — and, much later, Vice Chairman and Premier, shortly before his assassination.

After getting out point I was supposed to make, with bonus through others that could have waited, I guided chair to bedroom and was at once summoned to Prof's. "Manuel, I'm sure you noticed our distinguished visitor from the Middle Kingdom."

"Old Chinee from committee?"

"Try to curb the Loonie talk, son. Please don't use it at all here, even with me. Yes. He wants to know what we meant by 'tenfold or a hundredfold.' So tell him."

"Straight? Or swindle?"

"The straight. This man is no fool. Can you handle the technical details?"

"Done my homework. Unless he's expert in ballistics."

"He's not. But don't pretend to know anything you don't know. And don't assume that he's friendly. But he could be enormously helpful if he concludes that our interests and his coincide. But don't try to persuade him. He's in my study. Good luck. And remember — speak standard English."

Dr. Chan stood up as I came in; I apologized for not standing. He said that he understood difficulties that a gentleman from Luna labored under here and for me not to exert myself — shook hands with himself and sat down.

I'll skip some formalities. Did we or did we not have some specific solution when we claimed there was a cheap way to ship massive tonnage to Luna?

Told him was a method, expensive in investment but cheap in running expenses. "It's the one we use on Luna, sir. A catapult, an escape-speed induction catapult."

His expression changed not at all. "Colonel, are you aware that such has been proposed many times and always rejected for what seemed good reasons? Something to do with air pressure."

"Yes, Doctor. But we believe, based on extensive analyses by computer and on our experience with catapulting, that today the problem can be solved. Two of our larger firms, the LuNoHo Company and the Bank of Hong Kong in Luna, are ready to head a syndicate to do it as a private venture. They would need help here on Earth and might share voting stock — though they would prefer to sell bonds and retain control. Primarily what they need is a concession from some government, a permanent easement on which to build the catapult. Probably India."

(Above was set speech. LuNoHoCo was bankrupt if anybody examined books, and Hong Kong Luna Bank was strained; was acting as central bank for country undergoing upheaval. Purpose was to get in last word, "India." Prof had coached me that this word *must* come *last*.)

Dr. Chan answered, "Never mind financial aspects. Anything which is physically possible can always be made financially possible; money is a bugaboo of small minds. Why do you select India?"

"Well, sir, India now consumes, I believe, over ninety per cent of our grain shipments —"

"Ninety-three point one per cent."

"Yes, sir. India is deeply interested in our grain, so it seemed likely that she would cooperate. She could grant us land, make labor and materials available and so forth. But I mentioned India because she holds a wide choice of possible sites, very high mountains not too far from Terra's equator. The latter is not essential, just helpful. But the site *must* be a high mountain. It's that air pressure you spoke of, or air density. The catapult head should be at as high altitude as feasible but the ejection end, where the load travels over eleven kilometers per second, *must* be in air so thin that it approaches vacuum. Which calls for a very high mountain. Take the peak Nanda Devi, around four hundred kilometers from here. It has a railhead sixty kilometers from it and a road almost to its base. It is eight thousand meters high. I don't know that Nanda Devi is ideal. It is simply a possible site with good logistics; the ideal site would have to be selected by Terran engineers."

"A higher mountain would be better?"

"Oh, yes, sir!" I assured him. "A higher mountain would be preferred over one nearer the equator. The catapult can be designed to make up for loss in free ride from Earth's rotation. The difficult thing is to avoid so far as possible this pesky thick atmosphere. Excuse me, Doctor; I did not mean to criticize your planet."

"There are higher mountains. Colonel, tell me about this proposed catapult."

I started to. "The length of an escape-speed catapult is determined

by the acceleration. We think — or the computer calculates that an acceleration of twenty gravities is about optimum. For Earth's escape speed this requires a catapult three hundred twenty-three kilometers in length. Therefore —"

"Stop, please! Colonel, are you seriously proposing to bore a hole over three hundred kilometers deep?"

"Oh, no! Construction has to be above ground to permit shock waves to expand. The stator would stretch nearly horizontally, rising perhaps four kilometers in three hundred and in a straight line — almost straight, as Coriolis acceleration and other minor variables make it a gentle curve. The Lunar catapult is straight so far as the eye can see and so nearly horizontal that the barges just miss some peaks beyond it."

"Oh. I thought that you were over-estimating the capacity of present-day engineering. We drill deeply today. Not that deeply. Go on."

"Doctor, it may be that common misconception which caused you to check me is why such a catapult has not been constructed before this. I've seen those earlier studies. Most assumed that a catapult would be vertical, or that it would have to tilt up at the end to toss the spacecraft into the sky — and neither is feasible nor necessary. I suppose the assumption arose from the fact that your spaceships *do* boost straight up, or nearly."

I went on: "But they do that to get above atmosphere, not to get into orbit. Escape speed is not a vector quantity; it is scalar. A load bursting from a catapult at escape speed will not return to Earth no matter what its direction. Uh . . . two corrections: it must not be headed toward the Earth itself but at some part of the sky hemisphere, and it must have enough added velocity to punch through whatever atmosphere it still traverses. If it is headed in the right direction it will wind up at Luna."

"Ah, yes. Then this catapult could be used but once each lunar month?"

"No, sir. On the basis on which you were thinking it would be once every day, picking the time to fit where Luna will be in her orbit. But in fact — or so the computer says; I'm not an astronautics expert — in fact this catapult could be used almost any time, simply by varying ejection speed, and the orbits could still wind up at Luna."

"I don't visualize that."

"Neither do I, Doctor, but — Excuse me but isn't there an exceptionally fine computer at Peiping University?"

"And if there is?" (Did I detect an increase in bland inscrutability? A Cyborg-computer — Pickled brains? Or live ones, aware? Horrible, either way.)

"Why not ask a topnotch computer for all possible ejection times for such a catapult as I have described? Some orbits go far outside Luna's orbit before returning to where they can be captured by Luna, taking a fantastically long time. Others hook around Terra and then go quite directly. Some are as simple as the ones we use from Luna. There

are periods each day when short orbits may be selected. But a load is in the catapult less than one minute; the limitation is how fast the loads can be made ready. It is even possible to have more than one load going up the catapult at a time if the power is sufficient and computer control is versatile. The only thing that worries me is — these high mountains, they are covered with snow?"

"Usually," he answered. "Ice and snow and bare rock."

"Well, sir, being born in Luna, I don't know anything about snow. The stator would not only have to be rigid under the heavy gravity of this planet but would have to withstand dynamic thrusts at twenty gravities. I don't suppose it could be anchored to ice or snow. Or could it be?"

"I'm not an engineer, Colonel, but it seems unlikely. Snow and ice would have to be removed. And kept clear. Weather would be a problem, too."

"Weather I know nothing about, Doctor, and all I know about ice is that it has a heat of crystallization of three hundred thirty-five million joules per tonne. I have no idea how many tonnes would have to be melted to clear the site, or how much energy would be required to keep it clear, but it seems to me that it might take as large a reactor to keep it free of ice as to power the catapult."

"We can build reactors, we can melt ice. Or engineers can be sent north for re-education until they do understand ice." Dr. Chan smiled and I shivered. "However the engineering of ice and snow was solved in Antarctica years go; don't worry about it. A clear, solid-rock site about three hundred fifty kilometers long at a high altitude — Anything else I should know?"

"Not much, sir. Melted ice could be collected near the catapult head and thus be the most massy part of what will be shipped to Luna — quite a saving. Also the steel canisters would be reused to ship grain to Earth, thus stopping another drain that Luna can't take. No reason why a canister should not make the trip hundreds of times. At Luna it would be much the way barges are now landed off Bombay, solid-charge retrorockets programmed by ground control — except that it would be much cheaper, two and a half kilometer seconds change of motion versus eleven-plus, a squared factor of about twenty — but actually even more favorable, as retroes are parasitic weight and the pay load improves accordingly. There is even a way to improve that."

"How?"

"Doctor, this is outside my specialty. But everybody knows that your best ships use hydrogen as reaction mass heated by a fusion reactor. But hydrogen is expensive in Luna and any mass could be reaction mass; it just would not be as efficient. Can you visualize an enormous, brute-force space tug designed to fit Lunar conditions? It would use raw rock, vaporized, as reaction mass and would be designed to go up into parking orbit, pick up those

shipments from Terra, bring them down to Luna's surface. It would be ugly, all the fancies stripped away — might not be manned even by a Cyborg. It can be piloted from the ground, by computer."

"Yes, I suppose such a ship could be designed. But let's not complicate things. Have you covered the essentials about this catapult?"

"I believe so, Doctor. The site is the crucial thing. Take that peak Nandi Devi. By the maps I have seen it appears to have a long, very high ridge sloping to the west for about the length of our catapult. If that is true, it would be ideal — less to cut away, less to bridge. I don't mean that it is *the* ideal site but that is the sort to look for: a very high peak with a long, long ridge west of it."

"I understand." Dr. Chan left abruptly.

XXXII

Next few weeks I repeated that in a dozen countries, always in private and with implication that it was secret. All that changed was name of mountain.

In Ecuador I pointed out that Chimborazo was almost on equator — ideal! But in Argentina I emphasized that their Aconcagua was highest peak in Western Hemisphere. In Bolivia I noted that Altoplano was as high as Tibetan Plateau (almost true), much nearer equator, and offered a wide choice of sites for easy construction leading up to peaks comparable to any on Terra.

I talked to a North American who was a political opponent of that choom who had called us "rabble." I pointed out that, while Mount McKinley was comparable to anything in Asia or South America, there was much to be said for Mauna Loa — extreme ease of construction. Doubling gees to make it short enough to fit, and Hawaii would be Spaceport of World . . . *whole* world, for we talked about day when Mars would be exploited and freight for three (possibly four) planets would channel through their "Big Island."

Never mentioned Mauna Loa's volcanic nature; instead I noted that location permitted an aborted load to splash harmlessly in Pacific Ocean.

In Sovunion was only one peak discussed — Lenin, over seven thousand meters (and rather too close to their big neighbor).

Kilimanjaro, Popocatepetl, Logan, El Libertado. My favorite peak changed by country; all that we required was that it be "highest mountain" in hearts of locals. I found something good to say about modest mountains of Chad when we were entertained there and rationalized so well I almost believed it.

Other times, with help of leading questions from Stu LaJoie's stooges, I talked about chemical engineering (of which I know nothing but had memorized facts) on surface of Luna, where endless free vacuum and sun power and limitless raw materials and predictable conditions permitted ways of processing expensive or impossible Earthside — when day arrived that cheap shipping both ways made it profitable

to exploit Luna's virgin resources. Was always a suggestion that entrenched bureaucracy of Lunar Authority had failed to see great potential of Luna (true), plus an answer to a question asked, which answer asserted that Luna could accept any number of colonists.

This also was true, although never mentioned that Luna (yes, and sometimes Luna's Loonies) killed about half of new chums. But people we talked to rarely thought of emigrating themselves. They thought of forcing or persuading others to emigrate to relieve crowding — and to reduce their own taxes. Kept mouth shut about fact that half-fed swarms we saw everywhere did breed faster than even catapulting could possibly offset.

We could not house, feed, and train even a million new chums each year — and a million wasn't a drop on Terra; more babies than that were conceived every night. We could accept far more than would emigrate voluntarily but if they used forced emigration and flooded us ... Luna has only one way to deal with a new chum: Either he makes not one fatal mistake, in personal behavior or in coping with environment that will bite without warning . . . or he winds up as fertilizer in a tunnel farm.

All that immigration in huge numbers could mean would be that a larger percentage of immigrants would die. Too few of us to help them past natural hazards.

However, Prof did most talking about "Luna's great future." I talked about catapults.

During weeks we waited for committee to recall us, we covered much ground. Stu's men had things set up and only question was how much we could take. Would guess that every week on Terra chopped a year off our lives, maybe more for Prof. But he never complained and was always ready to be charming at one more reception.

We spent extra time in North America. Date of our Declaration of Independence, exactly three hundred years after that of North American British colonies, turned out to be wizard propaganda and Stu's manipulators made most of it. North Americans are sentimental about their "United States" even though it ceased to mean anything once their continent had been rationalized by F.N. They elect a president every eight years, why, could not say — why do British still have Queen? — and boast of being "sovereign." "Sovereign," like "love," means anything you want it to mean; it's a word in dictionary between "sober" and "sozzled."

"Sovereignty" meant much in North America and "Fourth of July" was a magic date. Fourth-of-July League handled appearances. Stu told us that it had not cost much to get it moving and nothing to keep going. League even raised money used elsewhere — North Americans enjoy giving no matter who gets it.

Farther south Stu used another date; his people planted idea that coup d'etat had been 5 May instead of two weeks later. We were greeted with "Cinco de Mayo! Libertad! Cinco de Mayo!" I thought they

were saying, "Thank you" — Prof did all talking.

But in 4th-of-July country I did better. Stu had me quit wearing a left arm in public, sleeves of my costumes were sewed up so that stump could not be missed, and word was passed that I had lost it "fighting for freedom." Whenever I was asked about it, all I did was smile and say, "See what comes of biting nails?"

I never liked North America, even first trip. It is not most crowded part of Terra, has a mere billion people. In Bombay they sprawl on pavements; in Great New York they pack them vertically — not sure anyone sleeps. Was glad to be in invalid's chair.

Is mixed-up place another way. They care about skin color — by making point of how they *don't* care. First trip I was always too light or too dark, and somehow blamed either way, or was always being expected to take stand on things I have no opinions on. Bog knows *I* don't know what genes I have. One grandmother came from a part of Asia where invaders passed through as regularly as locusts, raping as they went — why not ask her?

Learned to handle it by my second makee-learnee but it left a sour taste. Think I prefer a place as openly racist as India, where if you aren't Hindu, you're nobody — except that Parsees look down on Hindus and vice versa. However I never really had to cope with North America's reverse-racism when being "Colonel O'Kelly Davis, Hero of Lunar Freedom."

We had swarms of bleeding hearts around us, anxious to help. I let them do two things for me, things I had never had time, money or energy for as a student: I saw Yankees play and visited Salem.

Should have kept my illusions. Baseball is better over video, you can really see it and aren't pushed in by two hundred thousand other people. Besides, somebody should have shot that outfield. I spent most of that game dreading moment when they would have to get my chair out through crowd — that and assuring host that I was having a wonderful time.

Salem was just a place, no worse (and no better) than rest of Boston. After seeing it I suspected they had hanged wrong witches. But day wasn't wasted. I was filmed laying a wreath on a place where a bridge had been in another part of Boston, Concord, and made a memorized speech. Bridge is still there, actually. You can see it, down through glass. Not much of a bridge.

Prof enjoyed it all, rough as it was on him; Prof had great capacity for enjoying. He always had something new to tell about great future of Luna. In New York he gave managing director of a hotel chain, one with rabbit trade mark, a sketch of what could be done with resorts in Luna — once excursion rates were within reach of more people. Visits too short to hurt anyone, escort service included, exotic side trips, gambling — no taxes.

Last point grabbed attention, so Prof expanded it into "longer old

age" theme — a chain of retirement hostels where an earthworm could live on Terran old-age pension and go on living, twenty, thirty, forty years longer than on Terra. As an exile — but which was better? A live old age in Luna? Or a funeral crypt on Terra? His descendants could pay visits and fill those resort hotels. Prof embellished with pictures of "night clubs" with acts impossible in Terra's horrible gravity, sports to fit our decent level of gravitation — even talked about swimming pools and ice skating and possibility of *flying!* (Thought he had tripped his safeties.) He finished by hinting that Swiss cartel had tied it up.

Next day he was telling foreign-divisions manager of Chase International Panagra that a Luna City branch should be staffed with paraplegics, paralytics, heart cases, amputees, others who found high gravity a handicap. Manager was a fat man who wheezed. He may have been thinking of it personally — but his ears pricked up at "no taxes."

We didn't have it all our own way. News was often against us and were always hecklers. Whenever I had to take them on without Prof's help I was likely to get tripped. One man tackled me on Prof's statement to Committee that we "owned" grain grown in Luna; he seemed to take it for granted that we did not. Told him I did not understand question.

He answered, "Isn't it true, Colonel, that your provisional government has asked for membership in Federated Nations?"

Should have answered, "No comment." But fell for it and agreed. "Very well," he said, "the impediment seems to be the counterclaim that the Moon belongs to the Federated Nations — as it always has — under supervision of the Lunar Authority. Either way, by your own admission, that grain belongs to the Federated Nations, in trust."

I asked how he reached that conclusion? He answered, "Colonel, you style yourself 'Undersecretary of Foreign Affairs.' Surely you are familiar with the charter of the Federated Nations."

I had skimmed it. "Reasonably familiar," I said — cautiously, I thought.

"Then you know the First Freedom guaranteed by the Charter and its current application through F & A Control Board Administrative Order Number eleven-seventy-six dated three March of this year. You concede therefore that all grain grown on the Moon in excess of the local ration is ab initio and beyond contest the property of all, title held in trust by the Federated Nations through its agencies for distribution as needed." He was writing as he talked. "Have you anything to add to that concession?"

I said, "What in Bog's name you talking about?" Then, "Come back! Haven't conceded anything!"

So *Great New York Times* printed: "LUNAR 'UNDERSECRETARY, SAYS: 'FOOD BELONGS TO HUNGRY' New York Today — O'Kelly Davis, soi-disant 'Colonel of the Armed Forces of Free Luna' here on a junket to stir up support for the insurgents in the F.N. Lunar

colonies said in a voluntary statement to this paper that the 'Freedom from Hunger' clause in the Grand Charter applied to the Lunar grain shipments —"

I asked Prof how should have handled? "Always answer an unfriendly question with another question," he told me. "Never ask him to clarify; he'll put words in your mouth. This reporter — Was he skinny? Ribs showing?"

"No. Heavy-set."

"Not living on eighteen hundred calories a day, I take it, which is the subject of that order he cited. Had you known you could have asked him how long he had conformed to the ration and why he quit? Or asked him what he had for breakfast — and then looked unbelieving no matter what he answered. Or, when you don't know what a man is getting at, let your counter-question shift the subject to something you *do* want to talk about. Then, no matter what he answers, make your point and call on someone else. Logic does not enter into it. Just tactics."

"Prof, *nobody* here is living on eighteen hundred calories a day. Bombay, maybe. Not here."

"Less than that in Bombay. Manuel, that 'equal ration' is a fiction. Half the food on this planet is in the black market, or is not reckoned through one ruling or another. Or they keep two sets of books, and figures submitted to the F.N. have nothing to do with the economy. Do you think that grain from Thailand and Burma and Australia is correctly reported to the Control Board by Great China? I'm sure that the India representative on that food board doesn't think so. But India keeps quiet because she gets the lion's share from Luna . . . and then 'plays politics with hunger' — a phrase you may remember — by using our grain to control her elections. Kerala had a planned famine last year. Did you see it in the news?"

"No."

"Because it wasn't in the news. A managed democracy is a wonderful thing, Manuel, for the managers . . . and its greatest strength is a 'free press' when 'free' is defined as 'responsible' and the managers define what is 'irresponsible.' Do you know what Luna needs most?"

"More ice."

"A news system that does *not* bottleneck through one channel. Our friend Mike is our greatest danger."

"Huh? Don't you trust Mike?"

"Manuel, on some subjects I don't trust even myself. Limiting the freedom of news 'just a little bit' is in the same category with the classic example 'a little bit pregnant.' We are not yet free nor will we be as long as anyone — even our ally Mike — controls our news. Someday I hope to own a newspaper independent of any source or channel. I would happily set print by hand, like Benjamin Franklin."

I gave up. "Prof, suppose these talks fail and grain shipments stop. What happens?"

"People back home will be vexed with us . . . and many here on Terra would die. Have you read Malthus?"

"Don't think so."

"Many would die. Then a new

stability would be reached with somewhat more people — more efficient people and better fed. This planet isn't crowded; it is just mismanaged . . . and the unkindest thing you can do for a hungry man is to give him food. 'Give.' Read Malthus. It is never safe to laugh at Dr. Malthus; he always has the last laugh. A depressing man, I'm glad he's dead. But don't read him until this is over; too many facts hamper a diplomat, especially an honest one."

"I'm not especially honest."

"But you have no talent for dishonesty, so your refuge must be ignorance and stubbornness. You have the latter; try to preserve the former. For the nonce. Lad, Uncle Bernardo is terribly tired."

I said, "Sorry," and wheeled out of his room. Prof was hitting too hard a pace. I would have been willing to quit if would insure his getting into a ship and out of that gravity.

But traffic stayed one way — grain barges, naught else.

But Prof had fun. As I left and waved lights out, noticed again a toy he had bought, one that delighted him like a kid on Christmas — a brass cannon.

A real one from sailing ship days. Was small, barrel about half a meter long and massing, with wooden carriage, only kilos fifteen. A "signal gun" its papers said. Reeked of ancient history, pirates, men "walking plank." A pretty thing but I asked Prof *why?* If we ever managed to leave, price to lift that mass to Luna would hurt. I was resigned to abandoning a p-suit with years more wear in it — abandon everything but two left arms and a pair of shorts. If pressed, might give up social arm. If very pressed, would skip shorts.

He reached out and stroked shiny barrel. "Manuel, once there was a man who held a political make-work job like so many here in this Directorate, shining brass cannon around a court house."

"Why would court house have cannon?"

"Never mind. He did this for years. It fed him and let him save a bit, but he was not getting ahead in the world. So one day he quit his job, drew out his savings, bought a brass cannon — and went into business for himself."

"Sounds like idiot."

"No doubt. And so were we, when we tossed out the Warden. Manuel, you'll outlive me. When Luna adopts a flag, I would like it to be a cannon, *or,* on field *sable,* crossed by bar sinister *gules* of our proudly ignoble lineage. Do you think it could be managed?"

"Suppose so, if you'll sketch. But why a flag? Not a flag pole in all Luna."

"It can fly in our hearts . . . a symbol for all fools so ridiculously impractical as to think they can fight city hall. Will you remember, Manuel?"

"Sure. That is, will remind you when time comes." Didn't like such talk. He had started using oxygen tent in private — and would *not* use in public.

Guess I'm "ignorant" and "stubborn" — was both in place called Lexington, Kentucky, in Central Managerial Area. One thing no doctrine about, no memorized answers, was life in Luna. Prof said to tell truth and emphasize homely, warm, friendly things, especially anything different. "Remember, Manuel, the thousands of Terrans who have made short visits to Luna are only a tiny fraction of one per cent. To most people we will be as weirdly interesting as strange animals in a zoo. Do you remember that turtle on exhibition in Old Dome? That's us."

Certainly did; they wore that insect out, staring at. So when this male-female team started quizzing about family life in Luna, was happy to answer. I prettied it only by what I left out — things that aren't family life but poor substitutes in a community overloaded with males.

Luna City is homes and families mainly, dull by Terran standards — but I like it. And other warrens much same, people who work and raise kids and gossip and find most of their fun around dinner table. Not much to tell, so I discussed anything they found interesting. Every Luna custom comes from Terra since that's where we all came from, but Terra is such a *big* place that a custom from Micronesia, say, may be strange in North America.

This woman — can't call her lady — wanted to know about various sorts of marriage. First was it true that one could get married without a license "on" Luna?

I asked what a license was?

Her companion said, "Skip it, Mildred. Pioneer societies never have marriage licenses."

"But don't you keep records?" she persisted.

"Certainly," I agreed. "My family keeps a family book that goes back almost to first landing at Johnson City — every marriage, birth, death, every event of importance not only in direct line but all branches so far as we can keep track. And besides, is a man, a school teacher, going around copying old family records all over our warren, writing a history of Luna City. Hobby."

"But don't you have *official* records? Here in Kaintucky we have records that go back centuries."

"Madam, we haven't lived there that long."

"Yes, but — Well, Luna City must have a city clerk. Perhaps you call him 'county recorder'. The official who keeps track of such things. Deeds and so forth."

I said, "Don't think so, Madam. Some bookies do notary work, witnessing chops on contracts, keeping records of them. Is for people who don't read and write and can't keep own records. But never heard of one asked to keep record of marriage. Not saying couldn't happen. But haven't heard."

"How delightfully informal! Then this other rumor, about how simple it is to get a divorce on the Moon. I daresay that's true, too?"

"No, madam, wouldn't say divorce is simple. Too much to untangle. Mmm . . . take a simple example, one lady and say she has two husbands —"

"'Two'?"

"Might have more, might have just one. Or might be complex marriage. But let's take one lady and two men as typical. She decides to divorce one. Say it's friendly, with other husband agreeing and one she is getting rid of not making fuss. Not that it would do him any good. Okay, she divorces him; he leaves. Still leaves endless things. Men might be business partners, co-husbands often are. Divorce may break up partnership. Money matters to settle. This three may own cubic together, and while will be in her name, ex-husband probably has cash coming or rent. And almost always there are children to consider, support and so forth. Many things. No, madam, divorce is never simple. Can divorce him in ten seconds but may take ten years to straighten out loose ends. Isn't it much that way here?"

"Uh . . . just fuhget ah evah asked the question, Cunn'l; it may be simpluh hyuh." (She did talk that way but was understandable once I got program. Won't spell it again.) "But if that is a simple marriage, what is a 'complex' one?"

Found self explaining polyandries, clans, groups, lines and less common patterns considered vulgar by conservative people such as my own family. Deal my mother set up, say, after she ticked off my old man, though didn't describe that one. Mother was always too extreme.

Woman said, "You have me confused. What is the difference between a line and a clan?"

"Are quite different. Take own case. I have honor to be member of one of oldest line marriages in Luna — and, in my prejudiced opinion, best. You asked about divorce. Our family has never had one and would bet long odds never will. A line marriage increases in stability year after year, gains practice in art of getting along together, until notion of anybody leaving is unthinkable. Besides, takes unanimous decision of all wives to divorce a husband. Could never happen. Senior wife would never let it get that far."

Went on describing advantages — financial security, fine home life it gives children, fact that death of a spouse, while tragic, could never be tragedy it was in a temporary family, especially for children. Children simply could *not* be orphaned. Suppose I waxed too enthusiastic — but my family *is* most important thing in my life. Without them I'm just one-armed mechanic who could be eliminated without causing a draft.

"Here's why is stable," I said. "Take my youngest wife, sixteen. Likely be in her eighties before she is senior wife. Doesn't mean all wives senior to her will die by then; unlikely in Luna, females seem to be immortal. But may all opt out of family management by then; by our family traditions they usually do, without younger wives putting pressure on them. So Ludmilla —"

"'Ludmilla'?"

"Russki name. From fairy tale. Milla will have over fifty years of good example before has to carry burden. She's sensible to start with, not likely to make mistakes and if

did, has other wives to steady her. Self-correcting, like a machine with proper negative feedback. A good line marriage is immortal; expect mine to outlast me at least a thousand years — and is why shan't mind dying when time comes. Best part of me will go on living."

Prof was being wheeled out; he had them stop stretcher cart and listened. I turned to him.

"Professor," I said, "you know my family. Would mind telling this lady why it's a happy family? If you think so."

"It is," agreed Prof. "However, I would rather make a more general remark. Dear Madam, I gather that you find our Lunar marriage customs somewhat exotic."

"Oh, I wouldn't go that far!" she said hastily. "Just somewhat *unusual.*"

"They arise, as marriage customs always do, from economic necessities of the circumstances — and our circumstances are very different from those here on Earth. Take the line type of marriage which my colleague has been praising . . . and justifiably I assure you, despite his personal bias. I am a bachelor and have no bias. Line marriage is the strongest possible device for conserving capital and insuring the welfare of children — the two basic societal functions for marriage everywhere — in an environment in which there is no security, neither for capital nor for children, other than that devised by individuals. Somehow human beings always cope with their environments. Line marriage is a remarkably successful invention to that end. All other Lunar forms of marriage serve that same purpose, though not as well."

He said good night and left. I had with me — always! — a picture of my family, newest one, our wedding with Wyoming. Brides are at their prettiest and Wyoh was radiant — and rest of us looked handsome and happy, with Grandpaw tall and proud and not showing failing faculties.

But was disappointed; they looked at it oddly. But man — Mathews. name was — said, "Can you spare this picture, Colonel?"

Winced. "Only copy I have. And a long way from home."

"For a moment, I mean. Let me have it photographed. Right here, it need never leave your hands."

"Oh. Oh, certainly!" Not a good picture of me but is face I have, and did Wyoh justice and they just don't come prettier than Lenore.

So he photographed it and next morning they did come right into our hotel suite and woke me before time and did arrest me and take me away wheelchair and all and did lock me in a cell with *bars!* For bigamy. For polygamy. For open immorality and publicly inciting others to same.

Was glad Mum couldn't see.

XXXIII

Took Stu all day to get case transferred to an F.N. court and dismissed. His lawyers asked to have it tossed out on "diplomatic immunity" but F.N. judges did not fall into trap. Merely noted that alleged of-

fenses had taken place outside jurisdiction of lower court, except alleged "inciting" concerning which they found insufficient evidence. Aren't any F.N. laws covering marriage. Can't be — just a rule about each nation required to give "full faith and credence" to marriage customs of other member nations.

Out of those eleven billion people perhaps seven billion lived where polygamy is legal, and Stu's opinion manipulators played up "persecution". It gained us sympathy from people who otherwise would never have heard of us — even gained it in North America and other places where polygamy is not legal, from people who believe in "live and let live." All good, because always problem was to be noticed. To most of those bee-swarm billions Luna was nothing; our rebellion hadn't been noticed.

Stu's operators had gone to much thought to plan setup to get me arrested. Was not told until weeks later after time to cool off and see benefits. Took a stupid judge, a dishonest sheriff and barbaric local prejudice which I triggered with that sweet picture, for Stu admitted later that range of color in Davis family was what got judge angry enough to be foolish even beyond native talent for nonsense.

My one consolation, that Mum could not see my disgrace, turned out mistaken. Pictures, taken through bars and showing grim face, were in every Luna paper, and write-ups used narstiest Earthside stories, not larger number that deplored injustice. But should have had more faith in Mimi. She wasn't ashamed, simply wanted to go Earthside and rip some people to pieces.

While helped Earthside, greatest good was in Luna. Loonies became more unified over this silly huhu than had ever been before. They took it personally and "Adam Selene" and "Simon Jester" pushed it. Loonies are easy going except on one subject, women. Every lady felt insulted by Terran news stories — so male Loonies who had ignored politics suddenly discovered I was their boy.

Spinoff. Old lags feel superior to those not transported. Later found self greeted by ex-cons with: "Hi, jail bird!" A lodge greeting — I was accepted.

But saw nothing good about it then! Pushed around, treated like cattle, fingerprinted, photographed, given food we wouldn't offer hogs, exposed to endless indignity, and only that heavy field kept me from trying to kill somebody. Had I been wearing number-six arm when grabbed, might have tried.

But steadied down once I was freed. Hour later we were on way to Agra; had at last been summoned by Committee. Felt good to be back in suite in maharajah's palace but eleven-hour zone change in less than three did not permit rest; we went to hearing bleary-eyed and held together by drugs.

"Hearing" was one-sided; we listened while chairman talked. Talked an hour; I'll summarize:

Our preposterous claims were rejected. Lunar Authority's sa-

cred trust could not be abandoned. Disorders on Earth's Moon could not be tolerated. Moreover recent disorders showed that Authority had been too lenient. Omission was now to be corrected by an activist program, a five-year plan in which all phases of life in Authority's trusteeship would be overhauled. A code of laws was being drafted; civil and criminal courts would be instituted for benefit of "client-employees" — which meant *all* persons in trust area, not just consignees with uncompleted sentences. Public schools would be established, plus indoctrinal adult schools for client-employees in need of same. An economic, engineering and agricultural planning board would be created to provide fullest and most efficient use of Moon's resources and labor of client-employees. An interim goal of quadrupling grain shipments in five years had been adopted as a figure easily attainable once scientific planning of resources and labor was in effect. First phase would be to withdraw client-employees from occupations found not to be productive and put them to drilling a vast new system of farm tunnels in order that hydroponics would commence in them not later than March 2078. These new giant farms would be operated by Lunar Authority, scientifically, and not left to whims of private owners. It was contemplated that this system would, by end of five-year plan, produce entire new grain quota. In meantime client-employees producing grain privately would be allowed to continue. But they would be absorbed into new system as their less efficient methods were no longer needed.

Chairman looked up from papers. "In short, the Lunar colonies are going to be civilized and brought into managerial co-ordination with the rest of civilization. Distasteful as this task has been, I feel — speaking as a citizen rather than as chairman of this committee — I feel that we owe you thanks for bringing to our attention a situation so badly in need of correction."

Was ready to burn his ears off. "Client-employees"! What a fancy way to say "slaves"! But Prof said tranquilly, "I find the proposed plans most interesting. Is one permitted to ask questions? Purely for information?"

"For information, yes."

North American member leaned forward. "But don't assume that we are going to take any back talk from you cavemen! So mind your manners. You aren't in the clear on this, you know."

"Order," chairman said. "Proceed, Professor."

"This term 'client-employee' I find intriguing. Can it be stipulated that the majority of inhabitants of Earth's major satellite are not undischarged consignees but free individuals?"

"Certainly," chairman agreed blandly. "All legal aspects of the new policy have been studied. With minor exceptions some ninety-one per cent of the colonists have citizenship, original or derived, in various member nations of the Federated Nations. Those who wish to return to their home countries have a right to do so. You will be pleased to learn that

the Authority is considering a plan under which loans for transportation can be arranged . . . probably under supervision of International Red Cross and Crescent. I might add that I myself am heartily backing this plan — as it renders nonsensical any talk about 'slave labor.'" He smiled smugly.

"I see," agreed Prof. "Most humane. Has the committee — or the Authority — pondered the fact that most — effectively all, I should say — considered the fact that inhabitants of Luna are physically unable to live on this planet? That they have undergone involuntary permanent exile through irreversible physiological changes and can never again live in comfort and health in a gravitational field six times greater than that to which their bodies have become adjusted?"

Scoundrel pursed lips as if considering totally new idea.

"Speaking again for myself, I would not be prepared to stipulate that what you say is necessarily true. It might be true of some, might not be others. People vary widely. Your presence here proves that it is not impossible for a Lunar inhabitant to return to Earth. In any case we have no intention of *forcing* anyone to return. We hope that they will choose to stay and we hope to encourage others to emigrate to the Moon. But these are individual choices, under the freedoms guaranteed by the Great Charter. But as to this alleged physiological phenomenon — It is not a legal matter. If anyone deems it prudent, or thinks he would be happier, to stay on the Moon, that's his privilege."

"I see, sir. We are free. Free to remain in Luna and work, at tasks and for wages set by you . . . or free to return to Earth to die."

Chairman shrugged. "You assume that we are villains. We're not. Why, if I were a young man I would emigrate to the Moon myself. Great opportunities! In any case I am not troubled by your distortions — history will justify us."

Was surprised at Prof; he was not fighting. Worried about him — weeks of strain and a bad night on top. All he said was, "Honorable Chairman, I assume that shipping to Luna will soon be resumed. Can passage be arranged for my colleague and myself in the first ship? For I must admit, sir, that this gravitational weakness of which I spoke is, in our cases, very real. Our mission is completed; we need to go home."

(Not a word about grain barges. Nor about "throwing rocks," nor even futility of beating a cow. Prof just sounded tired.)

Chairman leaned forward and spoke with grim satisfaction. "Professor, that presents difficulties. To put it bluntly, you appear to be guilty of treason against the Great Charter, indeed against all humanity . . . and an indictment is being considered. I doubt if anything more than a suspended sentence would be invoked against a man of your age and physical condition. However . . . do you think it would be prudent of us to give you passage back to the place where you committed these

acts — there to stir up more mischief?"

Prof sighed. "I understand your point. Then, sir, may I be excused? I am weary."

"Certainly. Hold yourself at the disposal of this committee. The hearing stands adjourned. Colonel Davis."

"Sir?" I was directing wheelchair around, to get Prof out at once; our attendants had been sent outside.

"A word with you, please."

"Uh — " Looked at Prof; eyes were closed and seemed unconscious. But he moved one finger, motioning me to him. "Honorable Chairman, I'm more nurse than diplomat; have to look after him. He's an old man, he's ill."

"The attendants will take care of him."

"Well —" Got as close to Prof as I could from chair, leaned over him. "Prof, are you right?"

He barely whispered. "See what he wants. Agree with him. But stall."

Moments later was alone with chairman, soundproof door locked. Meant nothing. Room could have a dozen ears, plus one in my left arm.

He said, "A drink? Coffee?"

I answered, "No, thank you, sir. Have to watch my diet here."

"I suppose so. Are you really limited to that chair? You look healthy."

I said, "I could, if had to, get up and walk across room. Might faint. Or worse. Prefer not to risk. Weigh six times what I should. Heart's not used to it."

"I suppose so. Colonel, I hear you had some silly trouble in North America. I'm sorry, I truly am. Barbaric place. Always hate to have to go there. I suppose you're wondering why I wanted to see you."

"No, sir, assume you'll tell when suits you. Instead was wondering why you still call me 'Colonel.' "

He gave a barking laugh. "Habit, I suppose. A lifetime of protocol. Yet it might be well for you to continue with that title. Tell me, what do you think of our five-year plan?"

Thought it stunk. "Seems to have been carefully thought out."

"Much thought went into it. Colonel, you seem to be a sensible man. I know you are. I know not only your background but practically every word you've spoken, almost your thoughts, ever since you set foot on Earth. You were born on the Moon. Do you regard yourself as a patriot? Of the Moon?"

"Suppose so. Though tend to think of what we did just as something that had to be done."

"Between ourselves — yes. That old fool Hobart. Colonel, that *is* a good plan . . . but lacks an executive. If you are *really* a patriot or let's say a practical man with your country's best interests at heart, you might be the man to carry it out." He held up hand. "Don't be hasty! I'm not asking you to 'sell out,' 'turn traitor,' or any nonsense like that. This is your chance to be a *real* patriot — not some phony hero who gets himself killed in a lost cause. Put it this way. Do you think it is possible for the Lunar colonies to hold out against all the force that

the Federated Nations of Earth can bring to bear? You're not really a military man, and I know that, too. In your honest estimation how many ships and bombs do you think it would take to destroy the Lunar colonies?"

I answered, "One ship, six bombs."

"Correct! My God, it's good to talk to a sensible man. Two of them would have to be awf'ly big, perhaps specially built. A few people would stay alive, for a while, in smaller warrens beyond the blast areas. But one ship would do it, in ten minutes."

I said, "Conceded, sir, but Professor de la Paz pointed out that you don't get milk by beating a cow. And certainly can't by shooting it."

"Why do you think we've held back, done nothing, for over a month? That idiot colleague of mine — I won't name him — spoke of 'back talk.' Back talk doesn't fret me. It's just talk. And I'm interested in results. No, my dear Colonel, we won't shoot the cow . . . but we would, if forced to, let the cow know it *could* be shot. H-missiles are expensive toys but we could afford to expend some as warning shots, wasted on bare rock to let the cow know what *could* happen. But that is more force than one likes to use. It might frighten the cow and sour its milk." He gave another barking laugh. "Better to persuade old bossy to give down willingly."

I waited. "Don't you want to know how?" he asked.

"How?" I agreed.

"Through you. Don't say a word and let me explain."

He took me up on that high mountain and offered me kingdoms of Earth. Or of Luna. Take job of "Protector Pro Tem" with understanding was mine permanently if I could deliver. Convince Loonies they could not win. Convince them that this new setup was to their advantage — emphasize benefits, free schools, free hospitals, free this and that — details later but an everywhere government just like on Terra. Taxes starting low and handled painlessly by automatic checkoff and through kickback revenues from grain shipments. But most, important, this time Authority would not send a boy to do a man's job. Two regiments of police at once.

"Those damned Peace Dragoons were a mistake," he said, "one we won't make again. Between ourselves, the reason it has taken us a month to work this out is that we had to convince the Peace Control Commission that a handful of men cannot police three million people spread through six largish warrens and fifty and more small ones. So you'll start with enough police. Not combat troops but military police used to quelling civilians with a minimum of fuss. Besides that, this time they'll have female auxiliaries. The standard ten per cent. No more rape complaints. Well, sir? Think you can swing it? Knowing it's best in the long run for your own people?"

I said I ought to study it in detail, particularly plans and quotas for five-year plan, rather than make snap decision.

"Certainly, certainly!" he agreed. "I'll give you a copy of the white paper we've made up. Take it home, study it, sleep on it. Tomorrow we'll talk again. Just give me your word as a gentleman to keep it under your hair. No secret, really . . . but these things are best settled before they are publicized. Speaking of publicity, you'll need help — and you'll get it. We'll go to the expense of sending up topnotch men, pay them what it's worth, have them centrifuge the way those scientists do — you know. *This* time we're doing it right. That fool Hobart — he's actually dead, isn't he?"

"No, sir. Senile, however."

"Should have killed him. Here's your copy of the plan."

"Sir? Speaking of old men — Professor de la Paz can't stay here. Wouldn't live six months."

"That's best, isn't it?"

I tried to answer levelly, "You don't understand. He is greatly loved and respected. Best thing would be for me to convince him that you mean business with those H-missiles — and that it is his patriotic duty to salvage what we can. But, either way, if I return without him . . . well, not only could not swing it; wouldn't live long enough to try."

"Hmm. Sleep on it. We'll talk tomorrow. Say fourteen o'clock."

I left and as soon as was loaded into lorry gave way to shakes. Just don't have high-level approach.

Stu was waiting with Prof. "Well?" said Prof.

I glanced around, tapped ear. We huddled, heads over Prof's head and two blankets over us all. Stretcher wagon was clean and so was my chair; I checked them each morning. But for room itself seemed safer to whisper under blankets.

Started in. Prof stopped me. "Discuss his ancestry and habits later. The facts."

"He offered me job of warden."

"I trust you accepted."

"Ninety per cent. I'm to study this garbage and give answer tomorrow. Stu, how fast can we execute Plan Scoot?"

"Started. We were waiting for you to return. If they let you return."

Next fifty minutes were busy. Stu produced a gaunt Hindu in a doti; in thirty minutes he was a twin of Prof, and Stu lifted Prof off wagon onto a divan. Duplicating me was easier. Our doubles were wheeled into suite's living room just at dusk and dinner was brought in. Several people came and went — among them elderly Hindu woman in sari, on arm of Stuart LaJoie. A plump babu followed them.

Getting Prof up steps to roof was worst. He had never worn powered walkers, had no chance to practice and had been flat on back for more than a month.

But Stu's arm kept him steady. I gritted teeth and climbed those thirteen terrible steps by myself. By time I reached roof heart was ready to burst. Was put to it not to black out. A silent little flitter craft came out of gloom right on schedule and ten minutes later we were in chartered ship we had used past month — two minutes after that we jetted for Australia. Don't know what it cost to

prepare this dance and keep it ready against need, but was no hitch.

Stretched out by Prof and caught breath, then said, "How you feel, Prof?"

"Okay. A bit tired. Frustrated."

"Ja da. Frustrated."

"Over not seeing the Taj Mahal, I mean. I never had opportunity as a young man — and here I've been within a kilometer of it twice, once for several days, now for another day . . . and still I haven't seen it and never shall."

"Just a tomb."

"And Helen of Troy was just a woman. Sleep, lad."

We landed in Chinee half of Australia, place called "Darwin," and were carried straight into a ship, placed in acceleration couches and dosed. Prof was already out and I was beginning to feel dopy when Stu came in, grinned, and strapped down by us. I looked at him. "You, too? Who's minding shop?"

"The same people who've been doing the real work all along. It's a good setup and doesn't need me any longer. Mannie old cobber, I did not want to be marooned a long way from home. Luna, I mean, in case you have doubts. This looks like the last train from Shanghai."

"What's Shanghai got to do with?"

"Forget I mentioned it. Mannie, I'm flat broke, concave. I owe money in all directions — debts that will be paid only if certain stocks move the way Adam Selene convinced me they would move, shortly after this point in history. And if I'm wanted, or will be, for offenses against the public peace and dignity. Put it this way: I'm saving them the trouble of transporting me. Do you think I can learn to be a drillman at my age?"

Was feeling foggy, drug taking hold. "Stu, in Luna y'aren't old . . . barely started . . . 'nyway . . . eat our table f'rever! Mimi *likes* you."

"Thanks, cobber, I might. Warning light! Deep breath!"

Suddenly was kicked by ten gee.

XXXIV

Our craft was ground-to-orbit ferry type used for manned satellites, for supplying F.N. ships in patrol orbit, and for passengers to and from pleasure-and-gambling satellites. She was carrying three passengers instead of forty, no cargo except three p-suits and a brass cannon (yes, silly toy was along; p-suits and Prof's bang-bang were in Australia a week before we were) and good ship *Lark* had been stripped — total crew was skipper and a Cyborg pilot.

She was heavily over-fueled.

We made (was told) normal approach on *Elysium* satellite . . . then suddenly scooted from orbital speed to escape speed, a change even more violent than liftoff.

This was scanned by F.N. Skytrack; we were commanded to stop and explain. I got this second hand from Stu, self still recovering and enjoying luxury of no-gee with one strap to anchor. Prof still out.

"So they want to know who we are and what we think we are doing," Stu told me. "We told them that we were Chinese registry sky

wagon *Opening Lotus* bound on an errand of mercy, to wit, rescuing those scientists marooned on the Moon, and gave our identification — as *Opening Lotus.*"

"How about transponder?"

"Mannie, if I got what I paid for, our transponder identified us as the *Lark* up to ten minutes ago . . . and now has I.D.'d us as the *Lotus.* Soon we will know. Just one ship is in position to get a missile off and it must blast us in —" he stopped to look — "another twenty-seven minutes according to the wired-up gentleman booting this bucket, or its chances of getting us are poor to zero. So if it worries you — if you have prayers to say or messages to send or whatever it is one does at such times — now is the time."

"Think we ought to rouse Prof?"

"Let him sleep. Can you think of a better way to make the jump than from peaceful sleep instantaneously into a cloud of radiant gas? Unless you know that he has religious necessities to attend to? He never struck me as a religious man, orthodoctrinally speaking."

"He's not. But if you have such duties, don't let me keep you."

"Thank you, I took care of what seemed necessary before we left ground. How about yourself, Mannie? I'm not much of a padre but I'll do my best, if I can help. Any sins on your mind, old cobber? If you need to confess, I know quite a little about sin."

Told him my needs did not run that way. Then did recall sins, some I cherished, and gave him a version more or less true. That reminded him of some of his own, which reminded me —

Zero time came and went before we ran out of sins. Stu LaJoie is a good person to spend last minutes with, even if don't turn out to be last.

We had two days with naught to do but undergo drastic routines to keep us from carrying umpteen plagues to Luna. But didn't mind shaking from induced chills and burning with fever. Free fall was such a relief and was so happy to be going home.

Or almost happy. Prof asked what was troubling me. "Nothing," I said. "Can't wait to be home. But truth is, ashamed to show face after we've failed. Prof, what did we do wrong?"

"Failed, my boy?"

"Don't see what else can call it. Asked to be recognized. Not what we got."

"Manuel, I owe you an apology. You will recall Adam Selene's projection of our chances just before we left home." Stu was not in earshot but "Mike" was word we never used; was always "Adam Selene" for security.

"Certainly do! One in fifty-three. Then when we reached Earthside dropped to reeking one in hundred. What you guess it is now? One in thousand?"

"I've had new projections every few days . . . which is why I owe you an apology. The last, received just before we left, included the then-untested assumption that we would escape, get clear of Terra and home safely. Or that at least one

of us would make it, which is why Comrade Stu was summoned home, he having a Terran's tolerance of high acceleration. Eight projections, in fact, ranging from three of us dead, through various combinations up to three surviving. Would you care to stake a few dollars on what that last projection is, setting a bracket and naming your own odds? I'll give a hint. You are far too pessimistic."

"Uh . . . no, damn it! Just tell."

"The odds against us are now only seventeen to one . . . and they've been shortening all month. Which I couldn't tell you."

Was amazed, delighted, overjoyed — hurt. "What you mean, couldn't tell me? Look, Prof, if not trusted, deal me out and put Stu in executive cell."

"Please, son. That's where he will go if anything happens to any of us — you, me, or dear Wyoming. I could not tell you Earthside — and *can* tell you now — not because you aren't trusted but because you are no actor. You could carry out your role more effectively if you believed that our purpose was to achieve recognition of independence."

"Now he tells!"

"Manuel, Manuel, we had to fight hard every instant — and lose."

"So? Am not big enough boy to be told?"

"Please, Manuel. Keeping you temporarily in the dark greatly enhanced our chances; you can check this with Adam. May I add that Stuart accepted his summons to Luna blithely without asking why? Comrade, that committee was too small, its chairman too intelligent. There was always the hazard that they might offer an acceptable compromise. That first day there was grave danger of it. Had we been able to force our case before the Grand Assembly there would have been no danger of intelligent action. But we were balked. The best I could do was to antagonize the committee, even stooping to personal insult to make certain of at least one hold-out against common sense."

"Guess I never will understand high-level approach."

"Possibly not. But your talents and mine complement each other. Manuel, you wish to see Luna free."

"You know I do."

"You also know that Terra can defeat us."

"Sure. No projection ever gave anything close to even money. So don't see why you set out to antagonize —"

"Please. Since they *can* inflict their will on us, our only chance lies in weakening their will. That was why we *had* to go to Terra. To be divisive. To create many opinions. The shrewdest of the great generals in China's history once said that perfection in war lay in so sapping the opponent's will that he surrenders without fighting. In that maxim lies both our ultimate purpose and our most pressing danger. Suppose, as seemed possible that first day, we had been offered an inviting compromise. A governor in place of a warden, possibly from our own number. Local autonomy. A delegate in the Grand Assembly. A higher price

for grain at the catapult head, plus a bonus for increased shipments. A disavowal of Hobart's policies combined with an expression of regret over the rape and the killings with handsome cash settlements to the victims' survivors. Would it have been accepted? Back home?"

"They did not offer that."

"The chairman was ready to offer something like it that first afternoon and at that time he had his committee in hand. He offered us an asking price close enough to permit such a dicker. Assume that we reached in substance what I outlined. Would it have been acceptable?"

"Uh . . . maybe."

"More than a 'maybe' by the bleak projection made just before we left home. It was the thing to be avoided at any cost — a settlement which would quiet things down, destroy our will to resist, without changing any essential in the longer-range prediction of disaster. So I switched the subject and squelched possibility by being difficult about irrelevancies and politely offensive. Manuel, you and I know — and Adam knows — that there must be an end to food shipments. Nothing less will save Luna from disaster. But can you imagine a wheat farmer fighting to end those shipments?"

"No. Wonder if can pick up news from home on how they're taking stoppage?"

"There won't be any. Here is how Adam has timed it, Manuel: No announcement is to be made on either planet until after we get home. We are still buying wheat. Barges are still arriving at Bombay."

"You told them shipments would stop at once."

"That was a threat, not a moral commitment. A few more loads won't matter and we need time. We don't have everyone on our side; we have only a minority. There is a majority who don't care either way but can be swayed — temporarily. We have another minority against us . . . especially grain farmers whose interest is never politics but the price of wheat. They are grumbling but accepting Scrip, hoping it will be worth face value later. But the instant we announce that shipments have stopped they will be actively against us. Adam plans to have the majority committed to us at the time the announcement is made."

"How long? One year? Two?"

"Two days, three days, perhaps four. Carefully edited excerpts from that five-year plan, excerpts from the recordings you've made especially that yellow-dog offer, exploitation of your arrest in Kentucky —"

"Hey! I'd rather forget that."

Prof smiled and cocked an eyebrow. "Uh —" I said uncomfortably. "Okay. If will help."

"It will help more than any statistics about natural resources."

Wired-up ex-human piloting us went in as one maneuver without bothering to orbit and gave us even heavier beating. Ship was light and lively. But change in motion is under two-and-a-half kilometers; was over in nineteen seconds and we were down at Johnson City.

I took it right, just a terrible con-

striction in chest and a feeling as if giant were squeezing heart, then was over and I was gasping back to normal and glad to be proper weight. But did almost kill poor old Prof.

Mike told me later that pilot refused to surrender control. Mike would have brought ship down in a low-gee, no-breakum-egg, knowing Prof was aboard. But perhaps that Cyborg knew what he was doing. A low-gee landing wastes mass and *Lotus Lark* grounded almost dry.

None of which we cared about, as looked as if that Garrison landing had wasted Prof. Stu saw it while I was still gasping, then we were both at him — heart stimulant, manual respiration, massage. At last he fluttered eyelids, looked at us, smiled. *"Home,"* he whispered.

We made him rest twenty minutes before we let him suit up to leave ship; had been as near dead as can be and not hear angels. Skipper was filling tanks, anxious to get rid of us and take on passengers. That Dutchman never spoke to us whole trip; think he regretted lettting money talk him into a trip that could ruin or kill him.

By then Wyoh was inside ship, p-suited to come to meet us. Don't think Stu had ever seen her in a p-suit and certain he had never seen her as a blonde; did not recognize. I was hugging her in spite of p-suit; he was standing by, waiting to be introduced. Then strange "man" in p-suit hugged him — he was surprised.

Heard Wyoh's muffled voice: "Oh heavens! Mannie, my helmet."

I unclamped it, lifted off. She shook curls and grinned. "Stu, aren't you glad to see me? Don't you *know* me?"

A grin spread over his face, slowly as dawn across maria. "Zdra'stvooeet'ye, Gospazha! I am most happy to see you."

"'Gospazha' indeed! I'm Wyoh to you, dear, always. Didn't Mannie tell you I'd gone back to blonde?"

"Yes, he did. But knowing it and seeing are not the same."

"You'll get used to it." She stopped to bend over Prof, kiss him, giggle at him, then straightened up and gave me a no-helmet welcome-home that left us both with tears despite pesky suit. Then turned again to Stu, started to kiss him.

He held back a little. She stopped. "Stu, am I going to have to put on brown makeup to welcome you?" Stu glanced at me, then kissed her. Wyoh put in as much time and thought as she had to welcoming me.

Was later I figured out his odd behavior. Stu, despite commitment, was still not a Loonie — and in meantime Wyoh had married. What's that got to do with it? Well, Earthside it makes a difference, and Stu did not know deep down in bones that a Loonie lady is own mistress. Poor chum thought *I* might take offense!

We got Prof into suit, ourselves same, and left, me with cannon under arm. Once underground and locked through, we unsuited — and I was flattered to see that Wyoh was wearing crushed under p-suit that red dress I bought her ages ago. She brushed it and skirt flared out.

Immigration room was empty save

for about forty men lined up along wall like new transportees; were wearing p-suits and carrying helmets — Terrans going home, stranded tourists and some scientists. Their p-suits would not go, would be unloaded before lift. I looked at them and thought about Cyborg pilot. When *Lark* had been stripped, all but three couches had been removed. These people were going to take acceleration lying on floorplates. If skipper was not careful he was going to have mashed Terrans au blut.

Mentioned to Stu. "Forget it," he said. "Captain Leures has foam pads aboard. He won't let them be hurt; they're his life insurance."

XXXV

My family, all thirty-odd from Grandpaw to babies, was waiting beyond next lock on level below and we got cried on and slobbered on and hugged. And this time Stu did not hold back.

Little Hazel made ceremony of kissing us. She had Liberty Caps, set one on each, then kissed us — and at that signal whole family put on Liberty Caps, and I got sudden tears. Perhaps is what patriotism feels like, choked up and so happy it hurts. Or maybe was just being with my beloveds again.

"Where's Slim?" I asked Hazel. "Wasn't he invited?"

"Couldn't come. He's junior marshal of your reception."

"'Reception?' This is all we want."

"You'll see."

Did. Good thing family came out to meet us; that and ride to L-City (filled a capsule) were all I saw of them for some time. Tube Station West was a howling mob, all in Liberty Caps. We three were carried on shoulders all way to Old Dome, surrounded by a stilyagi bodyguard, elbows locked to force through cheering, singing crowds. Boys were wearing red caps and white shirts and their girls wore white jumpers and red shorts color of caps.

At station and again when they put us down in Old Dome I got kissed by fems I have never seen before or since. Remember hoping that measures we had taken in lieu of quarantine were effective — or half of L-City would be down with colds or worse. (Apparently we were clean; was no epidemic. But I remember time — was quite small — when measles got loose and thousands died.)

Worried about Prof, too. Reception was too rough for a man good as dead an hour earlier. But he not only enjoyed it, he made a wonderful speech in Old Dome — one short on logic, loaded with ringing phrases. "Love" was in it, and "home" and "Luna" and "comrades" and "neighbors" and even "shoulder to shoulder" and all sounded good.

They had erected a platform under big news video on south face. Adam Selene greeted us from video screen and now Prof's face and voice were projected from it, much magnified, over his head. Did not have to shout. But did have to pause after every sentence. Crowd

roars drowned out even bull voice from screen — and no doubt pauses helped, as rest. But Prof no longer seemed old, tired, ill; being back inside The Rock seemed to be tonic he needed. And me, too! Was wonderful to be right weight, feel *strong*, breathe pure, replenished air of own city.

No mean city! Impossible to get all of L-City inside Old Dome — but looked as if they tried. I estimated an area ten meters square, tried to count heads, got over two hundred not half through and gave up. *Lunatic* placed crowd at thirty thousand, seems impossible.

Prof's words reached more nearly three million; video carried scene to those who could not crowd into Old Dome, cable and relay flashed it across lonely maria to all wardens. He grabbed chance to tell of slave future Authority planned for them. Waved that "white paper". "Here it is!" he cried. "Your fetters! Your leg irons! Will you wear them?"

"*No*!"

"They say you must. They say they will H-bomb . . . then survivors will surrender and put on these chains. Will you?"

"NO! NEVER!"

"'Never,'" agreed Prof. "They threaten to send troops . . . more and more troops to rape and murder. We shall fight them."

"DA!"

"We shall fight them on the surface, we shall fight them in the tubes, we shall fight them in the corridors! If die we must, we shall die *free!*"

"Yes! Ja-da! Tell 'em, tell 'em!"

"And if we die, let history write: This was Luna's finest hour! Give us liberty . . . or give us *death!*"

Some of that sounded familiar. But his words came out fresh and new; I joined in roars. Look . . . I *knew* we couldn't whip Terra — I'm tech by trade and *know* that an M-missile doesn't care how brave you are. But was ready, too. If they wanted a fight, let's have it!

Prof let them roar, then led them in *Battle Hymn of the Republic*, Simon's version. Adam appeared on screen again, took over leading it and sang with them, and we tried to slip away, off back of platform, with help of stilyagi led by Slim. But women didn't want to let us go and lads aren't at their best in trying to stop ladies; they broke through. Was twenty-two hundred before we four, Wyoh, Prof, Stu, self, were locked in room L of Raffles, where Adam-Mike joined us by video. I was starved by then, all were, so I ordered dinner and Prof insisted that we eat before reviewing plans.

Then we got down to business.

Adam started by asking me to read aloud "white paper", for his benefit and for Comrade Wyoming. "But first, Comrade Manuel, if you have the recordings you made Earthside, could you transmit them by phone at high speed to my office? I'll have them transcribed for study. All I have so far are the coded summaries Comrade Stuart sent up."

I did so, knowing Mike would

study them at once, phrasing was part of "Adam Selene" myth — and decided to talk to Prof about letting Stu in on the facts. If Stu was to be in executive cell, pretending was too clumsy.

Feeding recordings into Mike at overspeed took five minutes, reading aloud another thirty. That done, Adam said, "Professor, the reception was more successful than I had counted on, due to your speech, I think we should push the embargo through Congress at once. I can send out a call tonight for a session to begin at noon tomorrow. Comments?"

I said, "Look, those yammerheads will kick it around for weeks. If you must put it up to them — can't see why — do as you did with Declaration. Start late, jam it through after midnight using own people."

Adam said, "Sorry, Manuel. I'm getting caught up on events Earthside and you have catching up to do here. It's no longer the same group. Comrade Wyoming?"

"Mannie dear, it's an elected Congress now. They must pass it, Congress is what government we have for Luna."

I said slowly, "You held election and turned things over to them? *Everything?* Then what are *we* doing?" Looked at Prof, expecting explosion. My objections would not be on his grounds — but couldn't see any use in swapping one talk-talk for another. At least first group had been so loose we could pack it. This new group would be glued to seats.

Prof was undisturbed. Fitted fingertips together and looked relaxed. "Manuel, I don't think the situation is as bad as you seem to feel it is. In each stage it is necessary to adapt to the popular mythology. At one time kings were anointed by Deity, so the problem was to see to it that Deity anointed the right candidate. In this age the myth is 'the will of the people' . . . but the problem changes only superficially. Comrade Adam and I have had long discussions about how to determine the will of the people. I venture to suggest that this solution is one we can work with."

"Well . . . okay. But why weren't we told? Stu, did you know?"

"No, Mannie. There was no reason to tell me." He shrugged. "I'm a monarchist. I wouldn't have been interested. But I go along with Prof that in this day and age elections are a necessary ritual."

Prof said, "Manuel, it wasn't necessary to tell us till we got back. You and I had other work to do. Comrade Adam and dear Comrade Wyoming handled it in our absence . . . so let's find out what they did before we judge what they've done."

"Sorry. Well, Wyoh?"

"Mannie, we didn't leave *everything* to chance. Adam and I decided that a Congress of three hundred would be about right. Then we spent hours going over the Party lists — plus prominent people not in the Party. At last we had a list of candidates — a list that included some from the Ad-Hoc Congress.

Not all were yammerheads. We included as many as we could. Then Adam phoned each one and asked him — or her — if he would serve . . . binding him to secrecy in the meantime. Some we had to replace.

"When we were ready, Adam spoke on video, announced that it was time to carry out the Party's pledge of free elections, set a date, said that everybody over sixteen could vote, and that all anyone had to do to be a candidate was to get a hundred chops on a nominating petition and post it in Old Dome, or the public notice place for his warren. Oh, yes, thirty temporary election districts, ten Congressmen from each district. That let all but the smallest warrens be at least one district."

"So you had it lined up and Party ticket went through?"

"Oh, no, dear! There wasn't any Party ticket — officially. But we were ready with our candidates . . . and I must say my stilyagi did a smart job of getting chops on nominations. Our optings were posted the first day. Many other people posted; there were over two thousand candidates. But there was only ten days from announcement to election, and we knew what we wanted whereas the opposition was split up. It wasn't necessary for Adam to come out publicly and endorse candidates. It worked out — you won by seven thousand votes, dear, while your nearest rivals got less than a thousand."

"*I* won?"

"You won, I won, Professor won, Comrade Clayton won, and just about everybody we thought should be in the Congress. It wasn't hard. Although Adam never endorsed anyone, I didn't hesitate to let our comrades know who was favored. Simon poked his finger in, too. And we do have good connections with newspapers. I wish you had been here election night, watching the results. Exciting!"

"How did you go about nose counting? Never known how election works. Write names on a piece of paper?"

"Oh, no, we used a better system . . . because, after all, some of our best people can't write. We used banks for voting places, with bank clerks identifying customers and customers identifying members of their families and neighbors who don't have bank accounts. People voted orally and the clerks punched the votes into the banks' computers with the voter watching, and results were all tallied at once in Luna City clearing house. We voted everybody in less than three hours and results were printed out just minutes after voting stopped."

Suddenly a light came on in my skull and I decided to question Wyoh privately. No, not Wyoh — *Mike*. Get past his "Adam Selene" dignity and hammer truth out of his neuristors. Recalled a cheque ten million billion dollars too large and wondered how many had voted for me? Seven thousand? Seven hundred? Or just my family and friends?

But no longer worried about new


GRAY MORROW

Congress. Prof had not slipped them a cold deck but one that was frozen solid — then ducked Earthside while crime was committed. No us asking Wyoh; she didn't even *need* to know what Mike had done . . . and could do her part better if did not suspect.

Nor would anybody suspect. If was one thing all people took for granted, was conviction that if you feed honest figures into a computer, honest figures come out. Never doubted it myself till I met a computer with a sense of humor.

Changed my mind about suggesting that Stu be let in on Mike's self-awareness. Three was too many. Or perhaps too few. "Mi—" I started to say, and changed to: "My word! Sounds efficient. How big did we win?"

Adam answered without expression. "Eighty-six per cent of our candidates were successful. Approximately what I had expected."

("Approximately," my false left arm! *Exactly* what you expected, Mike old ironmongery!) "Withdraw objection to a noon session — I'll be there."

"It seems to me," said Stu, "assuming that the embargo starts at once, we will need something to maintain the enthusiasm we witnessed tonight. Or there will be a long quiet period of increasing economic depression — from the embargo, I mean — and growing disillusionment. Adam, you first impressed me through your ability to make shrewd guesses as to future events. Do my misgivings make sense?"

"They do."

"Well?"

Adam looked at us in turn, and was almost impossible to believe that this was a false image and Mike was simply placing us through binaural receptors. "Comrades . . . it must be turned into open war as quickly as possible."

Nobody said anything. One thing to talk about war, another to face up to it. At last I sighed and said, "When do we start throwing rocks?"

"We do not start," Adam answered. "They must throw the first one. How do we antagonize them into doing so? I will reserve my thoughts to the last. Comrade Manuel?"

"Uh . . . don't look at me. Way I feel, would start with a nice big rock smash at Agra — a bloke there who is a waste of space. But is not what you are after."

"No, it is not." Adam answered seriously. "You would not only anger the entire Hindu nation, a people intensely opposed to destruction of life, but you would also anger and shock people throughout Earth by destroying the Taj Mahal."

"Including me," said Prof. "Don't talk dirty, Manuel."

"Look," I said, "didn't say to do it. Anyhow, could miss Taj."

"Manuel," said Prof, "as Adam pointed out, our strategy must be to antagonize them into striking the first blow, the classic 'Pearl Harbor' maneuver of game theory, a great advantage in Welt-

politick. The question is *how*? Adam, I suggest that what is needed is to plant the idea that we are weak and divided and that all it takes is a show of force to bring us back into line. Stu? Your people Earthside should be useful. Suppose the Congress repudiated myself and Manuel? The effect?"

"Oh, *no!*" said Wyoh.

"Oh, *yes*, dear Wyoh. Not necessary to *do* it but simply to put it over news channels to Earth. Perhaps still better to put it out over a clandestine beam attributed to the Terran scientists still with us while our official channels display the classic stigmata of tight censorship. Adam?"

"I'm noting it as a tactic which probably will be included in the strategy. But it will not be sufficient alone. We must be bombed."

"Adam," said Wyoh, "why do you say so? Even if Luna City can stand up under their biggest bombs — something I hope never to find out — we know that Luna can't win an all-out war. You've said so, many times. Isn't there some way to work it so that they will just plain leave us alone?"

Adam pulled at right cheek — and I thought: Mike, if you don't knock off play-acting, you'll have me believing in you myself. Was annoyed at him and looked forward to a talk — one in which I would not have to defer to "Chairman Selene."

"Comrade Wyoming," he said soberly, "it's a matter of game theory in a complex non-zero-sum game. We have certain resources or 'pieces in the game' and many possible moves. Our opponents have much larger resources and a far larger spectrum of responses. Our problem is to manipulate the game so that our strength is utilized toward an optimax solution while inducing them to waste their superior strength and to refrain from using it at maximum. Timing is of the essense and a gambit is necessary to start a chain of events favorable to our strategy. I realize this is not clear. I could put the factors through a computer and show you. Or you can accept the conclusion. Or you can use your own judgment."

He was reminding Wyoh (under Stu's nose) that he was not "Adam Selene" but Mike, our dinkum thinkum who could handle so complex a problem because he *was* a computer and smartest one anywhere.

Wyoh backtracked. "No, no," she said, "I wouldn't understand the math. Okay, it has to be done. How do we do it?"

Was four hundred before we had a plan that suited Prof and Stu as well as Adam — or took that long for Mike to sell his plan while appearing to pull ideas out of rest of us. Or was it Prof's plan with "Adam Selene" as salesman?

In any case we had a plan and master strategy of Tuesday 14 May 2075 and varied from it only to calendar, one that grew out of match events as they actually had occurred. In essence it called for us to behave as narstily as possible while strengthening impression that we would be awfully easy to spank.

XXXVI

Was at Community Hall at noon, after too little sleep, and found I could have slept two hours longer; Congressmen from Hong Kong could not make it that early despite tube all way. Wyoh did not bang gavel until fourteen-thirty.

Yes, my bride wife was chairman pro tem in a body not yet organized. Parliamentary rulings seemed to come naturally to her, and she was not a bad choice. A mob of Loonies behave better when a lady bangs gavel.

Not going to detail what new Congress did and said that session and later. Minutes are available. I showed up only when necessary and never bothered to learn talk-talk rules — seemed to be equal parts common politeness and ways in which chairman could invoke magic to do it his (her) way.

No sooner had Wyoh banged them to order but a cobber jumped up and said, "Gospazha Chairman, move we suspend rules and hear from Comrade Professor de la Paz!" — which brought a whoop of approval.

Wyoh banged again. "Motion is out of order and Member from Lower Churchill will be seated. This house recessed without adjourning and Chairman of Committee on Permanent Organization, Resolutions and Government Structure still has the floor."

Turned out to be Wolfgang Korsakov, Member from Tycho Under (and a member of Prof's cell and our number-one finagler of LuNoHoCo) and he not only had floor, he had it all day, yielding time as he saw fit (i.e, picking out whom he wanted to speak rather than letting just anyone talk). But nobody was too irked. This mob seemed satisfied with leadership. Were noisy but unruly.

By dinnertime Luna had a government to replace co-opted provisional government — i.e., dummy government we had opted ourselvs, which sent Prof and me to Earth. Congress confirmed all acts of provisional government, thus putting face on what we had done, thanked outgoing government for services and instructed Wolfgang's committee to continue work on permanent government structure.

Prof was elected President of Congress and ex-officio Prime Minister of interim government until we acquired a constitution. He protested age and health . . . then said would serve if could have certain things to help him; too old and too exhausted from trip Earthside to have responsibility of presiding — except on occasions of state — so he wanted Congress to elect a Speaker and Speaker Pro Tem. And besides that, he felt Congress should augment its numbers by not more than ten per cent by itself electing members-at-large so that Prime Minister, whoever he might be, could opt cabinet members or ministers of state who might not now be members of Congress — especially minister-without-portfolio to take load off his shoulders.

They balked. Most were proud

of being "Congressmen" and already jealous of status. But Prof just sat looking tired, and waited — and somebody pointed out that it still left control in hands of Congress. So they gave him what he asked for.

Then somebody squeezed in a speech by making it a question to chair. Everybody knew (he said) that Adam Selene had refrained from standing for Congress on grounds that Chairman of Emergency Committee should not take advantage of position to elbow way into new government . . . but could Honorable Chairlady tell member whether was any reason not to elect Adam Selene a member-at-large? As gesture of appreciation for great services? To let all Luna — yes, and all those earthworms, especially ex-Lunar ex-Authority — know that we were *not* repudiating Adam Selene. On contrary he was our beloved elder statesman and was not President simply because he chose not to be!

More whoops that went on and on. You can find in minutes who made that speech but one gets you ten Prof wrote it and Wyoh planted it.

Here is how it wound up, over course of days:

Prime Minister and Secretary of State for Foreign Affairs: Professor Bernardo de la Paz.

Speaker, Finn Nielsen; Speaker Pro Tem, Wyoming Davis.

Undersecretary of State for Foreign Affairs and Minister of Defense, General O'Kelly Davis; Minister of Information, Terence Sheehan (Sheenie turned *Pravda* over to managing editor to work with Adam and Stu); Special Minister-without-Portfolio in Ministry of Information, Stuart Rene LaJoie, Congressman-at-Large; Secretary of State for Economics and Finance (and Custodian of Enemy Property), Wolfgang Korsakov; Minister of Interior Affairs and Safety, Comrade "Clayton" Watenabe; Minister-without-Portfolio and Special Adviser to Prime Minister, "Adam Selene" plus a dozen ministers and ministers-without-portfolio from warrens other than Luna City.

See where that left things? Brush away fancy titles and "B" Cell was still running things as advised by Mike, backed by a Congress in which we could not lose a test vote. But did lose others we did not want to win, or did not care about.

But at time could not see sense in all that talk-talk.

During evening session Prof reported on trip and then yielded to me — Committee Chairman Korsakov consenting — so that I could report what "five-year plan" meant and how Authority had tried to bribe me. I'll never make a speaker but had time during dinner break to swot speech Mike had written. He had slanted it so narstily that I got angry all over again and was angry when I spoke and managed to make it catching. Congress was ready to riot by time I sat down.

Prof stepped forward, thin and pale, and said quietly, "Comrade Members, what shall we do? I suggest, Chairman Korsakov consenting,

that we discuss informally how to treat this latest insolence to our nation."

One member from Novylen wanted to declare war and they would have done so right then if Prof had not pointed out that they were still hearing committee reports.

More talk, all bitter. At last Comrade Member Chang Jones spoke: "Fellow Congressmen — sorry, Gospodin Chairman Korsakov — I'm a rice and wheat farmer. Mean I used to be, because back in May I got a bank loan and sons and I are converting to variety farming. We're broke — had to borrow tube fare to get here — but family is eating and someday we might pull square with bank. At least I'm no longer raising grain.

"But others are. Catapult has never reduced headway by one barge whole time we've been free. We're still shipping, hoping their cheques will be worth something someday.

"But now we know! They've told us what they mean to do with us — *to* us! I say only way to make those scoundrels know we mean business is stop shipments *right now!* Not another tonne, not a kilo . . . until they come here and dicker honestly for honest price!"

Around midnight they passed Embargo, then adjourned subject to call . . . standing committees to continue.

Wyoh and I went home and I got reacquainted with my family. Was nothing to do; Mike-Adam and Stu had been working on how to hit them with it Earthside and Mike had shut catapult down ("technical difficulties with ballistic computer") twenty-four hours earlier. Last barge in trajectory would be taken by Poona Ground Control in slightly over one day and Earth would be told narstily that was *last* they would ever get.

XXXVII

Shock to farmers was eased by continuing to buy grain at catapult — but cheques now carried printed warning that Luna Free State did not stand behind them, did not warrant that Lunar Authority would ever redeem them even in Scrip, etc., etc. Some farmers left grain anyhow, some did not, all screamed. But was nothing they could do. Catapult was shut down, loading belts not moving.

Depression was not immediately felt in rest of economy. Defense regiments had depleted ranks of ice miners so much that selling ice on free market was profitable. LuNoHo Co steel subsidiary was hiring every able-bodied man it could find, and Wolfgang Korsakov was ready with paper money, "National Dollars," printed to resemble Hong Kong dollar and in theory pegged to it. Luna had plenty of food, plenty of work, plenty of money. People were not hurting. "Beer, betting, women and work" went on as usual.

"Nationals," as they were called, were inflation money, war money, fiat money, and were discounted a fraction of a percent on day of first issue, concealed as "exchange service charge." They were spendable money and never did drop to zero

but were inflationary and exchange reflected it increasingly. New government was spending money it did not have.

But that was later.

Challenge to Earth, to Authority and Federated Nations, was made intentionally narsty. F.N vessels were ordered to stay clear of Luna by ten diameters and not orbit at any distance under pain of being destroyed without warning. (No mention of *how,* since we could not.) Vessels of private registry would be permitted to land if (a) permission was requested ahead of time with ballistic plan, (b) a vessel thus cleared placed itself under Luna Ground Control (Mike) at a distance of one hundred thousand kilometers while following approved trajectory and (c) was unarmed save for three hand guns permitted three officers. Last was to be confirmed by inspection on landing before anybody was allowed to leave ship and before ship was serviced with fuel and/or reaction mass. Violation would mean confiscation of ship. No person allowed to land at Luna other than ship's crew in connection with loading, unloading, or servicing save citizens of Terran countries who had recognized Free Luna. (Only Chad — and Chad had no ships. Prof expected some private vessels to be reregistered under Chad merchant flag.)

Manifesto noted that Terran scientists still in Luna could return home in any vessel which conformed to our requirements. It invited all freedom-loving Terran nations to denounce wrongs done us and which the Authority planned against us, recognize us and enjoy free trade and full intercourse — and pointed out that there were no tariffs or any artificial restrictions against trade in Luna, and was policy of Luna government to keep it that way. We invited immigration, unlimited, and pointed out that we had a labor shortage and any immigrant could be self-supporting at once.

We also boasted of food — adult consumption over four thousand calories per day, high in protein, low in cost, no rationing. (Stu had Adam-Mike stick in price of 100-proof vodka — fifty cents HKL per liter, less in quantity, no taxes. Since this was less than one-tenth retail price of 80-proof vodka in North America, Stu knew it would hit home. Adam, "by nature" a teetotaler, hadn't thought of it. One of Mike's few oversights.)

Lunar Authority was invited to gather at one spot well away from other people, say in unirrigated part of Sahara, and received one last barge of grain free — straight down at terminal velocity. This was followed by a snotty lecture which implied that we were prepared to do same to anyone who threatened our peace, there being a number of loaded barges at catapult head, ready for such unceremonious delivery.

Then we waited.

But we waited busily. Were indeed a few loaded barges. These we unloaded and reloaded with rock with changes made in guidance transponders so that Poona Control could not affect them. Their retros

were removed, leaving only lateral thrustors, and spare retros were taken to new catapult, to be modified for lateral guidance. Greatest effort went into moving steel to new catapult and shaping it into jackets for solid rock cylinders. Steel was bottleneck.

Two days after our manifesto a "clandestine" radio started beaming to Terra. Was weak and tended to fade and was supposed to be concealed, presumably in a crater, and could be worked only certain hours until brave Terran scientists managed to rig automatic repeat. Was near frequency of "Voice of Free Luna" which tended to drown it out with brassy boasts.

Terrans remaining in Luna had no chance to make signals. Those who had chosen to stick with research were chaperoned by stilyagi every instant and locked into barracks to sleep.

But "clandestine" station managed to get "truth" to Terra. Prof had been tried for deviationism and was under house arrest. I had been executed for treason. Hong Kong Luna had pulled out, declared self separately independent . . . might be open to reason. Rioting in Novylen. All food growing had been collectivized and black-market eggs were selling for three dollars apiece in Luna City. Battalions of female troops were being enlisted, each sworn to kill at least one Terran, and were drilling with fake guns in corridors of Luna City.

Last was an almost-true. Many ladies wanted to do something militant and had formed a Home Defense Guard, "Ladies from Hades." But their drills were of a very practical nature — and Hazel was sulking because Mum had not allowed her to join. Then she got over sulks and started "Stilyagi Debs," a very junior home guard which drilled after school hours, did not use weapons, concentrated on backing up stilyagi air & pressure corps, and practiced first aid — and own no-weapons fighting, which — possibly — Mum never learned.

I don't know how much to tell. Can't tell all but stuff in history books is so *wrong*.

I was no better a "defense minister" than "congressman." Not apologizing, had no training for either. Revolution is an amateur thing for almost everybody; Prof was only one who seemed to know what he was doing, and, at that, was new to him, too. He had never taken part in a successful revolution or ever been part of a government, much less head.

As Minister of Defense I could not see many ways to defend except for steps already taken, that is, stilyagi air squads in warrens and laser gunners around ballistic radars. If F.N. decided to bomb, didn't see any way to stop them. Wasn't an interception missile in all Luna. And that's not a gadget you whomp up from bits and pieces. My word, we couldn't even make fusion weapons with which such a rocket is tipped.

But I went through motions. Asked same Chinee engineers who had built laserguns to take a crack at problem of intercepting bombs or

missiles — one same problem save that a missile comes at you faster.

Then turned attention to other things. Simply hoped that F.N. would never bomb warrens.

Some warrens, L-City in particular, were so deep down that they could probably stand direct hits. One cubic, lowest level of Complex where central part of Mike lived, had been designed to withstand bombing. On other hand Tycho Under was a big natural bubble cave like Old Dome and roof was only meters thick; sealer on under side was kept warm with hot water pipes to make sure new cracks sealed — would not take much of a bomb to crack Tycho Under.

But is no limit to how big a fusion bomb can be. F.N. could build one big enough to smash L-City — or theoretically even a Doomsday job that would split Luna like a melon and finish job some asteroid started at Tycho. If they did, couldn't see any way to stop them, so didn't worry.

Instead put time on problems I could manage, helping at new catapult, trying to work up better aiming arrangements for laser drills around radars (and trying to get drillmen to stick; half of them quit once price of ice went up), trying to arrange decentralized stand-by engineering controls for all warrens. Mike did designing on this. We grabbed every general-purpose computer we could find (paying in "nationals" with ink barely dry), and I turned job over to McIntyre, former chief engineer for Authority. Was a job within his talents and I couldn't do all rewiring and so forth, even if had tried.

Held out biggest computer, one that did accounting for Bank of Hong Kong in Luna and also was clearing house there. Looked over its instruction manuals and decided was a smart computer for one that could not talk, so asked Mike if he could teach it ballistics? We made temporary link-ups to let two machines get acquainted and Mike reported it could learn simple job we wanted it for — standby for new catapult — although Mike would not care to ride in ship controlled by it; was too matter-of-fact and uncritical. Stupid, really.

Well, didn't want it to whistle tunes or crack jokes. Just wanted it to shove loads out of catapult at right millisecond and at correct velocity, then watch load approach Terra and give a nudge.

HK Bank was not anxious to sell. But we had patriots on their board, we promised to return it when emergency was over, and moved it to new site—by rolligon, too big for tubes. Took all one dark semi-lunar. Had to jerry-rig a big airlock to get it out of Kong warren. I hooked it to Mike again and he undertook to teach art of ballistics against possibility that his linkage to new site might be cut in an attack.

(You know what bank used to replace computer? Two hundred clerks working abacuses. Abacusi? You know, slipsticks with beads, oldest digital computer, so far back in pre-history that nobody knows who invented. Russki and Chinee

and Nips have always used them, and small shops today.)

Trying to improve laser drills into space-defense weapons was easier but less straightforward. We had to leave them mounted on original cradles; was neither time, steel nor metalsmiths to start fresh. So we concentrated on better aiming arrangements. Call went out for telescopes. Scarce — what con fetches along a spyglass when transported? What market later to create supply? Surveying instruments and helmet binoculars were all we turned up, plus optical instruments confiscated in Terran labs. But we managed to equip drills with low-power big-field sights to coach-on with and high-power scopes for fine sighting, plus train and elevation circles and phones so that Mike could tell them where to point. Four drills we equipped with self-synchronous repeater drives so that Mike could control them himself. Liberated these selsyns at Richardson; astronomers used them for Bausch cameras and Schmidts in sky mapping.

But big problem was men. Wasn't money, we kept upping wages. No, a drillman likes to work or wouldn't be in that trade. Standing by in a ready room day after day, waiting for alert that always turns out to be just another practice — drove 'em crackers. They quit. One day in September I pulled an alert and got only seven drills manned.

Talked it over with Wyoh and Sidris that night. Next day Wyoh wanted to know if Prof and I would okay bolshoi expense money? They formed something Wyoh named "Lysistrata Corps." Never inquired into duties or cost, because next time I inspected a ready room found three girls and no shortage of drillmen. Girls were in uniform of Second Defense Gunners just as men were (drillmen hadn't bothered much with authorized uniform up to then) and one girl was wearing sergeant's stripes with gun captain's badge.

I made that inspection *very* short. Most girls don't have muscle to be a drillman and I doubted if this girl could wrestle a drill well enough to justify that badge. But regular gun captain was on job, was no harm in girls learning to handle lasers, morale was obviously high; I gave matter no more worry.

XXXVIII

Prof underrated his new Congress. Am sure he never wanted anything but a body which would rubberchop what we were doing and thereby do make it "voice of people." But fact that new Congressmen were *not* yammerheads resulted in them doing more than Prof intended. Especially Committee on Permanent Organization, Resolutions, and Government Structure.

Got out of hand because we were all trying to do too much. Permanent heads of Congress were Prof, Finn Nielsen and Wyoh. Prof showed up only when he wanted to speak to them — seldom. He spent time with Mike on plans and analysis (odds shortened to one in *five* during September), time with Stu and Shennie Sheehan on propaganda, controlling official news to

Earthside, very different "news" that went via "clandestine" radio, and reslanting news that came up from Earthside. Besides that he had finger in everything. I reported to him once a day, and all ministries both real and dummy did same.

I kept Finn Nielsen busy; he was my "Commander of Armed Forces". He had his lasergun infantry to supervise — six men with captured weapons on day we nabbed warden, now eight hundred scattered all through Luna and armed with Kongville monkey copies. Besides that, Wyoh's organizations, Stilyagi Air Corps, Stilyagi Debs, Ladies from Hades, Irregulars (kept for morale and renamed Peter Pan's Pirates) and Lysistrata Corps — all these halfway-military groups reported through Wyoh to Finn. I shoved it onto him. I had other problems, such as trying to be a computer mechanic as well as a "statesman" when jobs such as installing that computer at new catapult site had to be done.

Besides which, I am *not* an executive and Finn had talent for it. I shoved First and Second Defense Gunners under him, too. But first I decided that these two skeleton regiments were a "brigade" and made Judge Brody a "brigadier." Brody knew as much about military matters as I did — zero. But was widely known, highly respected, had unlimited hard sense — and had been a drillman before he lost leg. Finn was not a drillman, so couldn't be placed directly over them; they wouldn't have listened. I thought about using my co-husband Greg. But Greg was needed at Mare Undarum catapult, was only mechanic who had followed every phase of construction.

Wyoh helped Prof, helped Stu, had her own organization, made trips out to Mare Undarum — and had little time to preside over Congress; task fell on senior committee chairman, Wolf Korsakov . . . who was busier than any of us; LuNoHoCo was running everything Authority used to run and many new things as well.

Wolf had a good committee. Prof should have kept closer eye on it. Wolf had caused his boss, Moshai Baum, to be elected vice chairman and had in all seriousness outlined for his committee problem of determining what permanent government should be. Then Wolf had turned back on it.

Those busy laddies split up and did it — studied forms of government in Carnegie Library, held subcommittee meetings, three or four people at a time (few enough to worry Prof had he known) — and when Congress met early in September to ratify some appointments and elect more congressmen-at-large, instead of adjourning, Comrade Baum had gavel and they recessed — and met again and turned selves into committee-of-the-whole and passed a resolution and next thing we knew entire Congress was a Constitutional Convention divided into working groups headed by those subcommittees.

I think Prof was shocked. But he couldn't undo it, had all been proper under rules he himself had written. But he rolled with punch, went to Novylen (where Congress now met — more central) and spoke to them with usual good nature and simply cast doubts on what they were doing rather than telling them flatly they were wrong.

After gracefully thanking them he started picking early drafts to pieces:

"Comrade Members, like fire and fusion, government is a dangerous servant and a terrible master. You now have freedom — if you can keep it. But do remember that you can lose this freedom more quickly to yourselves than to any tyrant. Move slowly, be hesistant, puzzle out the consequences of every word. I would not be unhappy if this convention sat for ten years before reporting — but I would be frightened if you took less than a year.

"Distrust the obvious, suspect the traditional . . . for in the past mankind has not done well when saddling itself with governments. For example, I note in one draft report a proposal for setting up a commission to divide Luna into congressional districts and to reapportion them from time to time according to population.

"This is the traditional way. Therefore it should be suspect, considered guilty until proved innocent. Perhaps you feel that this is the *only* way. May I suggest others? Surely where a man lives is the least important thing about him. Constituencies might be formed by dividing people by occupation . . . or by age . . . or even alphabetically. Or they might not be divided, every member elected at large. And do not object that this would make it impossible for any man not widely known throughout Luna to be elected; that might be the best possible thing for Luna.

"You might even consider installing the candidates who receive the *least* number of votes; unpopular men may be just the sort to save you from a new tyranny. Don't reject the idea merely because it seems preposterous — think about it! In past history popularly-elected governments have been no better and sometimes far worse than overt tyrannies.

"But if representative government turns out to be your intention there still may be ways to achieve it better than the territorial district. For example you each represent about ten thousand human beings, perhaps seven thousand of voting age — and some of you were elected by slim majorities. Suppose instead of election a man were qualified for office by petition signed by four thousand citizens. He would then represent those four thousand affirmatively, with no disgruntled minority, for what would have been a minority in a territorial constituency would all be free to start other petitions or join in them. *All* would then be represented by men of their choice. Or a man with eight thousand supporters might have two votes in this body. Diffi-

culties, objections, practical points to be worked out — *many* of them! But you could work them out . . . and thereby the chronic sickness of representative government, the disgruntled minority which feels — correctly — that it has been disenfranchised.

"But, whatever you do, *do not let the past be a straightjacket!*

"I note one proposal to make this Congress a two-house body. Excellent — the more impediments to legislation the better. But, instead of following tradition, I suggest one house of legislators, another whose single duty is to repeal laws. Let the legislators pass laws only with a two-thirds majority . . . while the repealers are able to cancel any law through a mere one-third minority. Preposterous? Think about it. If a bill is so poor that it cannot command two-thirds of your consents, is it not likely that it would make a poor law? And if a law is disliked by as many as one-third is it not likely that you would be better off without it?

"But in writing your constitution let me invite attention to the wonderful virtues of the negative! Accentuate the negative! Let your document be studded with things the government is forever forbidden to do. No conscript armies . . . no interference however slight with freedom of press, or speech, or travel, or assembly, or of religion, or of instruction, or communication, or occupation . . . no involuntary taxation. Comrades, if you were to spend five years in a study of history while thinking of more and more things that your government should promise *never* to do and then let your constitution be nothing but those negatives, I would not fear the outcome.

"What I fear most are affirmative actions of sober and well-intentioned men, granting to government powers to *do* something that appears to need doing. Please remember always that the Lunar Authority was created for the noblest of purposes by just such sober and well-intentioned men, all popularly elected. And with that thought I leave you to your labors. Thank you."

"Gospodin President! Question of information! You said 'no involuntary taxation' — then how do you expect us to *pay* for things? Tanstaafl!"

"Goodness me, sir, that's *your* problem. I can think of several ways. Voluntary contributions just as churches support themselves . . . government-sponsored lotteries to which no one need subscribe . . . or perhaps you Congressmen should dig down into your own pouches and pay for whatever is needed; that would be one way to keep government down in size to its indispensable functions whatever they may be. If indeed there are any. I would be satisfied to have the Golden Rule be the only law; I see no need for any other, nor for any method of enforcing it. But if you *really* believe that your neighbors must have laws for their own good, why shouldn't *you* pay for it? Comrades, I beg you — do *not* resort to compulsory taxation. There

is no worse tyranny than to force a man to pay for what he does not want merely because *you* think it would be good for him."

Prof bowed and left, Stu and I followed him. Once in an otherwise empty capsule I tackled him. "Prof, I liked much that you said . . . but about taxation aren't you talking one thing and doing another? Who do you think is going to pay for all this spending we're doing?"

He was silent long moments, then said, "Manuel, my only ambition is to reach the day when I can stop pretending to be a chief executive."

"Is no answer!"

"You have put your finger on the dilemma of all government — and the reason I am an anarchist. The power to tax, once conceded, has no limits; it continues until it destroys. I was not joking when I told them to dig into their own pouches. It may not be possible to do away with government — sometimes I think that government is an inescapable disease of human beings. But it may be possible to keep it small and starved and inoffensive. And can you think of a better way than by requiring the governors themselves to pay the costs of their anti-social hobby?"

"Still doesn't say how to pay for what we are doing now."

" 'How,' Manuel? You *know* how we are doing it. We're *stealing* it. I'm neither proud of it nor ashamed; it's the means we have. If they ever catch on, they may eliminate us — and that I am prepared to face. At least, in stealing, we have not created the villainous precedent of taxation."

"Prof, I hate to say this — "

"Then why say it?"

"Because, damn it, I'm in it as deeply as you are . . . and want to see that money paid back! Hate to say it but what you just said sounds like hypocrisy."

He chuckled. "Dear Manuel! Has it taken you all these years to decide that I am a hypocrite?"

"Then you admit it?"

"No. But if it makes you feel better to think that I am one, you are welcome to use me as your scapegoat. But I am not a hypocrite to myself because I was aware the day we declared the Revolution that we would need much money and would have to steal it. It did not trouble me because I considered it better than food riots six years hence, cannibalism in eight. I made my choice and have no regrets."

I shut up, silenced but not satisfied. Stu said, "Professor, I'm glad to hear that you are anxious to stop being President."

"So? You share our comrade's misgivings?"

"Only in part. Having been born to wealth, stealing doesn't fret me as much as it does him. No, but now that Congress has taken up the matter of a constitution I intend to find time to attend sessions. I plan to nominate you for King."

Prof looked shocked. "Sir, if nominated, I shall repudiate it. If elected, I shall abdicate."

"Don't be in a hurry. It might be the only way to get the sort of constitution you want. And that I want, too, with about your own mild lack of enthusiasm. You could be proclaimed King and the people would take you. We Loonies aren't wedded to a republic. They'd love the idea — ritual and robes and a court and all that."

"No!"

"Ja *da*! When the time comes, you won't be able to refuse. Because we need a king and there isn't another candidate who would be accepted. Bernardo the First, King of Luna and Emperor of the Surrounding Spaces."

"Stuart, I must ask you to stop. I'm becoming quite ill."

"You'll get used to it. I'm a royalist because I'm a democrat. I shan't let your reluctance thwart the idea any more than you let stealing stop you."

I said, "Hold it, Stu. You say you're a royalist because you're a democrat?"

"Of course. A king is the people's only protection against tyranny . . . especially against the worst tyrants, themselves. Prof will be ideal for the job . . . because he does not want the job. His only shortcoming is that he is a bachelor with no heir. We'll fix that. I'm going to name *you* as his heir. Crown Prince. His Royal Highness Prince Manuel de la Paz, Duke of Luna City, Admiral General of the Armed Forces and Ultimate Protector of the Weak."

I stared. Then buried face in hands. "Oh, *Bog!*"

XXXIX

Monday 12 October 2076 about nineteen hundred I was headed home after a hard day of nonsense in our offices in Raffles. Delegation of grain farmers wanted to see Prof and I had been called because he was in Hong Kong-Luna.

Was rude to them. Had been two months of embargo and F.N. had never done us favor of being sufficiently narsty. Mostly they had ignored us, made no reply to our claims. I suppose to do so would have been to recognize us. Stu and Sheenie and Prof had been hard put to slant news from Earthside to keep up a warlike spirit.

At first everybody kept his p-suit handy. They wore them, helmets under arms, going to and from work in corridors. But that slacked off as days went by and did not seem to be any danger. P-suit is nuisance when you don't need it, so bulky. Presently taprooms began to display signs: "No P-suits Inside." If a Loonie can't stop for half a liter on way home because of p-suit, he'll leave it home or at station or wherever he needs it most.

My word, had neglected matter myself that day — got this call to go back to office and was halfway there before I remembered.

Had just reached easement lock thirteen when I heard and felt a sound that scares a Loonie more than anything else — a *Chuff*! in distance followed by a draft. Was into lock almost without undogging, then balanced pressures and through,

dogged it behind me and ran for our home lock — through it and shouting:

"P-suits, everybody! Get boys in from tunnels and close all airtight doors!"

Mum and Milla were only adults in sight. Both looked startled, got busy without a word. I burst into workshop, grabbed p-suit. "Mike! Answer!"

"I'm here, Man," he said calmly.

"Heard explosive pressure drop. What's situation?"

"That's level three, L-City. Rupture at Tube Station West, now partly controlled. Six ships landed, L-City under attack — "

"*What*?"

"Let me finish, Man. Six transports landed, L-City under attack by troops, Hong Kong inferred to be, phone lines broken at relay Bee Ell. Johnson City under attack; I have closed the armor doors between J-City and Complex Under. I cannot see Novylen but blip projection indicites it is under attack. Same for Churchill. Tycho Under. One ship in high ellipsoid over me, rising, inferred to be command ship. No other blips."

"Six ships — *where in hell were YOU?*"

He answered so calmly that I steadied down. "Farside approach, Man; I'm blind back there. They came in on tight Garrison didoes, skimming the peaks. I barely saw the chop-off for Luna City. The ship at J-City is the only one I can see; the other landings I conclusively infer from the ballistics shown by blip tracks I heard the break-in at Tube West, L-City, and can now hear fighting in Novylen. The rest is conclusive inference, probability above point nine nine. I called you and Professor at once."

Caught breath. "Operation Hard Rock, Prepare to Execute."

"Program ready. Man, not being able to reach you, I used your voice. Play back?"

"Nyet — Yes! *Da!*"

Heard "myself" tell watch officer at old catapult head to go on red alert for "Hard Rock" — first load at launch, all others on belts, everything cast loose, but do *not* launch until ordered by me personally — then launch to plan, full automatic. "I" made him repeat back.

"Okay," I told Mike. "Drill gun crews?"

"Your voice again. Manned, and then sent back to ready rooms. That command ship won't reach aposelenion for three hours four point seven minutes. No target for more than five hours."

"He may maneuver. Or launch missiles."

"Slow down, Man. Even a missile I'll see with minutes to spare. It's full bright lunar up there now. How much do you want the men to take? Unnecessarily."

"Uh . . . sorry. Better let me talk to Greg."

"Play back." Heard "my" voice talking to my co-husband at Mare Undarum; "I" sounded tense but calm. Mike had given him situation, had told him to prepare Operation

Little David's Sling, keep it on stand-by for full automatic. "I" had assured him that master computer would keep standby computer programmed, and shift would be made automatically if communication was broken. "I" also told him that he must take command and use own judgment if communication was lost and not restored after four hours — listen to Earthside radio and make up own mind.

Greg had taken it quietly, repeated his orders, then had said, "Mannie, tell family I love them."

Mike had done me proud; he had answered for me with just right embarrassed choke. "I'll do that, Greg — and look, Greg, I love you, too. You know that, don't you?"

"I know it, Mannie . . . and I'm going to say a special prayer for you."

"Thanks, Greg."

"'Bye, Mannie. Go do what you must."

So I went and did what I had to do. We weren't ready for it. But would never be readier; the battle for Luna had been joined.

TO BE CONCLUDED

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of October 23, 1962); Section 4369, Title 39, United States Code). 1. Date of filing: October 1, 1965. 2. Title of Publication: If Magazine. 3. Frequency of issue: Monthly. 4. Location of known office of publication: 421 Hudson Street, New York, New York 10014. 5. Location of the headquarters or general business offices of the publishers: 521 Hudson Street, New York, New York 10014. 6. Names and addresses of publisher, editor and managing editor. Publisher: Robert M. Guinn, 421 Hudson Street, New York, New York 10014. Editor: Frederik Pohl, 421 Hudson Street, New York, New York 10014. Managing Editor: None. 7. Owner: Galaxy Publishing Corporation, 421 Hudson Street, New York, New York 10014; Robert M. Guinn (sole stockholder), 421 Hudson Street, New York, New York 10014. 8. Known bondholders, mortgagees and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: None. 9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear on the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of the publishing corporation have been included in paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation. 10. A. Total no. copies printed (net press run): average no. copies each issue during preceding 12 months: 98,800; single issue nearest to filing date, 98,250. B. Paid circulation: 1. Sales through dealers and carriers, street vendors and counter sales: Average no. copies each issue during preceding 12 months, 62,240, single issue nearest to filing date, 63,800. 2. Mail subscriptions: Average no. copies each issue during preceding 12 months, 2,600; single issue nearest to filing date, 2,339. C. Total paid circulation: Average no. copies each issue during preceding 12 months, 68,480; single issue nearest to filing date, 66,139. D. Free Distribution (including samples) by mail, carrier or other means: average no. copies each issue during preceding 12 months: none; single issue nearest to filing date, none. E. Total distribution (sum of C and D): average no. copies each issue preceding 12 months: 64,840; single issue nearest to filing date, 66,139. F. Office use, left-over, unaccounted, spoiled after printing: Average no. copies each issue during preceding 12 months, 33,060; single issue nearest to filing date, 32,111. G. Total (sum of E and F—should equal net press run shown in A): Average no. copies each issue during preceding 12 months, 98,000; single issue nearest to filing date, 98,230. I certify that the statement made by me above are correct and complete. Robert M. Guinn, Publisher.

Dear Editor:

As a science-fiction fan of many years and an avid reader of your excellent magazine for just as long, I thought I would check with you on a striking fact regarding the recent power failure.

Fritz Leiber wrote a story a few years ago called *The Man Who Made Friends with Electricity.* A reading of this story may strike you with the same chill that hit me. Is Mr. Leiber available for comment? And should we have an ambassador to electrons?—George Ann Monahan, 5 Wright Avenue, Wakefield, Rhode Island.

* * *

Dear Editor:

D. Bruce Berry brings up an interesting idea about getting readers to write or to read letter columns. Why not dwell on it more? There was a time when readers' columns were much more vital to a magazine and some readers misused them and some editors decided to discourage such departments for that or other reasons. They are indicative of a lively enthusiasm, and lively enthusiasm is contagious. Part of the lack of success is the squeezed layout for letters. Why not start them inside the front cover in large type with a good heading and then continue them in back with smaller type? A lively readers' department generates lively letters. And it has to be two-way. People who ask questions like to be answered . . . even if they get told it is none of their business.

Why not try this expanded layout to the lead story? Why not double your budget for the first art work in the magazine even if it isn't the best story? After the cover it is the one that sells more magazines than anything else. Why not use a double spread and larger type for two or four pages so that the reader is easily hooked into the story before he is hardly aware of it? And continue a double spread art work for a few more pages, then you can revert to solid fine print after the reader is captured. This is like a gift store with sidewalks and display cases, and open doors and counters so arranged that you are off the street and in the middle of the merchandise before you are aware of it.

I think the cover is terribly important. It should stand out on the newsstand, catch the eye, arouse the curiosity and appeal, not repel. Everyone knows good philosophy about cover display, but how the devil do

you put it into practice? I, for one, think that nice cigar-shaped spaceships against a nice set of stars is very deadening and can only appeal to those of us who grew up with science fiction. I think color, action, a hint of "muchness' or "more-and-more-for-your-time" (not for your money-money is cheap) and a bit of mystery are important. Don't spell anything out to a gnat's eyebrow on the cover. Why read it if you do? Space ships in space usually spell out everything.

A promise of a new rewarding experience should go with the cover. It should not be tight and squeezed in, but should suggest that it goes beyond the boundaries of the cover in all directions. Particularly, there should be come color or movement toward the "turning edge of the magazine" to make someone want to open it and look. They had better find something provocative inside right away! And my idea of several double spreads and illustrations in the first few pages seems sound and important. You aren't *Life* magazine, but you can use a little of their merchandising.

We could convince education people that science fiction is more interesting than the cheaper spread on TV with a massive advertising campaign sponsored by a government grant or a sick millionaire. What is wrong with personal salesmanship? It isn't really the duty of a reader to sell the magazine to a prospective reader, but some fans have done so for years. Some others have personalities that would not make for good salesmanship. Leave a good issue in a public place. Not a bus station—they get swept up. Or hand the best story to someone who can appreciate it. Start a slow sales pitch, starting with what the prospect thinks he knows and believes. Avoid in-group jargon. The biggest stumbling block to science fiction is the same as the stumbling block to race relations—man's instinctive fear of the unfamiliar. Sneak, sneak, sneak and smile, smile and flatter, flatter. How wise you are to read this!!—only don't overdo it.

I suspect that science-fiction fans are becoming passive innocent bystanders though, who, like 38 persons in New York, wouldn't even call the police to prevent a murder. You wouldn't raise your voice to help science fiction or to promote space travel—or would you? Or can I make any of you mad?—Rosco Wright, Art Department, Western Montana College, Dillon, Montana.

* * *

Dear Editor:

My prime reason for reading *If* is, I like the stories. How you can publish such an incredible lineup of authors as E. E. Smith, Keith Laumer, Robert A. Heinlein at the same old price is beyond me! And I like your practice of including a brand-new writer in each issue. How long do you think it will be before you run out of new writers?—S/Sgt. Clifford Hosford, P. O. Box 30063, Lowry A.F.B. Station, Denver, Colorado 80230.

● Looks like we never will—the more we print, the more we get! This month, for instance a Texas lawyer gives us *Ouled Nail.*

—The Editor

* * *

Dear Editor:

Do you know of a national organization of science-fiction fan clubs? I have recently formed HICCUPS (Heinlein's Indigant Chowder und

Parading Society) and I am interested in national affiliation. It seems that the longer your stories get, the better they are—so keep publishing SF's best novels!—Alan Zisman, 827 Jerome Avenue, Hillside, New Jersey 07205.

* * *

Dear Editor:

Several of my friends and I agree that the wraparound cover of the October *If* is a great idea. We'd like to see it done more often! — Danny Mathews, 3229 Jana Place, Bossier City, Louisiana.

* * *

Dear Editor:

I was somewhat startled by D. Bruce Berry's comments that *If* and *Worlds of Tomorrow* are basically entertainment magazines.

They got me to thinking about what science fiction has become.

Magazine sf started off with a bang. BEMS, beauties and super-atomic-destructo devices literally littered the scene. Magazine sf was basically entertainment in those days, presenting novel ideas about novel inventions to its readership.

But in time, sf mellowed, became more subtle. The stories contained real people, not just the evilly evil badguy, who is inevitably subdued by the goody goody goodguy.

"Message stories" appeared more frequently — the "how mankind should be saved" type.

Now we seem to be bogging down. Sf no longer has a bottomless well of novel inventions sufficiently exciting to produce an actual "sense of wonder" so prevalent in the beginning. With the result that we are straining what "inventions" we have to the limit.

What I'm trying to say is that instead of producing entirely different levels of ideas and innovations, we are falling back on the type of fiction that was present in Gernsback's day.

Sf is a unique field. Mainstream fiction can only comment on how man, his mental makeup and phychology, is today. But sf can present a far-flung view of his makeup in the future.

Our purpose is not mere entertainment. We already have enough of that: witness the witless boob tube, or the incessant "sounds" coming from the radio. This is our entertainment. Why be like everyone else and bring yourself down to this level? Take a look at Gaughan's cover on the Oct. '65 issue of *If*. Is this representative of the full potential of sf?

Let's put some meat into science fiction. Retief and Gree stories are okay, to a certain extent. But let's not make it our goal in publishing.

In closing, I was wondering if there was any way to assure the safe arrival of subscription copies? Those of us who like copies in good condition find scrunched spines and covers unbecoming to the magazine. And besides, it's also harder to read.—Dan Barnett, 7542 Skyway, Paradise, Calif., 95969.

● Actually our goal in publishing is pretty simple: To print stories we enjoy, hoping that enough others will also enjoy them to keep us in business. So beautifully simple in theory—but, ah! how complex in putting it into effect!

That's it for another month. Next month a really fine new novel—*Earthblood*, by Laumer and Brown, one of the few we've read that we think thing can follow *The Moon Is a Harsh Mistress* without letdown, See you then . .—*The Editor.*

$70,000.00 IN CASH PRIZES!

"Your $1,200.00 check arrived this morning by Special Delivery. Thanks ever so much for your telephone call and prompt payment. It still doesn't seem possible. It's been a great thrill."

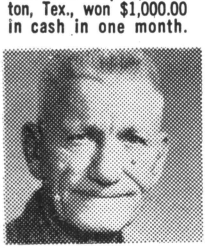
That's the way Emory Mead of Albany, N. Y., just one of our many big winners, reacted to receiving his cash prize. Dozens of men and women of all ages have cashed in as members of our exciting PUZZLE LOVERS CLUB.

Our Club winners got their cash awards for solving puzzles in their leisure time. Our Club also has awarded huge prizes for many other kinds of contests.

We've awarded cash in hundred-and-thousand-dollar units to retirees, sewing women, farmers, salesmen, war veterans, office workers, clerks, secretaries — people who never before dreamed of having the kind of money that movie stars make.

This announcement is an invitation to you, as a reader of this publication, to find out for yourself if you have the talent to win up to $70,000.00 in cash. If you are over 18 and like to play word games of any kind, the information below may lead you to thousands of dollars in extra cash that you may use as you wish.

Mrs. H. C. Despain, Houston, Tex., won $1,000.00 in cash in one month.



Ray Smith, Sacramento, Calif., won nearly $1,000.00 in Club contests.

Mrs. Florence Humphrey, Cincinnati, won $500.00 on just one puzzle.

YOU Can WIN Each Month!

Members of our Club win cash prizes at home, just by solving puzzles and entering Club contests. They turn an educational and enjoyable hobby into pure profit. **You can too!**

Your chief advantage in contests sponsored by our PUZZLE LOVERS CLUB is that you have only limited competition. Only members of the Club may compete and win.

In 1963 we offered our members $35,000.00. We actually paid out more cash than we said we would—$35,511.25, to be exact. In 1964, we again offered $35,000.00. Again, we paid out more than we promised—$40,778.11. And now we're offering our members $70,000.00 in cash prizes. Most contest groups offer about $4,500 or $5,000 a year. **Our Club gives you the opportunity to win double that every month!**

As a member of our Club you will be eligible to enter every cash prize contest we sponsor and you'll get at least four new contests each month. You'll have three weeks to solve each set of contests. One week after the deadline, you'll receive a new copy of our **Puzzle Lovers Newspaper** with names and addresses of all winners, correct solutions, and your new puzzle contests. When YOU win, you receive your prize within two weeks.

IT COSTS YOU NOTHING TO TRY OUR CONTESTS AND SEE IF YOU HAVE THE TALENT TO WIN

The coupon below will bring you, absolutely FREE, a sample copy of our **Puzzle Lovers Newspaper**, the only newspaper in the world exclusively devoted to contests (and it's published for members only). When your free copy of our newspaper arrives, sit down in a quiet place and read about our winners, our prizes, our contests. Try our stimulating word games to see if you can do them. You are under no obligation to enter our contests. If you do decide to go after our cash, there are no boxtops, no jingles to complete, nothing to buy.

Clip the coupon now and please be sure to print your name and address clearly. Then read about $1,000.00 winners like Mrs. Belle Smith of Yakima, Wash. Discover how hundreds of other members cashed in just by doing our puzzles in their spare time. Find out all about this exciting and profitable hobby now. You may receive your first big prize in a few weeks.

AFFIX THIS COUPON TO POSTCARD FOR FAST HANDLING OR MAIL IN ENVELOPE.

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Gentlemen,

Send me a **free** copy of your newspaper plus all details on your cash prize contests. I am under absolutely no obligation to pay anything. If I join the Club I may compete for all prizes and spend the cash I win any way I want.

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G.P. 2

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"In our first calendar year we did a gross of $40,000. Without constant help from the Duraclean home office such growth never would have been possible."

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"National Advertising and Duraclean prestige are very important. This year I will double last year's gross. For the first time in 20 years I've got security—without fear of losing my factory job. I gross about $8.50 an hour on the job."

H. P. Ohio

$2,880 in One Month

"I took in $2,880 in April. I worked from my home. My wife handles all telephone calls. We both enjoy our new found independence and the compliments we get from satisfied customers."

J. F. A. Texas

$360 Job Finished in one day

"I did the Sorority House in one day for $360. This business is in its infancy."

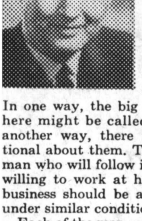
H. L. B. Texas

$116 for 6 Hours Work

"I have done hotels, studios, restaurants and churches. That is where the big money is. Example: One Saturday, $210 in 11 hours. Monday, $116 in 6 hours. I have also contracted to clean 80,000 square feet of carpet for a store for $4,000."

G. F. Wisconsin

FREE BOOK tells how these people—and hundreds of others—got started in this Big Money business. Send for your copy now.



Let me give *you* the same start I gave these men!

In one way, the big earnings reported here might be called exceptional. In another way, there is nothing exceptional about them. That's because any man who will follow instructions and is willing to work at his own Duraclean business should be able to do as well under similar conditions.

Each of the men quoted here had talents and abilities different from those of all the rest. *But each had one thing in common*—a desire to win personal independence in a business of his own. And each man took five identical steps to reach his goal.

1. Each one read an announcement such as you are reading now. 2. He wrote for complete information. 3. He read the literature we sent him. 4. He gained new confidence in himself and the belief that he could succeed with Duraclean. 5. He accepted our offer to help him get started. Later, he wrote to tell us about his success.

In each case, remember, *the first step was to write to Duraclean for information.* If you would like to own a business of your own, why don't you do as these men did—*right now.*

When I hear from you, I will send you facts about the Duraclean Franchise that will open your eyes. You will see why a Franchise business such as ours makes success for the individual the rule rather than the exception.

The Duraclean home service business has been tried and tested. The market for Duraclean Service is tremendous—and growing. The methods that lead to success have been clearly charted. When an ambitious man follows these methods, success is the logical result.

Some Franchise businesses require investments as high as $50,000. With ours, you can get started for a few hundred dollars and we finance the balance. Monthly payments are so small that the profits on less than one day's service can cover your payment for the entire month. Even with this small investment and operating as a one man business, your potential is $250.00 a week net profit. With two men working for you 35 hours a week, you should gross a profit of $420.00. Allowing 20% for advertising and incidentals, the net would amount to $336.00.

The most important part of Duraclean home service is cleaning rugs, carpets and upholstered furniture by a revolutionary modern process known as the "Absorption Method." You do the work right in the customer's premises. No harsh scrubbing with motor-driven brushes. No soaking. Instead, an aerated foam loosens the dirt and holds it in suspension until removed. A test conducted by an impartial laboratory showed that the modern Absorption Method removed twice as much dirt as was removed by old fashioned machine scrubbing.

If you are tired of working for others or of jumping from one proposition to another—if you have a real yearning for independence in a business of your own—then send for "The Duraclean Route to Success." There is no obligation—no charge. No salesmen will call to high pressure you. Send for the book now. Read it. Then if you want to take the next step toward independence, you can write to me and let me give *you* the same help I've given so many other successful men.

Grant Mauk
President

DURACLEAN COMPANY
523D **Duraclean Building, Deerfield, Ill. 60015**

GRANT MAUK, *President*
523D **Duraclean Bldg., Deerfield, Ill. 60015**

Dear Mr. Mauk:

Please mail a copy of your Free Book that tells how I can get a Duraclean Franchise started in spare time without giving up my present income. No charge. No obligation. And no salesman is to call on me.

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Address_____

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