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I held out for five-to-one, but he said no dice. So I put two bucks on the favorite in the third at Belmont and called it a day.—PWF
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THE MACHINE THAT SAVED THE WORLD

By MURRAY LEINSTER

They were broadcasts from nowhere—sinister emanations flooding in from space—smashing any receiver that picked them up. What defense could Earth devise against science such as this?

THE first broadcast came in 1972, while Mahon-modified machines were still strictly classified, and the world had heard only rumors about them. The first broadcast was picked up by a television ham in Osceola, Florida, who fumblingly reported artificial interference on the amateur TV bands. He heard and taped it for ten minutes—so he said—before it blew out his receiver. When he replaced the broken element, the broadcast was gone.

But the Communications Commission looked at and listened to the tape and practically went through the ceil-
foretell flesh- rending supersonic blasts?
It stationed a monitor truck in Osceola for months, listening feverishly to nothing.

Then for a long while there were rumors of broadcasts which blew out receiving apparatus, but nothing definite. Weird patterns appeared on screens high-pitched or deep-bass notes sounded—and the receiver went out of operation. After the ham operator in Osceola, nobody else got more than a second or two of the weird interference before blowing his set during six very full months of CC agitation.

Then a TV station in Seattle abruptly broadcast interference superimposed on its regular network program. The screens of all sets tuned to that program suddenly showed exotic, curiously curved, meaningless patterns on top of a commercial spectacular broadcast. At the same time incredible chirping noises came from the speakers, alternating with deep-bass hootings, which spoiled the ju-ju music of the most expensive ju-ju band on the air. The interference ended only with a minor breakdown in the transmitting station. It was the same sort of interference that the Communications Commission had thrown fits about in Washington. It threw further fits now.

A month later a vision-phone circuit between Chicago and Los Angeles was unusable for ten minutes. The same meaningless picture-pattern and the same preposterous noises came on and monopolized the line. It ceased when a repeater-tube went out and a parallel circuit took over. Again, frantic agitation displayed by high authority.

Then the interference began to appear more frequently, though still capriciously. Once a Presidential broadcast was confused by interference apparently originating in the White House, and again a three-way top-secret conference between the commanding officers of three military departments ceased when the unhuman-sounding noises and the scrambled picture pattern inserted itself into the closed-circuit discussion. The conference broke up amid consternation. For one reason, military circuits were supposed to be interference-proof. For another, it appeared that if interference could be spotted to this circuit or this receiver it was likely this circuit or that receiver could be tapped.

For a third reason, the
broadcasts were dynamite. As received, they were badly scrambled, but they could be straightened out. Even the first one, from Osceola, was cleaned up and understood. Enough so to make top authority tear its hair and allow only fully-cleared scientific consultants in on the thing.

The content of the broadcasts was kept considerably more secret than the existence of Mahon units and what they could do. And Mahon units were brand-new, then, and being worked with only at one research installation in the United States.

The broadcasts were not so closely confined. The same wriggly patterns and alien noises were picked up in Montevideo, in Australia, in Panama City, and in grimly embattled England. All the newspapers discussed them without ever suspecting that they had been translated into plain speech. They were featured as freak news—and each new account mentioned that the broadcast reception had ended with a break-down of the receiving apparatus.

Guarded messages passed among the high authorities of the nations that picked up the stuff. A cautious inquiry went even to the Compubs.

The Union of Communist Republics answered characteristically. It asked a question about Mahon units. There were rumors, it said, about a new principle of machine-control lately developed in the United States. It was said that machines equipped with the new units did not wear out, that they exercised seeming intelligence at their tasks, and that they promised to end the enormous drain on natural resources caused by the wearing-out and using-up of standard-type machinery.

The Compub Information Office offered to trade data on the broadcasts for data about the new Mahon-modified machines. It hinted at extremely important revelations it could make.

The rest of the world deduced astutely that the Compubs were scared, too. And they were correct.

Then, quite suddenly, a break came. All previous broadcast receptions had ended with the break-down of the receiving instrument. Now a communicator named Betsy, modified in the Mahon manner and at work in the research installation working with Mahon-modified devices, began to pick up the broadcasts consistently, keeping
each one on its screen until it ended.

Day after day, at highly irregular intervals, Betsy’s screen lighted up and showed the weird patterns, and her loudspeakers emitted the peepings and chirps and deep-bass hootings of the broadcasts. And the high brass went into a dither to end all dithers as tapes of the received material reached the Pentagon and were translated into intelligible speech and pictures.

This was when Metech Sergeant Bellews, in charge of the Rehab Shop at Research Installation 83, came into the affair. Specifically, he entered the picture when a young second lieutenant came to the shop to fetch him to Communications Center in that post.

The lieutenant was young and tall and very military. Sergeant Bellews was not. So he snorted, upon receipt of the message. He was at work on a vacuum cleaner at the moment—a Mahon-modified machine with a flickering yellow standby light that wavered between brightness and dimness with much more than appropriate frequency. The Rehabilitation Shop was where Mahon-modified machines were brought back to usefulness when somebody messed them up. Two or three machines—an electric ironer, for one—operated slowly and hesitantly. That was occupational therapy. A washing-machine churned briskly, which was convalescence. Others, ranging from fire-control computers to teletypes and automatic lathes, simply waited with their standby lights flickering meditatively according to the manner and custom of Mahon-modified machines. They were ready for duty again.

The young lieutenant was politely urgent.

“But I been there!” protested Sergeant Bellews. “I checked! It’s a communicator I named Betsy. She’s all right! She’s been mishandled by the kinda’ halfwits Communications has around, but she’s a good, well-balanced, experienced machine. If she’s turning out broadcasts, it’s because they’re comin’ in! She’s all right!”

“I know,” said the young lieutenant soothingly. His uniform and his manners were beautiful to behold. “But the Colonel wants you there for a conference.”

“I got a communicator in the shop here,” said Sergeant Bellews suspiciously. “Why don’t he call me?”
“Because he wants to try some new adjustments on—ah—Betsy, Sergeant. You have a way with Mahon machines. They’ll do things for you they won’t do for anybody else.”

Sergeant Bellews snorted again. He knew he was being buttered up, but he’d asked for it. He even insisted on it, for the glory of the Metallurgical Technicians’ Corps. The big brass tended to regard Metechs as in some fashion successors to the long-vanished veterinary surgeons of the Farriers’ Corps, when horses were a part of the armed forces. Mahon-modified machines were new—very new—but the top brass naturally remembered everything faintly analogous and applied it all wrong. So Sergeant Bellews conducted a one-man campaign to establish the dignity of his profession.

But nobody without special Metech training ought to tinker with a Mahon-modified machine.

“If he’s gonna fool with Betsy,” said the Sergeant bitterly, “I guess I gotta go over an’ boss the job.”

He pressed a button on his work-table. The vacuum cleaner’s standby light calmed down. The button provided soothing sub-threshold stimuli to the Mahon unit, not quite giving it the illusion of operating perfectly—if a Mahon unit could be said to be capable of illusion—but maintaining it in the rest condition which was the foundation of Mahon-unit operation, since a Mahon machine must never be turned off.

The lieutenant started out of the door. Sergeant Bellews followed at leisure. He painstakingly avoided ever walking the regulation two paces behind a commissioned officer. Either he walked side by side, chatting, or he walked alone. Wise officers let him get away with it.

Reaching, the open air a good twenty yards behind the lieutenant, he cocked an approving eye at a police-up unit at work on the lawn outside. Only a couple of weeks before, that unit had been in a bad way. It stopped and shivered when it encountered an unfamiliar object.

But now it rolled across the grass from one path-edge to another. When it reached the second path it stopped, briskly moved itself its own width sidewise, and rolled back. On the way it competently manicured the lawn. It picked up leaves, retrieved a stray cigarette-butt, and snapped up a
scrap of paper blown from somewhere. Its tactile units touched a new-planted shrub. It delicately circled the shrub and went on upon its proper course.

Once, where the grass grew taller than elsewhere, it stopped and whirred, trimming the growth back to regulation height. Then it went on about its business as before.

Sergeant Bellews felt a warm sensation. That was a good machine that had been in a bad way and he'd brought it back to normal, happy operation. The sergeant was pleased.

The lieutenant turned into the Communications building. Sergeant Bellews followed at leisure. A jeep went past him—one of the special jeeps being developed at this particular installation—and its driver was talking to someone in the back seat, but the jeep matter-of-factly turned out to avoid Sergeant Bellews. He glowed. He'd activated it. Another good machine, gathering sound experience day by day.

He went into the room where Betsy stood—the communicator which, alone among receiving devices in the whole world, picked up the enigmatic broadcasts consistently. Betsy was a standard Mark IV communicator, now carefully isolated from any aerial. She was surrounded by recording devices for vision and sound, and by the most sensitive and complicated instruments yet devised for the detection of short-wave radiation. Nothing had yet been detected reaching Betsy, but something must. No machine could originate what Betsy had been exhibiting on her screen and emitting from her speakers.

Sergeant Bellews tensed instantly. Betsy's standby light quivered hysterically from bright to dim and back again. The rate of quivering was fast. It was very nearly a sine-wave modulation of the light—and when a Mahon-modified machine goes into sine-wave flicker, it is the same as Cheyne-Stokes breathing in a human.

He plunged forward. He jerked open Betsy's adjustment-cover and fairly yelped his dismay. He reached in and swiftly completed corrective changes of amplification and scanning voltages. He balanced a capacity bridge. He soothed a saw-tooth resonator. He seemed to know by sheer intuition what was needed to be done.

After a moment or two the standby lamp wavered slowly from near-extinction to half-
brightness, and then to full brightness and back again. It was completely unrythmic and very close to normal.

"Who done this?" demanded the sergeant furiously. "He had Betsy close to fatigue collapse! He'd ought to be court-martialed!"

He was too angry to notice the three civilians in the room with the colonel and the lieutenant who'd summoned him. The young officer looked uncomfortable, but the colonel said authoritatively:

"Never mind that, Sergeant. Your Betsy was receiving something. It wasn't clear. You had not reported, as ordered, so an attempt was made to clarify the signals."

"Okay, Colonel!" said Sergeant Bellews bitterly. "You got the right to spoil machines! But if you want them to work right you got to treat 'em right!"

"Just so," said the colonel. "Meanwhile — this is Doctor Howell, Doctor Graves, and Doctor Lecky. Sergeant Bellews, gentlemen. Sergeant, these are not MDs. They've been sent by the Pentagon to work on Betsy."

"Betsy don't need workin' on!" said Sergeant Bellews belligerently. "She's a good, reliable, experienced machine! If she's handled right, she'll do better work than any machine I know!"

"Granted," said the colonel. "She's doing work now that no other machine seems able to do — drawing scrambled broadcasts from somewhere that can only be guessed at. They've been unscrambled and these gentlemen have come to get the data on Betsy. I'm sure you'll cooperate."

"What kinda data do they want?" demanded Bellews. "I can answer most questions about Betsy!"

"Which," the colonel told him, "is why I sent for you. These gentlemen have the top scientific brains in the country, Sergeant. Answer their questions about Betsy and I think some very high brass will be grateful.

"By the way, it is ordered that from now on no one is to refer to Betsy or any work on these broadcasts, over any type of electronic communication. No telephone, no communicator, no teletype, no radio, no form of communication except \textit{viva voce}. And that means you talking to somebody else, Sergeant, with no microphone around. Understand? And from now on you will not talk about anything at all except to these gentlemen and to me."
Sergeant Bellews said incredulously:

"Suppose I got to talk to somebody in the Rehab Shop. Do I signal with my ears and fingers?"

"You don’t talk," said the colonel flatly. "Not at all."

Sergeant Bellews shook his head sadly. He regarded the colonel with such reproach that the colonel stiffened. But Sergeant Bellews had a gift for machinery. He had what amounted to genius for handling Mahon-modified devices. So long as no more competent men turned up, he was apt to get away with more than average.

The colonel frowned and went out of the room. The tall young lieutenant followed him faithfully. The sergeant regarded the three scientists with the suspicious air he displayed to everyone not connected with Mahon units in some fashion.

"Well?" he said with marked reserve. "What can I tell you first?"

Lecky was the smallest of the three scientists. He said ingratiatingly, with the faintest possible accent in his speech:

"The nicest thing you could do for us, Sergeant, would be to show us that this—Betsy, is it?—with other machines before her, has developed a contagious machine insanity. It would frighten me to learn that machines can go mad, but I would prefer it to other explanations for the messages she gives."

"Betsy can’t go crazy," said Bellews with finality. "She’s Mahon-controlled, but she hasn’t got what it takes to go crazy. A Mahon unit fixes a machine so it can loaf and be a permanent dynamic system that can keep acquired habits of operatin’. It can take trainin’. It can get to be experienced. It can learn the tricks of its trade, so to speak. But it can’t go crazy!"

"Too bad!" said Lecky. He added persuasively: "But a machine can lie, Sergeant? Would that be possible?"

Sergeant Bellews snorted in denial.

"The broadcasts," said Lecky mildly, "claim a remarkable reason for certainty about an extremely grave danger which is almost upon the world. If it’s the truth, Sergeant, it is appalling. If it is a lie, it may be more appalling. The Joint Chiefs of Staff take it very seriously, in any case. They—"

"I got cold shivers," said Sergeant Bellews with irony. "I’m all wrought up. Huh!

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AMAZING STORIES
The big brass gets the yellin’ yollups every so often anyhow. Listen to them, and nothin’ happens except it’s top priority top secret extra crash emergency! What do you want to know about Betsy?”

There was a sudden squealing sound from the communicator on which all the extra recording devices were focussed. Betsy’s screen lighted up. Peculiarly curved patterns appeared on it. They shifted and changed. Noises came from her speaker. They were completely unearthly. Now they were shrill past belief, and then they were chopped into very small bits of sound, and again they were deepest bass, when each separate note seemed to last for seconds.

“You might,” said Lecky calmly, “tell us from where your Betsy gets the signal she reports in this fashion.”

There were whirrings as recorders trained upon Betsy captured every flickering of her screen and every peeping noise or deep-toned rumble. The screen-pattern changed with the sound, but it was not linked to it. It was a completely abnormal reception. It was uncanny. It was somehow horrible because so completely remote from any sort of human communication in the year 1972.

The three scientists watched with worried eyes. A communicator, even with a Mahon unit in it, could not originate a pattern like this! And this was not conceivably a distortion of anything transmitted in any normal manner in the United States of America, or the Union of Compubs, or any of the precariously surviving small nations not associated with either colossus.

“This is a repeat broadcast!” said one of the three men suddenly. It was Howell, the heavy-set man. “I remember it. I saw it projected—like this, and then unscrambled. I think it’s the one where the social system’s described—so we can have practice at trying to understand. Remember?”

Lecky said, as if the matter had been thrashed out often before:

“I do not believe what it says, Howell! You know that I do not believe it! I will not accept the theory that this broadcast comes from the future!”

The broadcast stopped. It stopped dead. Betsy’s screen went blank. Her wildly fluctuating standby light slowed gradually to a nearly normal rate of flicker.

“That’s not a theory,” said Howell dourly. “It’s a state-
ment in the broadcast. We saw the first transmission of this from the tape at the Pentagon. Then we saw it with the high-pitched parts slowed down and the deep-bass stuff speeded up. Then it was a human voice giving data on the scanning pattern and then rather drearily repeating that history said that intertemporal communication began with broadcasts sent back from 2180 to 1972. It said the establishment of two-way communication was very difficult and read from a script about social history, to give us practice in unscrambling it. It's not a theory to say the stuff originates in the future. It's a statement.

"Then it is a lie," said Lecky, very earnestly. "Truly, Howell, it is a lie!"

"Then where does the broadcast come from?" demanded Howell. "Some say it's a Compub trick. But if they were true they'd hide it for use to produce chaos in a sneak attack. The only other theory—"

Graves, the man with the short moustache, said jerkily: "No, Howell! It is not an extra-terrestrial creature pretending to be a man of our own human future. One could not sleep well with such an idea in his head. If some non-human monster could do this—"

"I do not sleep at all," said Lecky simply. "Because it says that two-way communication is to come. I can listen to these broadcasts tranquilly, but I cannot bear the thought of answering them. That seems to me madness!"

Sergeant Belleews said approvingly:

"You got something there! Yes, sir! Did you notice how Betsy's standby light was wabbling while she was bringin' in that broadcast? If she could sweat, she'd've been sweating!"

Lecky turned his head to stare at the sergeant.

"Machines," said Belleews profoundly, "act according to the golden rule. They do unto you as they would have you do unto them. You treat a machine right and it treats you right. You treat it wrong and it busts itself—still tryin' to treat you right. See?"

Lecky blinked.

"I do not quite see how it applies," he said mildly.

"Betsy's an old, experienced machine," said the sergeant. "A signal that makes her sweat like that has got something wrong about it. Any ordinary machine 'ud break down handlin' it."

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Graves said jerkily:
“The other machines that received these broadcasts did break down, Sergeant. All of them.”

“Sure!” said the sergeant with dignity. “O’ course, who’s broadcastin’ may have been tinkerin’ with their signal since they seen it wasn’t gettin’ through. Betsy can take it now, when younger machines with less experience can’t. Maybe a micro-micro-watt of signal. Then it makes her sweat. If she was broadcastin’, with a hell of a lot more’n a micro-microwatt—it’d be bad! I bet you that every machine we make to broadcast breaks down! I bet—”

Howell said curtly:
“Reasonable enough! A signal to pass through time as well as space would be different from a standard wave-type! Of course that must be the answer.”

Sergeant Bellews said truculently:
“I got a hunch that whoever’s broadcastin’ is busting transmitters right an’ left. I never knew anything about this before, except that Betsy was pickin’ up stuff that came from nowhere. But I bet if you look over the record-tapes you will find they got breaks where one transmitter switch-ed off or broke down and another took over!”

Lecky’s eyes were shining. He regarded Sergeant Bellews with a sort of tender respect.
“Sergeant Bellews,” he said softly, “I like you very much. You have told us undoubtedly true things.”

“Think nothin’ of it,” said the sergeant, gratified. “I run the Rehab Shop here, and I could show you things—”

“We wish you to,” said Lecky. “The reaction of machines to these broadcasts is the one viewpoint we would never have imagined. But it is plainly important. Will you help us, Sergeant? I do not like to be frightened—and I am!”

“Sure, I’ll help,” said Sergeant Bellews largely. “First thing is to whip some stuff together so we can find out what’s what. You take a few Mahon units, and install ’em and train ’em right, and they will do almost anything you’ve a mind for. But you got to treat ’em right. Machines work by the golden rule. Always! Come along!”

Sergeant Bellews went to the Rehab Shop, followed only by Lecky. All about, the sun shone down upon buildings with a remarkably temporary look about them, and on lawns
with a remarkably lush look about them, and signboards with very black lettering on gray paint backgrounds. There was a very small airfield inside the barbed-wire fence about the post, and elaborate machine-shops, and rows and rows of barracks and a canteen and a USO theatre, and a post post-office. Everything seemed quite matter-of-fact.

Except for the machines.

They were the real reason for the existence of the post. The barracks and married-row dwellings had washing-machines which looked very much like other washing-machines, except that they had standby lights which flickered meditatively when they weren’t being used.

The television receivers looked like other TV sets, except for minute and wavering standby lights which were never quite as bright or dim one moment as the next. The jeeps—used strictly within the barbed-wire fence around the post—had similar yellow glowings on their instrument-boards, and they were very remarkable jeeps. They never ran off the graveled roads onto the grass, and they never collided with each other, and it was said that the nine-year-old son of a lieutenant-colonel had tried to drive one and it would not stir. Its motor cut off when he forced it into gear. When he tried to re-start it, the starter did not turn. But when an adult stepped into it, it operated perfectly—only it braked and stopped itself when a small child toddled into its path.

There were some people who said that this story was not true, but other people insisted that it was. Anyhow the washing-machines were perfect. They never tangled clothes put into them. It was reported that Mrs. So-and-so’s washing-machine had found a load of clothes tangled, and reversed itself and worked backward until they were straightened out.

Television sets turned to the proper channels—different ones at different times of day—with incredible facility. The smallest child could wrench at a tuning-knob and the desired station came on. All the operating devices of Research Installation 83 worked as if they liked to—which might have been alarming except that they never did anything of themselves. They initiated nothing. But each one acted like an old, favorite possession. They fitted their masters. They seemed to tune
themselves to the habits of their owners. They were infinitely easy to work right, and practically impossible to work wrong.

Such machines, of course, had not been designed to cope with enigmatic broadcasts or for military purposes. But the jet-planes on the small airfield were very remarkable indeed, and the other and lesser devices had been made for better understanding of the Mahon units which made machines into practically a new order of creation.

Sergeant Bellews ushered Lecky into the Rehab Ship. There was the pleasant, disorderly array of devices with their wavering standby lights. They gave an effect of being alive, but somehow it was not disturbing. They seemed not so much intent as meditative, and not so much watchful as interested. When the sergeant and his guest moved past them, the unrhythmic waverings of the small yellow lights seemed to change hopefully, as if the machines anticipated being put to use. Which, of course, was absurd. Mahon machines do not anticipate anything. They probably do not remember anything, though patterns of operation are certainly retained in very great variety. The fact is that a Mahon unit is simply a device to let a machine stand idle without losing the nature of an operating machine.

The basic principle goes back to antiquity. Ships, in ancient days, had manners and customs individual to each vessel. Some were sweet craft, easily handled and staunch and responsive. Others were stubborn and begrudging of all helpfulness. Sometimes they were even man-killers. These facts had no rational explanation, but they were facts. In similarly olden times, particular weapons acquired personalities to the point of having personal names—Excalibur, for example.

Every fighting man knew of weapons which seemed to possess personal skill and ferocity. Later, workmen found that certain tools had a knack of fitting smoothly in the hand—seeming even to divine the grain of the wood they worked on. The individual characteristics of violins were notorious, so that a violin which sang joyously under the bow was literally priceless.

And all these things, as a matter of observation and not of superstition, kept their qualities only when in constant use. Let a ship be hauled out of water and remain there
for a time, and she would be clumsy on return to her native element. Let a sword or tool stay unused, and it seemed to dull. In particular, the finest of violins lost its splendor of tone if left unplayed, and any violin left in a repair-shop for a month had to be played upon constantly for many days before its living tone came back.

The sword and the tool perhaps, but the ship and the violin certainly, acted as if they acquired habits of operation by being used, and lost them by disuse. When more complex machines were invented, such facts were less noticeable. True, no two automobiles ever handled exactly the same, and that was recognized. But the fact that no complex machine worked well until it had run for a time was never commented on, except in the observation that it needed to be warmed up. Anybody would have admitted that a machine in the act of operating was a dynamic system in a solid group of objects, but nobody reflected that a stopped machine was a dead thing. Nobody thought to liken the warming-up period for an aeroplane engine to the days of playing before a disused dulled violin regained its tone.

Yet it was obvious enough. A ship and a sword and a tool and a violin were objects in which dynamic systems existed when they were used, and in which they ceased to exist when use stopped. And nobody noticed that a living creature is an object which contains a dynamic system when it is living, and loses it by death.

For nearly two centuries quite complex machines were started, and warmed up, and used, and then allowed to grow cold again. In time the more complex machines were stopped only reluctantly. Computers, for example, came to be merely turned down below operating voltage when not in use, because warming them up was so difficult and exacting a task. Which was an unrecognized use of the Mahon principle. It was a way to keep a machine activated while not actually operating. It was a state of rest, of loafing, of idleness, which was not the death of a running mechanism.

The Mahon unit was a logical development. It was an absurdly simple device, and not in the least like a brain. But to the surprise of everybody, including its inventor, a Mahon-modified machine did more than stay warmed up. It retained operative habits as no complex device had ever
done before. In time it was recognized that Mahon-modified machines acquired experience and kept it so long as the standby light glowed and flickered in its socket. If the lamp went out the machine died, and when reenergized was a different individual entirely, without experience.

Sergeant Bellews made such large-minded statements as were needed to brief Lecky on the work done in this installation with Mahon-controlled machines.

“They don’t think,” he explained negligently, “any more than dogs think. They just react—like dogs do. They get patterns of reaction. They get trained. Experienced. They get good! Over at the airfield they’re walking around beaming happy over the way the jets are flyin’ themselves.”

Lecky gazed around the Rehab Shop. There were shelves of machines, duly boxed and equipped with Mahon units, but not yet activated. Activation meant turning them on and giving them a sort of basic training in the tasks they were designed to do. But also there were machines which had broken down—invariably through misuse, said Sergeant Bellews acidly—and had been sent to the Rehab Shop to be re-trained in their proper duties.

“Guys see ’em acting sensible and obediently,” said Bellews with bitterness, “and expect ’em to think. Over at the jet-field they finally come to understand.” His tone moderated. “Now they got jets that put down their own landing-gear, and holler when fuel’s running low, and do acrobatics happy if you only jiggle the stick. They mighty near fly themselves! I tell you, if well-trained Mahon jets ever do tangle with old-style machines, it’s goin’ to be a caution to cats! It’ll be like a pack of happy terriers pilin’ into hamsters. It’ll be murder!”

He surveyed his stock. From a back corner he brought out a small machine with an especially meditative tempo in its standby-lamp flicker. The tempo accelerated a little when he put it on a workbench.

“They got batteries to stay activated with,” he observed, “and only need real juice when they’re workin’. This here’s a play-back recorder they had over in Recreation. Some guys trained it to switch frequencies — speed-up and slow-down stuff. They laughed themselves sick! There used to
be a tough guy over there,—a staff sergeant, he was—that gave lectures on military morals in a deep bass voice. He was proud of that bull voice of his. He used it frequently. So they taped him, and Al here—" the name plainly referred to the machine—"used to play it back switched up so he sounded like a squeaky girl. That poor guy, he liked to busted a bloodvessel when he heard himself speakin’ soprano. He raised hell and they sent Al here to be rehabilitated. But I switched another machine for him and sent it back, instead. Of course, Al don’t know what he’s doing, but—"

He bolted the two instruments together. He made connections with flexible cables and tucked the cable out of sight. He plugged in for power and began to make adjustments.

The small scientist asked curiously:

"What are you preparing, Sergeant?"

"These two’ll unscramble that broadcast," said Sergeant Bellews, with tranquil confidence. "Al’s learned how to make a tape and switch frequencies expert. Gus, here, he’s a unscrambler that can make any kinda scanning pattern. Together they’ll have a party doing what they’re special trained for. We’ll hook 'em to Betsy’s training-terminals."

He regarded the two machines warmly. Connected, now, their standby lights flickered at a new tempo. They synchronized, and broke synchrony, and went back into elaborate, not-quite-resolvable patterns which were somehow increasingly integrated as seconds went by.

"Those lights look kinda nice, don’t they?" asked the sergeant admiringly. "Makes you think of a coupla dogs gettin’ acquainted when they’re goin’ out on a job of hunting or something."

"Somebody had a bright notion with this one, too," he said. "They figured they’d scramble pictures for secret transmission, like they scramble voice. But they found they hadda have team-trained sets to work, an’ they weren’t interchangeable. They sent Gus here to be deactivated an’ trained again. I kinda hate to do that. Sometimes you got to deactivate a machine, but it’s like shooting a dog somebody’s taught to steal eggs, who don’t know it’s wrong."
But Lecky said abruptly, in amazement:

"But, Sergeant! In the Pentagon it takes days to unscramble a received broadcast such as Betsy receives! It requires experts—"

"Huh!" said Sergeant Bellews. He picked up the two machines. "Don’t get me started about the kinda guys that wangle headquarters-company jobs! They got a special talent for fallin’ soft. But they haven’t necessarily got anything else!"

Lecky followed Sergeant Bellews as the sergeant picked up his new combination of devices and headed out of the Rehab Shop. Outside, in the sunshine, there were roarings to be heard. Lecky looked up. A formation of jets swam into view against the sky. A tiny speck, trailing a monstrous plume of smoke, shot upward from the jet-field. The formation tightened.

The ascending jet jiggled as if in pure exuberance as it swooped upward—but the jiggling was beautifully designed to throw standard automatic gunsights off.

A plane peeled off from the formation and dived at the ascending ship. There was a curious alteration in the thunder of motors. The rate-of-rise of the climbing jet dwindled almost to zero. Sparks shot out before it. They made a cone the diving ship could not avoid. It sped through them and then went as if disappointedly to a lower level. It stood by to watch the rest of the dog-fight.

"Nice!" said Sergeant Bellews appreciatively. "That’s a Mahon jet all by itself, training against regular ships. They have to let it shoot star-bullets in training, or it’d get hot and bothered in a real fight when its guns went off."

The lower jet streaked skyward once more. Sparks sped from the formation. They flared through emptiness where the Mahon jet had been but now was not. It scuttled abruptly to one side as concerted streams of sparks converged. They missed. It darted into zestful, exuberant maneuverings, remarkably like a dog dashing madly here and there in pure high spirits. The formation of planes attacked it resolutely.

Suddenly the lone jet plunged into the midst of the formation, there were coruscations of little shooting stars, and one—two—three planes disgustedly descended to lower levels as out of action. Then the single ship shot upward, seemed eagerly to shake it-
self, plunged back— and the last ships tried wildly to escape, but each in turn was technically shot down.

The Mahon jet headed back for its own tiny airfield. Somehow, it looked as if, had it been a dog, it would be wagging its tail and panting happily.

“That one ship,” said Lecky blankly, “it defeated the rest?”

“It’s got a lot of experience,” said the sergeant. “You can’t beat experience.”

He led the way into Communications Center. In the room where Betsy stood, Howell and Graves had been drawing diagrams at each other to the point of obstinacy.

“But don’t you see?” insisted Howell angrily. “There can be no source other than a future time! You can’t send short waves through three-dimensional space to a given spot and not have them interceptable between. Anyhow, the Compubs wouldn’t work this way! They wouldn’t put us on guard! And an extraterrestrial wouldn’t pretend to be a human if he honestly wanted to warn us of danger! He’d tell us the truth! Physically and logically it’s impossible for it to be anything but what it claims to be!”

Graves said doggedly:

“But a broadcast originating in the future is impossible!”

“Nothing,” snapped Howell, “that a man can imagine is impossible!”

“Then imagine for me,” said Graves, “that in 2180 they read in the history books about a terrible danger to the human race back in 1972, which was averted by a warning they sent us. Then, from their history-books, which we wrote for them, they learn how to make a transmitter to broadcast back to us. Then they tell us how to make a transmitter to broadcast ahead to them. They don’t invent the transmitter. We tell them how to make it— via a history book. We don’t invent it. They tell us— from the history book. Now imagine for me how that transmitter got invented!”

“You’re quibbling,” snapped Howell. “You’re refusing to face a fact because you can’t explain it. I say face the fact and then ask for an explanation!”

“Why not ask them,” said Graves, “how to make a round square or a five-sided triangle?”

Sergeant Bellewes pushed to a spot near Betsy. He put down his now-linked Mahon-
modified machines and began to move away some of the recording apparatus focused on Betsy.

“Hold on there!” said Howell in alarm. “Those are recorders!”

“We’ll let ’em record direct,” said the sergeant.

Lecky spoke feverishly in support of Bellews. But what he said was, in effect, a still-marveling description of the possibilities of Mahon-modified machines. They were, he said with ardent enthusiasm, the next step in the historic process by which successively greater portions of the cosmos enter into a symbiotic relationship with man. Domestic animals entered into such a partnership aeons ago. Certain plants—wheat and the like—even became unable to exist without human attention. And machines were wrought by man and for a long time served him reluctantly. Pre-Mahon machines were tamed, not domestic. They wore themselves out and destroyed themselves by accidents. But now there were machines which could enter into a truly symbiotic relationship with humanity.

“What,” demanded Howell, “what in hell are you talking about?”

Lecky checked himself. He smiled abashedly:

“I think,” he said humbly, “that I speak of the high destiny of mankind. But the part that applies at the moment is that Sergeant Bellews must not be interfered with.”

He turned and ardently assisted Sergeant Bellews in making room for the just-brought devices. Sergeant Bellews led flexible cables from them to Betsy. He inserted their leads in her training-terminals. He made adjustments within.

It became notable that Betsy’s standby light took up new tempos in its wavering. There were elaborate interweavings of rate and degree of brightening among the lights of all three instruments. There was no possible way to explain the fact, but a feeling of pleasure, of zestful stirring. was somehow expressed by the three machines which had been linked together into a cooperating group.

Sergeant Bellews eased himself into a chair.

“Now everything’s set,” he observed contentedly. “Remember, I ain’t seen any of these broadcasts unscrambled. I don’t know what it’s all about. But we got three Mahon machines set up now to work on the next crazy broad-
cast that comes in. There's Betsy and these two others. And all machines work ac-
cordin' to the Golden Rule, but Mahon machines—they are honey-babes! They'll bust themselves tryin' to do what you ask 'em. And I asked these babies for plenty—only not enough to hurt 'em. Let's see what they turn out."

He pulled a pipe and tobacco from his pocket. He filled the pipe. He squeezed the side of the bowl and puffed as the tobacco glowed. He relaxed, underneath the wall-sign which sternly forbade smoking by all military personnel within these premises.

It was nearly three hours—but it could have been hundreds—before Betsy's screen lighted abruptly.

The broadcast came in; a new transmission. The picture-pattern on Betsy's screen was obviously not the same as other broadcasts from nowhere. The chirps and peepings and the rumbling deep sounds were not repetitions of earlier noise-sequences. It should have taken many days of finicky work by technicians at the Pentagon before the originally broadcast picture could be seen and the sound interpreted. But a play-back recorder named Al, and a pic-
ture-unscrambler named Gus were in closed-circuit relationship with Betsy. She received the broadcast and they unscrambled the sound and vision parts of it immediately.

The translated broadcast, as Gus and Al presented it, was calculated to put the high brass of the defense forces into a frenzied tizzy. The anguish in previous occasions would seem like very calm contemplation by comparison. The high brass of the armed forces should grow dizzy. Top-echelon civilian officials should tend to talk incoherently to themselves, and scientific consultants—biologists in particular—ought to feel their heads spinning like tops.

The point was that the broadcast had to be taken seriously because it came from nowhere. There was no faintest indication of any signal outside of Betsy's sedately gray-painted case. But Betsy was not making it up. She couldn't. There was a technology involved which required the most earnest consideration of the message carried by it.

And this broadcast explained the danger from which the alleged future wished to rescue its alleged past. A brisk, completely deracialized broad-
caster appeared on Gus's screen.

In clipped, oddly stressed, but completely intelligible phrases, he explained that he recognized the paradox his communication represented. Even before 1972, he observed, there had been argument about what would happen if a man could travel in time and happened to go back to an earlier age and kill his grandfather. This communication was an inversion of that paradox. The world of 2180 wished to communicate back in time and save the lives of its great-great-grandparents so that it—the world of 2180—would be born.

Without this warning and the information to be given, at least half the human race of 1972 was doomed.

In late 1971 there had been a mutation of a minor strain of *staphylococcus* somewhere in the Andes. The new mutation thrived and flourished. With the swift transportation of the period, it had spread practically all over the world unnoticed, because it produced no symptoms of disease.

Half the members of the human race were carriers of the harmless mutated *staphylococcus* now, but it was about to mutate again in accordance with Gordon's Law (the reference had no meaning in 1972) and the new mutation would be lethal. In effect, one human being in two carried in his body a semi-virus organization which he continually spread, and which very shortly would become deadly. Half the human race was bound to die unless it was instructed as to how to cope with it. Unless—

Unless the world of 2180 told its ancestors what to do about it. That was the proposal. Two-way communication was necessary for the purpose, because there would be questions to be answered, obscure points to be clarified, numerical values to be checked to the highest possible degree of accuracy.

Therefore, here were diagrams of the transmitter needed to communicate with future time. Here were enlarged diagrams of individual parts. The enigmatic parts of the drawing produced a wave-type unknown in 1972. But a special type of wave was needed to travel beyond the three dimensions of ordinary space, into the fourth dimension which was time. This wave-type produced unpredictable surges of power in the transmitter, wherefore at least six transmitters should be built
and linked together so that if one ceased operation another would instantly take up the task.

The broadcast ended abruptly. Betsy’s screen went blank. The colonel was notified. A courier took tapes to Washington by high-speed jet. Life in Research Establishment 83 went on sedately. The barracks and the married quarters and the residences of the officers were equipped with Mahon-modified machines which laundered diapers perfectly, and with dial telephones which always rang right numbers, and there were police-up machines which took perfect care of lawns, and television receivers tuned themselves to the customary channels for different hours with astonishing ease: Even jetplanes equipped with Mahon units almost landed themselves, and almost flew themselves about the sky in simulated combat with something very close to zest.

But the atmosphere in the room in Communications was tense.

“I think.” said Howell, with his lips compressed, “that this answers all your objections, Graves. Motive—”

“No,” said Lecky painfully. “It does not answer mine. My objection is that I do not believe it.”

“Huh!” said Sergeant Bellows scornfully. “O’ course, you don’t believe it! It’s phoney clear through!”

Lecky looked at him hopefully.

“You noticed something that we missed, Sergeant?”

“Hell, yes!” said Sergeant Bellows. “That transmitter diagram don’t have a Mahon unit in it!”

“Is that remarkable?” demanded Howell.

“Remarkable dumb,” said the sergeant. “They’d ought to know—”

The tall young lieutenant who earlier had fetched Sergeant Bellows to Communications now appeared again. He gracefully entered the room where Betsy waited for more broadcast matter. Her stand-by light flickered with something close to animation, and the similar yellow bulbs on Al and Gus responded in kind.

The tall young lieutenant said politely:

“I am sorry, but pending orders from the Pentagon the colonel has ordered this room vacated. Only automatic recorders will be allowed here, and all records they produce will be sent to Washington without examination. It seems that no one on this post has
the necessary clearance for this type of material."

Lecky blinked. Graves sputtered:

“But — dammit, do you mean we can work out a way to receive a broadcast and not be qualified to see it?"

“There’s a common-sense view,” said Sergeant Bellews oracularly, “and a crazy view, and there’s what the Pentagon says, which ain’t either.” He stood up. “I see where I go back to my shop and finish rehabilitating the colonel’s vacuum cleaner. You gentlemen care to join me?”

Howell said indignantly:

“This is ridiculous! This is absurd!”

“Uh-uh,” said Sergeant Bellews benignly. “This is the armed forces. There’ll be an order makin’ some sort of sense come along later. Meanwhile, I can brief you guys on Mahon machines so you’ll be ready to start up again with better information when a clearance order does come through. And I got some beer in my quarters behind the Rehab Shop. Come along with me!”

He led the way out of the room. The young lieutenant paused to close the door firmly behind him and to lock it. A bored private, with side-arms, took post before it. The lieutenent was a very conscientious young man.

But he did not interfere with the parade to Sergeant Bellews’ quarters. The young lieutenant was very military, and the ways of civilians were not his concern. If eminent scientists chose to go to Sergeant Bellews’ quarters instead of the Officers Club, to which their assimilated rank entitled them, it was strictly their affair.

They reached the Rehab Shop, and Sergeant Bellews went firmly to a standby-light-equipped refrigerator in his quarters. He brought out beer and deftly popped off the tops. The icebox door closed quietly.

“Here’s to crime,” said Sergeant Bellews amiably.


“Sergeant,” he said, “did I see a gleam in your eye just now?”

Sergeant Bellews reflected, gently shaking his opened beer-can with a rotary motion, for no reason whatever. “Uh-uh,” he rumbled. “I wouldn’t say a gleam. But you mighta seen a glint. I got some ideas from what I seen during that broadcast. I wanna get to work on ’em. Here’s the place..."
to do the work. We got facilities here."

Howell said with precise hot anger:

"This is the most idiotic situation I have ever seen even in government service!"

"You ain’t been around much," the sergeant told him kindly. "It happens everywhere. All the time. It ain’t even a exclusive feature of the armed forces." He put down his beer-can and patted his stomach. "There’s guys who sit up nights workin’ out standard operational procedures just to make things like this happen, everywhere. The colonel hadda do what he did. He’s got orders, too. But he felt bad. So he sent the lieutenant to tell us. He does the colonel’s dirty jobs—and he loves his work."

He moved grandly toward the Rehab Shop proper, which opened off the quarters he lived in—very much as a doctor’s office is apt to open off his living quarters.

"We follow?" asked Lecky zestfully. "You plan something?"

"Natural!" said Sergeant Bellews largely.

He led the way into the Rehab Shop, which was dark and shadowy, and only very dimly lighted by flickering, wavering lights of many machines waiting as if hopefully to be called on for action. There were the shelves of machines not yet activated. Sergeant Bellews led the way toward his desk. There was a vacuum cleaner on it, on standby. He put it down on the floor.

Lecky watched him with some eagerness. The others came in, Howell dourly and Graves wiping his moustache.

The sergeant considered his domain.

"We’ll be happy to help you," said Lecky.

"Thanks," said the sergeant. "I’m under orders to help you, too, y’know. Just supposing you asked me to whip up something to analyze what Betsy receives, so it can be checked on that it is a new wave-type."

"Can you do that?" demanded Graves. "We were supposed to work on that—but so far we’ve absolutely nothing to go on!"

The sergeant waved his hand negligently.

"You got something now. Betsy’s a Mahon-modified device. Every receiver that picked up one of those crazy broadcasts broke down before it was through. She takes ’em in her stride—especial with Al and Gus to help her. Wouldn’t it be reasonable to guess that
Mahon machines are—uh—especially adapted to handle inter-temporal communication?"

“Very reasonable!” said Howell dourly. “Very! The broadcast said that the wave-type produced unpredictable surges of current. Ordinary machines do find it difficult to work with whatever type of radiation that can be.”

“Betsy chokes off those surges,” observed the sergeant. “With Gus and Al to help, she don’t have no trouble. We hadn’t ought to need to make any six transmitters if we put Mahon-unit machines together for the job!”

“Quite right,” agreed Lecky, mildly. “And it is odd—”

“Yeah,” said the sergeant. “It’s plenty odd my great-great-great-grandkids haven’t got sense enough to do it themselves!”

He went to a shelf and brought down a boxed machine,—straight from the top-secret manufactory of Mahon units. It had never been activated. Its standby light did not glow. Sergeant Bellews ripped off the carton and said reflectively:

“You hate to turn off a machine that’s got its own ways of working. But a machine that ain’t been activated has not got any personality. So you don’t mind starting it up to turn it off later.”

He opened the adjustment-cover and turned something on. The standby light glowed. Closely observed, it was not a completely steady glow. There were the faintest possible variations of brightness. But there was no impression of life.

Graves said:

“Why doesn’t it flicker like the others?”

“No habits,” said the sergeant. “No experience. It’s like a newborn baby. It’ll get to have personality after it’s worked a while. But not now.”

He went across the shop again. He moved out a heavy case, and twisted the release, and eased out a communicator of the same type—Mark IV—as Betsy back in the Communications room. Howell went to help him. Graves tried to assist. Lecky moved other things out of the way. They were highly eminent scientists, and Metech Sergeant Bellews was merely a non-commissioned officer in the armed forces. But he happened to have specialized information they had not. Quite without condescension they accepted his authority in his own field, and therefore his equality. As civilians they had no rank to maintain, and they
disagreed with each other—and would disagree with the sergeant—only when they knew why. Which was one of the reasons why they were eminent scientists.

Sergeant Bellews brought out yet another box. He unrolled cables. He selected machines whose flickering lights seemed to bespeak eagerness to be of use. He coupled them to the newly unboxed machines, whose lights were vaguely steady.

"Training cables," he said over his shoulder. "You get one machine working right, and you hook it with another, and the new machine kinda learns from the old one. Kinda! But it ain't as good as real experience. Not at first."

Presently the lights of the newly energized machines began to waver in somewhat the manner of the ready-for-operation ones. But they did not give so clear an impression of personality.

"Look!" said Sergeant Bellews abruptly. "I got to check with you. The more I think, the more worried I get."

"You begin to believe the broadcasts come from the future?" demanded Graves. "And it worries you? But they do not speak of Mahon units—"

"I don't care where they come from," said the sergeant. "I'm worryin' about what they are! The guy in the broadcast—not knowing Mahon units—said we'd have to make half a dozen transmitters so they'd take over one after another as they blew out. You see what that means?"

Lecky said crisply:

"You pointed it out before. There is something in the wave-type which—you would say this, Sergeant!—which machines do not like. Is that the reasoning?"

"Uh-uh!" The sergeant scowled. "Machines work by the golden rule. They try to do unto you what they want you to do unto them. Likes an' dislikes don't matter. I mean that there's something about that wave-type that machines can't take! It busts them. If it sort of explodes surges of current in 'em—Look! Any running machine is a dynamic system in a object. A jet-plane operating is that. So's a waterspout. So's a communicator. But if you explode surges of heavy current in a dynamic system in an operating machine—things get messed up. The operating habit is busted to hell. I'm saying that if this wave-type makes crazy surges of current start up—why—if
the surges are strong enough
they'll bust not only a commu-
nicator but a jet-plane. Or a
water-spout. Anything! See?"

Lecky blinked and suddenly
went pale.

"But," said Howell reason-
ably, "you said that Betsy
handled it. Especially well
when linked with other Mahon
machines."

"Yeah," said the sergeant.

"I think," observed Graves
jerkily, "that you are prepar-
ing new machines, without de-
veloped — personalities, be-
cause you think that if they
make this special-type wave
they'll be broken."

"Yeah," said the sergeant,
again. "The signal Betsy was
amplifyin' coulda been as little
as a micro-micro-watt. At its
frequency an' type, she'd
choke it down if it was more.
But even a micro-micro-watt
bothered Betsy until she got
Al and Gus to help. She was
fair screamin' for somebody
to come help her hold it. But
the three of them done all
right."

Howell conceded the point.

"That seems sound reason-
ing."

"But you don't broadcast
with a micro-micro-watt. You
use a hell of a lot more power
than that! The transmitter
the guy in the screen said to
make was a twenty-kilowatt
job. Not too much for a broad-
cast of sine waves, but a hell
of a lot to be turned loose, in
waves that have Betsy holler-
in' at the power she was han-
dlin'!"

"It might break even the
Mahon machines in this in-
stallation?" demanded Howell.

"You're gettin' warm," said
the sergeant.

Graves said:

"You mean it might break
all operating communicators
in a very large area?"

"You're gettin' hot," said
the sergeant grimly.

Lecky wetted his lips.

"I think," he said very care-
fully, "that you suspect it is
a wave-type which will break
any dynamic system, in any
sort of object a dynamic sys-
tem can exist in."

"Yeah," said the sergeant.
He waited, looking at Lecky.

"And," said Lecky, "not
only operating machines are
dynamic systems. Living
plants and animals are, too. So
are men."

"That's what I'm drivin'
at," said Sergeant Bellewes.

"So you believe," said
Lecky, very pale indeed, "that
we have been given the cir-
cuit-diagram of a transmitter
which will broadcast a wave-
type which destroys dynamic
systems — life as well as the
operation of machines. Persons—in the future or an alien creature in a space-ship, or perhaps even the Compubs—are furnishing us with designs for transmitters of death, to be linked together so that if one fails the others will carry on. And they lure us to destroy ourselves by lying about who they are and what they propose."

"They’re lyin’," said the sergeant. "They say they’re in the future and they don’t know a thing about Mahon units. Else they’d use ’em."

Lecky wetted his lips again. "And—if they are not in the future, they are trying to get us to destroy ourselves because that would be safer and surer than trying to destroy us by—say—transmitters of death dropped upon us by parachute. Yet if we do not destroy ourselves, they will surely do that."

"If we don’t bump ourselves off, it’ll be because we got wise," acknowledged the sergeant. "If we get wise, we could bump them off by parachute-transmitter. So they’ll beat us to it. They’ll have to!"

"Yes," said Lecky. "They’ll have to. It has always been said that a death-ray was impossible. This would be a death-broadcast. If we do not broadcast, they will—whoever they are. It is—" He smiled mirthlessly at the magnitude of his understatement. "It is urgent that we do something. What shall we do, Sergeant?"

A squadron of light tanks arrived at Research Installation 83 that afternoon, with a shipment of courier motorcycles. They had been equipped with Mahon units and went to the post to be trained.

The Pentagon was debating the development of a Mahon-modified guided missile, and a drone plane was under construction. But non-military items also arrived for activation and test. Automatic telephone switching systems, it appeared, could be made much simpler if they could be trained to do their work instead of built so they couldn’t help it.

Passenger-cars other than jeeps showed promise. It had long been known that most accidents occurred with new cars, and that ancient jalopies were relatively safe even in the hands of juvenile delinquents. It was credible that part of the difference was in the operating habits of the cars.

It appeared that humanity was upon the threshold of a new era, in which the value of personality would reappear among the things taken for
that there’s different sorts of the wave-type those guys want us to broadcast. Like there’s a spectrum of visible light. If we were color-blind and yellow’d bust things, they’d transmit in red that we could see, and they’d tell us to broadcast something in yellow that’d wipe us out. And we wouldn’t have sense enough not to broadcast the yellow, because we wouldn’t know the difference between it and red until we did broadcast. Then it’d be too late.”

Howell watched with tight-clamped jaws. He had committed himself to the authenticity of the broadcasts claiming to be from a future time. Now he was shaken, but only enough to admit the need for tests. Graves sat unnaturally still. Lecky looked at Sergeant Bellews with a peculiarly tranquil expression on his face.

“Only,” grunted the sergeant, “it ain’t frequency we got to figure, but type. Nobody hardly uses anything but sine waves for communication, but I got to make this gadget turn out a freak wave-type by guess and golly. I got a sort of test for it, though.”

He straightened up and connected a cable from the generator to the Mark IV com-
municator which was a factory twin of Betsy.

"I'm gonna feed this communicator half a micro-micro-
watt of stuff like the broadcast—I think," he announced grimly. "I saw the diagrams of the transmitters they want us to make. I'm guessing the broadcast-wave they use is close to it but not exact. Close, because it's bad for machines. Not exact, because they're alive while they use it. I hope I don't hit anything on the nose. Okay?"

Lecky said gently:

"I have never been more frightened. Go ahead!"

Sergeant Bellews depressed a stud. The communicator's screen lighted up instantly. It was receiving the generator's minute output and accepted it as a broadcast. But the signal was unmodulated, so there was no image nor any sound.

The communicator's standby light flickered steadily.

Sergeant Bellews adjusted a knob on the generator. The communicator's standby flicker changed in amplitude. Bellews turned the knob back. He adjusted another control. The standby light wavered crazily.

Graves said nervously:

"I think I see. You are trying to make this communicator react as Betsy did. When it does, you will consider that your generator is creating a wave like the broadcasts from nowhere."

"Yeah," said Bellews. "It ain't scientific, but it's the best I can do."

He worked the generator-controls with infinite care. Once the communicator's standby light approached sine-wave modulation. He hastily shifted away from the settings which caused it. He muttered:

"Close!"

Then, suddenly, the communicator's lamp began to waver in an extraordinary, hysterical fashion. Sergeant Bellews turned down the volume swiftly. He wiped sweat off his forehead.

"I—I think I got the trick," he said heavily. "It's a hell of a wave-type! Are you guys game to feed it into this communicator's output amplifier?"

"I have six sets of cold chills running up and down my spine," said Lecky. "I think you should proceed."

Howell said angrily:

"It's got to be tried, hasn't it?"

"It's got to be tried," acknowledged Sergeant Bellews.

He shifted the generator's cable from the communicator's input to the feed-in for preamplified signal. The com-
communicator's screen went dark. It no longer received a simulated broadcast signal. It was now signalling—calling. But the instant the new signal started out, the standby light flickered horribly. Sergeant Bellews grimly plugged in other machines—to the three scientists they looked like duplicates of Gus and Al—to closed-circuit relationship with Betsy's twin. The standby light calmed.

"Now we test," he said grimly. "Got a watch?"

Lecky extended his wrist.

"Watch it," said Sergeant Bellews.

He stepped up the output.

"My watch has stopped," said Lecky, through white lips.

Graves looked at his own watch. He shook it and held it to his ear. He looked sick. Howell growled and looked at his own.

"That wave stops watches," he admitted unwillingly.

"But not Mahon machines easy," said Sergeant Bellews heavily, "and not us. There was almost three micro-micro-watts goin' out then. That's three-millionths of a millionth of a ampere-second at one volt. We—"

His voice stopped, as if with a click. The screen of Betsy's factory-twin communicator lighted up. A man's face peered out of it. He was bearded and they could not see his costume, but he was frightened.

"What—what is this?" cried his voice shrilly from the speakers.

Sergeant Bellews said very sharply:

"Hey! You ain't the guy we've been talking to!"

The screen went dark. Sergeant Bellews put his hand over the microphone opening. He turned fiercely upon the rest.

"Look!" he snapped. "We were broadcastin' their trick wave—the wave they used to talk to us! And they picked it up! But they weren't expectin' it! They were set to pick up the wave they told us to transmit! See? That guy'll come back. He's got to! So we got to play along! He'll want to find out if we got wise and won't broadcast ourselves to death! If he finds out we know what we're doin', they'll parachute a transmitter down on us before we can do it to them! Back me up! Get set!"

He removed his hand from the microphone.

"Callin' 2180!" he chattered urgently. "Calling the guy that just contacted us! Come in, 2180! You're not the guy we've been talking to, but come in! Come in, 2180!"
Howell said stridently:

“But if that’s 2180, how’d we parachute—”

Lecky clapped a hand over his mouth with a fierceness surprising in so small a man. He whispered desperately into Howell’s ear. Graves absurdly began to bite his nails, staring at the communicator-screen. Sergeant Bellews continued his calling, ever more urgently.

His voice echoed peculiarly in the Rehab Shop. It seemed suddenly a place of resonant echoes. All the waiting, repaired, or to-be-rehabilitated machines appeared to listen with interest while Sergeant Bellews called:

“Come in, 2180! We been trying to reach you for a coupla weeks! We got somebody else instead of you, and they been talkin' to us, and they say that they’re 3020 instead of 2180, but we’ve got to contact you! They don’t know anything about that germ that’s gonna mutate and bump us off! It’s ancient history to them. We got to reach you! Come in, 2180!”

The flickering yellow lights of the machines wavered as if all the quasi-living machines were listening absorbedly. The Rehab Shop was full of shadows. And Sergeant Bellews sat before the dark-screened communicator with sweat on his face, calling cajolingly to nothingness to come in.

After five minutes the screen grew abruptly bright again. The brisk, raceless broadcaster of the earlier broadcast—not the bearded man—came back. He forced a smile:

“Ah! 1972! At last you reach us! But we did not hope you could make your transmitters so soon!”

“We tried to analyze your wave,” said Sergeant Bellews, with every appearance of feverish relief, “but we only got it approximate. We tried callin’ back with what we got, and we got through time, all right, but we contacted some guys in 3020 instead of you! We need to talk to you!—Can you give me the stuff about that bug that’s gonna wipe out half of us? Quick? I got a recorder goin’.”

The completely uncharacterizable man in the screen forced a second smile. He held something to his ear. It would be a tiny sound-receiver. Obviously the contact in time or place or nowhere was being viewed by others than the one man who appeared. He was receiving instructions.

“Ah!” he said brightly, “but now that you have the
contact, you will not lose it again! Leave your controls where they are, and our learned men will tell your learned men all that they need to know. But—3020? You contacted 3020? That is not in our records of your time!"

He listened again to the thing at his ear. His expression became suddenly suspicious, as if someone had ordered that as well as the words which came next.

"We do not understand how you could contact a time a thousand years beyond us. It is possible that you attempt a joke. A—a kid, as you would say."

Sergeant Bellewes beamed into the screen which so remarkably functioned as a transmitting-eye also.

"Hell!" he said cordially. "You know we wouldn’t kid you! You or our great-great-great-grandchildren! We depend on you! We got to get you to tell us how not to get wiped out! In 3020 the whole business is forgotten. It’s a thousand years old, to them! But they’re passin’ back some swell machinery—"

He turned his head as if listening to something the microphone could not pick up. But he looked appealingly at Lecky. Lecky nodded and moved toward the communicator.

"Look!" said Sergeant Bellewes into the screen. "Here’s Doc Lecky—one of our top guys. You talk to him."

He gave his seat to Lecky. Out of range of the communicator, he mopped his face. His shirt was soaked through by the sweat produced by the stress of the past few minutes. He shivered violently, and then clamped his teeth and fumbled out sheets of paper. He beckoned to Graves. Graves came.

"We—we got to give him a doctored circuit," whispered Sergeant Bellewes desperately, "and it’s got to be good—an’ quick!"

Graves bent over the paper on which the sergeant dripped sweat. The sergeant murmured through now-chattering teeth what had to be devised, and at once. It must be the circuit-diagram for a transmitter to be given to the man whose face filled the screen. The transmitter must be of at least twenty-kilowatt power. It must be such a circuit as nobody had ever seen before.

It must be convincing. It should appear to radiate impossibly, or to destroy energy without radiation. But it must actually produce a broadcast
signal of this exotic type—here the sergeant described with shaky precision the exact constants of the wave to be generated—and the broadcaster from nowhere must not be able to deduce those constants or that wave-type from the diagram until he had built the transmitter and tried it.

"I know it can't be done!" said the sergeant desperately. "I know it can't! But it's gotta be! Or they'll parachute a transmitter down on us sure."

Graves smiled a quick and nervous smile. He began to sketch a circuit. It was a wonderful thing. It was the product of much ingenuity and meditation. It had been devised—by himself—as a brain-teaser for the amusement of other high-level scientific brains. Mathematicians zestfully contrive problems to stump each other. Specialists in the higher branches of electronics sometimes present each other with diagrammed circuits which pretend to achieve the impossible. The problem is to find the hidden flaw.

Graves deftly outlined his circuit and began to fill in the details. Ostensibly, it was a circuit which consumed energy and produced nothing—not even heat. In a sense it was the exact opposite of a perpetual-motion scheme, which pretends to get energy from nowhere. This circuit pretended to radiate energy to nowhere, and yet to get rid of it.

Presently Lecky could be heard expostulating gently:

"But of course we are willing to give you the circuit by which we communicate with the year 3020! Naturally! But it seems strange that you suspect us! After all, if you do not tell us how to meet the danger your broadcasts have told of, you will never be born!"

Sergeant Bellews mopped his face and moved into the screen's field of vision.

"Doc," he said, laying a hand on Lecky's arm. "Doc Graves is sketchin' what they want right now. You want to come show it, Doc?"

Graves took Lecky's place. He spread out the diagram, finishing it as he talked. His nervous, faint smile appeared as the mannerism of embarrassment it was.

"There can be no radiation from a coil shaped like this," he said embarrassedly, "because of the Werner Principle. . . . Yet on examination . . . input to the transistor series involves . . . energy must flow . . . and when this coil . . ."
His voice flowed on. He explained a puzzle, presenting it diffidently as he had presented it to other men in his own field. Then he had been playing—for fun. Now he played for perhaps the highest stakes that could be imagined.

He completed his diagram and, smiling nervously, held it up to the communicator-screen. It was instantly transmitted, of course. To nowhere. Which was most appropriate, because it pretended to be the diagram of a circuit sending radiation to the same place.

The face on the screen twitched, now. The hand with the tiny earphone was always at the ear of the man on the screen, so that he plainly did not speak one word without high authority.

"We will—examine this," he said. His voice was a full two tones higher than it had been. "If you have been—truthful we will give you the information you wish."

Click! The screen went dark. Lecky let out his breath. Sergeant Bellews threw off the transmission switch. He began to shake. Howell said indignantly:

"When I make a mistake, I admit it! That broadcast isn’t from the future! If it hadn’t been a lie, he’d have known he had to tell us what we wanted to know! He couldn’t hold us up for terms! If he let us die he wouldn’t exist!"

"Y-yeah," said Sergeant Bellews. "What I’m wonderin’ is, did we fool him?"

"Oh, yes!" said Graves, with diffident confidence. "I don’t know but three men in the world who could find the flaw in that circuit." He smiled faintly. "But it radiates all the energy that’s fed into it."

He turned to Sergeant Bellews. "You gave me the constants of a wave you wanted it to radiate. I fixed it. It will. But why that special type—that special wave?"

Sergeant Bellews pulled himself together.

"Because," he said grimly, "that was the wave they wanted us to broadcast. What I’m hoping is that you gave ’em a transmitter to do exactly the same thing as the one they designed for us. If they’re fooled, they’ll broadcast the wave they told us to broadcast. If it busts machines, it’ll bust their machines. If it stops all dynamic systems dead—includin’ men—they’ll be stopped dead, too." Then he looked from one to another of the three scientists, each one reacting in his own special way.

"Personally," said Sergeant Bellews doggedly, "I’m goin’
to have a can of beer. Who'll join me?"

The world wagged on. The automatic monitors in Communications Center reported that another broadcast had been received by Betsy and undoubtedly unscrambled by Al and Gus, working as a team. The reported broadcast was, of course, an interception of the two-way talk from the Rehab Shop.

The tall young lieutenant, working with his eyes kept conscientiously shut, extracted the tapes and loaded them in a top-security briefcase. A second courier took off for Washington with them. There a certified, properly cleared major-general had them run off, and saw and heard every word of the conversation between the Rehab Shop and—nowhere. He howled with wrath.

Sergeant Bellew's went into the guardhouse while plane-loads of interrogating officers flew from Washington. Howell and Graves and Lecky went under strict guard until they could be asked some thousands of variations of the question, "Why did you do it?" The high brass quivered with fury. They did not accept decisions made at non-commissioned-officer level.

Communication with their great - great - great - grandchildren, they considered, should have been begun with proper authority and under high-ranking auspices. They commanded that 2180 should immediately be re-contacted and properly authorized and good-faith conference begun all over again. The only trouble was that they could get no reply.

The dither was terrific and the tumult frantic. When, moreover, even Betsy remained silent, and Al and Gus had nothing to unscramble, the high brass built up explosive indignation. But it was confined to top-security levels.

The world outside the Pentagon knew nothing. Even at Research Installation 83 very, very few persons had the least idea what had taken place. The sun shone blandly upon manicured lawns, and the officers' children played vociferously, and washing-machines laundered diapers with beautiful efficiency, and vacuum cleaners and Mahon-modified jeeps performed their functions with an air of enthusiastic contentment. It seemed that a golden age approached.

It did. There were machines which were not merely possessions. Mahon-modified ma-
machines acquired reflections of the habits of the families which used them. An electric icebox acted as if it took an interest in its work. A vacuum cleaner seemed uncomfortable if it did not perform its task to perfection. It would seem as absurd to exchange an old, habituated family convenience as to exchange a member of the family itself. Presently there would be washing-machines cherished for their seeming knowledge of family-member individual preferences, and personal fliers respected for their conscientiousness, and one would relievedly allow an adolescent to drive a car if it were one of proven experience and sagacity...

The life of an ordinary person would be enormously enriched. A Mahon-modified machine would not even wear out. It took care of its own lubrication and upkeep—giving notice of its needs by the behavior of its standby-lamp. When parts needed replacement one would feel concern rather than irritation. There would be a personal relationship with the machines which so faithfully reflected one's personality.

And the machines would always, always, always act to-ward humans according to the golden rule.

But meanwhile the Rehab Shop was taken over by officers of rank. They tried frantically to resume the communication that had been broken off. Suspecting that Sergeant Bellews had shifted controls, they essayed to shift them back. The communicator which was Betsy's factory twin went into sine-wave standby-modulation, and suddenly smoked all over and was wrecked. The wave-generator went into hysterics and produced nothing whatever. Then there was nothing to do but pull Sergeant Bellews out of the clink and order him to do the whole business all over again.

"I can't," said Sergeant Bellews indignantly. "It can't be done. Those guys are busy buildin' a transmitter according to the diagram Doc Graves gave them. They won't pay no attention to anything until they'd tried to chat with their great - great - great - grandchildren in 3120. They were phonys, anyhow! Pretendin' to be in 2180 and not knowin' what Mahon units could do!"

Lecky and Graves and Howell were even less satisfactory. They couldn't pretend even to try what the questioning-teams from the Pentagon...
wanted them to do. And Betsy remained silent, receiving nothing, and Gus and Al waited meditatively for something to unscramble, and nothing turned up.

And then, at 3:00 P.M. Greenwich mean time, on August 9, 1972, nearly every operating communicator in the fringe of free nations around the territory of the Union of Communist Republics—all communicators blew out.

There were only four men in the world who really knew why—Sergeant Bellew and Lecky and Graves and Howell. They knew that somewhere behind the Iron Curtain a twenty-kilowatt transmitter had been turned on. It produced a wave of the type and with the characteristics that would have been produced by a transmitter built from the diagram sent through Betsy and Al and Gus for people in the United States to build. Obviously, it had been built from Graves' diagram broadcast to somewhere else and it broadcast what the United States had been urged to broadcast.

It blew itself out instantly, of course. The wave it produced would stop any dynamic system at once, including its own. But it hit Stockholm and traffic jammed as the dynamic systems of cars in operation were destroyed. In Gibraltar, the signal-systems of the Rock went dead. All around the fringe of the armed Communist republics machines stopped and communications ended and very many persons with heart conditions died very quietly. Because their dynamic systems were least stable. But healthy people—like Mahon-modified machines—had great resistance...outside the Iron Curtain.

There was, though, almost a vacuum of news and mechanical operations at the rim of a nearly perfect circle some four thousand miles in diameter, whose center was in a Compub research installation.

It was very bad. Such a panic as had never been known before swept the free world. Some mysterious weapon, it was felt, had been used to cripple those who would resist invasion, and the Compub armed forces would shortly be on the march, and Armageddon was at hand. The free world prepared to die fighting.

But war did not come. Nothing happened at all. In three days there were sketchy communications almost everywhere outside that monstrous circle of silence. But nothing came out of that circle. Nothing.
In two weeks, exploring parties cautiously crossed the barbed-wire frontier fences to find out what had happened. Those who went farthest came back shaken and sick. There were survivors in the Compubs, of course. Especially near the fringes of the circle. There were some millions of survivors. But there was no longer a nation to be called the Union of Communist Republics. There were only frightened, starving people trudging blindly away from cities that were charnel-houses and machines that would not run and trees and crops and grasses that were stark dead where they stood. It would be a long time before anybody would want to cross those lifeless plains and enter the places which once had been swarming hives of homes and people.

And presently, of course, Sergeant Bellews was let out of the guardhouse. He could not be charged with any crime. Nor could Graves nor Lecky nor Howell. They were asked, confidentially, to keep their mouths shut. Which they would have done anyhow. And Sergeant Bellews was asked with reluctant respectfulness, just what he thought had really happened.

"Some guys got too smart," he said, fuming. "A guy that'll broadcast a wave that'll wreck machines . . . I haven't got any kinda use for him! Dammit, when a machine treats you accordin' to the golden rule, yououghta treat it the same way!"

There were other, also-respectful questions.

"How the hell would I know?" demanded Sergeant Bellews wrathfully. "It coulda been that we did make contact with 2180, and they were smart an' told the Compubs to try out what we told 'em. But I don't believe it. It coulda been a kinda monster from some other planet wanting us wiped out. But he learned him a lesson, if he did! And o' course, it coulda been the Compubs themselves, trying to fool us into committing suicide so they'd—uh—inherit the earth. I wouldn't know! But I bet there ain't any more broadcasts from nowhere!"

He was allowed to return to the Rehab Shop, and the flickering standby lights of many Mahon - modified machines seemed to glow more warmly as he moved among them.

And he was right, there not being any more broadcasts from nowhere.

There weren't.

Not ever.

THE END
The long-suffering public went along with billboards and singing commercials; they tolerated half a dozen sales pitches in a half-hour radio or TV show; they suffered stoically through the "hard-sell" and the "soft-sell." But when the hucksters turned the wild blue yonder into a vast television screen, they howled—

GET OUT OF OUR SKIES!

By E. K. JARVIS

ON THE first cloudy day in November, Tom Blacker, the shining light of Ostreich and Company, Public Relations Counsellors, placed a call to a shirtsleeved man on the rooftop of the Cannon Building in New York City.

His message brought an immediate response from the waiting engineer, who flicked switches and twirled dials with expert motions, and brought into play the gigantic 50,000-watt projector installed on the peak.

In his own office, Tom paced the floor in front of the three-window exposure, watching the heavens for the results.

They weren’t long in coming.

The eyes came first. Eyes the size of Navy dirigibles, with pupils of deep cerulean blue, floating against the backdrop of the gray cumulus. The long lashes curled out almost a hundred feet from the lids. Then the rest of Monica Mitchell’s famous face appeared: the flowing yellow locks, the sensuously curved lips, parted moistly from even white teeth. From chin to hairline, the projected image above the city was close to a thousand feet in diameter.

Then, as if the floating countenance wasn’t alarming enough, the ruby lips began to move. Monica’s sweet-sultry voice, like the first drippings from a jar of honey, overcame the city sounds, and began crooning the syrupy strains of Love Me Alone. Which happened, by no coincidence, to be the title and
Monica's image—plastered across the heavens—stopped traffic in all directions.
theme song of Monica’s newest epic.

It was a triumph. Tom knew it the moment he looked down at the crowded thoroughfare eighteen stories beneath the window. Traffic had come to a more than normal standstill. Drivers were leaving their autos, and hands were being upraised towards the gargantuan face on the clouds above.

And of course, Tom’s phone rang.

Ostreich’s big scowling face was barely squeezed within the confines of the visiphone screen. He said nothing intelligible for two minutes.

“Relax, Chief,” Tom said brightly. “I’ve been saving this as a surprise.”

Ostreich’s reply was censorable.

“Now look, D. O. You gave me carte blanche with this Mitchell babe, remember? I figured we really needed a shot in the arm for this new picture of hers. The receipts on her last turkey couldn’t pay her masseurs.”

Ostreich, who had built his firm by establishing golden public images for various industrialists and their enterprises, had anticipated trouble the moment he let the barrier down to admit such unworthy clients as Monica Mitchell. But he had never anticipated that his ace publicist would display such carnival tactics in their promotion. He growled like a taunted leopard.

“This is a cheap trick, Tom! Do you hear me? Turn that thing off at once!”

“Who, me?” Tom said innocently. “Gosh, D. O. I’m no engineer. I left instructions with the operator to keep the projector going for three hours, until sunset. Don’t think I can do anything about it now.”

“You’ll damn well have to do something about it! You’re ruining us!”

“Look at it this way, Chief. What can we lose? If anybody takes offense, we can blame it on that Hollywood gang.”

“Turn that damn thing off! If that blankety face isn’t out of the sky in ten minutes, you can start emptying your desk!”

Tom was a redhead. He reached over and snapped the visiphone switch before his boss could have the satisfaction. He stomped to the window, still railing at Ostreich’s lack of appreciation.

But he chuckled when he saw the activity in the street. The crowds were thickening at the intersections, and a special battalion of city police
were trying to keep things moving. Behind him, the visiphone was beeping frantically again.

He waited a full minute before answering, all set to snap at Ostreich once more.

But it wasn’t Ostreich. It was a square-faced man with beetling brows and a chin like the biting end of a steam shovel. It took Tom a while to recognize the face of Stinson, commissioner of police.

“Mr. Blacker?”

“Yes, sir?” Tom gulped.

“Mr. Ostreich referred me to you. You responsible for that—” the commissioner’s voice was choked. “—that menace?”

“Menace, sir?”

“You know what I’m talking about. We’ve got half a dozen CAA complaints already. That thing’s a menace to public safety, a hazard to air travel—”

“Look, Mr. Stinson. It’s only a harmless publicity stunt.”

“Harmless? You got funny ideas, Mr. Blacker. Don’t get the wrong idea about our city ordinances. We got statutes that cover this kind of thing. If you don’t want to be a victim of one of them, turn that damned monstrosity off!”

The commissioner’s angry visage left a reverse shadow burned on the visiphone screen. It remained glowing there long after the contact was broken.

Tom Blacker walked the carpeted floor of his office, chewing on his lower lip, and cursing the feeble imaginations of Ostreich and the rest of them. When his temper had cooled, he got sober thoughts of indictments, and law suits, and unemployment. With a sigh, he contacted the engineer on the roof of the Cannon Building. Then he went to the window, and watched Monica’s thousand-foot face fade gradually out of sight.

At four o’clock that afternoon, a long white envelope crossed Tom’s blotter. There was a check to the amount of a month’s salary enclosed, and a briefly-worded message from the office of the president.

When he left the office, Ostreich’s rolling phrases buzzed in his head like swarming gnats. “... a mockery of a great profession... lowering of dignity... incompatible with the highest ideals of...”

At ten o’clock that night, Tom was telling his troubles to a red-coated man behind a chromium bar on Forty-ninth Street. The man listened with
all the gravity of a physician, and lined up the appropriate medicine in front of his patient.

By midnight, Tom was singing Christmas carols, in advance of the season, with a tableful of Texans.

At one o’clock, he swung a right cross at a mounted policeman, missed, and fell beneath the horse’s legs.

At one-fifteen, he fell asleep against the shoulder of a B-girl as they rode through the streets of the city in a sleek police vehicle.

That was all Tom Blacker remembered, until he woke up in Livia Cord’s cozy two-room apartment. He moved his head and winced with the pain.

“Hi,” the girl said.

She was smiling down at him, and for a moment, her floating face reminded Tom of the episode which had just cost him twenty grand a year. He groaned, and rolled the other way on the contour couch.

“Hair of the dog?” she said. There was a gleaming cannister in her hand.

“No, thanks.” He sat up, rubbing the stiff red hair on the back of his head. One eye seemed permanently screwed shut, but the other managed to take in his surroundings. It explored the girl first, and appreciatively.

She was wearing something black and satiny, cut in the newest Dallas-approved style, with long, tantalizing diagonal slashes across the breast and hips. Her hair was strikingly two-toned, black and blonde. Her teeth were a blinding white, and had been filed to canine sharpness.

“My name’s Livia,” the girl said pleasantly. “Livia Cord. I hope you don’t mind what I did.”

“And what was that?” Tom’s other eye popped open, almost audibly.

“Bailing you out of jail. Seems you got into a fracas with a mounted cop. I think you tried to punch his horse.”

“Nuts. I was trying to hit him.”

“Well, you didn’t.” She chuckled, and poured herself a drink. “You’ve had quite a day, Mr. Blacker.”

“You said it.” There was a taste in his mouth like cigar ashes. He tried to stand up, but the weight on his head kept him where he was. “You wouldn’t have an oxygen pill around?”

“Sure.” She left with a toss of her skirt and a revelation of silky calves. When she returned with the tablet and water, he took it gratefully.
After a few minutes, he felt better enough to ask:

"Why?"

"What's that?"

"Why'd you bail me out? I don't know you. Or do I?"

She laughed. "No. Not yet you don't. But I know you, Mr. Blacker. By reputation, at any rate. You see—" She sat next to him on the couch, and Tom was feeling well enough to tingle at her nearness. "We're in the same line of work, you and I."

"Unemployment?"

"No," she smiled. "Public relations. Only I'm on the client's side of the fence. I work for an organization called Homelovers, Incorporated. Ever heard of them?"

Tom shook his head.

"Maybe you should. It's a rather important company, and growing. And they're always on the lookout for superior talent."

He squinted at her. "What is this? A job offer?"

"Maybe." She wriggled a little, and the slits in her dress widened just a fraction. "We've got the nucleus of a good PR department now. But with a really experienced man at the controls—it could grow enormously. Think you might be interested?"

"Maybe I would," Tom said. But he wasn't thinking about PR right then.

"Mr. Andrusco's had you in mind for a long time," Livia Cord continued. "I've mentioned your name to him several times as a possible candidate. If you hadn't been fired from Ostreich, we might have tried to tempt you away." Her fingers touched a stray lock of red hair. "Now—we don't have to be surreptitious about it. Do we?"

"No," Tom said guardedly. "I guess not."

"If you're free tomorrow, I could arrange a meeting with Mr. Andrusco. Would you like that?"

"Well..."

"His office opens at nine. We could get there early."

Tom looked at his watch. Livia said: "I know it's late. But we could get an early start in the morning, right after breakfast. Couldn't we?"

"I dunno," Tom frowned. "By the time I get home..."

"Home?" The girl leaned back. "Who said anything about home?"

Her bedroom was monochromed. Even the sheets were pink. At five o'clock, the false dawn glimmered through the window, and the light falling on his eyes awakened him. He looked over at the sleeping
girl, feeling drugged and detached. She moaned slightly, and turned her face towards him. He blinked at the sight of it, and cried aloud.

“What is it?” She sat up in bed and flicked on the table lamp. “What’s the matter?”

He looked at her carefully. She was beautiful. There wasn’t even a smudge of lipstick on her face.

“Nothing,” he said dreamily, and turned away. By the time he was asleep again, his mind had already erased the strange image from his clouded brain—that Livia Cord had absolutely no mouth at all.

It was hard to keep track of the glass-and-steel structures that had been springing up daily along the Fifth-Madison Thruway. When Tom and Livia stepped out of the cab in front of 320, he wasn’t surprised that the building—an odd, cylindrical affair with a pointed spire—was strange to him. But he was taken aback to realize that all sixty floors were the property of Homelovers, Incorporated.

“Quite a place,” he told the girl.

She smiled at him tightly. Livia was crackling with business electricity this morning, her spiked heels clicking along the marble floors of the lobby like typewriter keys. She wore a tailored gray suit that clung to her body with all the perfection and sexlessness of a window mannequin. In the elevator, shooting towards the executive offices on the 57th floor, Tom looked over at her and scratched his poorly-shaven cheeks in wonderment.

They plowed right through the frosty receptionist barrier, and entered an office only half the size of Penn Station. The man behind the U-shaped desk couldn’t have been better suited to the surroundings by Central Casting. He was cleft-jawed, tanned, exquisitely tailored. If his polished brown toupee had been better fitted, he would have been positively handsome.

The handshake was firm.

“Good to see you,” he grinned. “Heard a lot about you, Mr. Blacker. All of it good.”

“Well,” Livia said airily. “I’ve done my part. Now you two come to terms. Buzz me if you need me, J. A.”

John Andrusco unwrapped a cigar when she left, and said: “Well, now. Suppose we get right down to cases, Mr. Blacker. Our organization is badly in need of a public relations set-up that can pull out
all the stops. We have money and we have influence. Now all we need is guidance. If you can supply that, there’s a vacant chair at the end of the hall that can accommodate your backside.” He grinned manfully.

“Well,” Tom said delicately. “My big problem is this, Mr. Andrusco. I don’t know what the hell business you’re in.”

The executive laughed heartily. “Then let me fill you in.”

He stepped over to a cork-lined wall, pressed a concealed button, and panels parted. An organizational chart, with designations that were meaningless to Tom, appeared behind it.

“Speaking basically,” Andrusco said, “Homelovers, Incorporated represents the interests of the world’s leading real estate concerns. Land, you know, is still the number one commodity of Earth, the one priceless possession that rarely deteriorates in value. In fact, with the increase in the Earth’s population, the one commodity that never seems to be in excess supply.”

“I see,” Tom said, not wholly in truth.

“The stability of real estate is our prime concern. By unification of our efforts, we have maintained these values over a good many years. But as you know, a good business organization never rests on its laurels. Sometimes, even basic human needs undergo unusual—alterations.”

“I’m not following too well,” Tom said frankly. “Just where does public relations come into this? I can’t see much connection.”

Andrusco frowned, but without wrinkling his serene brow too much. He went to the multipaned window and locked his hands behind his back.

“Let me put it this way, Mr. Blacker. With the Earth’s population approaching the three billion mark, you can imagine that real estate is at a greater premium than ever—yes, even the remotest land areas have gained in market value. But let me ask you this. If there were only a hundred apples in the world, and you owned all of them, what would you do if you learned that someone else had discovered a fruitful orchard, which contains ten million apples?”

“I’d go out of the apple business.”

“Precisely.” Andrusco rocked on his heels. “In a sense, that’s very much the problem that Homelovers, Incorporat-
ed may have to face in the next generation."

"Somebody swiping your apples?"

"In a way." The man chuckled. "Yes, in a way." He raised his arm slowly, and pointed to the sky. "The apples," he said, "are up there."

"Huh?" Tom said.

"Space, Mr. Blacker. Space is opening its doors to us. Already, the UN Space Commission has launched some two dozen manned vehicles into the outer reaches. Already, the satellite-building colony on the moon is well under way. The progress of our space program has been accelerating month by month. The expert predictions have been more and more optimistic of late. In another ten, twenty years, the solar system will be beckoning the children of Earth..."

Tom said nothing for a while. Then he cleared his throat.

"Well... I'm no expert on these things. But maybe the population could stand a little more real estate, Mr. Andrusco. In twenty years..."

"Nonsense!" The voice was snappish. "The best authorities say it isn't so. There's plenty of room on Earth. But if ever a mass exodus begins—"

"That doesn't seem possible," Tom said. "Does it? I mean, only a handful of guys have ever gone out there. A drop in the bucket. I mean, Mars and all that may be fun to visit, but who'd want to live there?"

Andrusco turned to him slowly.

"The apples in the new orchard may be sour, Mr. Blacker. But if your livelihood depended on your own little stack of fruit—would you be willing to sit by and take the chance?"

Tom shrugged. "And is that the public relations job? To keep people out of space?"

"Put in its crudest form, yes."

"A pretty tough job. You know that guff about Man's Pioneering Spirit."

"Yes. But we're worried about the public spirit, Mr. Blacker. If we can dampen their ardor for space flight—only delay it, mind you, for another few years—we can tighten our own lines of economic defense. Do I make myself clear?"

"Not completely."

"Will you take the job?"

"What does it pay?"

"Fifty thousand."

"Where do I sit?"
By the afternoon, Tom Blacker was ensconced in a fair-sized office with vaguely oriental furnishings and an ankle-deep rug. Livia’s pretty ankles visited it first.

"Here’s an outline I began on the PR program," she told him briskly, dropping a sheet of paper on his desk. "I didn’t get very far with it. I’m sure you can add a lot."

"Okay. I’ll read it over this afternoon." He tipped the chair back. "How about dinner tonight?"

"Sorry. Busy tonight. Maybe later this week."

But it wasn’t until Friday, three days later, that he saw Livia Cord again. He accomplished that by calling her in for a conference, spreading his own typewritten notes on the desk in front of him.

"Got some rough ideas drafted on the program," he told her. "The possibilities of this thing are really unlimited. Granted, of course, that there’s money in this picture."

"There’s money all right," Livia said. "We don’t have to worry about that."

"Good. I’ve put down a list of leading citizens that might be enrolled as backers for anything we might come up with, people who have been outspoken about the expense or danger of space flight. We’ll keep it on file, and add to it as new names crop up in the press. Then here’s a listing of categories for us to develop subprograms around. Religious, economic, social, medical—Medical’s good. There’s a heck of a lot of scare-value in stories about cosmic rays, alien diseases, plagues, zero gravity sickness, all that sort of thing. Sterility is a good gimmick; impotence is even better."

Livia smiled. "I know what you mean."

"Mmm. Come to think of it, we ought to set up a special woman’s-point-of-view program, too. That’ll be worth plenty. Then there’s the tax question. We’ll have to see what we can set up in Washington, some kind of anti-space lobby. Good feature story material here, too. You know the stuff—one space vessel equals the cost of two hundred country hospitals."

"Sounds great."

"We’ll have to plan on press parties, special stuff for the magazines and networks. I’ve got a plan for some Hollywood promotion to counteract all this Destination Space garbage they’ve been turning out. And as for television—"

He talked on for another
hour, feeling mounting excitement for the job he was doing. Tom wasn’t sure that he liked the aims of Homelovers, Incorporated, but the challenge was enjoyable. Even at dinner that night, in Livia’s snug apartment, he rattled on about the PR program until the girl began to yawn.

The bedroom was still monochrome. Only Livia had transformed it magically into powder blue. Tom slept blissfully until morning, and went into the office that week end for sheer love of what he was doing.

After less than a month, his efforts started producing results. On a crisp December morning, he found the following in his mail:

“EARTH SONG”
A Screenplay
by
Duncan Devine

Roger Tenblade, a dashing young rocket pilot in the UN Air Force, yearns to join the Space Expeditionary Force now planning the first landing and colonization of the planet Mars. Despite the protest of his lovely fiancée, Diane, he embarks upon the journey. The trip is fraught with hazards, and the ship is struck by a meteor enroute. Every member of the crew is killed, except Roger, who heroically brings the vessel back to home base. However, Roger is exposed to large amounts of cosmic radiation. When he is so informed by the medical authorities, he realizes that he can never make Diane a normal husband. So rather than return to her and ruin her life, he changes his identity and disappears to South America, where he takes a job as a shuttle pilot for a third-class airline.

Meanwhile, Diane marries Harold Farnsworth, scion of one of America’s wealthiest families . . .

Tom Blacker chuckled, and slipped the scenario back into the envelope. He marked the manuscript “O.K. for Production,” and turned to the other mail.

There was the prospectus of a television series that sounded interesting. He looked it over carefully.

“CAPTAIN TERRA”
Half-hour Television Series
written by
Craig Comfort

Captain Terra, and his Earth Cadets are dedicated to the principle of “Earth Above All” and have sworn their
lives to the preservation of Earth and its peoples, and to the protection of Earth against the hostile aliens constantly threatening the planet.

Program One, Act One

Bobby, Captain Terra’s youthful aide, is attacked one day by a strange creature which he describes as half-man, half-snake. He reports the incident to Captain Terra, who calls a special session of his Earth Patrol to determine how best to deal with this enemy...

Tom read the prospectus through, and then dictated a letter to its producers to call for an appointment.

At the bottom of the mail pile, he found an enthusiastic letter from a theatrical producer named Homer Bradshaw, whom he had dealt with briefly during his career at Ostreich and Company.

Dear Tom,

Great to hear about your new connection! Have a fabulous gimmick that ought to be right down your alley. Am thinking of producing a new extravaganza entitled: “Be It Ever So Humble.”

This will be a real classy show, with plenty of chorus line and top gags. We plan to kid the pants off this space-man business, until those bright boys in the glass hats cry uncle. I’ve already lined up James Hocum for the top banana, and Sylvia Crowe for the female lead. You know Sylvia, Tom; she’ll make space flight sound about as chic as a debutante’s ball on the Staten Island Ferry. This is the way to do the job, Tom — laugh ’em out of it.

If you’re interested in a piece of this, you can always reach me at...

He was about to call it a day at five-thirty, when he got a visiphone call from John Andrusco. When he walked into the immense office at the other end of the floor, he saw a glassy-eyed man standing at Andrusco’s desk, twirling his hat with nervous fingers.

“Tom,” Andrusco said cheerfully, “want you to meet somebody. This is Sergeant Walt Spencer, formerly of the UN Space Commission.”

Tom shook the man’s hand, and he could feel it trembling in his own.

“I called Walt in here specially, thanks to that memo you sent me, Tom. Great idea of yours, about talking to some of the boys who’ve actually been in space. Walter
here’s willing to cooperate a hundred percent.”

“That’s fine,” Tom said uneasily.

“Thought you two ought to get together,” Andrusco said, reaching for his hat. “Think he can help a lot, Tom. Talk it over.”

“Well—suppose we have a drink, Sergeant? That fit your plans all right?”

“Suits me,” the man said, without emotion.

They went down in the elevator together, and slid into a red-leather booth in the Tuscany Bar in the base of the building. The sergeant ordered a double Scotch, and gulped it with the same respect you give water.

“So you’ve been in space,” Tom said, looking at him curiously. “Must have been quite an experience.”

“Yeah.”

“Er—I take it you’ve left the service.”

“Yeah.”

Tom frowned, and sipped his martini. “How many trips did you make, Sergeant?”

“Just one. Reconnaissance Moon Flight Four. About six years ago. You must have read about it.”

“Yes,” Tom said. “Sorry.”

The man shrugged. “Things happen. Even on Earth, things happen.”

“Tell me something.” Tom leaned forward. “Is it true about—” He paused, embarrassed. “Well, you hear a lot of stories. But I understand some of the men on that flight, the ones who got back all right, had children. And—well, you know how rumors go—”


“Oh.” Tom tried to hide his disappointment behind the cocktail glass. It would have made great copy, if he could have proved the truth of the old rumor about two-headed babies. But what could Sergeant Spencer do for the PR program? Andrusco must have had something in mind.

He asked him point-blank.

“It’s like this,” the man said, his eyes distant. “Since I quit the service, I haven’t been doin’ so good. With jobs, I mean. And Mr. Andrusco—he said he’d give me five thousand dollars if I’d—help you people.”

“Did Mr. Andrusco describe this help?”

“Yeah. He wants me to do a story. About the kid my wife had. The first kid.”

“What about the first kid?”

“Well, she died, the first kid did. In childbirth. It was
something that happens, you know. My wife's a little woman; the baby was smothered."

"I see. And what kind of story do you want to tell?"

"It's not my idea." A hint of stubbornness glimmered in his dull eyes. "It's that Andrusco guy's. He wants me to tell how the baby was born a —mutant."

"What?"

"He wants me to release a story saying the baby was a freak. The kid was born at home, you see. The only other person who saw her, besides me and my wife, was this doctor we had. And he died a couple of years back."

Tom slumped in his chair. This was pushing public relations a little far.

"Well, I dunno," he said. "If the baby was really normal—"

"It was normal, all right. Only dead, that's all."

Tom stood up. "Okay, Sergeant Spencer. Let me think it over, and I'll give you a buzz before the end of the week. All right?"

"Anything you say, Chief."

In the morning, Tom Blacker went storming into John Andrusco's plush office.

"Now look, Mr. Andrusco. I don't mind slanting a story a little far. But this Spencer story of yours is nothing but a hoax."

Andrusco looked hurt. "Did he tell you that? How do you like that nerve?"

"What do you mean?"

"Why, that story's as genuine as gold. We've known about the freak birth for a long time. Cosmic rays, you know. Those men on that reconnaissance flight really got bombarded."

Tom wasn't sure of himself. "You mean, it's true?"

"Of course it is! As a matter of fact, we've got a photograph of the dead baby, right after it was delivered. The doctor who attended Mrs. Spencer took it without their knowledge, as a medical curiosity. He sold it to us several years ago. We've never used it before, because we knew that the Spencers would just deny it. Now that Walt's willing to cooperate... ."

"Can I see the photo?"

"Why, certainly." He opened the top drawer and handed a glossy print across the desk. Tom looked at it, and winced.

"Scales!" he said.

"Like a fish," Andrusco said sadly. "Pretty sad, isn't it?" He looked out of the window and sighed cavernously. "It's a menacing world up there... ."

The rest of the day was
wasted. Tom Blacker’s mind wasn’t functioning right.

He told Livia about it at lunch.

Livia Cord continued eating, chewing delicately on her food without flexing a muscle or wincing an eyebrow.

On the Third of April, the story of Sergeant Walter Spencer’s first-born monster broke in newspapers, magazines, and telecasts across the country. It was a five-year-old story, but it carried too much significance for the space-minded present to be ignored.

Two days later, Sergeant Spencer, 32, and his wife, Laura, 30, were found dead of asphyxiation in their new home in Greenwich, Connecticut. The cause of death was listed as suicide.

Tom Blacker didn’t hear the news until a day after it happened. He was in Washington, setting up a series of meetings with members of a House group investigating space flight expenditures. When he returned by ’copter that evening, he found Police Commissioner Joe Stinson waiting for him in Tom’s own favorite chair.

The square, heavy-jowled face was strangely calm.

“Long time no see,” he said mildly. “You’ve been a busy man lately, Mr. Blacker.”

“Hello, Mr. Stinson. Won’t you come in?”

“I’m in,” the commissioner shrugged. “Landlord let me wait here. It’s chilly outside. Do you want the preliminaries, or should we have the main bout?”

“It’s about Spencer, isn’t it?” Tom built himself a long drink. “I heard about it on the ’copter radio, flying in. Too bad. He was a nice guy; I never met his wife.”

“But you knew him, right? In fact, you and the sergeant did a lot of business together?”

“Look, Mr. Stinson. You know what kind of job I’m trying to do. It’s no secret. Spencer’s story happened to gear in nicely with our public relations effort. And that’s all.”

“Maybe it is.” The commissioner’s eyes hardened. “Only some of us aren’t satisfied. Some of us are kinda restless about the coroner’s verdict.”

“What?”

“You heard me. It’s fishy, you know? Nice young couple buys a new house, then turns on the gas. Leave behind a couple of kids, too. Boys, nice boys.”

“I couldn’t feel worse about it,” Tom said glumly. “In a
way, I can almost feel responsible . . ."

“How?”

“I dunno. They were perfectly willing to release that story about their first-born. But maybe when they actually saw it in print, they couldn’t stand the spotlight—”

“And that’s your theory?”

“Yes. But I hope I’m wrong, Mr. Stinson. For my own sake.”

The commissioner drew a folded sheet of paper out of his pocket.

“Let me read you something. This hasn’t been released to the press, and maybe it won’t be. Interested?”

“Of course.”

“It’s a letter. A letter that was never mailed. It’s addressed to Tom Blacker, care of Homelovers, Incorporated, 320 Fifth-Madison, New York.”

“What?” Tom reached for it.

“Uh-uh. It was never mailed, so it’s not your property. But I’ll read it to you.” He slipped on a pair of bifocals.

Dear Mr. Blacker. I’ve been trying to reach you all week, but you’ve been out of town. Laura and I have just seen the first news story about our baby, and we’re just sick about it. Why didn’t you tell us about that photograph you were going to print? If we had known about that, we never would have consented to doing what you wanted. My wife never gave birth to that damned thing, and I don’t care who knows it. I’ve called Mr. Andrusco to tell him that we don’t want any part of this business any more. I’d send you back every penny of the five thousand dollars, only we’ve already spent half of it. I’m going to call the newspapers and tell them everything . . .

The commissioner paused. “It goes on for another half page. But no use reading any more. I’d like a reaction, Mr. Blacker. Got one handy?”

Tom was on his feet.

“I don’t believe it!” His fist thudded into his palm. “The letter’s a fake!”

“That’s easy to prove, Mr. Blacker.”

“But the picture was genuine! Don’t you see that? Sure, we paid Spencer something for his cooperation. But the picture was the real thing, taken by his family doctor. You’ve heard what the medical authorities said about it.”

Stinson said nothing. Then he got up slowly and walked to the door.

“Maybe so. But you’re missing the point I want to
make, Mr. Blacker. This letter was dated the same day as the Spencer suicides. Does it sound to you like the kind of thing a man would put in a suicide note? Think it over.”

Tom looked at the door the commissioner closed behind him.

“No,” he said aloud. “It doesn’t.”

Tom didn’t go to the Home-lover building the next morning. He proceeded directly to the Lunt Theatre, where Homer Bradshaw was putting Be It Ever So Humble into rehearsal.

He was in no mood for the theatre, but the appointment had been made too long before. When he came through the doors of the theatre, Homer leaped halfway up the aisle to greet him, and pounded his back like a long-lost pal. Actually, he had met the producer only twice before.

“Great to have you here, Tom!” he said enthusiastically. “Great! We’ve just been putting things together. Got some red-hot numbers we had written specially for us. Wait ’til you hear ’em!” He waved towards the two shirtsleeved men hovering around the on-stage piano. “You know Julie, don’t you? And Milt Steiner? Great team! Great team!”

They took seats in the sixth row while Homer raved about the forthcoming production that was going to cost Home-lovers, Incorporated some hundred thousand dollars. A dozen shapely girls in shorts and leotards were kicking their heels lackadaisically in the background, and a stout man with a wild checkered suit was wandering around the stage with an unlit cigar in his hand, begging the stagehands for a match.

“Hey, fellas!” Homer Bradshaw called to the men at the piano. “Run through that Gypsy number for Mr. Blacker, huh?”

They came to life like animated dolls. The tallest of the pair stepped in front of the stage while the other thumped the piano keys. The tall one sang in a loud nasal voice, with an abundance of gestures.

“Gypsy!
“Gypsy!
“Why do you have to be a gypsy?
“Life could be so ypsy-pipsy
“Staying home and getting tipsy
“Safe on Earth with me!”

He swung into the second chorus while Tom Blacker kept his face from showing
his true opinion of the specialty number. The next offering didn't change his viewpoint. It was a ballad. A blonde girl in clinging black shorts sang it feelingly.

"There's a beautiful Earth tonight
"With a beautiful mellow light
"Shining on my spaceman in the moon.
"Why did he leave me?
"Only to grieve me?
"Spaceman, come home to me soon . . ." 

"Did you like it? Did you like it?" Homer Bradshaw said eagerly.

"It'll do fine," Tom Blacker said, with his teeth clenched.

When he left the theatre, Tom visiphoned the office to tell Livia that he was taking the rest of the day off. But he found that Livia herself was spending the day in her two-room apartment downtown. He hung up, and decided that he had to talk to her about Stinson's visit. He hopped a cab, and gave him Livia's address.

John Andrusco answered the door.

"Well! Thought you were at the office, Tom?"

He found himself glaring at the lean-jawed executive. What was Andrusco doing here?

"I've been over at the theatre," Tom explained. "Watching that musical we're spending all that dough on." He stepped inside. "I might say the same about you, Mr. Andrusco."

"Me? Oh, I just came to talk over some business with Livia. Poor kid's not feeling so hot, you know."

"No, I didn't." He dropped his hat familiarly on the contour couch, with almost too much deliberation. "Livia in bed?"

"No." The girl appeared at the door of the bedroom, wrapping a powder-blue negligee around her. "What brings you here, Tom?"

"I—I wanted to talk something over with you. Now that you're here, Mr. Andrusco, we can all talk it over."

"What's that?" Andrusco made himself at home at the bar.

"It's about Walt Spencer. I had a visitor last night, the police commissioner. He showed me a letter that Spencer had written just before he—before he died. It was addressed to me, only Spencer had never mailed it."

Andrusco looked sharply at
the girl. "And what was in this letter?"

"He was upset," Tom said. "He wanted to back out of the deal we made. Said the picture was a phoney. But the thing that's bothering the police is the tone of the damned letter. It just doesn't sound like a man about to kill himself and his wife—"

"Is that all?" Livia took the drink from Andrusco's hand and sipped at it. "I thought it was something serious."

"It is serious!" Tom looked sternly at her. "I want to know something, Mr. Andrusco. You told me that picture was genuine. Now I want you to tell me again."

The man smiled, with perfect teeth. "How do you mean, genuine? Is it a picture of a genuine infant with scales?"

"Yes."

"I assure you. In that respect, the picture is absolutely genuine."

Tom thought it over.

"Wait a while. Was the story genuine, too?"

John Andrusco smiled. He sat on the sofa, and rubbed the palms of his hands over his knees. Then he looked towards Livia Cord and said:

"Well—I didn't think we could hold out on our clever Mr. Blacker as long as we have. So we might as well enlist his cooperation fully. Eh, Livia?"

"I think so." The girl smiled, her teeth sharp.

"What does that mean?" Tom said.

"The infant," John Andrusco answered slowly, "was not Walter Spencer's child. That, I'm afraid, was nothing more than a little white lie."

Tom looked confused.

"Then what was it?"

Livia finished her drink.

"It was my child."

The man and the woman, whose grins now seemed permanently affixed to their faces, were forced to wait a considerable amount of time before Tom Blacker was both ready and able to listen to their explanation.

Livia did most of the talking.

"You'll probably be horrified at all this," she said, with a trace of amusement around her red mouth. "Particularly since you and I have been—" She paused, and looked towards Andrusco with a slight lift of her shoulder. "Well, you know. But you needn't feel too squeamish, Tom. After all, I was born and raised on Earth. I am, you might say, an honorary Earth woman."

Tom's eyes bulged at her.
“This civilization from which my husband and I claim ancestry is perhaps no older than your own. Unfortunately, we were not blessed with a planetary situation as agreeable as Earth’s. Our sun is far feebler, the orbital paths of our moons act drastically upon our waters, causing generations of drought and centuries of flood . . .”

“What are you talking about?” Tom said hoarsely.

“I speak of home,” Livia Cord said. And her eyes gleamed.

“Antamunda is the name we give it,” John Andrusco said cordially. “A world very much like your own in size and atmosphere, Mr. Blacker. But tragically, a world whose usefulness has been gradually coming to an end. Our ancestors, who were scientists of much ability, foresaw this some hundreds of years ago. Since that time, they have been seeking a solution to the problem.”

“I don’t believe this!”

“We have,” Livia said carefully, “excellent evidence.”

“Some five hundred years ago,” Andrusco continued, “our people despatched an exploratory space vessel. A home-hunting force, seeking to relocate the surviving members of our race. It was a long, trying odyssey, but it finally culminated in the selection of a new home. I needn’t tell you that the home is in your own solar system.”

Tom shot to his feet. “You mean Earth? You mean you want to take over here—”

Andrusco looked shocked. “Certainly not! What a violent thought, Mr. Blacker!”

“The planet you call Mars,” Livia said coolly, “was the selected destination. A planet with only limited facilities for the support of life. But a planet even more like our own dying world than Earth, Mr. Blacker. So you needn’t cry havoc about alien invaders.” She laughed sharply.

“Then what are you doing here?”

“Merely waiting,” Andrusco said. “We are the offspring of the surviving members of the expeditionary force from Antamunda, placed here on Earth as a vanguard of the immigration that will shortly take place to this system. But your own world is in no danger, Mr. Blacker. That you must believe. Physically, our people are not your equals. Scientifically, we are advanced in certain fields and shamefully backwards in others. Biologically—” He frowned. “This is our greatest weakness. To the Anti-
mundans, your breeding capacity is nothing short of grotesque.” His handsome lip curled. He enjoyed watching Tom’s reaction.

Tom swallowed hard. “How long have you been here?”

“Some four generations have been born here. Our duty has been merely to await the arrival of our people. But in the last fifty years, we found ourselves faced with another obligation. It was that obligation which brought about the formation of Homelovers, Incorporated.”

“I don’t understand.”

“We had underestimated the science of Earth. Our own necessity drove us towards the perfection of space flight. Earth had no such urgency. But now—” Livia looked mournful. “Now we were faced with the possibility that Mars would soon be a colony of your own planet, before our people had a chance to make it their rightful home. You can see the consequences of that. A conflict of interests, a question of territorial rights. Even the possibility of an interplanetary war—”

“War!”

“A possibility greatly to be abhorred,” Andrusco said. “And one we were sure we could eliminate, if we could merely delay the colonization of Mars.”

“Don’t you see?” Livia said earnestly. “If we could make Mars our natural home, then the people of Earth would come to us as friendly visitors—or invaders, whichever they prefer. But if we arrived too late— No, Tom. We feel that it is imperative—to the peace of both our worlds—that Antamunda reach Mars first.”

“Then it’s a race!” Tom was bewildered.

“You may call it that. But a race we are determined to win. And we will win!”

Tom thought of another question.

“The infant,” he said. “The creature with scales . . .”

“It was mine,” the girl said sadly. “Born to John and me some ten years ago. Unfortunately, it did not live. And while your Earth eyes may consider it a creature—” She drew herself up proudly. “It was a perfectly formed Antamundan child.”

Tom gaped at her.

“No,” she said, answering the question in his gaze. “You are looking at us as we are. We lose our scales after our infancy, when our mouths are formed . . .”

After a while, Tom asked: “And what about Spencer?”

“Unfortunate,” the man
said. "His betrayal to the press would have done us incalculable harm. It was necessary to do what we did."

"Then you did kill them?"

Livia turned her head aside. "And you think I'll stand for that?" Tom said.

"Perhaps not," Andrusco said. "But frankly—I don't really know what you can do about it. Except, of course, repeat this explanation to the authorities. You're free to do that, Tom. Any time at all." He smiled, slyly.

"You think they won't believe me?"

Livia came over to Tom's chair, and slithered one arm around his shoulder.

"Why, Tom, darling. Are you so sure that you believe it?"

He left the apartment some ten minutes later, and took a cab to 320 Fifth-Madison. It was almost five o'clock, and the steel-and-glass cylinder was emptying rapidly of its Homelover employees. He watched the stream of ordinary people stepping off the elevators: the young secretaries with their fresh faces and slim figures, laughing at office anecdotes and sharing intimate confidences about office bachelors; the smooth-cheeked young executives, in their gray and blue suits, gripping well-stocked brief cases, and striding energetically down the lobby, heading for the commuter trains; the paunchy, dignified men with their gray temples and gleaming spectacles, walking slowly to the exits, quoting stock prices and planning golf dates.

The crowd eddied about him like a battling current as he made his way towards the elevators, and their images swam before his face in pink-and-white blurs. And for one terrible moment, in the thickest vortex of the crowd, he began to imagine that the faces were melting before his eyes, the mouths disappearing into the flesh, and below the white collars and black-knit ties and starched pink blouses appeared a shimmering collection of ugly scales.

He shuddered, and stepped into an empty car, punching the button that shot him to the executive floor of the Homelovers Building.

In his office, he switched on the visiphone and made contact with a square-faced man who frowned mightily when he recognized his caller.

"What do you want?" Stinson said.

"I have to see you," Tom told him. "I learned some-
thing this afternoon, about Walt Spencer. I don’t know whether you’ll believe it or not, but I have to take that chance. Will you talk to me?”

“All right. But we’ll have to make it down here.”

“I’ll be there in an hour. I want to organize a few things first. Then we can talk.”

Tom switched off, and began to empty his desk. He found nothing in the official communications of the Home-lovers that would substantiate his story, but he continued to gather what information he could about the PR program.

He was just clicking the locks on his brief case, when a gray-haired woman with a pencil thrust into her curls popped her head in the doorway.

“Mr. Blacker?” she smiled. “I’m Dora, Mr. Wright’s secretary. Mr. Wright wants to know if you’ll stop in to see him.”

“Wright?” Tom said blankly.

“The treasurer. His office is just down the hall. He’s very anxious to see you, something about the expense sheets you turned in last week.”

Tom frowned. “Why don’t I see him in the morning?”

“It won’t take but a minute.”

“All right.”

He sighed, picked up the brief case, and followed Dora outside. She showed him the door of an office some thirty paces from his own, and he entered without knocking.

A frail man, with a bald head and a squiggly moustache, stood up behind his desk.

“Oh, dear,” he said nervously. “I’m terribly sorry to do this, Mr. Blacker. But I have my instructions.”

“Do what?”

“Oh, dear,” Mr. Wright said again.

He took the gun that was lying in his out-box, and fired it. His trembling hand sent the bullet spangling into the wooden frame of the door. Tom dropped to the thick carpet, and then scrambled to the tall credenza set against the right wall of the office. He shoved it aside with his left hand and ducked behind it. The treasurer came out from behind his desk, still muttering to himself.

“Please,” he said in anguish, “this is very painful for me!”

He fired the gun again, and the bullet tore a white hole in the wall above Tom’s head.

“Don’t be so difficult,” the little man pleaded. “Sooner or later—”
But Tom insisted upon being difficult. His fingers closed around a loose volume of New York State Tax Laws, and jiggled it in readiness. When the little treasurer came closer, he sprung from hiding and hurled the book. It slammed against Wright’s side, and surprised him enough to send the arm holding the weapon into the air. That was the advantage Tom wanted. He leaped in a low-flying tackle, and brought Wright to the carpet. Then he was on top of the little man, grappling for the gun. Tom fought hard to get the gun.

He got it, but not before it was fired again.

Tom looked down at the widening stain that was marring the smooth texture of the carpet and was horrified. He bent down over the frail figure, lifting the bald head in his hands.

“Mr. Wright!”

The treasurer groaned.

“Sorry,” he said. “Instructions, Mr. Blacker . . .”

“From whom? Andrusco?”

“Yes . . . Your message reported from switchboard . . . had orders . . .”

“Is it true?” Tom said frantically. “About Antamunda? Is the story true?”

The little man nodded. Then he lifted one hand feebly towards the desk. “Gary,” he said. “Tell Gary . . .”

Tom looked in the direction of the gesture, and saw the back of a framed photograph. When he turned to the treasurer again, the thin lips had stopped moving.

He lowered the body to the floor and went to the desk. The photo was that of a young man with stiff-bristled, blond hair and a rugged smile. The inscription read:

“To Pop, with deep affection, Gary.”

Tom shook his head, wonderingly. Were these creatures so very different?

When Tom stepped out on Fifth-Madison some ten minutes later, it was just in time to watch a police vehicle draw up to the entrance of 320. Sensing danger, he stepped into the shade of the Tuscany Bar awning, and watched the uniformed men pound their way down the marbled lobby floor towards the elevators. He thought fast, and decided that the arrival of the police was connected with the shooting in Wright’s office.

The question was—who were they after?

He walked into the Tuscany, and headed for the bank of visiphone booths. He
dialed the police commissioner, but ducked out of the path of the visiphone eye.

Stinson growled at the blank screen. “Who is it?”

“Never mind,” Tom said, muffling his voice. “But if you want the killers of Walt Spencer and his wife, pick up John Andrusco and a gal named Livia Cord.”

“Okay, Blacker,” Stinson thundered. “I knew you’d be calling in.”

Tom swore, and showed himself. “Listen, I’m telling you the truth. They told me the whole story. Then they tried to have me killed.”

“Is that so? And I suppose the assassin was a guy named Wright?”

“Yes!”

“Okay, wise guy. We’re on to you. You’ve been pocketing some of that Homelovers dough, and the treasurer found you out. Isn’t that the story?”

“No! Wright’s one of them.”

“Sure, pal. Whatever you say. Only stay right where you are so you can do your explaining proper.”

Tom tightened his lips. “Uh-huh. I don’t like the sound of things. I’ll see you later, Mr. Stinson.”

“Blacker!”

Tom switched off.

By the time he was settled behind the red neck of a cabdriver, Tom was wiping a dripping film of sweat from his forehead. He couldn’t return to his apartment; there was bound to be a stake-out. He couldn’t go to Livia’s; that would be walking right into danger. And he couldn’t go to Stinson, without risking a murder charge.

He leaned forward.

“Driver—make that the La-Guardia Heliport.”

However efficient Stinson’s operations might have been, their tentacles hadn’t reached the ’copter-rental station at the heliport. Tom signed out a speedy vessel under an assumed name, and taxied it down the runway. Then he pointed the nose west, and radioed ahead to his destination at Washington, D. C.

Colonel Grady Mordigan had the thoughtful air of a scholar and the body of a college wrestler. When Tom Blacker’s name was announced to him, his mouth turned down grimly. He was commanding officer of the Space Flight Commission of the UN Air Force, and he had good reason to frown at the sound of the PR man’s name.

But he invited him into his office.
"So you're Tom Blacker," he said, pinching his jaw. "I've heard a lot about you, Mr. Blacker."

"I'm sure," Tom said. "Only I want to tell you this, Colonel. I've broken my connection with Homelovers. I'm on your side now."

"Side? There are no sides in this issue, Mr. Blacker. As far as I'm concerned, Homelovers is nothing but a flea on the lip of a lion. A damned annoying flea, maybe—but nothing more than that. Now what do you want?"

"I have to talk to you about something. Something I just found out. Will you listen to me?"

The colonel leaned back, looking at his watch. "Five minutes," he snapped.

Tom talked for fifteen. Mordigan didn't call a halt until he was finished, listening without a change of expression. When Tom ran out of words, he merely tapped his fingers on the desk.

"And that's your whole story?" he said gently.

"Yes, sir. I know it's a wild one. That's one of the things they're counting on. It's just wild enough to get me put into a laughing academy, where I can't do them any mischief. But I had to take that chance, Colonel."

"I see. And this—man you killed. What's happening about that?"

"I don't know," Tom said. "The way I figure it, Andrusco and the girl have told the police that I was embezzling money from the firm—that I killed the treasurer for my own protection. But it's not true! He's one of them—one of those creatures—"

"But you have no real proof?"

Tom's back stiffened. "No," he said grimly. "If I had proof, I'd have gone to the police. But I came here instead. Now you can tell me if I did the right thing."

Mordigan grimaced. "I don't know, damn it! I don't have any love for the Homelovers. To me, they've always been a bunch of greedy businessmen, intent on salvaging their franchises at any expense. But it's not easy to think of them as a bunch of—" His mouth twisted. "Loathsome aliens . . ."

"Maybe not so loathsome," Tom said miserably. "I just don't know. Maybe their cause is as just to them as ours is to us. But they're determined to reach Mars before we do—before you do! And they'll do anything to make sure—"
The colonel stood up. "But I'm afraid that question is academic, Mr. Blacker. Because if our calculations are right, an Earth vessel will be on the planet Mars within the next thirty-six hours."

"What?"

"No announcement has been made. But a Mars-bound ship was launched almost a month ago, containing seven members of the space commission. Our last radio contact with Captain Wright leads us to expect—"

"Who?" Tom was on his feet.

"Captain Gary Wright, the commander of the ship." His brow knitted. "Why? Do you know him?"

"I'm not sure," Tom said weakly. "But if he's the same man—then that flight's in danger."

"What are you talking about?"

Tom concluded his story about the death of the Homelover's treasurer, down to the last detail of the framed photograph on Wright's desk. The tale brought Colonel Mordigan into immediate action. He buzzed for his orderly, and in another minute, was rummaging through a folder marked Classified.

"Yes," he said numbly. "It's the same man. Father's named Benjamin Wright, and he's vice-president and treasurer of Homelovers, Incorporated. I never connected the two...."

He looked up, his eyes heavy. "If your story is true, Mr. Blacker, then Captain Wright is one of these so-called Antamundans. And if their mission is what you say it is—"

Tom clenched his fists on the blotter. "Please, sir! Let me stay here until the flight is concluded. After that, you can do what you like."

"All right," Mordigan said wearily. "I'll fix you up with something in the officer's quarters. But I'm sure you're wrong, Mr. Blacker. You have to be."

Twenty-four hours later, radio contact with the Mars expeditionary ship ceased abruptly.

From Mt. Wilson observatory, a hurried message arrived, reporting a small, brief nova in the orbital vicinity of the planet Mars.

Tom Blacker, dozing fitfully on a cot in the quarters of a grumpy Lieutenant-Colonel, was awakened suddenly, and summed to the office of Colonel Grady Mordigan.

"Very well, Mr. Blacker," the colonel said stiffly. "I'm willing to help. Just tell me what you want me to do."
The receptionist smiled icily at Tom, and then the smile vanished like a Martian polar cap.

"Why—Mr. Blacker!"

"Hi, Stella," he grinned. "Mr. Andrusco in his office?"

"Why, I don’t know. Suppose I give him a ring—"

He stopped the hand that was reaching for the telephone. "No need of that. I think I’ll just surprise him. After all, it’s been some time."

He turned the knob of John Andrusco’s door slowly.

Livia was with him. When he entered, they both stood up hastily, their eyes wide and their mouths unhinged.

Livia reacted first. She cried out his name, and then sat down heavily, as if the words had been a physical force.

"Hi, Livia," Tom said casually. "Good to see you again, Mr. Andrusco. Sorry that I haven’t been around—but things have been pretty hectic for me lately."

"How did you get here?" Andrusco’s voice was chocked. "I’ve been here all week end, if you want to know." Tom seated himself blithely. "As a matter of fact, the Homelovers Building has had quite a lot of visitors this week end."

"What do you mean?"

“You know the staff of cleaning personnel that invades this place every Saturday? Well, there were some changes made this particular week end. I’m sure you’ll be interested in hearing about them.”

Livia said: "Shall I call the police, John?"

"The police were represented," Tom said. "Don’t worry about that. In fact, the top technicians from three government agencies were doing the housework around here this week end, Mr. Andrusco. They probably didn’t get the building much cleaner—but they swept up a lot of other things. Yes, they certainly uncovered other things."

Andrusco walked over to Livia, and touched her shoulder in a comforting gesture. The sight of them made Tom scowl.

"All right!" he said roughly. "I’m not blaming you for what you’re doing. But things were getting out of hand, Mr. Andrusco. That’s why we had to put a stop to it."

"And have you?" Andrusco asked politely.

“I’m afraid so. It was quite a shock, let me tell you. We didn’t know what to expect when we dissected this building of yours. But the last
thing we expected to find was —a spaceship.”

Andrusco smiled. “It was cleverly done. You’ll have to admit that.”

“I do,” Tom said fervently. “You’ve got those space flight experts absolutely insane with curiosity. They’ll want to hear the whole story. Will you give it to them?”

The man shrugged. “It doesn’t matter, I suppose. I presume the engines have been dismantled?”

“Made inoperable, yes. It would have been a great trick, if you could have done it.”

Livia spoke sadly. “It was the only thing we could have done. There’s no place on this Earth where we could have erected a spaceship without being observed. So we created this building. In time, we would have perfected the mechanism and left this silly planet of yours.”

“That’s what I don’t understand,” Tom said. “What about Antamunda—and the survivors—”

“There’s no longer an Antamunda,” John Andrusco said hollowly. “The story we told you was true in its essence, but not, I’m afraid complete. You see, the exodus that took place five hundred years ago was a total exodus.

The entire population of our world—a handful, a pitiful ragged thousand—left Antamunda for this planet. We thought to make it our new home, for all eternity. But in time, we learned that we had emigrated to an extinction just as certain.”

“What do you mean?”

“This world is cursed to us, Mr. Blacker. I can’t tell you why. We breed slowly, infrequently—you might even say, thoughtfully. And on your planet, but one child in a thousand has survived the rigors of childbirth on Earth.” He looked at Livia, and the woman lowered her eyes in remembered sorrow.

“That’s why we had to leave,” Andrusco said. “To repopulate elsewhere.” We chose the planet Mars, and we were determined to make it our home before your world claimed it. Our scientists and technicians have worked on nothing else but this flight since the beginning of the last century. This building—this vessel—was the culmination of our plans. In another few years, we would have been ready. The dream would have been realized.”

Tom walked to the window of the office, and looked out at a bank of swift-moving clouds.
drifting past the spire of the Homelovers Building.

"I'm afraid that's the saddest part," he said. "The atomic engines in the basement have been examined, Mr. Andrusco. The best opinions say that they're pitifully inadequate. The men who studied them say that you would never have made the journey in safety."

"That can't be true! In time—"

"In time, perhaps. But since your landing here, your scientists have forgotten a great deal about space flight. I'm afraid you would have never reached that Promised Land..."

Andrusco said: "Then we must die..."

"No!" Tom said.

Livia looked at him.

"I said no!" he repeated.

"The Antamundans can live. Don't you see that?"

"No," Andrusco said, shaking his head. "On Earth, we shall die. If Mars is closed to us..."

"Can't you see? If Mars can be opened for Earth, then it can be opened for you, too. For all Antamundans! Your people can make the journey, too, once space has been cleared for Earth ships. You can still have your new home!"

"Perhaps," Livia said dreamily. "Perhaps that is the only way. But by then, Tom, it will be already too late. There has been no living child born to us in the last ten years. By the time the Earth people reach Mars and establish regular passageway—we will be too old to keep the race alive."

"Then let's speed it up!" he said. "Let's make sure that the space lanes open! Let's do everything to make Space the most important project on Earth!"

"But how?" Andrusco said, bewildered.

Tom went to the visiphone.

"Get me the Lunt Theatre!" he snapped.

Homer Bradshaw's face appeared.

"Mr. Bradshaw?"

"Hi, Tom! How's the boy?"

"Great, Homer, great. Only listen. I got a new angle for you. We're gonna doctor up that show of yours before the opening. Don't worry about the dough—Homelovers will take care of it with pleasure."

"Sure, Tom! Anything you say!"

"Then take this down. The first thing we're changing is the title. From now on it's Mars Or Bust..."

THE END
ANDY LARSON was a hard-headed Swede. He had to be, to be still alive. He hadn’t been able to move anything but that hard head for what he estimated to be about three hours since he regained consciousness. And in that time he hadn’t heard anything that led him to believe anyone else had survived the crash.

The only thing Andy Larson had heard was the water and the far-away whine of the patrol ship on its grid track search pattern. It had not reached his area yet, and he wasn’t at all excited about his chances of being spotted when it did get nearer. He could turn his head, and he could see the tangled interlacing of tree branches and vines above and around him. He remembered, at the first moment of impact, just before the ship began to break apart, a tremendous geyser of mud and water. The picture was indelibly imprinted on his mind. He couldn’t see the water now, but he could hear it. The litter he could see by twisting his head as far to the left as it would go told him they had crash-landed on the water—a river by the sound of it—and had skipped drunkenly, in something approximating flat stone fashion, into the forest lining the river’s bank. There had been no explosion and no fire, there was no wide swath cut through the trees—and therefore no reason why he should assume the patrol would spot him. There might be pieces of the ship lying
Hurt and helpless, Larson waited for death.
where the patrol could see them. But he doubted that, for the river was deep and the vegetation was thick.

He strained his ears, not to hear if the patrol was approaching closer, but listening for the sound of life around him. This was his one hope—another survivor, and of necessity a mobile one. Someone to shout and wave, to climb a tree, to find an open space and build a fire, to light a flare, to do something—anything—that would attract the patrol’s attention. Andy Larson wasn’t afraid of dying. He felt no panic, no agonies of conscience, remorse or bitterness at the apparent inevitability of the prospect before him. But if he was not destined to die he needed a miracle or the assistance of that almost impossible—but only almost—survivor. And instead of praying for the miracle, he listened with all the hearing power at his command for the sound of human life. That would be miracle enough, and he didn’t intend to stop listening until he couldn’t any more.

Not that he didn’t pray at all; back home in New Jersey, while not considered a pillar of the church, Andy Larson was known as a good, practicing Lutheran. But it was doubtful if the Lutherans, or any other sect for that matter, had sent missionaries this high into the heavens yet; the misbegotten flight he had been on had been only the fourth to reach this strange little planet of Abernathy since its discovery by the good professor back in ’92. So Andy was no longer a practicing Lutheran, if practicing meant going to church. But he had prayed more than once during the long outward journey. And he was praying now, while his ears strained for sounds and his eyes strained for movement; praying for himself, yes, but even more for his wife, and for someone he had never seen.

He couldn’t help being afraid for Elsie; he had been gone from home almost seven months, and she had been rocked with morning sickness for the last three weeks before he left, moaning over her saltines and begging him not to go even though she knew he couldn’t and would not back out. She was afraid of the unknown he was going into, and he was afraid of the unknown that awaited her—it was the first time for both unknowns for both of them.
In a little while he could stop straining his eyes. Greenish dusk was slipping into night. Soon his ears would have to do all the work. The thought of night-prowl-ling creatures disturbed him somewhat; no-one knew for sure yet what, if anything, lived in these thick, isolated jungles. Paralyzed as he was, he was fair game—his choice of words in the thought brought a grimacing smile to his face. He tried once again—was it the thousandth time yet?—to move his arms, his legs, his hands, a finger, a toe. Earlier, he had thought he was moving the big toe on his left foot, but he couldn’t raise his head to see past the twisted bulk of metal that lay across him, the toe had nothing to rub upon to give it feeling, and there was absolutely no feeling between it and his head to give it any meaning anyhow. But it would have been a nice feeling just to know it was still there.

He gave up the attempt when sweat beaded out on his forehead and went back to listening and praying. He was tempted to pray for the miracle now, for blackness blotted out even the pitiful remains of the ship, and the whine of the patrol had muted to a singing hum in the distance.

The night turned cold and damp, but Andy Larson, in his sheathing of paralysis, didn’t feel it. The loneliness was on him, the awesome loneliness of having to wait for death alone, with no warm hand to hold on to until the parting. He still felt no great fear or bitterness. Only the loneliness, and sadness. He would never know his son, or daughter, would never know that it loved him, that he was the biggest thing in its life. And it—that was ugly; he would call it “he”; if he had a choice a son it would be—he, his son, would never know his father, or how much his father wanted to love him. And Elsie—how lonely it would be for her. Her time must be getting close now, and she would be frightened. The doctor hadn’t told her what he had told him—that she was too slight, definitely not built for childbearing. But she knew. And she would be brave, but frightened and alone.

The hours of night trudged by. The few stars that peeped through the trees were no help in telling the time, and Andy had lost interest in it anyhow. It was night, it had
been night for what seemed like years, the blackness around him proclaimed it would be night still for many more years. He dozed off and on, at times waking with a start, thinking he had heard something. For a few minutes he would listen intently, feverishly. But when nothing reached his ears but the little night sounds he had become accustomed to, he would sink back into the lethargy that weighed upon his eyelids.

He wondered if he could be dying. He thought he was getting weaker—but how could he tell for sure? He could feel nothing, there was no pain, no muscular failure, no falling weakly to the ground. There were no muscles left and he was on the ground already. It was a Herculean effort to keep his eyes open, to listen as he had vowed he would. But that might be only fatigue, the need for sleep. And shock! Of course. He had to be suffering from shock, and from exposure, too. So if he didn’t die of starvation, and if some beast didn’t devour him, and if whatever wounds and injuries he had didn’t do him in, he would probably die anyhow from pneumonia.

The thought was almost a comforting one. It took him off the hook, unburdened him of the need to worry about whether or not he lived. The thing was out of his hands, and no stubbornness on his part was going to do any good. He had prayed himself out before, prayed until the words of the prayers were nothing but imbecile mutterings and mumblings, meaningless monosyllables swirling pointlessly and endlessly through his tired brain. The thing was out of his hands. He—Andy Larson—he gave up. He quit. He was nothing but a head that was hard and a body that was dead. What right did he have thinking he had any control over what happened to him? He was incapable of doing anything himself—he had to wait until something happened to him. And he knew what was going to happen. So that’s what he’d do. He’d just wait.

He closed his eyes and saw Elsie, and before he realized he was going to do it he was praying again, talking to God about Elsie, and then talking to Elsie about God, and then back to God again and to Elsie again, and he knew he was crying because he could taste the tears, and he knew he was going to die because there wasn’t any-
thing else that could happen, and he knew suddenly that he was mortally afraid. He could not lay rigidly, tensely—there were no muscles to tighten. But the tension had to go somewhere. He felt a numbness creeping up the back of his neck, felt his eyes bulging as if they would burst, heard a roaring in his ears. He opened his mouth, gasping, trying to breathe deeply, the roaring in his ears reaching a crescendo and then breaking into a cold sighing wind that loudened and softened with the regularity of a pulse beat. He didn’t know if he was awake or sleeping, dozing or dreaming, dying or dead. But he heard Elsie.

She was calling him. Over the cold black nothingness that separated them she was calling his name, her voice riding on the mournful wind sighing in his ears. He could hear her—it was as simple as that. He still didn’t know if he was dreaming or dead. He didn’t care. She was calling to him and he could hear, and although it wasn’t the miracle he had wanted to pray for, still it was a miracle. He didn’t question it; the comfort of hearing her voice after the terrible loneliness was enough. He didn’t won-
der how it could happen, didn’t doubt that she could hear him answering her, as he was doing now. At first, so overcome with joy and relief, so thankful for the miracle, he didn’t even recognize the tones of pain in her voice.

“Elsie, Elsie, Elsie,” he cried out with his mind, reaching for her, wanting to seize her and hold her and never let her slip away again. “I hear you, my darling. I hear you!”

“Thank God!” Her voice broke, and the sound of sobbing carried on the wind reached his ears. For a moment it puzzled him. He had been crying, but her soaks were something different. The night suddenly seemed to turn much colder. “What is it, Elsie?” he called in fright.

The sobbing became a choking cough. He heard her grunt and gasp, and then a small scream turned his blood into ice. After a long moment she spoke again, panting, her voice strained and scratchy. “Thank God you can hear me, Andy. I’ve called and called. I prayed that I didn’t care what happened, just so long as you could be with me. And you are, you are. It’s a miracle
and I don’t know how. But you’re with me and I won’t be afraid any more. I won’t... oh... oh...”

Andy suddenly understood. “Elsie,” he cried frantically. “Where are you? Are you in the hospital? Is everything all right? Is the doctor there? Elsie!” He shouted her name aloud, angrily, trying to force it through the immense absorbent space between them, cursing and screaming at his own helplessness.

“Be quiet, Andy,” she said at last. “Stop carrying on so. I’m all right now—it’s just that the pain comes and sometimes I don’t know what to do.”

“But are you all right? Did the doctor—?”

“Shhh, Andy. Of course I’m all right. I’m in the labor room and there are lots of nice people to take care of me. Dr. Bell says it’s like this often with first babies. And since I’m smaller than I should be—that doesn’t help any. But I’m going to be all right.”

“You called me, though. You said you were afraid of something, and prayed that—”

“You know how big a sissy I can be sometimes, Andy. Remember the time the wasp got in the bathroom while I was taking a shower, and how we got tangled up in the shower curtain where I was trying to hide...from him and you were trying to catch him? And remember what happened right after that? Right there in the bathroom?” She laughed lightly.

To hear her laugh again! Andy smiled to himself, remembering. She had been so soft and cool and pretty, snarled in the shower curtain, her hair damp and curly, her cheeks flushed, uttering little squeals and yelps and giggles that were exciting music, and suddenly he wasn’t chasing the wasp any more and she wasn’t giggling because the wasp was tickling her. She had pulled his head under the shower, and he had got soaked anyway, so he climbed into the tub and she helped pull off his clothes and they soaped each other into a lather and they rinsed and they climbed out together, but they never got dried off and they never got out of the bathroom—at least not for a long time. And oh, how her laugh had tinkled then, and how he loved her when she laughed.

He thought of her laughing now, and a pain shot through his head. He tried to
visualize her now, as she laughed—the swollen, hurt-looking belly, the heavy breasts dragging her frail shoulders forward, the drawn, pinched look he knew must be between her eyes as it was always when she felt unwell. He could visualize her this way, but not laughing. Then he heard her, and she wasn’t laughing any more, and her moans were needles and her screams were knives.

It lasted longer this time. It lasted so long he could taste the blood where his teeth had ground through his lip, although he couldn’t remember the pain of doing it. She came back to him at last, groaning weakly, and they talked, he cheerfully for her sake, she bravely for his. They remembered things they had done together, good times, happy times. They talked of what they would do when he came home, and what would they call the baby? Andy Junior if a boy? Elsie if a girl? Or Karen, or Mary, or Kirsten, or maybe Hermione? They laughed at that, and they laughed again at the thought of twins. But the laughs turned into gasps and cries of pain. And Elsie lay thrashing in the labor room of a hospital in New Jersey, and Andy lay rigidly under a rigidity not of his own making in a jungle far away.

She came back to him and told him the doctors had had a consultation, and had agreed to wait a little longer. She came back and told him they had decided they could not wait much longer, and would have to undertake a Caesarean. She came back and told him she had begged them to give her a little more time to try and do it herself, but she was afraid they were going to give her something to knock her out. She came and she went, but even when she was gone she was never so far away that Andy could not hear her. He wanted to stop his ears to the hysterical outpourings, but he was helpless, and he hated himself for wanting to.

When she came back the next time, with weakness turning her voice into a hoarse whisper, he begged her to take the drugs. But she wasn’t listening to him. “Andy, Andy,” she said, “listen to me please. It’s important. They’ve decided on the Caesarean, and I haven’t got much time. I’ve been thinking of the way we’ve been talking, and I think it
happened because I needed you so much. That’s how I got all the way to where you are. I needed you with me with every part of me, and somehow part of me found you. But Andy, you must have needed me, too. You must have needed me, Andy, or how did you get back to me?"

Despite the weakness of her voice, the fear in it rang out loudly. He tried to laugh and told her he was perfectly fine, except for worry about her. He made up a story about lying on his bunk, sipping a cool lemonade and listening to soft music, trying to calm his nerves over the prospect of becoming a new father and wondering where he would get the cigars to distribute to the boys.

But she wouldn’t believe him. She insisted that he tell her the truth, pleading with him, crying out her love and her fear and her need. At last he told her of the crash, speaking lightly, pointing out that the patrol ship would be back with daylight and all would be well. He didn’t mention the fact that he had no body below the neck, but he knew she knew it was worse than he described.

Then she was gone again, for so long a time he thought the operation had started. But the wind still blew raggedly in his ears, and she came back, slowly, but with new vibrancy in her voice. "Andy, you dope," she whispered with a brave attempt at sprightliness. "Why didn’t you — tell — me — sooner?" She was gasping, but hurried on. "I can tell the doctor, and he can telephone somebody and they can use the radio and tell the patrol where you are. Oh! Andy—where are you—? Hurry—"

She was going again, and as quickly as he could he told her of the river and the jungle, and where approximately the ship had been just before the crash. Then she was gone and he closed his eyes and let the waves of near-hysterical relief wash over him. He was exhausted, the strain of long concentration had drained his strength, but he could almost feel the nerve ends in his dead body tingling with the exhilaration that sang in his mind. It was the miracle he hadn’t dared pray for. It would be the greatest miracle ever performed, and he had almost lost it, almost killed it, almost thrown it away. But Elsie—He prayed feverishly now,
thanking, thanking, and praying for the miracle to really happen and for Elsie and his son to be all right.

Then the wind was roaring blackly in his ears and the wind was turning into a shrieking demon and above it he could hear her wild scream: “They don’t believe me! They say I’m delirious. Andy! They’re coming with something to put me to sleep. They don’t believe me, Andy . . .”

It ended. The wind stopped abruptly with her voice. The only things Andy Larson could hear were the blood pounding in his head and the grating of insects singing their last to the approaching dawn. It was all over, and he closed his eyes to the lightening sky. It was all over, the miracle was dead, the miracle never was, he was dead, he never was. Elsie—He rocked his head back and forth, wanting to cry, to curse and shout out his hatred of life. But nothing would come out, nothing was left.

It was all over. He lay under his memorial, a junk pile of twisted metal, inching his way toward death, the abortion of an abortive miracle, alone, tearless, wifeless, sonless, helpless.

A faint hum drifted to his ears. He looked up, wondering that the dawn had come so soon. The sky was brilliant with light, but still he could not see the patrol ship, knew that it couldn’t see him, no matter how close the hum got.

The hum came closer and closer, grew louder, and then he heard her soft laugh and the hum faded away.

“Andy? Aren’t you coming?”

He stared at the sky, his eyes bulging, his tongue swollen in his throat. He couldn’t see anything, the light was so bright. He thought he must be dreaming—he had heard that people had strange visions when they were dying. But her voice sounded so real.

“Don’t worry, honey,” she said softly. “Everything is all right now. Come on, we’re waiting.”

He strained his eyes to see, and the phrase we’re waiting struck him just as the other voice let out a cry.

“What—?” he mumbled, stupidly, happily, afraid to believe.

She laughed again, and little pieces of glittering silver tinkled through the gold of the sky. “I guess we’ll have to call him Andy, after
his father. He was a slow-poke too."

She was there beside him now—or he was beside her—he didn't know which, for he was suddenly free of the great weight that held him down, he had the sensation of floating lightly through the air. But they were together and she was radiant, and he was happier than he had ever thought he could be, even though she couldn't put her arms around him as he wanted her to because her arms were full of his son. His arms weren't full—only his eyes and his throat and his heart—and he put them around her, holding her tightly.

The baby howled a protest, and Elsie laughed her wonderful laugh again. "He has a good voice, Andy, don't you think?"

"A lovely voice," Andy agreed, and his own voice sounded to him as if he were singing.

THE END

"We're looking for Martian glyftogs. They taste like artichokes. Got any?"
The space ships were miracles of power and precision; the men who manned them, rich in endurance and courage. Every detail had been checked and double checked; every detail except——

THE NOTHING EQUATION

By TOM GODWIN

The cruiser vanished back into hyperspace and he was alone in the observation bubble, ten thousand light-years beyond the galaxy’s outermost sun. He looked out the windows at the gigantic sea of emptiness around him and wondered again what the danger had been that had so terrified the men before him. Of one thing he was already certain; he would find that nothing was waiting outside the bubble to kill him. The first bubble attendant had committed suicide and the second was a mindless maniac on the Earthbound cruiser but it must have been
something inside the bubble that had caused it. Or else they had imagined it all.

He went across the small room, his magnetized soles loud on the thin metal floor in the bubble's silence. He sat down in the single chair, his weight very slight in the feeble artificial gravity, and reviewed the known facts.

The bubble was a project of Earth's Galactic Observation Bureau, positioned there to gather data from observations that could not be made from within the galaxy. Since metallic mass affected the hypersensitive instruments the bubble had been made as small and light as possible. It was for that reason that it could accommodate only one attendant.

The Bureau had selected Horne as the bubble's first attendant and the cruiser left him there for his six months period of duty. When it made its scheduled return with his replacement he was found dead from a tremendous overdose of sleeping pills. On the table was his daily-report log and his last entry, made three months before:

I haven't attended to the instruments for a long time because it hates us and doesn't want us here. It hates me the most of all and keeps trying to get into the bubble to kill me. I can hear it whenever I stop and listen and I know it won't be long. I'm afraid of it and I want to be asleep when it comes. But I'll have to make it soon because I have only twenty sleeping pills left and if—

The sentence was never finished. According to the temperature recording instruments in the bubble his body ceased radiating heat that same night.

The bubble was cleaned, fumigated, and inspected inside and out. No sign of any inimical entity or force could be found.

Silverman was Horne's replacement. When the cruiser returned six months later bringing him, Green, to be Silverman's replacement, Silverman was completely insane. He babbled about something that had been waiting outside the bubble to kill him but his nearest to a rational statement was to say once, when asked for the hundredth time what he had seen:

"Nothing—you can't really see it. But you feel it watching you and you hear it trying to get in to kill you. One time I bumped the wall and
—for God’s sake—take me away from it—take me back to Earth . . ."

Then he had tried to hide under the captain’s desk and the ship’s doctor had led him away.

The bubble was minutely examined again and the cruiser employed every detector device it possessed to search surrounding space for lightyears in all directions. Nothing was found.

When it was time for the new replacement to be transferred to the bubble he reported to Captain McDowell.

"Everything is ready, Green," McDowell said. "You are the next one." His shaggy gray eyebrows met in a scowl. "It would be better if they would let me select the replacement instead of them."

He flushed with a touch of resentment and said, "The Bureau found my intelligence and initiative of thought satisfactory."

"I know—the characteristics you don’t need. What they ought to have is somebody like one of my engine room roustabouts, too ignorant to get scared and too dumb to go nuts. Then we could get a sane report six months from now instead of the ravings of a maniac."

"I suggest," he said stiffly, "that you reserve judgement until that time comes, sir."

And that was all he knew about the dangers, real or imaginary, that had driven two men into insanity. He would have six months in which to find the answer. Six months minus—He looked at the chronometer and saw that twenty minutes had passed since he left the cruiser. Somehow, it seemed much longer . . .

He moved to light a cigarette and his metal soles scraped the floor with the same startling loudness he had noticed before. The bubble was as silent as a tomb.

It was not much larger than a tomb; a sphere eighteen feet in diameter, made of thin sheet steel and crisscrossed outside with narrow reinforcing girders to keep the internal air pressure from rupturing it. The floor under him was six feet up from the sphere’s bottom and the space beneath held the air regenerator and waste converter units, the storage batteries and the food cabinets. The compartment in which he sat contained chair, table, a narrow cot, banks of dials, a remote-control panel for operating the instruments
mounted outside the hull, a microfilm projector, and a pair of exerciser springs attached to one wall. That was all.

There was no means of communication since a hyperspace communicator would have affected the delicate instruments with its radiations but there was a small microfilm library to go with the projector so that he should be able to pass away the time pleasantly enough.

But it was not the fear of boredom that was behind the apprehension he could already feel touching at his mind. It had not been boredom that had turned Horne into a suicide and Silverman into—

Something cracked sharply behind him, like a gunshot in the stillness, and he leaped to his feet, whirling to face it.

It was only a metal reel of data tape that had dropped out of the spectrum analyzer into the storage tray.

His heart was thumping fast and his attempt to laugh at his nervousness sounded hollow and mirthless. Something inside or outside the bubble had driven two men insane with its threat and now that he was irrevocably exiled in the bubble, himself, he could no longer dismiss their fear as products of their imagination. Both of them had been rational, intelligent men, as carefully selected by the Observation Bureau as he had been.

He set in to search the bubble, overlooking nothing. When he crawled down into the lower compartment he hesitated then opened the longest blade of his knife before searching among the dark recesses down there. He found nothing, not even a speck of dust.

Back in his chair again he began to doubt his first conviction. Perhaps there really had been some kind of an invisible force or entity outside the bubble. Both Horne and Silverman had said that "it" had tried to get in to kill them.

They had been very definite about that part.

There were six windows around the bubble's walls, set there to enable the attendant to see all the outside-mounted instruments and dials. He went to them to look out, one by one, and from all of them he saw the same vast emptiness that surrounded him. The galaxy—his galaxy—was so far away that its stars were like dust. In the
other directions the empty gulf was so wide that galaxies and clusters of galaxies were tiny, feeble specks of light shining across it.

All around him was a void so huge that galaxies were only specks in it. . . .

Who could know what forces or dangers might be waiting out there?

A light blinked, reminding him it was time to attend to his duties. The job required an hour and he was nervous and not yet hungry when he had finished. He went to the exerciser springs on the wall and performed a work-out that left him tired and sweating but which, at least, gave him a small appetite.

The day passed, and the next. He made another search of the bubble’s interior with the same results as before. He felt almost sure, then, that there was nothing in the bubble with him. He established a routine of work, pastime and sleep that made the first week pass fairly comfortably but for the gnawing worry in his mind that something invisible was lurking just outside the windows.

Then one day he accidentally kicked the wall with his metal shoe tip.

It made a sound like that from kicking a tight-stretched section of tin and it seemed to him it gave a little from the impact, as tin would do. He realized for the first time how thin it was—how deadly, dangerously thin.

According to the specifications he had read it was only one-sixteenth of an inch thick. It was as thin as cardboard.

He sat down with pencil and paper and began calculating. The bubble had a surface area of 146,500 square inches and the internal air pressure was fourteen pounds to the square inch. Which meant that the thin metal skin contained a total pressure of 2,051,000 pounds.

Two million pounds.

The bubble in which he sat was a bomb, waiting to explode the instant any section of the thin metal weakened.

It was supposed to be an alloy so extremely strong that it had a high safety factor but he could not believe that any metal so thin could be so strong. It was all right for engineers sitting safely on Earth to speak of high safety factors but his life depended upon the fragile wall not cracking. It made a lot of difference.

The next day he thought
he felt the hook to which the exerciser spring was attached crack loose from where it was welded to the wall. He inspected the base of the hook closely and there seemed to be a fine, hairline fracture appearing around it.

He held his ear to it, listening for any sound of a leak. It was not leaking yet but it could commence doing so at any time. He looked out the windows at the illimitable void that was waiting to absorb his pitiful little supply of air and he thought of the days he had hauled and jerked at the springs with all his strength, not realizing the damage he was doing.

There was a sick feeling in his stomach for the rest of the day and he returned again and again to examine the hairline around the hook.

The next day he discovered an even more serious threat: the thin skin of the bubble had been spot-welded to the outside reinforcing girders. Such welding often created hard, brittle spots that would soon crystallize from continued movement—and there was a slight temperature difference in the bubble between his working and sleeping hours that would daily produce a contraction and expansion of the skin. Especially when he used the little cooking burner.

He quit using the burner for any purpose and began a daily inspection of every square inch of the bubble’s walls, marking with white chalk all the welding spots that appeared to be definitely weakened. Each day he found more to mark and soon the little white circles were scattered across the walls wherever he looked.

When he was not working at examining the walls he could feel the windows watching him, like staring eyes. Out of self defense he would have to go to them and stare back at the emptiness.

Space was alien; coldly, deadly, alien. He was a tiny spark of life in a hostile sea of Nothing and there was no one to help him. The Nothing outside was waiting day and night for the most infinitesimal leak or crack in the walls; the Nothing that had been waiting out there since time without beginning and would wait for time without end.

Sometimes he would touch his finger to the wall and think, _Death is out there, only one-sixteenth of an inch away._ His first fears became a black and terrible conviction: the bubble could not continue to
resist the attack for long. It had already lasted longer than it should have. Two million pounds of pressure wanted out and all the sucking Nothing of intergalactic space wanted in. And only a thin skin of metal, rotten with brittle welding spots, stood between them.

It wanted in—the Nothing wanted in. He knew, then, that Horne and Silverman had not been insane. It wanted in and someday it would get in. When it did it would explode him and jerk out his guts and lungs. Not until that happened, not until the Nothing filled the bubble and enclosed his hideous, turned-inside-out body would it ever be content . . .

He had long since quit wearing the magnetized shoes, afraid the vibration of them would weaken the bubble still more. And he began noticing sections where the bubble did not seem to be perfectly concave, as though the rolling mill had pressed the metal too thin in places and it was swelling out like an over-inflated balloon.

He could not remember when he had last attended to the instruments. Nothing was important but the danger that surrounded him. He knew the danger was rapidly increasing because whenever he pressed his ear to the wall he could hear the almost inaudible tickings and vibrations as the bubble’s skin contracted or expanded and the Nothing tapped and searched with its empty fingers for a flaw or crack that it could tear into a leak.

But the windows were far the worst, with the Nothing staring in at him day and night. There was no escape from it. He could feel it watching him, malignant and gloating, even when he hid his eyes in his hands.

The time came when he could stand it no longer. The cot had a blanket and he used that together with all his spare clothes to make a tent stretching from the table to the first instrument panel. When he crawled under it he found that the lower half of one window could still see him. He used the clothes he was wearing to finish the job and it was much better then, hiding there in the concealing darkness where the Nothing could not see him.

He did not mind going naked—the temperature regulators in the bubble never let it get too cold.

He had no conception of time from then on. He emerg-
ed only when necessary to bring more food into his tent. He could still hear the Nothing tapping and sucking in its ceaseless search for a flaw and he made such emergences as brief as possible, wishing that he did not have to come out at all. Maybe if he could hide in his tent for a long time and never make a sound it would get tired and go away . . .

Sometimes he thought of the cruiser and wished they would come for him but most of the time he thought of the thing that was outside, trying to get in to kill him. When the strain became too great he would draw himself up in the position he had once occupied in his mother's womb and pretend he had never left Earth. It was easier there.

But always, before very long, the bubble would tick or whisper and he would freeze in terror, thinking, This time it's coming in . . .

Then, one day, suddenly, two men were peering under his tent at him.

One of them said, "My God —again!" and he wondered what he meant. But they were very nice to him and helped him put on his clothes. Later, in the cruiser, everything was hazy and they kept asking him what he was afraid of.

"What was it—what did you find?"

He tried hard to think so he could explain it. "It was— it was Nothing."

"What were you and Horne and Silverman afraid of— what was it?" the voice demanded insistently.

"I told you," he said. "Nothing."

They stared at him and the haziness cleared a little as he saw they did not understand. He wanted them to believe him because what he told them was so very true.

"It wanted to kill us. Please—can't you believe me? It was waiting outside the bubble to kill us."

But they kept staring and he knew they didn't believe him. They didn't want to believe him . . .

Everything turned hazy again and he started to cry. He was glad when the doctor took his hand to lead him away . . .

The bubble was carefully inspected, inside and out, and nothing was found. When it was time for Green's replacement to be transferred to it Larkin reported to Captain McDowell.

"Everything is ready, Larkin," McDowell said. "You're the next one. I wish we knew what the danger is." He
scowled. “I still think one of my roustabouts from the engine room might give us a sane report six months from now instead of the babblings we’ll get from you.”

He felt his face flush and he said stiffly, “I suggest, sir, that you not jump to conclusions until that time comes.”

The cruiser vanished back into hyperspace and he was alone inside the observation bubble, ten thousand light years beyond the galaxy’s outermost sun. He looked out the windows at the gigantic sea of emptiness around him and wondered again what the danger had been that had so terrified the men before him.

Of one thing he was already certain; he would find that nothing was waiting outside the bubble to kill him...

**THE END**

“Great comets! It must be earth’s gravity that’s doing it!”
ROLF DEKKER stared incredulously at the slim, handsome young Earther who was approaching the steps of Rolf’s tumbling-down Spacertown shack. *He’s got no ears,* Rolf noted in disbelief. After five years in space, Rolf had come home to a strangely-altered world, and he found it hard to accept.

Another Earther appeared. This one was about the same size, and gave the same impression of fragility. This one had ears, all right—and a pair of gleaming, two-inch horns on his forehead as well. *I’ll be eternally roasted,* Rolf thought. *Now I’ve seen everything.*

Both Earthers were dressed in neat, gold-inlaid green tunics, costumes which looked terribly out of place amid the filth of Spacertown, and their hair was dyed a light green to match.

He had been scrutinizing them for several moments before they became aware of him. They both spotted him at once and the one with no ears turned to his companion and whispered something. Rolf, leaning forward, strained to hear.

“... beautiful, isn’t he? That’s the biggest one I’ve seen!”

“Come over here, won’t you?” the horned one called, in a soft, gentle voice which contrasted oddly with the raucous bellowing Rolf had been accustomed to hearing in space. “We’d like to talk to you.”

Just then Kanaday emerged from the door of the shack
The doctor refused to change Dekker, so Dekker was going to change the doctor.
and limped down to the stair-case.

"Hey, Rolf!" he called. "Leave those things alone!"
"Let me find out what they want first, huh?"
"Can't be any good, whatever it is," Kanaday growled. "Tell them to get out of here before I throw them back to wherever they came from. And make it fast."

The two Earthers looked at each other uneasily. Rolf walked toward them.

"He doesn't like Earthers, that's all," Rolf explained. "But he won't do anything but yell."

Kanaday spat in disgust, turned, and limped back inside the shack.

"I didn't know you were wearing horns," Rolf said.

The Earther flushed. "New style," he said. "Very expensive."

"Oh," Rolf said. "I'm new here; I just got back. Five years in space. When I left you people looked all alike. Now you wear horns."

"It's the new trend," said the earless one. "We're Individs. When you left the Conforms were in power, style-wise. But the new surgeons can do almost anything, you see."

The shadow of a frown crossed Rolf's face. "Anything?"

"Almost. They can't transform an Earther into a Spacer, and they don't think they ever will."

"Or vice versa?" Rolf asked. They sniggered. "What Spacer would want to become an Earther? Who would give up that life, out in the stars?"

Rolf said nothing. He kicked at the heap of litter in the filthy street. What spacer indeed? he thought. He suddenly realized that the two little Earthers were staring up at him as if he were some sort of beast. He probably weighed as much as both of them, he knew, and at six-four he was better than a foot taller. They looked like children next to him, like toys. The savage blast of acceleration would snap their flimsy bodies like toothpicks.

"What places have you been to?" the earless one asked.

"Two years on Mars, one on Venus, one in the Belt, one on Neptune," Rolf recited. "I didn't like Neptune. It was best in the Belt; just our one ship, prospecting. We made a pile on Ceres—enough to buy out. I shot half of it on Neptune. Still have plenty left, but I don't know what I can do with it." He didn't add that he had come home puzzled,
wondering why he was a Spacer instead of an Earther, condemned to live in filthy Spacertown when Yawk was just across the river.

They were looking at his shabby clothes, at the dirty brownstone hovel he lived in—an antique of a house four or five centuries old.

“You mean you’re rich?” the Earther said.

“Sure,” Rolf said. “Every Spacer is. So what? What can I spend it on? My money’s banked on Mars and Venus. Thanks to the law I can’t legally get it to Earth. So I live in Spacertown.”

“Have you ever seen an Earther city?” the earless one asked, looking around at the quiet streets of Spacertown with big powerful men sitting idly in front of every house.

“I used to live in Yawk,” Rolf said. “My grandmother was an Earther; she brought me up there. I haven’t been back there since I left for space.” They forced me out of Yawk, he thought. I’m not part of their species. Not one of them.

The two Earthers exchanged glances.

“Can we interest you in a suggestion?” They drew in their breath as if they expected to be knocked sprawling.

Kanaday appeared at the door of the shack again.

“Rolf. Hey! You turning into an Earther? Get rid of them two cuties before there’s trouble.”

Rolf turned and saw a little knot of Spacers standing on the other side of the street, watching him with curiosity. He glared at them.

“I’ll do whatever I damn well please,” he shouted across.

He turned back to the two Earthers. “Now, what is it you want?”

“I’m giving a party next week,” the earless one said. “I’d like you to come. We’d like to get the Spacer slant on life.”

“Party?” Rolf repeated. “You mean, dancing, and games, and stuff like that?”

“You’ll enjoy it,” the Earther said coaxingly. “And we’d all love to have a real Spacer there.”

“When is it?”

“A week.”

“I have ten days left of my leave. All right,” he said. “I’ll come.”

He accepted the Earther’s card, looked at it mechanically, saw the name—Kal Quinton—and pocketed it. “Sure,” he said. “I’ll be there.”

The Earthers moved toward their little jetcar, smiling
gratefully. As Rolf crossed
the street, the other Spacers
jumped him with cold, puzzled
stares.

Kanaday was almost as tall
as Rolf, and even uglier. Rolf's
eyebrows were bold and
heavy; Kanaday's, thick, con-
torted, bushy clumps of hair.
Kanaday's nose had been
broken long before in some
barroom brawl; his cheek-
bones bulged; his face was
strong and hard. More im-
portant, his left foot was
twisted and gnarled beyond
hope of redemption by the
most skillful surgeon. He had
been crippled in a jet explo-
sion three years before, and
was of no use to the Space-
lines any more. They had pen-
sioned him off. Part of the
deal was the dilapidated old
house in Spacertown which he
operated as a boarding-house
for transient Spacers.

"What do you want to do
that for?" Kanaday asked.
"Haven't those Earthers push-
ed you around enough, so you
have to go dance at one of
their wild parties?"

"Leave me alone," Rolf
muttered.

"You like this filth you live
in? Spacertown is just a
ghetto, that's all. The Earth-
ers have pushed you right into
the muck. You're not even a
human being to them—just
some sort of trained ape. And
now you're going to go and
entertain them. I thought you
had brains, Rolf!"

"Shut up!" He dashed his
glass against the table; it
bounced off and dropped to
the floor, where it shattered.

Kanaday's girl Laney en-
tered the room at the sound
of the crash. She was tall and
powerful-looking, with
straight black hair and the
strong cheekbones that char-
acterized the Spacers. Imme-
diately she stooped and began
shoveling up the broken glass.

"That wasn't smart, Rolf," she said. "That'll cost you half
a credit. Wasn't worth it, was
it?"

Rolf laid the coin on the
edge of the table. "Tell your
pal to shut up, then. If he
doesn't stop icing me I'll fix
his other foot for him and
you can buy him a dolly."

She looked from one to the
other. "What's bothering you
two now?"

"A couple of Earthers were
here this morning," Kanaday
said. "Slumming. They took a
fancy to our young friend
here and invited him to one
of their parties. He accepted."

"He what? Don't go, Rolf.
You're crazy to go."

"Why am I crazy?" He
tried to control his voice.
“Why should we keep ourselves apart from the Earthers? Why shouldn’t the two races get together?”

She put down her tray and sat next to him. “They’re more than two races,” she said patiently. “Earther and Spacer are two different species, Rolf. Carefully, genetically separated. They’re small and weak, we’re big and powerful. You’ve been bred for going to space; they’re the castoffs, the ones who were too weak to go. The line between the two groups is too strong to break.”

“And they treat us like dirt—like animals,” Kanaday said. “But they’re the dirt. They were the ones who couldn’t make it.”

“Don’t go to the party,” Laney said. “They just want to make fun of you. Look at the big ape, they’ll say.”

Rolf stood up. “You don’t understand. Neither of you does. I’m part Earther,” Rolf said. “My grandmother on my mother’s side. She raised me as an Earther. She wanted me to be an Earther. But I kept getting bigger and uglier all the time. She took me to a plastic surgeon once, figuring he could make me look like an Earther. He was a little man; I don’t know what he looked like to start with but some other surgeon had made him clean-cut and straight-nosed and thin-lipped like all the other Earthers. I was bigger than he was—twice as big, and I was only fifteen. He looked at me and felt my bones and measured me. ‘Healthy little ape’—those were the words he used. He told my grandmother I’d get bigger and bigger, that no amount of surgery could make me small and handsome, that I was fit only for space and didn’t belong in Yawk. So I left for space the next morning.”

“I see,” Laney said quietly. “I didn’t say good-bye. I just left. There was no place for me in Yawk; I couldn’t pass myself off as an Earther any more. But I’d like to go back and see what the old life was like, now that I know what it’s like to be on the other side for a while.”

“It’ll hurt when you find out, Rolf.”

“I’ll take that chance. But I want to go. Maybe my grandmother’ll be there. The surgeons made her young and pretty again every few years; she looked like my sister when I left.”

Laney nodded her head. “There’s no point arguing with him, Kanaday. He has to
go back there and find out, so let him alone.”

Rolf smiled. “Thanks for understanding.” He took out Quinton’s card and turned it over and over in his hand.

Rolf went to Yawk on foot, dressed in his best clothes, with his face as clean as it had been in some years. Spacertown was just across the river from Yawk, and the bridges spanning the river were bright and gleaming in the mid-afternoon sun.

The bombs had landed on Yawk during the long-forgotten war, but somehow they had spared the sprawling borough across the river. And so Yawk had been completely rebuilt, once the radioactivity had been purged from the land, while what was now Spacertown consisted mostly of buildings that dated back to the Twentieth Century.

Yawk had been the world’s greatest seaport; now it was the world’s greatest spaceport. The sky was thick with incoming and outgoing liners. The passengers on the ship usually stayed at Yawk, which had become an even greater metropolis than it had been before the Bomb. The crew crossed the river to Spacertown, where they could find their own kind.

Yawk and Spacertown were like two separate planets. There were three bridges spanning the river, but most of the time they went unused, except by spacemen going back home or by spacemen going to the spaceport for embarkation. There was no regular transportation between the two cities; to get from Spacertown to Yawk, you could borrow a jetcar or you could walk. Rolf walked.

He enjoyed the trip. I’m going back home, he thought as he paced along the gleaming arc of the bridge, dressed in his Sunday best. He remembered the days of his own childhood, his parentless childhood. His earliest memory was of a fight at the age of six or so. He had stood off what seemed like half the neighborhood, ending the battle by picking up an older bully, much feared by everyone, and heaving him over a fence. When he told his grandmother about the way he had won the fight she cried for an hour, and never told him why. But they had never picked on him again, though he knew the other boys had jeered at him behind his back as he grew bigger and bigger over the years. “Ape,” they called him. “Ape.”

But never to his face.
He approached the Yawk end of the bridge. A guard was waiting there—an Earther guard, small and frail, but with a sturdy-looking blaster at his hip.

“Going back, Spacer?”

Rolf started. How did the guard know? And then he realized that all the guard meant was, are you going back to your ship?

“No. No, I’m going to a party. Kal Quinton’s house.”

“Tell me another, Spacer.” The guard’s voice was light and derisive. A swift poke in the ribs would break him in half, Rolf thought.

“I’m serious. Quinton invited me. Here’s his card.”

“If this is a joke it’ll mean trouble. But go ahead; I’ll take your word for it.”

Rolf marched on past the guard, almost nonchalantly. He looked at the address on the card. 12406 Kenman Road. He rooted around in his fading memory of Yawk, but he found the details had blurred under the impact of five years of Mars and Venus and the Belt and Neptune. He did not know where Kenman Road was.

The glowing street signs were not much help either. One said 287th Street and the other said 72nd Avenue. Kenman Road might be anywhere.

He walked on a block or two. The streets were anti-septically clean, and he had the feeling that his boots, which had lately trod in Spacertown, were leaving dirtmarks along the street. He did not look back to see.

He looked at his wristchron. It was getting late, and Kenman Road might be anywhere. He turned into a busy thoroughfare, conscious that he was attracting attention. The streets here were crowded with little people who barely reached his chest; they were all about the same height, and most of them looked alike. A few had had radical surgical alterations, and every one of these was different. One had a unicorn-like horn; another, an extra eye which cunningly resembled his real ones. The Earthers were looking at him furtively, as they would at a tiger or an elephant strolling down a main street.

“Where are you going, Spacer?” said a voice from the middle of the street.

Rolf’s first impulse was to snarl out a curse and keep moving, but he realized that the question was a good one and one whose answer he was trying to find out for himself. He turned.

Another policeman stood on
the edge of the walkway. "Are you lost?" The policeman was short and delicate-looking.

Rolf produced his card.

The policeman studied it. "What business do you have with Quinton?"

"Just tell me how to get there," Rolf said. "I'm in a hurry."

The policeman backed up a step. "All right, take it easy." He pointed to a kiosk. "Take the subcar here. There's a stop at Kenman Road. You can find your way from there."

"I'd rather walk it," Rolf said. He did not want to have to stand the strain of riding in a subcar with a bunch of curious staring Earthers.

"Fine with me," the policeman said. "It's about two hundred blocks to the north. Got a good pair of legs?"

"Never mind," Rolf said. "I'll take the subcar."

Kenman Road was a quiet little street in an expensive-looking end of Yawk. 12406 was a towering building which completely overshadowed everything else on the street. As Rolf entered the door, a perfumed little Earther with a flashing diamond where his left eye should have been and a skin stained bright purple appeared from nowhere.

"We've been waiting for you. Come on; Kal will be delighted that you're here."

The elevator zoomed up so quickly that Rolf thought for a moment that he was back in space. But it stooped suddenly at the 62nd floor, and, as the door swung open, the sounds of wild revelry drifted down the hall. Rolf had a brief moment of doubt when he pictured Laney and Kana-day at this very moment, playing cards in their moulderind hovel while he walked down this plastiline corridor back into a world he had left behind.

Quinton came out into the hall to greet him. Rolf recognized him by the missing ears; his skin was now a subdued blue to go with his orange robe.

"I'm so glad you came," the little Earther bubbled. "Come on in and I'll introduce you to everyone."

The door opened photoelectrically as they approached. Quinton seized him by the hand and dragged him in. There was the sound of laughter and of shouting. As he entered it all stopped, suddenly, as if it had been shut off. Rolf stared at them quizzically from under his lowering
brows, and they looked at him with ill-concealed curiosity.

They seemed divided into two groups. Clustered at one end of the long hall was a group of Earthers who seemed completely identical, all with the same features, looking like so many dolls in a row. These were the Earthers he remembered, the ones whom the plastic surgeons had hacked at and hewn until they all conformed to the prevailing concept of beauty.

Then at the other end was a different group. They were all different. Some had glittering jewels set in their foreheads, others had no lips, no hair, extra eyes, three nostrils. They were a weird and frightening group, highest product of the plastic surgeon’s art.

Both groups were staring silently at Rolf.

“Friends, this is Rolf—Rolf—”

“Dekker,” Rolf said after a pause. He had almost forgotten his own last name.

“Rolf Dekker, just back from outer space. I’ve invited him to join us tonight. I think you’ll enjoy meeting him.”

The stony silence slowly dissolved into murmurs of polite conversation as the party-goers adjusted to the presence of the newcomer.

They seemed to be discussing the matter earnestly among themselves, as if Quinton had done something unheard-of by bringing a Spacer into an Earther party.

A tall girl with blonde hair drifted up to him.

“Ah. Jonne,” Quinton said. He turned to Rolf. “This is Jonne. She asked to be your companion at the party. She’s very interested in space and things connected with it.”

Things connected with it, Rolf thought. Meaning me. He looked at her. She was as tall an Earther as he had yet seen, and probably suffered for it when there were no Spacers around. Furthermore, he suspected, her height was accentuated for the evening by special shoes. She was not of the Individ persuasion, because her face was well-shaped, with smooth, even features, with no individualist distortion. Her skin was unstained. She wore a clinging off-the-breast tunic. Quite a dish, Rolf decided. He began to see that he might enjoy this party.

The other guests began to approach timidly, now that the initial shock of his presence had worn off. They asked silly little questions about space—questions which show-
ed that they had only a superficial interest in him and were treating him as a sort of talking dog. He answered as many as he could, looking down at their little painted faces with concealed contempt.

They think as little of me as I do of them. The thought hit him suddenly and his broad face creased in a smile at the irony. Then the music started.

The knot of Earthers slowly broke up and drifted away to dance. He looked at Jonne, who had stood patiently at his side through all this.

"I don’t dance," he said. "I never learned how." He watched the other couples moving gracefully around the floor, looking for all the world like an assemblage of puppets. He stared in the dim light, watching the couples clinging to each other as they rocked through the motions of the dance. He stood against the wall, wearing his ugliness like a shield. He saw the great gulf which separated him from the Earthers spreading before him, as he watched the dancers and the gay chatter and the empty badinage and the furtive hand-holding, and everything else from which he was cut off. The bizarre Indi-

vids were dancing together—he noticed one man putting an extra arm to full advantage—and the almost identical Conforms had formed their own group again. Rolf wondered how they told each other apart when they all looked alike.

"Come on," Jonne said. "I’ll show you how to dance." He turned to look at her, with her glossy blonde hair and even features. She smiled prettily, revealing white teeth.Probably newly purchased? Rolf wondered.

"Actually I do know how to dance," Rolf said. "But I do it so badly—"

"That doesn’t matter," she said gaily. "Come on."

She took his arm. Maybe she doesn’t think I look like an ape, he thought. She doesn’t treat me the way the others do. But why am I so ugly, and why is she so pretty?

He looked at her and she looked at him, and he felt her glance on his stubby face with its ferocious teeth and burning yellowish eyes. He didn’t want her to see him at all; he wished he had no face.

He folded her in his arms, feeling her warmth radiate through him. She was very tall, he realized, almost as tall as a Spacer woman—but with
none of the harsh ruggedness of the women of Spacetown. They danced, she well, he clumsily. When the music stopped she guided him to the entrance of a veranda.

They walked outside into the cool night air. The lights of the city obscured most of the stars, but a few still showed, and the moon hung high above Yawk. He could dimly make out the lights of Spacetown across the river, and he thought again of Laney and Kanaday and wished Kanaday could see him now with this beautiful Earther next to him.

“You must get lonely in space,” she said after a while.

“I do,” he said, trying to keep his voice gentle. “But it’s where I belong. I’m bred for it.”

She nodded. “Yes. And any of those so-called men inside would give ten years of his life to be able to go to space. But yet you say it’s lonely.”

“Those long rides through the night,” he said. “They get you down. You want to be back among people. So you come back. You come back. And what do you come back to?”

“I know,” she said softly. “I’ve seen Spacetown.”

“Why must it be that way?”

he demanded. “Why are Spacers so lucky and so wretched all at once?”

“Let’s not talk about it now,” she said.

I’d like to kiss her, he thought. But my face is rough, and I’m rough and ugly, and she’d push me away. I remember the pretty little Earther girls who ran laughing away from me when I was thirteen and fourteen, before I went to space.

“You don’t have to be lonely,” she said. One of her perfect eyebrows lifted just a little. “Maybe someday you’ll find someone who cares, Rolf. Someday, maybe.”

“Yeah,” he said. “Someday, maybe.” But he knew it was all wrong. Could he bring this girl to Spacetown with him? No; she must be merely playing a game, looking for an evening’s diversion. Something new: make love to a Spacer.

They fell silent and he watched her again, and she watched him. He heard her breath rising and falling evenly, not at all like his own thick gasps. After a while he stepped close to her, put his arm around her, tilted her head into the crook of his elbow, bent, and kissed her.

As he did it, he saw he was botching it just like every-
thing else. He had come too close, and his heavy boot was pressing on the tip of her shoe; and he had not quite landed square on her lips. But still, he was close to her. He was reluctant to break it up, but he felt she was only half-responding, not giving anything of herself while he had given all. He drew back a step.

She did not have time to hide the expression of distaste that involuntarily crossed her face. He watched the expression on her face as she realized the kiss was over. He watched her silently.

"Someday, maybe," he said. She stared at him, not hiding the fear that was starting to grow on her face.

He felt a cold chill deep in his stomach, and it grew until it passed through his throat and into his head.

"Yeah," he said. "Someday, maybe. But not you. Not anyone who's just playing games. That's all—you want something to tell your friends about, that's why you volunteered for tonight's assignment. It's all you can do to keep from laughing at me, but you're sticking to it. I don't want any of it, hear me? Get away."

She stepped back a pace. "You ugly, clumsy clown. You ape!" Tears began to spoil the flawless mask of her face. Blinded with anger, he grabbed roughly for her arm, but she broke away and dashed back inside.

She was trying to collect me, he thought. Her hobby: interesting dates. She wanted to add me to her collection. An Experience. Calmly he walked to the end of the veranda and stared off into the night, choking his rage. He watched the moon making its dead ride across the sky, and stared at the sprinkling of stars. The night was empty and cold, he thought, finally. But not more so than I.

He turned and looked back through the half-opened window. He saw a girl who looked almost like her, but was not tall enough and wore a different dress. Then he spotted her. She was dancing with one of the Conforms, a frail-looking man a few inches shorter than she, with regular, handsome features. She laughed at some sly joke, and he laughed with her.

Rolf watched the moon for a moment more, thinking of Laney's warning. They just want to make fun of you. Look at the big ape, they'll say.

He knew he had to get out of there immediately. He was
a Spacer, and they were Earthers, and he scorned them for being contemptuous little dolls, and they laughed at him for being a hulking ape. He was not a member of their species; he was not part of their world.

He went inside. Kal Quinton came rushing up to him.

"I'm going," Rolf said.

"What? You don't mean that," the little man said. "Why, the party's scarcely gotten under way, and there are dozens of people who want to meet you. And you'll miss the big show if you don't stay."

"I've already seen the big show," Rolf told him. "I want out. Now."

"You can't leave now," Quinton said. Rolf thought he saw tears in the corners of the little man's eyes. "Please don't leave. I've told everyone you'd be here—you'll disgrace me."

"What do I care? Let me out of here." Rolf started to move toward the door. Quinton attempted to push him back.

"Just a minute, Rolf. Please!"

"I have to get out," he said. He knocked Quinton out of his way with a backhand swipe of his arm and dashed down the hall frantically, looking for the elevator.

Laney and Kanaday were sitting up waiting for him when he got back, early in the morning. He slung himself into a pneumochair and unsealed his boots, releasing his cramped, tired feet.

"Well," Laney asked. "How was the party?"

"You have fun among the Earthers, Rolf?"

He said nothing.

"It couldn't have been that bad," Laney said.

Rolf looked up at her. "I'm leaving space. I'm going to go to a surgeon and have him turn me into an Earther. I hate this filthy life!"

"He's drunk," Kanaday said.

"No, I'm not drunk," Rolf retorted. "I don't want to be an ape any more."

"Is that what you are? If you're an ape, what are they to you? Monkeys?" Kanaday laughed harshly.

"Are they really so wonderful?" Laney asked. "Does the life appeal to you so much that you'll give up space for it? Do you admire the Earthers so much?"

She's got me, Rolf thought. I hate Spacetown, but will I like Yawk any better? Do I really want to become one of those little puppets? But there's nothing left in space
for me. At least the Earthers are happy.

I wish she wouldn’t look at me that way. “Leave me alone,” he snarled. “I’ll do whatever I want to do.” Laney was staring at him, trying to poke behind his mask of anger. He looked at her wide shoulders, her muscular frame, her unbeautiful hair and rugged face, and compared it with Jonne’s clinging grace, her flowing gold hair.

He picked up his boots and stomped up to bed.

The surgeon’s name was Goldring, and he was a wiry, intense man who had prevailed on one of his colleagues to give him a tiny slit of a mouth. He sat behind a shining plastiline desk, waiting patiently until Rolf finished talking.

“It can’t be done,” he said at last. “Plastic surgeons can do almost anything, but I can’t turn you into an Earther. It’s not just a matter of chopping eight or ten inches out of your legs; I’d have to alter your entire bone structure or you’d be a hideous misproportioned monstrosity. And it can’t be done. I can’t build you a whole new body from scratch, and if I could do it you wouldn’t be able to afford it.”

Rolf stamped his foot impatiently. “You’re the third surgeon who’s given me the same line. What is this—a conspiracy? I see what you can do. If you can graft a third arm onto somebody, you can turn me into an Earther.”

“Please, Mr. Dekker. I’ve told you I can’t. But I don’t understand why you want such a change. Hardly a week goes by without some Yawk boy coming to me and asking to be turned into a Spacer, and I have to refuse him for the same reasons I’m refusing you! That’s the usual course of events—the romantic Earther boy wanting to go to space, and not being able to.”

An idea hit Rolf. “Was one of them Kal Quinton?”

“I’m sorry, Mr. Dekker. I just can’t divulge any such information.”

Rolf shot his arm across the desk and grasped the surgeon by the throat. “Answer me!”

“Yes,” the surgeon gasped. “Quinton asked me for such an operation. Almost everyone wants one.”

“And you can’t do it?” Rolf asked.

“Of course not. I’ve told you: the amount of work needed to turn Earther into Spacer or Spacer into Earther is inconceivable. It’ll never be done.”
"I guess that's definite, then," Rolf said, slumping a little in disappointment. "But there's nothing to prevent you from giving me a new face—from taking away this face and replacing it with something people can look at without shuddering."

"I don't understand you, Mr. Dekker," the surgeon said.

"I know that! Can't you see it—I'm ugly! Why? Why should I look this way?"

"Please calm down, Mr. Dekker. You don't seem to realize that you're a perfectly normal-looking Spacer. You were bred to look this way. It's your genetic heritage. Space is not a thing for everyone; only men with extraordinary bone structure can withstand acceleration. The first men were carefully selected and bred. You see the result of five centuries of this sort of breeding. The sturdy, heavy-boned Spacers—you, Mr. Dekker, and your friends—are the only ones who are fit to travel in space. The others, the weaklings like myself, the little people, resort to plastic surgery to compensate for their deficiency. For a while the trend was to have everyone conform to a certain standard of beauty; if we couldn't be strong, we could at least be handsome. Lately a new theory of individualism has sprung up, and now we strive for original forms in our bodies. This is all because size and strength has been bred out of us and given to you."

"I know all this," Rolf said. "Why can't you—"

"Why can't I peel away your natural face and make you look like an Earther? There's no reason why; it would be a simple operation. But who would you fool? Why can't you be grateful for what you are? You can go to Mars, while we can merely look at it. If I gave you a new face, it would cut you off from both sides. The Earthers would still know you were a Spacer, and I'm sure the other Spacers would immediately cease to associate with you."

"Who are you to say? You're not supposed to pass judgment on whether an operation should be performed, or you wouldn't pull out people's eyes and stick diamonds in!"

"It's not that, Mr. Dekker." The surgeon folded and unfolded his hands in impatience. "You must realize that you are what you are. Your appearance is a social norm, and for acceptance in your social environment you must
continue to appear, well, perhaps, shall I say apelike?"

It was as bad a word as the surgeon could have chosen.

"Ape! Ape, am I! I'll show you who's an ape!" Rolf yelled, all the accumulated frustration of the last two days suddenly bursting loose. He leaped up and overturned the desk. Dr. Goldring hastily jumped backwards as the heavy desk crashed to the floor. A startled nurse dashed into the office, saw the situation, and immediately ran out.

"Give me your instruments! I'll operate on myself!" He knocked Goldring against the wall, pulled down a costly solidograph from the wall and kicked it at him, and crashed through into the operating room, where he began overturning tables and heaving chairs through glass shelves.

"I'll show you," he said. He cracked an instrument case and took out a delicate knife with a near-microscopic edge. He bent it in half and threw the crumpled wreckage away. Wildly he destroyed everything he could, raging from one end of the room to the other, ripping down furnishings, smashing, destroying, while Dr. Goldring stood at the door and yelled for help.

It was not long in coming. An army of Earther police-

men erupted into the room and confronted him as he stood panting amid the wreckage. They were all short men, but there must have been twenty of them.

"Don't shoot him," someone called. And then they advanced in a body.

He picked up the operating table and hurled it at them. Three policemen crumpled under it, but the rest kept coming. He batted them away like insects, but they surrounded him and piled on. For a few moments he struggled under the load of fifteen small men, punching and kicking and yelling. He burst loose for an instant, but two of them were clinging to his legs and he hit the floor with a crash. They were on him immediately, and he stopped struggling after a while.

The next thing he knew he was lying sprawled on the floor of his room in Spacetown, breathing dust out of the tattered carpet. He was a mass of cuts and bruises, and he knew they must have given him quite a going-over. He was sore—from head to foot.

So they hadn't arrested him. No, of course not; no more than they would arrest any wild animal who went berserk. They had just dump-
ed him back in the jungle. He tried to get up, but couldn’t make it. Quite a going-over it must have been. Nothing seemed broken, but everything was slightly bent.

“Satisfied now?” said a voice from somewhere. It was a pleasant sound to hear, a voice, and he let the mere noise of it soak into his mind. “Now that you’ve proved to everyone that you really are just an ape?”

He twisted his neck around—slowly, because his neck was stiff and sore. Laney was sitting on the edge of his bed with two suitcases next to her.

“It really wasn’t necessary to run wild there,” she said. “The Earthers all knew you were just an animal anyway. You didn’t have to prove it so violently.”

“Okay, Laney. Quit it.”

“If you want me to. I just wanted to make sure you knew what had happened. A gang of Earther cops brought you back a while ago and dumped you here. They told me the story.”

“Leave me alone.”

“You’ve been telling everyone that all along, Rolf. Look where it got you. A royal beating at the hands of a bunch of Earthers. Now that they’ve thrown you out for the last time, has it filtered into your mind that this is where you belong?”

“In Spacetown?”

“Only between trips. You belong in space, Rolf. No surgeon can make you an Earther. The Earthers are dead, but they don’t know it yet. All their parties, their fancy clothes, their extra arms and missing ears—that means they’re decadent. They’re finished. You’re the one who’s alive; the whole universe is waiting for you to go out and step on its neck. And instead you want to turn yourself into a greenskinned little monkey! Why?”

He pulled himself to a sitting position. “I don’t know,” he said. “I’ve been all mixed up, I think.” He felt his powerful arm. “I’m a Spacer.” Suddenly he glanced at her. “What are the suitcases for?” he said.

“I’m moving in,” Laney said. “I need a place to sleep.”

“What’s the matter with Kanaday? Did he get tired of listening to you preaching? He’s my friend, Laney; I’m not going to do him dirt.”

“He’s dead, Rolf. When the Earther cops came here to bring you back, and he saw what they did to you, his hatred overflowed. He always hated Earthers, and he hated
them even more for the way you were being tricked into thinking they were worth anything. He got hold of one of those cops and just about twisted him into two pieces. They blasted him.”

Rolf was silent. He let his head sink down on his knees. “So I moved down here. It’s lonely upstairs now. Come on; I’ll help you get up.”

She walked toward him, hooked her hand under his arm, and half-dragged, half-pushed him to his feet. Her touch was firm, and there was no denying the strength behind her.

“I have to get fixed up,” he said abruptly. “My leave’s up in two days. I have to get out of here. We’re shipping for Pluto.”

He rocked unsteadily on his feet. “I’ll really get lonely here then,” he said.

“Are you really going to go? Or are you going to find some jack-surgeon who’ll make your face pretty for a few dirty credits?”

“Stop it. I mean it. I’m going. I’ll be gone a year on this signup. By then I’ll have enough cash piled up on various planets to be a rich man. I’ll get it all together and get a mansion on Venus, and have Greenie slaves.”

It was getting toward noon. The sun, high in the sky, burst through the shutters and lit up the dingy room.

“I’ll stay here,” Laney said. “You’re going to Pluto?”

He nodded. “Kanaday was supposed to be going to Pluto. He was heading there when that explosion finished his foot. He never got there after that.”

“Poor old Kanaday,” Rolf said.

“I’ll miss him too. I guess I’ll have to run the boardinghouse now. For a while. Will you come back here when your year’s up?”

“I suppose so,” Rolf said without looking up. “This town is no worse than any of the other Spacertowns. No better, but no worse.” He slowly lifted his head and looked at her as she stood there facing him.

“I hope you come back,” she said.

The sun was coming in from behind her, now, and lighting her up. She was rugged, all right, and strong: a good hard worker. And she was well built. Suddenly his aches became less painful, as he looked at her and realized that she was infinitely more beautiful than the slick, glossy-looking girl he had kissed on the veranda, who
had bought her teeth at a store and had gotten her figure from a surgeon. Laney, at least, was real.

"You know," he said at last, "I think I have an idea. You wait here and I'll come get you when my year's up. I'll have enough to pay passage to Venus for two. We can get a slightly smaller mansion than I planned on getting. But we can get it. Some parts of Venus are beautiful. And the closest those monkeys from Yawk can get to it is to look at it in the night sky. You think it's a good idea?"

"I think it's a great idea," she said, moving toward him. Her head was nearly as high as his own.

"I'll go back to space. I have to, to keep my rating. But you'll wait for me, won't you?"

"I'll wait."

And as he drew her close, he knew she meant it.

THE END

One always reaches out for an Asimov book with the same pleasure one experiences on meeting an old dear friend. In both cases one is assured of being entertained. In the case of Asimov, one has not only entertainment, but the additional dividend of well-written, well thought-out entertainment. This collection (reprinted from a hard cover edition) is no disappointment. With this author quality is a habit.

Each of the stories is different and illustrates Asimov's imagination as far as variety of subject-matter is concerned. For instance, in one called "Youth," two boys catch some strange animals with which they intend to join a circus. In reality, the "animals" are intelligent beings from another planet whose tiny spaceship has crashed in an effort to make contact with one of the boy's fathers who is an astronaut.

Asimov's way with scientific detail is such that he can have you believing anything with the greatest ease. I read the story, "Sucker Bait," about a boy in the Mnemonic Service whose job it was to remember everything he saw, heard, read, etc., so he could serve as a kind of master card catalogue. When I finished I did not experience so much as a flicker of doubt that such a thing was possible.

But when it came to the title story, "The Martian Way," even I (ardent fan though I am) could not find the will to believe. Earth resents the fact that Mars uses so much of her water supply to run her spaceships and for other vital industry. She threatens to cut off Mars' water supply, thus crippling any chance for that planet's fu-
ture growth. It is imperative that Mars find her own supply, and Mars succeeds. Where? On Saturn? How? By blasting an enormous hunk of ice from Saturn’s rings (which are happily made of ice), embedding 25 spaceships in it, and flying the enormous iceberg back to Mars.

This story was a letdown in comparison to the plausibility of the others, but one cannot get too annoyed because even Asimov’s failures are the work of a fine craftsman and though it fails, it certainly does so in the grand manner.


This novel of the future has its roots in a problem that is already being widely discussed today—overpopulation. The story is filled with action; events tumble over one another.

By the 23rd century, Earth’s population has reached the seven billion mark. Lack of food and space are a constant menace. Out of the crisis is formed the Bureau of Population Equalization, commonly known as Popeek. Its thankless tasks include shifting large numbers of people from overcrowded countries to underdeveloped, spacious ones and practicing Euthanasia (called Happy Sleep) on weak children and suffering adults. The person who heads such a Bureau must be very strong—strong enough to withstand pressure from the two opposing camps: those who did not wish to see any organization given God-like powers, and those who felt that even Popeek’s measures were not strong enough. The leader must also be callous enough to believe that the ends justify the means and unselfish enough to serve in a post where the assassin’s bullet might come at any time. And as if the job were not complex enough already, he must decide how to release the news of successful experiments in immortality, and a successful exploration trip to a distant star without starting a public riot.

Obviously such a leader must be a superman, and Ray Walton, the hero, is very nearly just that. Too much so, in fact. Yes, Mr. Silverberg has him fall under the sway of a greedy brother and spare the son of a well-known poet from Happy Sleep, but his description of the doubts these acts bring seem very superficial. This reviewer wanted to see more of a real human being in the post, even if he failed in the end. Ray Walton does not fail; he succeeds but only due to an extreme stretch of the imagination.

The author has written a good story (no small accomplishment), but given this situation he could have written an excellent one. It’s a thrill-provoking story; it should have been a thought-provoking one.
This is an excellent science fiction book. The only misfortune connected with this fact is that the person who develops a taste for topnotch s-f is likely to go hungry most of the time. There just isn’t enough good stuff to go around.

Gorden Holder, an engineer, had been working on experimental rockets at the Australian Proving Grounds. He is the sole survivor of a crew of seven manning a spaceship years ahead of its time. How he managed to survive not only the crash, but fifteen years on Mars, forms the engrossing bulk of this book.

The interest is kept and held at a high pitch even though there is really only one character. The gadgets that Holder built to keep alive are always interesting and plausibly explained. And the ideas that pass through his mind, the various moods that color his fifteen Robinson Crusoe-like years are beautifully set forth.

Occasionally one gets a bit startled at the fact that Holder is able to solve all the problems with which he is faced. But this flaw is almost a welcome one because the book is so well written that one would otherwise be convinced that Gorden Holder is not just a bit of imagination, but a real man.
Test Your Space I. Q.

Scientifilms are a regular supplement to the sci-fi reading diet. Hollywood now recognizes they are sure-fire box-office. The best ones are frequently revived at science fiction conventions. One researcher is currently compiling a list of 2,000 of them. If you miss more than 15 in the following quiz, you've been watching too much television and not getting out to the theater often enough. If you get half right, that's about average. Fifteen correct and you qualify as a fan-about-town. Tick off 20 in the right boxes and your name must be Forrest Ackerman or Robert Bloch. In that case you have seen too many scientifilms and should give your eyes a rest.

1. "After Worlds Collide" was produced by Geo. Pal. □ □
2. "The Beast From 20,000 Fathoms" was based on a story by Ray Bradbury. □ □
3. "The Invasion of the Body Snatchers" was the sequel to "The Body Snatchers." □ □
4. "The Son of Frankenstein" was the sequel to "Frankenstein." □ □
5. The famous European scientifilm "By Rocket to the Moon" was made in France. □ □
6. Arthur C. Clarke authored the scenario of "Destination Moon." □ □
7. "The Day the Earth Stood Still" was based on the short story "The Master Shall Not Die." □ □
8. "Donovan's Brain" by Curt Siodmak was filmed twice, the first time under the title "The Monster and the Lady." □ □
9. "Flash Gordon" was the hero of a Universal serial of the same name. □ □
11. Ray Bradbury's "It Came From Outer Space" was filmed in 3d for viewing through polaroid glasses. □ □
12. "King Kong" was created by Lloyd Arthur Eshbach, starred Mae Clarke, was in technicolor, had special effects by Paul Blaisdell, was about a giant ant, and was the sequel to "Hong Kong."

13. "Lost Horizon" introduced the hidden Utopia of Shangri-La.

14. Peter Lorre had a bald head before Yul Brynner in "Mad Love."

15. "The Magnetic Monster" was about an explosive element.

16. "The Man in the White Suit" was the sequel to "The Man in the Gray Flannel Suit."

17. The great German silent classic of the future, "Metropolis," was selected for revival at the First World Science Fiction Convention.

18. "One Million B.C.," the prehistoric film featuring Lon Chaney Jr., was adapted from the novel "The Lost World" by Sir Arthur Conan Doyle.

19. The "XM" in "Rocketship XM" stood for experimental Model.

20. Jules Verne wrote "The Things to Come."

★

TEST YOUR SPACE I.Q.

ANSWERS

Dear Editor:

Today I picked up and read my first, and not last, Amazing Stories magazine. At first sight the artistic cover caught my eye. A man in a space suit (I should hope so) in space, chained to an asteroid (an odd position) numbered 76042 (quite a number). I immediately wondered if the craters, so placed, had been formed before or after he was chained there, so I read “The Penal Cluster”—especially good. The other stories were fine too.

In “The Observatory” you said, in one way or the other, that your experimental man became bald or lost things to count so he was timeless. Why didn’t he observe the stars? He was in black space almost, and the sun doesn’t blot all the stars there. At 10 miles most of the atmosphere is below. Why not a little deeper, say three miles.

I must say that “Test Your Space I.Q.” is a challenge and “Amazing But True” is amazing and that the cartoons are a howl. Keep them going.

Donald Watts
936 Wakefield Ct.
Fletcher Hills, Calif.

*Do you think our experimental man would have learned to count with no one there to teach him? It’s an interesting point.*

Dear Editor:

I wonder if you are aware of one thing: all the stories in your magazine have a boy-girl or fast moving theme. While these stories are good in a way, people do get tired of reading the same thing all the time. As soon as a person sees the title and the picture that is
drawn with the story, he just about knows what is going to happen. In the August issue of Amazing Stories, the story, “The Plague Bearers” by Harlan Ellison, was, as you said it was: a “rough” and “tough” story. It turned out differently from what I expected.

There are two types of science fiction story plot (novel and short story). The first type is based on science and could happen, IF. Each of these stories makes you think about things, such as: “What Is Man’s Fate?” This type of story plot is read by the scientist, the sophisticate and the people who just like to read them. However, the other type is the “romantic” or adventure type. These stories are generally short, fast moving, and (although not always) have a boy-girl theme in them. These are read by those who want simple wording, nothing much to think about, and above all, a science fiction story to read.

But I do enjoy some of the stories that are printed in Amazing. One of them, “Monster On Stage Four” by Henry Slesar, while very “ify,” was very funny. I enjoyed it very much. Keep up the good work on the Frosty cartoons, they brighten up the magazine.

Christopher G. Utter
136 Westwood Dr.
San Francisco 12, Calif.

• You’d be surprised how many scientists and sophisticates like romantic and adventure type stories also, Chris.

Dear Editor:

I have been a s-f fan for a couple of years now and I am a steady reader of Amazing Stories. I find it the best s-f for my money.

My friends didn’t like s-f very well so I left my July issue of Amazing lying around. Sure enough one of them read it. Now they’ve changed their minds.

I would like to congratulate you on your Amazing Stories Science Fiction Novel. I hope there will be many more to follow. It’s a great idea which credits the ingenuity of the staff of Amazing.

William F. Snow
White Salmon, Washington

• You’re a good salesman, William. Say the word and we’ll send you a couple of copies to leave lying around in new places.

Dear Ed:

I just bought my first recent issue of Amazing. The Space Club is a wonderful feature. Now for the brickbats. “The Glass Brain” by Harlan Ellison was the worst example of s-f writing yet. Any
story using sadism as the sole selling ingredient should be barred from your magazine. Many more like this and you will have to change your name from Amazing Stories to “Sadism Stories.”

The rest of the magazine was fine and I will not hesitate to buy it again. I do have some suggestions: In the old Amazing you would place on the back cover a picture of an invention such as “War Ships of Mars” or “Submarine of Neptune” and inside you would have a page to explain them. Why not again? You used to have half-page non-fiction fact features splattered through the magazine. These were interesting, why not again? You also had “Meet The Authors.”

George Wagner
39 Wilbers Lane
Fort Thomas, Kentucky

● We’ve replaced those old fillers with features that most of our readers look forward to each month. The quizzes are especially popular just now. “Meet The Authors” was very popular and we may find room to revive it.

Dear Editor:

I have just finished reading the September issue and I think “The Penal Cluster” is excellent, but the picture and caption that accompanied it on page 7 were misleading.

Give that Texan a cigar! Bill Hauptman is the only person I have heard of who shares my opinion of the science fiction of today. It’s quite good but needs more action.

Dave Donovan
56 Whittier Rd.
Reading, Mass.

● We’re sure you’ll find enough action in this issue to just about last you until the next one comes out. And if there’s a way to get even more action in our stories, by golly, we’ll find it!

Dear Editor:

After trying to read three of your issues I am of the firm conviction that your magazine is nothing but tripe. Literary trash in the truest sense. The stories you print are the worst on the market. Worst of all is your letter column. In here you print nothing but the few fanatic letters that praise your magazine. This is the kind of gutless praise that shouldn’t appear in any magazine, but to bolster your own ego you print it. I thought that women were supposed to have a so-called intuition but it appears Ginger Rebach lost hers

... OR SO YOU SAY
somewhere along the way. Although I do not think you will print this letter (as it would deflate your ego in front of the fanatics supposedly discovering your magazine) I challenge any of your so-called readers, if there are any left, to dispute me.

Howard A. Leeson
11920-80 St.
Edmonton, Alta.
Canada

• Anybody for the defense?

Dear Editor:

Having read in the “Science Fiction Times” that you were going to print a listing of all s-f fan clubs in the September Amazing, I looked forward to that issue with eager anticipation and was not disappointed. Besides the listing of clubs I thought the stories as a whole were remarkably good, especially the lead story, “The Penal Cluster” and “The Glass Brain” by Ellison.

Bruce A. Fredstrom
719 North 3rd
Sandpoint, Idaho

• If there is enough interest, we’ll publish another updated list of fan clubs in a few months. Let us know if you want it, you fans.

Dear Ed:

I sincerely like your stories in Amazing. On the whole I think you get the most interesting and humorous stories of all the s-f magazines. Some of your stories don’t agree with my tastes though, but I guess you have to write to try and please all the different kinds of tastes.

“A God Named Smith” was one of the finest pieces of s-f I have ever had the opportunity to read.

Bill Berland
Idaho Falls, Idaho

• We do our darnedest to put something for everybody into Amazing. And the size of the readership indicates we’re succeeding—at least to a great extent.

Dear Editor:

“Monster On Stage 4” is the second BEM/monster story in six months. Beware! Your magazine is going to the BEMs. I liked the ending though.
Stay the size you are. The magazine is easy to carry that way. If you have the applicants give The Space Club more room. Love those Frosty cartoons.

I have received many nice letters since my name appeared in The Space Club.

Mike Barnes
704 West St.
Pasadena, Texas

• We'd certainly like to give The Space Club a few more pages, but can't see our way clear to cut down on any of the other popular features. If we were deluged with indignant demands, of course, we would have to bow to them.

Dear Editor:

I have just finished the August issue of Amazing and want to congratulate you on “Monster On Stage 4.” It had a real surprising ending.

I'm sorry you cut out the serials, but for those that like serials here's a tip. After you have all the installments cut them out with a razor blade and glue them into a cardboard cover. Presto, one science fiction novel. I have seven of these already. I don't see how anybody can miss installments because one dealer doesn't have them. I cover at least six dealers all over town to get mine.

Joseph Dwyer
1006 Jamestown Crescent
Norfolk, Va.

• Sounds like a good idea for the serial-minded, Mr. Dwyer. Trouble is, too many people feel a month is too long to wait to see what happens. And you can't blame them, really. If Amazing ever goes weekly, we'll run two serials at a time.

Dear Editor:

As this is the first letter I've written to you in nearly a year, I would like to mention that I tried to start an Amazing Stories Fan Club eight months ago when I was a poor guy who didn't know any better. I had one applicant, only one so I gave up that idea.

At the present I'm working on a one-page weekly fanzine which I'll start putting out next year.

In the July issue your best story was “Brief Hunger.”

And I agree with Clayton Hamlin, having collected quite a file of back issues of Amazing and Fantastic.

One thing I've noticed in the letter column—you don't answer all

... OR SO YOU SAY
of the questions in readers' letters and a lot of your answers are quite obviously "double-talk."

Why don't you have an Anniversary issue every April?
Say, "Twenty Million Miles To Earth" was pretty good.
Sad to admit the present Amazing can't stand up to back issues edited by Ray Palmer.

Phil Chase
14 Kennebec St.
Bar Harbor, Maine

- Guess the readers of Amazing are all tied up in other clubs, Phil. And if you're trying to get us to say Ray Palmer isn't a great editor, you won't succeed, because he is.

Dear Editor:

I am now positive that Amazing is on the upgrade. You gave us a good July issue, a nauseating August ish, and a very excellent September one.
The cover was the best Valigursky ever did for Amazing. And what's this? A cover by Finlay? Gosh, something to break Valigursky's two-year run on Amazing.
The "Penal Cluster" was very good, as were all of the other stories. No complaint except for the illustrations. Amazing has just got to get better interiors to make it near the top again.

When are you going to do a novel, Fairman? Your readers are crying for them.

Don Kent
3800 Wellington
Chicago, Ill.

- This is to report that Fairman has turned fat and lazy. Novels are written by the lean hungry guys like Ellison, Jorgensen, Lesser et al. The good ones, that is.

Dear Ed:

I have been a science fiction fan for more than ten years and Amazing has always been one of my favorite magazines. I always read "Or So You Say" first, mainly to see how others feel about stories I liked and vice versa. Then I take the "Test Your Space I.Q." to see how brilliant your magazine is making me. It must be helping since I scored 95 points in the August issue.

Well, this is the first time in all these years I have ever written to an editor. I have often wanted to but one thing or another prevented it. I am a busy housewife and mother. When I do have a
moment I am usually reading all the stories in your books, so I just haven't had a chance to tell you how much I enjoy them.

I got a real charge out of Brian Caden's "Why don't you?" letter and your very clever answer.

Mrs. Elaine Fielder  
4717 Cedar Ave.  
Philadelphia 43, Pa.

- Don't wait another ten years, Mrs. Fielder.

Dear Editor:

I have just finished reading my special Flying Saucer Issue of Amazing Stories and I found it very interesting but I am still up in the air as to whether there are any flying saucers or not. I have not been able to decide one way or the other.

I belong to the Ground Observer Corps and have sky watched for over nineteen months. During that time, I have watched for about fifteen hundred hours and have checked in hundreds of planes but not once have I seen anything even resembling a flying saucer, much as I would like to see one.

I serve on sky watch in San Fernando, California from midnight until 10 A.M. every Friday and nothing would please me more than to see a flying saucer close up while I am on duty. If there are any who sky watch and who have seen a flying saucer, I would be only too happy to hear from them.

Fred G. Michel  
Veterans Hospital  
Bldg. 62, Room 107  
Sepulveda, Calif.

- We'd like to have them let us know, too.

Dear Editor:

I really wonder why it is that so many science fiction magazines are resorting to UFO Columns when flying saucers and the craze that went with them went out long ago. Sure, there are still some crackpots hanging on and there are still some fairly substantial reports, but I see no reason for your devoting half a magazine to the mania. First Palmer, then Santesson, then Hamlin and now Fairman.

As for the Amazing Novels, they're ok with me as long as you don't limit them to screenplays. After all, they're supposed to take the place of the serials in Amazing and Fantastic as you have said countless times. Ok, that's fine. As long as they're not all screen-

...OR SO YOU SAY
plays. I hope you realize that Hollywood screenplays are for the birds...especially original screenplays. Why, Hollywood is doing well to turn out a fair movie adapted from an excellent book. But these original screenplays are really corny.

"Monster On Stage 4" seems to be a take-off on the movie company that is filming Slesar's "20 Million Miles To Earth." The ending came much too quickly in it.

The plot of "Gods Also Die" has been run into the ground so many times that it almost sickens me to read it. Big white man becomes god of alien natives and it so happens they have a ritual where big white god is sacrificed. Oh, that kind of plot can be found at a dime a dozen.

The only good thing about "Shoot the Works" was the beautiful Finlay illustration.

There's one improvement in this issue of Amazing and that's the return to small type of the letter column. It allows room for more letters and consequently will bring you more mail. The readers have been raving about this for quite some time and I'm glad to see you answer their pleas. Believe me, it is an asset to the magazine.

Guess only one major improvement could be asked for now: Cut out these nauseating "Amazing But True" features and revive "The Revolving Fan."

Bill Meyers
4301 Shawnee Circle
Chattanooga 11, Tennessee

• Afraid you're wrong, Bill. More people are interested in flying saucers than ever before. If this wasn't true, we'd ignore the subject. And believe us, we could ignore it with the best of them.

Dear Ed:

I have your August issue of Amazing Stories at hand. First of all, I should like to say I have enjoyed your magazine for about three years now and it seems to get better. I thought "Monster On Stage 4" was a fairly good story with one small inconsistency: at one place Mr. Slesar has the goofus running amuck, but at the end it is tame. How come? As for "Look-Alike Army" it was just what you said it was...the most fantastic invasion strategy ever developed. Fantastic is the only word I can think of for it, too. Actually, the best stories I have read in a long time were "The Plague Bearers" and "Shoot The Works."

As for your departments, I read them even more religiously than the stories. I have written a few of the chess players you have listed and have my eye out for more. I've read so many letters this issue that all added up to the same thing. It made me wonder why you
didn't just say the reaction was great to "Edge of the Knife" and let it go at that?

Larry L. Brandon
505 Lincoln Street
Osage City, Kansas

- Guess Mr. Slesar feels that even the wildest goofus can be tamed.

Dear Ed:

Your September issue was up to its usual standards. The cartoons were really good and I got a large charge out of them. Keep up the good work.

Your Directory of Science Fiction Fan Clubs was a welcome sight. I would like to note a change though. The Dallas Futurian Society recently held elections and the following officers were elected: President, Jim Hitt; Secretary, Judy Wainscott. Anyone wishing information contact:

Jim Hitt
2432 Hillglenn Rd.
Dallas 28, Texas

- Change duly noted and published. Wonder how many fans are represented in that list of clubs? Your guess is as good as ours.

"He says they'll teach us to fight. Are you mad at anybody?"
THEODORE TAYLOR, woolen manufacturer of Britain, "gave up running" at 90, toured the United States as a "salesman" when 98 years old, and remained managing director of his company until his death at 102.

WILLIAM DE MORGAN lived to become one of the most famous novelists of his time. Yet he did not begin his literary career until he was sixty years old.

WALTER WILLIAMS, one hundred and ten years old, a Civil War veteran, took his first plane ride in 1953.

GEORGE A. THOMPSON of Brampton, Ont., was "dying" at the age of 42, yet lived to climb to the top of the Bank of Commerce Building (highest in the British Commonwealth) at the age of 86 and walked twenty miles on his 87th birthday.

NICHOLAS DESMAREST, pedestrian geologist of France, began compiling his "Physical Geography" at the age of sixty-nine and was at work on the fifth volume at the time of his death at the age of ninety.

SIR HUBERT WILKINS, the Polar explorer, was a penniless farm boy at thirteen. When he was nineteen he controlled five moving picture theaters.

JOHANN WOLFGANG VON GOETHE began his famous drama "Faust" when only about twenty years old and completed it in the last years of his life at the age of nearly eighty.

LIBERTY HYDE BAILEY grafted forty kinds of apples on one tree at the age of ten. Seventy-nine years later, as the world's foremost horticultural writer, he made a month-long journey into the Amazon jungle in search of further botanical knowledge.

JOHN STUART MILL was able to read Greek at the age of three and wrote a history of Rome at the age of six.

JEREMIAH HORROCK, who authored a work on "The Theory of the Moon" which even Sir Isaac Newton studied to advantage, did not live beyond the age of twenty-three years.

BLAISE PASCAL, French mathematician, produced his work, a treatise on conic sections, when only seventeen.

R. S. CRAGGS
AND NOW THE NEWS... by Theodore Sturgeon
Something inside Mac Lyle made him a slave to the news. He had to read every newspaper, listen to every radio news-cast, see every TV news show. Then that same strange something caused him to make the biggest news, HIMSELF!

NO MAN PURSUETH, by Ward Moore
The newspapers said the amnesia epidemic had nothing to do with the disappearance of hundreds of planes in mid-air. Some Senators said the planes were somehow being spirited behind the iron curtain. Then they heard the news that the Russians were blaming the disappearance of their own planes on the U.S.!

KING'S EVIL, by Avram Davidson
Did Dr. Mainstone's power come from the demon? Did he use occult powers to cure illnesses as yet undiagnosed by science? Then he encounters a mysterious patient afflicted with the most frightening disease of all—The King's Evil!

THE CENSUS TAKERS, by Frederik Pohl
The census takers in an overpopulated world had an easy job. All they had to do was mark every three-hundredth person for death. Then a mystery man turned up with a plan to make their job easier—by de-populating the entire world!

THE MAN WHO CAME EARLY, by Paul Anderson
Gerald Samson was catapulted back a thousand years in a freak atomic explosion. With his knowledge of modern science he thought he could be a king among the primitive people who found him but they had something far more powerful than science to stop him!

FINAL CLEARANCE, by Rachel Maddux
Can the dead return? In this chilling story a corpse returns for a visit and when you read what he has to say about the "hereafter"—you'll be glad you're still alive!

PLUS—stories by Ron Smith, Will Stanton, a complete novelette by Charles L. Fontenay.

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ICARUS MONTGOLFIER WRIGHT, by Ray Bradbury. Rocket pilot Prentiss is to pilot the first rocket to the moon. But the night before his take-off he makes an even more amazing flight — backwards through time!

THE COSMIC EXPENSE ACCOUNT, by Cyril Kornbluth. A tiny 81-year-old woman discovers a new science and uses it to make entire armies and the most brilliant scientific minds feel helpless before her!

THE ASA RULE, by Jay Williams. Earth scientists on Mars are helpless against the deadly attacks of strange insects.

Only the aboriginal ASA Martian tribe knows the secret of warding off these attacks — but they are sworn to turn over any earthman who learns their secret to the "sacred" insects!

THE SHODDY LANDS, by C. S. Lewis. Imagine yourself in a land where nothing is like anything you've ever seen before — not the trees or the sky, or the people. A land ruled by a giant woman where everything becomes exactly as she wants it to be — including you!

— and MORE! See other side for further details