

# THRILLING ANC WONDER STORIES

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FEATURED NOVELETS

**PLANET  
OF THE  
SMALL MEN**  
By MURRAY LEINSTER

**THERE SHALL  
BE NO DARKNESS**  
By JAMES BLISH

**JOURNEY  
FOR SEVEN**  
JOHN D. MACDONALD

A THRILLING  
PUBLICATION

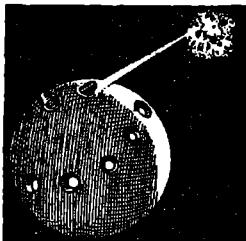
# THRILLING WONDER STORIES

VOL. XXXVI, No. 1

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April, 1950

## Featured Complete Novelet



### PLANET OF THE SMALL MEN

By MURRAY LEINSTER

*Pursued by implacable aliens from a saffron star, a quartet of Earth folk finally finds an odd haven of hope upon an astonishing world whose baffling contrasts defy logic!* 11

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# PLANET of the SMALL MEN

*Pursued by implacable aliens from a saffron star, a quartet of Earth folk finds a haven of hope upon a world whose contrasts defy logic!*



**a novelet by  
MURRAY LEINSTER**

## CHAPTER I

### *Attack from Nowhere*

**S**TARS exploded into being on every hand with all the suddenness and violence of catastrophe. The *Marintha*, battered and scarred, came out of overdrive into normal space with the fran-

tic speed of a bat just streaking out of hell.

A lifeboat blister was gone. There was a swollen streak all along her plating on one side as if something improbable

had played upon her briefly and softened the metal so that it bulged from the air-pressure within. One of her atmosphere-fins had been blown jaggedly off and there was a gaping hole in an after-compartment.

Lon Howel saw the great ringed sun off to one side, swimming grandly in space with its attendant family of planets. It was a yellow sun, sol-type except for the ring telling of some ancient satellite which had blundered inside Roche's Limit and splintered into dust.

**T**HREE was a green planet not far from the *Marintha*. But somewhere there was that slug-shaped other ship—smaller even than the *Marintha*—which against all reason and probability and even possibility had attacked the earth-ship with insensate ferocity near a yellow planet many, many light-years back toward the Crab Nebula. The attack was preposterous, because the evidence had been overwhelming that there could not be another race in all the Galaxy that human beings need fear.

But there was another race. The bulbous ship—rather like a loathsome slug in outline—had not only attacked the *Marintha* without warning but its first fire had hulled the exploring-yacht and shattered an atmospheric-fin. Worse, when Lon threw an overdrive in absolutely automatic response to danger the bulbous ship had been able to follow.

It went into overdrive too, and for the first time in all history meteor-detectors rang a strident, continuous alarm signal while a human ship sped through emptiness at two hundred times the speed of light. Which meant that another solid object was within detector-range and stayed there.

The slug-ship had a matching course and velocity. It was capable of pursuit even in overdrive. To remain within a quarter-million miles of a ship at nearly two billion miles per second could not possibly be an accident. It was pursuit.

Lon Howel didn't believe it at first. Then he tried evasive tactics—in over-

drive! They didn't work. And he tried to outdistance the ferocious pursuer by overloading his drive, adding forty more light-speeds to the safe maximum. The pursuer matched it—which was something to make Lon's face turn slowly gray as he realized its implications.

Travel in overdrive is trying at best. Even a week in overdrive with the knowledge that an enemy trails one—an enemy one cannot battle—is worse. But a seeming unending flight during which it becomes apparent that one's pursuer mockingly refrains from annihilating you merely because he wants to be led to your home planet, which will be practically defenseless against him—that is far worse.

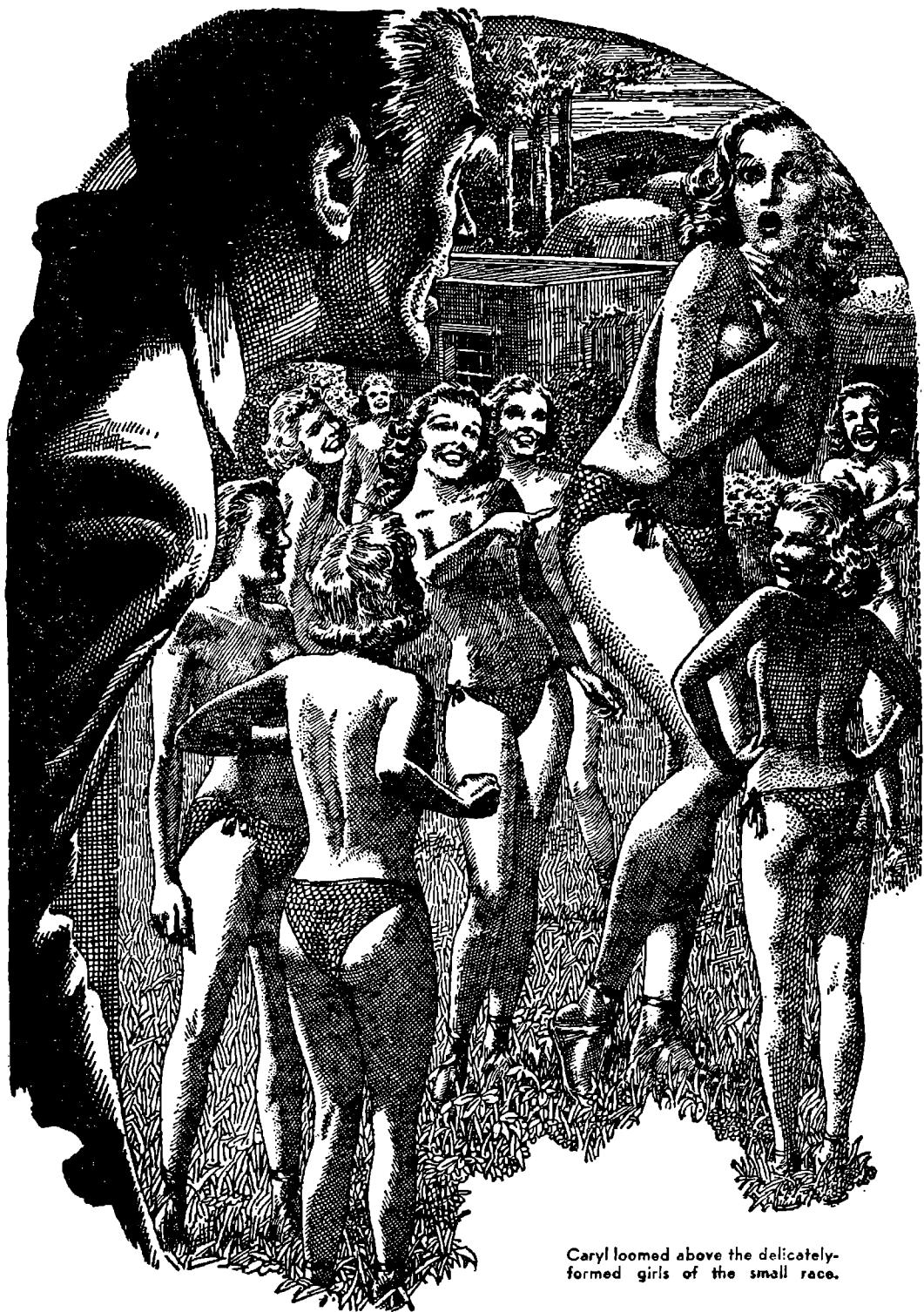
So Lon Howel cut his overdrive and the stars exploded into being all about him. He counted two seconds while abstractedly noting the ringed sun and the nearby green planet. Then he stabbed home the overdrive button again.

And there was the snapping rasp of an arc somewhere, a shout from the engine-room—and nothing happened. The arc died and the smell of scorched insulation was in the air for an instant before the air-changer cleared it. The *Marintha* was still in normal space and there were the two—no, three—no, four planets circling it.

Caryl came quickly through the door into the control-room. She said quietly, "The overdrive's gone, Lon. The energy-surge when you cut it out wrecked the very heart of it."

Lon said heavily, "There's a good trick gone. We might have got away. I don't know how good the slug-ship's detectors are." They had spoken of the enemy ship by its shape, lacking any other information save of its enmity and its power to destroy. "But if there was any delay at all it got out of detector-range before its pilot could come out of overdrive too. And I figured I'd be off on a new course before he could pick us up."

Caryl nodded. Once they had decided that their pursuer was waiting to be led to the planet from which the *Marin-*



Caryl loomed above the delicately-formed girls of the small race.

tha had come they had taken time to plan every maneuver carefully. Even the two-second pause in normal space had its reason.

"We should have destroyed our star-maps before now," said Lon coldly. "We should have bombs on hand to blow the *Marintha* to atoms. Since we've stopped leading the way home they'll stop playing and take us. Of course we must die so we can't be drained of any information."

"Get busy destroying all our navigation stuff, will you? Set everybody at it. I'm going to head for that planet yonder. If we can land on it we may have time to duck before they can find us. By the color and sun it should be an oxygen planet."

The *Marintha* was plunging toward the green world on interplanetary drive as he spoke. Caryl nodded and went back out of sight. There was no time for sentiment now. The *Marintha* was one of literally hundreds of exploring craft out in space from Earth.

Humanity was expanding with splendid confidence. The days of romantic exploration had returned. The cracking of the problem of speed faster than light had set men free from their own solar system. The Mathewson discoveries of the basis of pathogenicity had wiped out all fear of plagues from alien micro-organisms.

The solution of the mystery of the Lost Race had seemed to ensure that humanity could have no enemies—because the race which had been mankind's forerunner had apparently been a galaxy-wide culture which had perished by its own act and had left no potential enemies of its descendants alive. So it had seemed.

Humanity had been sallying forth to occupy and populate a galaxy with an estimated three to four hundred million habitable planets awaiting its coming. Anybody could take a yacht or a colony-ship and go out and find a planet which was his for the taking. But the *Marintha* had found an enemy. And any race which could trail in overdrive had humanity at its mercy.

There was the smell of scorched cellulose—a heat-ray on star-maps and navigation records. The air-changer battled valiantly with the smell. It strengthened and weakened as new batches of paper and records were thrown into the cone of intolerable heat. The *Marintha*, though, was unarmed.

The heat-ray was designed only to clear away vegetation around a landing-place on a strange world. Hand-weapons had seemed all that any ship needed to carry. An antiquated gun, shooting explosive bullets the size of one's little finger, was the most dangerous device on the ship. Superson pistols were adequate protection against any form of wild life smaller than an elephant.

The *Marintha* was doomed. Only if she could get down somewhere on the planet below would there be even a faint possibility of a lease on life for the four humans on board. And they had an obligation greater than self-preservation.

To be captured alive or even in dying to furnish information by which an enemy race could learn of the whereabouts of humanity would be a form of treason so monstrous as to have no name. Lon did not even think of seeking to save his own life or Caryl's or either of the others. It did not occur to him to try to compromise with the stark necessity of dying.

**A**N unwarmed Earth might be subject to attack. The slug-ship had weapons humanity had not dreamed of. The beam which made one whole side of the earth-ship's beryllium-steel hull bulge out like wet paper—the fraction of a second delay in getting into overdrive would have drained her of air and left everything intact for an enemy's inspection—that beam was not only unknown but unimagined by men.

The weapon which had blown off the atmosphere-fin and holed the hull and sent the lifeboat spouting off in flaming fragments had never been conceived. It was not a matter of material missiles. It was something else. Humanity,

warned, might turn its thoughts to warfare and arm itself. But humanity now was defenseless.

So Lon sent the *Marintha* plunging toward the green planet. He tried not to hope but it was hard to refrain. In a fiftieth of a second the slug-ship should have overshot the place where the *Marintha* had cut her overdrive field.

It should be seconds before the fact could be noted and interpreted and it was possible that, with haste to introduce errors, the slug-ship might be trivially off-course and actually out of detector-range when it got back.

If it hadn't stopped and turned about in less than five seconds it would be ten thousand million miles away.

To be within a quarter-million miles of the exact line—meteor-detector range—and a quarter-million miles of the correct distance would be superhuman.

Lon found himself casting his mind ahead feverishly. If he could get to ground. If he could conceal the ship under water or in towering vegetation! If he could somehow hide on a planet from pursuit he could not evade in space, then the crew of the *Marintha* might contrive something either to defeat and destroy the slug-ship—or to escape with the news of its existence and, inevitably, that of the race which had made it.

The disk of the green planet grew and grew. Lon piled on every ounce of acceleration he dared. He saw a blue sea and polar ice-caps. He saw a cloud-mass looking like a blob of white, overlaying green land and blue sea alike. The round face of the world almost filled the forward screen and his speed was so great that he could not possibly stop short in time to land on the near side, must circle and ground on the farther hemisphere.

He swung the battered little explorer-yacht back on its course and began to apply deceleration. Careful math was needed for such a task but he did not intend to ground gently at a predetermined space-port. Anywhere on the

far side of a ten-thousand-mile disk would do. The deceleration built up and in spite of himself he hoped.

Then the alarm rang stridently.

He set his lips and abandoned all flimsy and now impractical plans for continuing to live. He flung the *Marintha* about again, end-for-end. He plunged for the planet's face once more, crushing acceleration pressing him hard against the pilot's seat. He changed course a little.

There the sea looked deep—very deep. He had hit atmosphere at full interplanetary speed. If the *Marintha* didn't break up and reach ground only as a shower of incandescent metal droplets, at least she'd plunge down to the very greatest depth of this unknown sea and the slug-ship would never be able to locate or recover her.

Caryl climbed through the door and struggled to his side. "No chance, Lon?" she asked quietly, panting a little with the strain of fighting such acceleration.

"Not a prayer," he said briefly. "Sorry." Then he added steadily, "I wish you were back on Earth, though."

Something flamed past the *Marintha*'s hull. It was a near miss—a miss by feet only. A second and third and fourth followed—all near misses and all on one side.

"Trying to make us sheer off," said Lon evenly. "We could go around the limb of the planet and they know it. They don't want to riddle our hull, for fear of losing useful data. But they've got to. We'll hit that deep now, I think, even if they smash us first."

He switched on a stern visiplate. The slug-ship was still so far away that it was invisible. But its location was in no doubt. As he looked a thin pencil of ravening flame sprang into existence, seemingly reaching from infinity to the hull of the fleeing space-yacht. The *Marintha* reeled.

Another and another and another of the instantaneous bolts winked into being and each time the *Marintha* shuddered under the impact. Her drive went and her gyros. She hurtled on toward the planet, turning slowly now and

quite helpless to avoid a crash. Acceleration ceased. Lon reached out his arm and put it around Caryl.

"Tough luck," he said wryly. "Nice to have known you, Caryl. Look me up on the other side, will you?"

She kissed him, very white. There was a rending crash as another bolt struck. The slowly tumbling little ship was near indeed to the green world. A rotating port showed it, so near and so huge that they could see only a part of its surface. It was so near that it was suddenly down. They fell and the details of its surface grew more distinct.

"I guess eight hundred miles," said Lon, "and before the instruments went we were hitting a hundred and twelve miles a second." He held her fast. "Be seeing you."

The surface of the planet toward which they fell was abruptly blotted out by a flaring incandescence. That was the air, compressed by their fall, heated by compression to a blue-white.

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## CHAPTER II

### *Death from the Sky*

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THEY felt nothing. They waited for the ports to break through and all the interior of the ship to fill with the incandescence that would snuff out life before they had time to know death as it took them.

But nothing happened—nothing. The incandescence died away. They felt all the sensations of free fall—absolute weightlessness, unreasonable giddiness, the inherited panic which has come down to men from the ancestors of the Lost Race itself.

But the vanishing of the incandescence hinted that their fall was being checked—which was impossible. Nothing external could have slowed the fall of the yacht without shattering its hull and crushing the life out of its occupants.

Air screamed past the wrecked *Marin-*

*tha*. From the thinnest of whistlings at the upper limit of audibility it became a high-pitched shriek, then a squeal, then a moan which went down and down the scale. And Lon Howel looked sick with dread as it appeared that something was acting to break their fall without any sensation to tell of it.

He watched the screen. Revolving, it showed the thickly green-clad planetary surface below, the distant curving horizons, then a sudden glimpse of a sky already glowing blue between the fading stars. In that path of sky there were futile, flashing lightnings, stabbing at the *Marintha* but stopped at the ring of the atmosphere.

The features of the planet's surface swelled before their eyes. They would not hit the deep part of the sea. They would strike the shallows near a continental shoreline. Lon clenched his fists. No—they would strike on land itself. It was outside of all reason or credibility but they were not plummeting downward any longer. They were descending swiftly but that was all.

When mountains were discernible as separate swellings of the ground they were merely in a dive beyond that of an atmosphere-flier. When a mountain-crest reared up level with them they were descending not much faster than a parachute. But they felt no braking. Their sensations were still those of free fall.

Then there were trees rising to meet them and the *Marintha* crashed into a monster pile of interlaced branches and foliage, caromed off and splintered a group of slender stalks, growing straight and tall—and suddenly reached solidity with a bone-shaking crash, tumbled over and was still.

When the final crash came Lon was holding Caryl close, trying to use his body as a cushion. He succeeded. His head rang from a knock that came of the final turnover but Caryl was unharmed.

He got dizzily to his feet. "Everybody out, fast! If the Slug put some sort of tractor on us to keep us from smashing we've got to get away before they start

fishing it back up out of atmosphere! *Outside!*"

He shouted it through the door from the control-room. He helped Caryl, ignoring a trickle of red down his cheek. The four who made up the crew of the *Marintha* ran for the exit-port.

Caryl was first out the side-port—now on top of the hull with the ship lying on her side. She jumped to the ground, followed by the others. There was Burton, big-game hunter extraordinary and engineer for the private expedition. There was her father, a biologist of note on Earth but on this yachting cruise through light-centuries of space a zestful ship's cook.

They were bruised and battered by their landing. Without exception, they still did not quite believe that they were alive. But they went swarming out of the wrecked space-yacht and Lon snatched up what hand-weapons he could and joined them in scuttling off into the jungle which almost hid the ship.

Again nothing happened. They ran and panted and scrambled until they were a mile away. There they stopped, gasping for breath. Lon passed out superson pistols. He gave the antique firearm to Burton. There was a heat-ray with which they could build fires. That was all their equipment.

They had abandoned the *Marintha* because they certainly had not checked her headlong drop to destruction, yet it had been checked. They waited for the battered punctured hull to rise and go heavily and preposterously toward the sky. Human science said a tractor-beam was theoretically impossible yet something had slowed their fall!

**B**UT the wreck lay still. They were in a jungle almost without under-brush. Most of the trees had a communal habit of growth, of straight stalks which put out branches that presently put out other branches toward the ground, to take root and nourish yet other straight stalks, which would put out other branches.

There were no calls as of birds or

insects but a tiny musical humming seemed to come from nowhere in particular, forming a background-noise never plainly heard, yet always preventing the silence from being oppressive.

Lon ceased to watch the wreck. He scanned the sky instead. There was no sign of the slug-ship which had attacked without challenging some thousands of thousands of parsecs away and had pursued without respite but failed to follow them into atmosphere.

"Queer," he said, frowning. "Our friends certainly aren't scared off. What's keeping them?"

Burton said meditatively, "They could think this is our home planet. Have you any idea what system this might be, Lon? Could they be hunting an Earth-colony now that we've gone to ground? Perhaps hunting a city? Would there be humans here, do you think?"

Lon shook his head. "There aren't more than a couple of dozen actually colonized planets so far—with people on them in thousands or with settlements bigger than villages. The odds would be millions to one against even a single plantation here."

Caryl's father said, "What checked our fall, Lon? You didn't. We were really splitting space wide open. You meant to crash, didn't you?"

"We were hitting a hundred-twelve a second," said Lon curtly. "Most meteors hit Earth's atmosphere at around forty-five. We should have vaporized in the air and if anything was left it should have plunged into what looked like an ocean deep back yonder." He jerked his thumb toward the horizon. "We agreed it was more important not to give them anything to work on than to save our lives."

"Quite so," Caryl's father conceded.

"There was incandescence in front of the forward ports," added Lon, still scanning the sky. "Then it stopped. Our fall slowed progressively. I thought the slug-ship had slapped something on us and was pulling us back."

Burton suggested, "Maybe they can't lift the *Marintha* because a tractor-beam doesn't work in air. Or maybe

she's too heavy for their stuff."

"To which," said Lon, "there are two answers. One is that we were decelerated from over a hundred miles a second to almost zero in a pretty short time, so whatever did it had plenty of power. The other is that it *did* work in air. The longer we were in atmosphere the slower we fell. And it worked on us as well as the ship."

Caryl's father said mildly, "The planet where the slug-ship jumped us was a chlorine planet. The vegetation was yellow, and it was a white-dwarf sun. Maybe they haven't landed because they've no equipment for working in an oxygen atmosphere."

"Not likely," said Lon. "Any space-suit would do."

Then Caryl suggested, "If there's something that checked our fall—and there was—maybe they ran into it when they started to follow us. Maybe they noticed something working on their ship and got away fast. We would have if we could. We did when the slug-ship jumped us. At least we tried."

**L**ON blinked at her. He had ideas about Caryl but every so often she startled him by showing brains which had very little to do with his feelings for her. This was such an occasion.

"You've got something there," he said, as he thought it over. "If the Slug started down after us and ran into something the creatures inside didn't understand and couldn't smash—they'd back off in a hurry! Right!"

"But then what? What'll they do now? Fumble around a while, or try to get word back home? Will they try to find a way to get at us or yell for help to wipe us out of space? If you're right, we've a chance to go on living."

Then Caryl's father said, "And what are we going to do with it?"

"Plenty!" said Lon evenly. "All the human race is out exploring as if the whole Galaxy were a glorified picnic ground. No idea of danger. No idea that any ship needs arms. But whoever or whatever is in that slug-ship is dangerous and arms are needed against them

because they don't like us."

"They don't like us so extensively that they've gone to a lot of trouble following us—they think home—with the idea of wiping us out. They'll do the same thing to any other Earth-ship they come upon. Next time they may succeed—and there will be Earth, helpless as a sitting duck."

"They'll smash it like an undesirable bug if our friends up yonder are typical of their race. The thing we've got to do is to get a warning to Earth. If it costs all our lives it'll still be dirt cheap."

"I was in the engine-room," said Burton drily, "when something a foot across stabbed through the plating and hit our main drive. It missed me by inches and I had just time to get out and slam the door before the vacuum got me."

"But I did see that our drive is smashed. It's not even scrap-iron. Some of it's melted and some of it simply splashed. It can't be repaired. We need a new drive to navigate and we couldn't make one in a thousand years."

"Our overdrive's gone too," said Caryl unhappily. "It blew out. We might repair it but—"

"I agree on the need to warn Earth, Lon," said Caryl's father, "but I don't see the ghost of a chance."

"Neither do I," admitted Lon. "I guess we've got to make one."

Something moved across the sky very far away. It had flapping wings. Burton shaded his eyes. All of them watched it. It certainly wasn't the slug-ship. But the atmosphere was faintly misty and they could not tell whether it was something quite small and near by, flying slowly, or something of considerable size a long way off, flying fast.

"It could be alive," said Burton. "This would fly here, naturally. But we don't know yet what sort of things they are. There's a flying carnivore on Spicus Four that—"

"Could it be a flying machine?" asked Caryl uneasily.

Burton shrugged. "A few days back," he said drily, "I'd have smiled at your ignorance, Caryl. Right now I simply don't know."

The evidence had seemed conclusive, just a little while before, that there could not be any intelligent race in all the Galaxy except the human. There was a race that lived on a chlorine-atmosphere planet near the Crab Nebula. But the odds against a second non-human race remained enormous and certainly chlorine-breathers would not have made a colony on a yellow-sun satellite.

"As far as that creature's concerned," agreed Lon, "there's no way of knowing. The chances are it's simply something that wings grew on naturally. But I've got a feeling there's something unusual on this planet that will either kill us or help us. I think we'd better try to find it in a hurry. We need to send that warning to Earth and we may not have much time."

The four humans were not very impressive just then. They were battered and disheveled. They possessed exactly what they had worn on the *Marintha* plus the hand-weapons Lon had snatched up at the last instant.

Their ship was a hopeless wreck and when in repair it had been unable either to escape or to defy the slug-ship, which presumably still hovered overhead out of atmosphere. They were definitely not in a position to speak of communication with Earth some light-centuries distant.

"There's no force-field in nature," said Lon doggedly, "that would have kept us from crashing. There's nothing in Earthly science either, that could have done it. But something did. We've got to find out what it was and who or

what handles it and try to make a deal to warn Earth about those chlorine-breathing maniacs in the Slug and their homicidal tendencies."

**C**ARYL'S father pointed suddenly. Something was coming straight down from the sky. It was very small—smaller than the *Marintha* or even the *Marintha's* vanished lifeboat. It was hardly larger than the body of a man.

It could easily have escaped notice in its descent except for two things. One was the rate at which it came down. It did not drop like a free-falling object, with swiftly increasing velocity. It descended steadily, barely holding to the same rate of downward travel.

And this in spite of the billowing, voluminous trail of what looked like rocket-smoke behind it. The smoke, however, was yellow. It poured out fiercely, making enormous masses of thick vapor which seemed struggling to push on.

Lon stared—and something clicked in his brain. He had seen history-reels of ancient warfare and early interplanetary flights.

"Let's get out of here!" he snapped suddenly. "The other side of the hill! Quickly!"

He literally drove the others before him. Infected by his haste they scrambled over the crest of the hill on which they had halted, were running down the opposite slope, dodging slender tree trunks, when the blast came.

[Turn page]

The ground kicked under their feet. It seemed to rise and strike a violent blow, so that their knees buckled. There was a flare of light so bright that the trees, where they rose above the hill crest, appeared to flame momentarily with an unholy light.

Seconds later came the roar—with it a monstrous solid wall of wind. Branches and leaves flew overhead. Clods of earth and small stones pelted the fugitives. Caryl turned a frightened face to Lon. There were crashings and cracklings, and all manner of minor noises in the wake of the unbelievable blast. They ceased to run. They knew what it was, of course. By instinct they turned and looked back.

They saw the ghastly cloud still rising skyward. It reached up and up and up, expanded at the top with a horrible swiftness until it took the form of a palm tree. It was a slender shaft of flame-lit vapor with a spreading rounded top. There could be only one kind of explosion which would make in lightning-threaded cloud the form of a palm tree ten miles high.

"We've got to see which way the wind blows," said Lon evenly. "That will be dropping radioactive rain presently. We don't want to be in the way of it."

They watched in silence. They should not have been alive. They should in the first instance have been vaporized with the *Marintha* in its faster-than-meteoric fall into atmosphere. They should have been killed in any event when their ship crashed. Certainly they should have been close by the ship, trying to salvage possessions from the wreckage, when the creatures in the slug-ship—they had no doubt at all that the guided missile carrying an atomic bomb had come from their pursuer—when the guided bomb detonated so close to the wreck that the Earth-ship was now mere metallic vapor in the upper stratosphere.

Even at their present distance, radiation-burns would have killed them certainly except for the hill-crest between.

"It's moving toward the ocean," said Lon at last. "But just in case, we'll get away from here. Our friends aloft will

think we're dead and come back later to hunt over the whole planet for humans."

Then he stopped. It was very still—very, very, very still. It was noticeably and startlingly quiet. The world around them was oppressively and quite horribly silent.

Then, abruptly, a tiny musical humming began. It was a sort of background noise which seemed to come from nowhere in particular. It was never plainly heard but it did keep the stillness from being oppressive. It began without preliminary, at full volume, exactly as if someone had thrown a switch.

Half an hour later they saw the atmosphere-flier.

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### CHAPTER III

#### *Company*

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THEY were headed away from the bomb-crater then, moving inland toward a range of mountains not far away. There would be streams of water there, almost certainly some sort of animal life.

They had to think in terms of independent survival for days now and they were not equipped for anything but the most favorable conditions. They wore the light clothing suitable for the air-conditioned environment of the *Marintha*. They had superson pistols but they had no tools and absolutely no instruments for observation.

Gravity on this planet seemed to be a little greater than on Earth—not hamperingly greater, to be sure—but they could not be certain about it. They had been in the artificial gravity of the *Marintha* for so long that the feel of Earth itself would probably have been strange.

But the air was satisfactory, as the air of one out of every three planets of a sol-type sun is bound to be. There were smells about too. They were unrecognizable but basically familiar, as if merely the scents of vegetation in a

hitherto unvisited part of Earth. That also was reasonable.

With a given type of radiation from the sun and a given set of elements available for combination, certain organic compounds would be inevitable. Chlorophyl, for example. This vegetation was green and it would make chlorophyl to absorb sunlight and the chlorophyl in turn would make starches and sugars and undoubtedly cellulose.

The organic chemistry of sol-type systems is essentially alike everywhere in the galaxy. It could not be otherwise. So there should be food. But some plants on Earth are poisonous and some animals—mostly fish—so selection would be a problem.

That, though, was Caryl's father's department. He was looking at some pendulous clumps of nutlike fruits the size of baseballs, hanging from the branches of a tree-cluster with leaves as fine as maiden-hair fern, when Caryl cried, "Look! A plane!"

Lon Howel turned. And there was a plane. But it was a freak. It did not have the sheen of metal anywhere about it. It was not streamlined in the exaggerated fashion of Earth-fliers, which strive for the maximum of speed. It was reasonably good design as far as its fusilage went but the wings were minute. They were no larger in proportion to the ship than the fins of an earthly fish.

And the speed of the craft was not high. Even an earth-plane sometimes looks as if it were hanging in the air—as if it were not moving fast enough for its wings to support it. This aircraft gave that impression enormously multiplied.

It was near enough so that they could guess at its size—perhaps thirty feet over all—and its wing-spread of not over ten feet. The wings were not deep either. But the fusilage was large enough to hold two men side by side and probably several pairs of seats.

It flew quartering toward them, yielding smoothly to vagrant air-currents in exactly the manner of earth-gliders. It passed within a quarter of a mile, some

two hundred feet above the treetops. As they stared at it it went on toward the spot where the bomb had exploded.

"Do you suppose the slug-ship landed and these are—creatures from it?" asked Caryl in a whisper.

"They'd know better than to go into radioactive territory," said Lor slowly. "They aimed their bomb by sight and undoubtedly watched it explode. They wouldn't need to take a close look now."

The plane with the oddly insufficient wings lifted a little and disappeared over a hilltop. There was silence among the group of humans who saw it vanish.

"There've been probably sixty thousand planets landed on," said Lor sourly, "in some thousands of space-voyages. And there's never been a sign of an intelligent race except us. And we have to find, not one intelligent race but two! One of them is up to atmosphere-fliers but doesn't know an atom bomb when it goes off and goes doddering over to look at the crater!"

He added angrily, "We've led the slug-creatures to the planet of a second intelligent race—Not intending to but we've done it! The slug-creatures will think this is our home planet! We know what they tried to do to us! They'll certainly try to do the same to all this planet when they get a little more help from home!"

He clenched and unclenched his hands. "And it's not doing Earth any good, either! Another exploring ship will blunder into that chlorine-breather's culture sooner or later! If those creatures have overdrive they're no more limited to one solar system than we are. Humans are bound to run into them! And what will happen then?"

"It would be interesting," said Caryl's father meditatively, "to know why they attacked us on sight. Breathing atmospheres that are mutually poisonous, we couldn't very well interfere with each other's way of life. We'd have nothing to gain by quarreling with them. Why did they attack us? What could they gain by destroying us?"

Lon said bitterly, "Why does a weasel kill what it can't possibly make use of?"

Why did people hunt long after the food ceased to count? Why did people do deep-sea fishing for fish they couldn't possibly eat? Why did they follow dogs running after a fox? Why do we still hunt with cameras and superson guns?"

**B**URTON said deliberately, "That's a rather pessimistic statement, Lon. One only hunts things that can't fight back, for sport. One doesn't hunt dangerous things for the fun of it. If they think killing us is merely a particularly lively form of sport they must think their weapons are enormously better than any we can make."

"They could be wrong!" snapped Lon. "We haven't gone in for fighting each other for a couple of generations now. But we haven't lost the knack if the need arises! There's the plane, coming back. Give me the heat-ray, Caryl!"

The oddly underwinged plane reappeared over a hilltop. It headed back on nearly the same course it had followed to the bomb-crater. It flew low, hardly a hundred feet above the hilltops. And it traveled with a vast leisureliness. It specifically did not travel fast enough to be supported by such a small wing-area at such a speed. It made hardly forty miles an hour.

Lon turned on the heat-ray and sprayed it into the foliage off to one side. Smoke arose—thick, pungent smoke. It went skyward in a dense column and Caryl coughed and drew back. The smoke was aromatic indeed. To a human the sudden eruption of white vapor would have been plainly a signal. The party from the *Marintha* waited for the plane to swerve nearer, to see the cause of the signal and so come within waving range from among the trees.

But the plane did not swerve. It went on, whether placidly from lack of interest or because its errand was too important to allow of deviation, could not be guessed. There were ports in its side, and for an instant they were in line. There was movement inside. It could be detected. But it was not possible to see what sort of creature moved.

The humans waved and shouted fran-

tically. The plane kept on. It went placidly and obviously over the tree-tops. It displayed no haste at all. It vanished.

From its first appearance to its last not more than ten minutes had elapsed. But the humans had hoped during those minutes. The disappearance of the plane without any heed paid to their signals was a shock.

"I suppose," said Caryl unhappily, "they thought that anybody around must have been killed."

The flaming stuff swiftly ceased to emit smoke. Lon looked at it with a scowl. The embers glowed only briefly afterward. Then the fire was out. It had actually flamed as long as the heat-ray played on it, no longer. The living plants seemed possessed of an enormous fluid content or else pumped much liquid sap to any part that was scorched. A forest fire could not sustain itself in such vegetation.

"They didn't worry about a fire in the woodland," said Lon moodily. "They must have known it would go out of itself. But why weren't they curious about how it got started? Or will they tip off somebody else to investigate?"

He stared in the direction in which the plane had vanished. He saw nothing but the thick lush growth which climbed the hillsides and filled the valleys between them.

Caryl's father said practically, "If there are intelligent creatures here we must get in touch with them if only to try to warn them of what they can expect. But how will we set about it if they ignore our signals?"

"We'll go hunt them," said Lon moodily. "It can't be far. That plane wasn't making over forty miles an hour and it was here within half an hour after the bomb dropped. It took off from somewhere less than twenty miles away.

"We've no idea of compass directions, of course, but we should be able to keep a fairly straight line along its course that far! And on top of the mountains yonder—I guess at three miles—we should be able to spot an airfield without any trouble."

Burton said drily, "But will we be welcome, bringing news that we've drawn the slug-ship here and that it's likely to come back with some of its friends to make a sporting event out of their massacre?"

"What else can we do?" demanded Lon. "Hole up and try to save our own skins? For what?"

He started off with Caryl by his side. The question of why they should try to save their own skins was relevant. They were in some sense like the space-castaways of romantic fiction. But castaways without reason for hope would still have no such reason for despair as they had. Other castaways could look for rescue for their children, if not for themselves.

But the conditions of their presence on this unnamed planet implied such danger to the rest of humanity that if it were not warned they would not only be castaways, but the sole survivors of the race. And that was not a prospect they could face. It was preferable to die for even a one-in-a-thousand chance to avoid it. There was no point in living as the only humans left.

**T**HEY went through the jungle. There was little undergrowth. Almost all the trees grew in colonies, each interconnected by its branches with others. The result was an enormous density of foliage overhead and almost bare ground below.

But there was creeping stuff with long feathery filaments, which crept over the ground and matted itself so that it made a springy carpet of a powdery gray. Here and there it bloomed—tiny flowers of startling magenta. There was no noise except the faint almost imperceptible hum which had been cut so abruptly when the bomb went off and had returned so abruptly a short while after.

They went on for a long way, then Burton said, "Hsst!"

They stopped. He handed the heavy firearm to Caryl's father and drew his superson pistol. He was looking upward. He took half a dozen catlike steps, sud-

denly threw up the pistol and pulled trigger.

It made that curious resonant hum of all superson weapons in addition to the ultra-high frequency which strikes unconscious any living thing it touches. It was a very brief sound. There was a pause, then a series of tiny crashings, then a thump.

Burton picked up a small furry thing with enormous eyes. There was membrane between its legs. It was plainly an arboreal creature which coasted through the air from branch to branch like flying foxes and flying squirrels on Earth.

But its neck was armored with bony scales like a ganoid fish—say, a sturgeon. It had no teeth, but horny, inflexible exposed jaws like a bird's bill. Caryl's father regarded it absorbedly.

"A new species, a new genus, a new phylon," he said. "What did you shoot it for, Burton?"

"It's the first animal I've seen," said Burton drily. "I use the word 'animal' in a very inclusive sense too. If we have to hunt our food we'll have to try this sort of creature, most likely."

"But," said Caryl's father, "not yet. You don't want it as a trophy?"

"Hardly!" said Burton.

Caryl's father put it down gently with a shrug of his shoulders. As a biologist he was interested but as a humanitarian he knew that he had no way of preserving specimens, so he laid it down to revive—as it would—when the effect of the superson pistol wore off.

The ground began to rise, more and more steeply. They came to a patch of extraordinary vegetation like cactus which seemed to be all spines—a foot and two feet long—with no pods to speak of. It covered acres. They went around it.

At five hundred feet they disturbed a huge bird which flapped violently, rose straight up, then winged heavily away. It had feathers but its head was not birdlike at all. It had whiskers and its legs seemed to end in feet which certainly were not claws for roosting on branches.

At a thousand feet elevation there was a tiny rustling and Burton fired again. He went cautiously to look. It was an attenuated body with an animal snout and no external limbs. But it was not a snake. It was warm to the touch.

"Birds with whiskers," growled Burton, "flying platypuses with scales and now warm-blooded snakes with pig-snouts! What will the aviators of this world look like?"

There was no answer. But none of the living creatures was really unreasonable. Flight on Earth is equally an ability of egg-laying birds with feathers and mammalian bats with fur. That all Earthly birds have beaks is an accident derived from the fact that members of a particular biological phylon happened to begin to sprout feathers, and beaks were not incompatible.

The beaks were there first. On this world feathered bodies were not associated with beaks. The creatures who found a place for themselves crawling on their bellies did not happen to be cold-blooded.

The retention of ganoid scales did happen to coincide with the acquisition of gliding-membranes. That was all. The unfamiliar is not necessarily unreasonable. But the existence of an oxygen-breathing intelligent race other than man seemed an impossibility.

The problem of the ancestry of man had been solved by interstellar exploration. On Mars and Titan in the home system of humanity the first adventurers found huge areas of rubble which could be nothing but the debris of shattered cities and the rubbish of a vanished civilization.

**D**ESTRUCTURE had been so complete, however, that no single unshattered article was ever discovered in the wreckage. When overdrive was devised and men traveled to the stars, on planet after planet similar spaces of pure wreckage were found, from the planets of Arcturus to those of Rigel and beyond.

Throughout a two-thousand-light-year globe of space the vanished cities ex-

isted on the planets of appropriate suns. There had been an interstellar culture which had been destroyed more completely than any sacked city of Earth. Nothing was left to reveal what sort of creature had built the cities or their architecture or arts or anything about them save that they were oxygen-breathers and had conquered space.

The mystery of the Lost Race went unsolved for nearly twenty years. Then one surviving structure was found and the skeletal remains of a single member of the vanished people. The answer to the mystery appeared in a manner to arouse at once the sympathy and the irritation of mankind.

The Lost Race was the forerunner of mankind. It had conquered space and solved the problem of unlimited power. It had reached the heights of technical achievement. And perhaps its final conquest was that of time—it had learned to acquire a certain limited foreknowledge of the future.

And it had discovered that the radiations of its power-plants, or perhaps the subtler radiations of deepest space, had so altered the genes of all its members that a mutation lay ahead and their race was about to change to a race of monsters.

The Lost Race had committed suicide rather than see its children metamorphose into hairless, big-headed monstrosities so alien as to be horrifying. It had smashed its cities so that no succeeding race could ever learn to achieve equal disaster. Only on Earth had its self-destruction been incomplete.

On Earth its mutated children did survive. The monstrous descendants the Lost Race had foreseen with such despair were human beings.

The solution of the mystery—quaintly pathetic and oddly insulting as it was—meant, however, that there could be no oxygen-breathing race inimical to men. The Lost Race had wiped out all its enemies and therefore all enemies to its progeny. So that men regarded all the galaxy as proved clear of enemies—an inheritance to be entered upon without fear.

Now the castaways from the *Marintha* had found their security doubly questionable. There was a culture of chlorine-breathers which doubtless was still savage or mindless when the Lost Race committed suicide but which now was farther advanced in some sciences than mankind. And here, on this planet, were oxygen-breathing creatures who had advanced at least to the conquest of its atmosphere.

Lon scrambled up a steep incline and helped Caryl join him. Burton and her father clumped after them. It was not a cautious method of advance on an unexplored world but all men had the habit of confidence. They had lost the idea of apprehension.

Here a sort of pass pierced the mountains. They came to a place where there were no trees and the creeping grayish stuff underfoot gave place to fernlike green growths almost knee-high. Through the pass they could see a wide valley and other mountains beyond.

Then Lon's eyes focussed on a curious shimmering in the air. It looked exactly like a column of smokeless heated air, rising from an unseen spot perhaps two hundred yards away. He halted, lifting a hand for silence.

But as he halted something dropped into the fernlike growth at his feet. There was a crisp *pop* and whitish vapor spouted out. He leaped, trying to drag Caryl with him. But she staggered three steps and collapsed. There were two other poppings and two other globular clouds of mist arose. Burton and Caryl's father staggered and crumpled to the ground.

Lon caught Caryl to his shoulder and the superson pistol hummed viciously. He thumbed the beam-control to fan it out, swept it back and forth vengefully. Then he plunged downhill with Caryl.

She was alive. She breathed. Her pulse—as he discovered when he stopped and bent over her—was fainter than normal but fairly regular. She had gasped at the sound and sight of the spurting vapor. A little of it had entered her lungs but only a little. Even

as he swore in a consuming rage her eyelids fluttered.

He stood up and sent a second fan-beam barrage completely around him. Then he bent over Caryl and began to give her artificial respiration. He was furious with an atavistic, bloodthirsty wrath. She had taken three steps before she fell unconscious. But Burton and her father had dropped in their tracks. Lon could not hope to do anything for them.

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## CHAPTER IV

### *Contact*

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**I**T was very still. There was always that odd humming background-noise, never quite loud enough to attract one's attention but always audible if one stopped to listen. But there was no other noise of any sort. Lon worked grimly on Caryl.

Twice more he sent a fan-beam from his superson pistol through a complete circle. Anything living that the beam hit would be reduced to unconsciousness by the ultra-high-frequency sound-waves. There could be no creeping up on him under such circumstances.

At long last Caryl gasped again, panted and swayed dizzily. She struggled to sit up.

"What happened?"

"Gas," said Lon grimly. "I held my breath and jumped, dragging you. You got a little of it. Your father and Burton keeled over. How do you feel?"

"I'm—all right," panted Caryl. She got unsteadily to her feet. Then she said, surprised, "I'm *quite* all right. Really I am! Now what do we do?"

Lon was suspicious but her color was good and her pulse again was strong and regular.

"It may have been an anaesthetic gas," he said grudgingly. "We'll see. Tell me if you have any queer feelings turn up—if your heart pounds or anything of that sort. We'll go see about the others. Get your pistol out. Shoot

anything that moves. If gas turns up again hold your breath and run!"

He led the way back uphill. But this time his pistol was ready in his hand and he was all vigilance and cold caution. Once he thought he heard a movement and his pistol hummed. But when he angrily tracked down the noise he found a tiny shelter of sticks and leaves built around a tree-trunk and inside it small creatures which at a guess would grow up to fly, flapping heavily, while wearing whiskers.

They reached the clear space with the ferny greenstuff underfoot. They saw the figures of their two companions. They sprawled limply in the knee-high ferns. Lon began to search with his eyes for enemies. But Caryl watched the prone figures.

She cried softly, "Lon! They're alive! They're breathing!"

He looked quickly. It was true. The two bodies did move slightly in the rhythm of breathing.

"It's anaesthesia," he admitted. "But so's this!"

Again he sent a beam of inaudible sound from the superson pistol. He played it methodically on all the landscape within view. Any creature which could see him was bound to get a dosage of the stunning vibrations.

Then he went openly to the unconscious two men from the *Marintha*. They breathed stertorously. Their bodies were lax. There was a tiny incrustation of microscopic crystals on the foliage near them.

He bent over, holding his breath, and dragged them away from that residue of the gas-bombs' contents. Caryl began to work on her father, using the same technic of artificial respiration Lon had used on her. He hesitated a moment, then moved away with his finger on his pistol-trigger.

Whatever had dropped near him hadn't been moving fast. It couldn't have been thrown or propelled from any great distance. He searched with grim caution. But when he found one of the attackers he did not believe his eyes.

The attacker was a human being.

Not an Earth-human, to be sure—the stunned, prone figure, naked except for sandals and a curious single garment of closely linked metal plates, was not over four feet tall. It was slenderly formed though, and in no sense grotesque. It was simply a miniature man.

When the superson beam hit it it had dropped a very simple tube, open at one end and eight inches long. It had no other apparent weapon—if that was a weapon. But in a part of its single metal garment was a row of receptacles like the loops of an ancient cartridge-belt. Most of them were filled with objects that might fit in the dropped tube.

Lon stared blankly. He heard Caryl calling his name, uneasily but not in fear. He heaved the small form over his shoulder and went to her. Her father was already beginning to gasp a little. Apparently artificial respiration hastened recovery from gas, a little bit but not much. Its effect seemed not to last as long as that of a superson beam at full power.

He dumped the limp small figure down before Caryl. "A local citizen," he observed curtly. "Your father will see the answer. I think I see it myself. Do you need anything?"

"No," said Caryl, staring with all her eyes at the small human figure. "I was just—uneasy."

"There were some more of these folk," said Lon. "I'm going to look for them. If this fellow starts to struggle shoot him again—but gently."

HE went back to hunt for other small-men. He found two. He remembered the column of what looked like hot air rising. He moved cautiously toward it through brushwood that rose breast-high. He heard a rustling before him and fired quickly. He heard the crash as something fell. An instant later he was looking down at a young female of the same miniature race. The man had been well-formed, but this girl was beautiful. Lon felt abruptly like a criminal.

He went on, more cautiously than before.

There was a clearing of sorts. He saw what looked at first like a hut. Then he realized that it was a plane not unlike the one he had seen before. It stood in a small place which surely allowed of no takeoff run.

There were two others of the miniature girls in sight. One of them tended something which definitely was not a fire but from which the column of heated air rose straight upward. The other spoke to her in a clear high voice whose syllables sounded like trills.

Lon raised his pistol. He felt lower than a scoundrel but there was nothing else to do. He did wait, though, until the one by the fire-thing drew back. Then he pulled trigger quickly, twice. The two girls collapsed limply.

He moved out and made sure that the one near the cooking could not possibly be scorched. He returned to the under-brush and brought out the other unconscious girl. He went back to Caryl. Her father was examining the small man with increasing enthusiasm. Burton was already trying groggily to stand up.

Lon told them briefly what he had seen and done. Caryl's father picked up the small-man tenderly. Burton came unsteadily in Lon's wake, returning more nearly to normal with every step.

They came out to the clearing and the plane to find Caryl and her father already there.

"It's beautiful!" said the biologist, beaming. "Parallel evolution, Lon. They're descendants of the Lost Race, too!"

"I'm encouraged—a little," said Lon. "They saw us and shot at us, just as we'd have done. They used gas. We use superson pistols. That suggests they have reached about the same stage of development we have. Our hunting weapons used to kill or wound. We have better sense than that now. So have they. If their technical level is as high—"

He went to the plane. The door was small but he managed to worm his way in. He came out minutes later with a square of cloth he had ripped loose. He began to tear it into strips.

"We've got to get these people tied up so we can try to communicate with them," he said, frowning. "I didn't see a motor in that plane."

He began to bind the small-men's hands and feet. Caryl, hesitating, took the other strips when he handed them to her and set to work on the extraordinarily delicate-seeming small-man girls.

The first man stirred in his bonds. Lon went over to him and lifted him to a comfortable sitting position. The small-man's eyes opened and as they cleared they looked startled. Then they flashed and his muscles made a convulsive heave, a tremendous effort to break the cloth strips which bound him.

"Easy!" said Lon, in as friendly a tone as he could manage. "What I'm saying is gibberish to you, of course, but we've got to make friends with you even if we have to break your neck!"

Caryl protested, "That's no way, Lon! Let me try!"

She spoke to the bound small-man, pointing to the three girls as unharmed as himself. Burton went over to the fire-thing.

"This is food," said Burton cheerfully, "and they're human in a way, so it must be human food. Smells good, anyway—but what's cooking it?"

There was a round ring, which seemed to be of metal. It lay on the ground. In its center there was a reddish luminosity which gave off heat. A metal pot bubbled above it and the smell was savory.

Caryl's father said enthusiastically, "Lon, my boy, it's marvelous! The Lost Race wiped itself out. We know that! Everywhere we've found the ruins of their cities, the air and vegetation has been right for men. But there's been no shattered Lost-Race city found on Earth! Do you see what that means?"

Lon listened while Caryl talked quietly to the first-waked of the three small-men and then included a second in her unthreatening if unintelligible conversation.

"They must have been like us, the Lost Race," said Caryl's father zestfully. "They wouldn't have eliminated

themselves until they made sure they had to. They'd wait until the monstrous children began to turn up—our ancestors. Our ancestors must have begun to be born!

"And the existence of men on Earth—look at it, Lon! What would we do if we faced the tragedy the Lost Race knew was before them? Most of us would want to die but some of us—a few—would love our children even if they were monsters. Some of us would slip away from the rest of our race.

"We'd take our strange and alien children—whom we loved—to a planet where they could live. Our hearts would be broken and we wouldn't want to live but we wouldn't want even our monstrous children to die. We'd stay with them, isolated from all the rest of our kind. We'd teach them as much as we could.

"We'd die gladly when the time came but—they wouldn't die with us. You can even guess at a pathetic attempt to teach our ancestors that there is knowledge which had caused overwhelming catastrophe—a tragedy. You can be sure those first children of the Lost Race weren't all alike—not even one species.

"So—there were other races and other species of mankind than our own. In time we—*homo sapiens*—had to wipe them out and now there's only one species of man on earth. And there's probably only one here. But they're men as we are! They're simply another species! And—"

**C**ARYL said quietly, "Lon, I think we're coming to an understanding. One of the girls is awake. I'm going to turn her loose."

Lon watched. One of the three girls was staring about affrightedly. One of the men spoke. His voice was not as deep as those of the three Earth-men but it was masculine enough. His tone was steady and not in the least panicky.

The terror lessened in the girl's eyes. Caryl smiled at her and she unknotted the strip around her ankles. She loosed the girl's hands and stood back.

All three men were conscious now.

They regarded the Earth-people with keen estimating eyes. The girl spoke uneasily and one of the small-men answered without turning his eyes from the Earthfolk. His tone was quaintly dry.

"I like these people," said Burton abruptly. "They don't panic."

The slim tiny girl moved toward the cooking-pot. Burton moved aside as if for a child. He smiled at her. She gasped a little but the gentleness of his expression could not be misunderstood. She smiled back.

There was a sudden release of tension. The four Earth-humans relaxed—though Lon's hand stayed close to his pistol.

"They'll be figuring as I did," observed Lon. "If our weapons aren't lethal, any more than theirs, they'll figure we probably think the same way they do."

The man spoke again. The girl rose, caught Caryl's eyes and beckoned to her. She led the way to one of the bound small-men, plucked an eight-inch tube from a hanger in his belt and handed it to Caryl.

"That's his weapon," said Lon quickly. "She's handing it over. She's offering a bargain."

The girl emptied the receptacles in the small-man's cartridge-belt. She handed the round objects also to Caryl. Then she touched the small-man's bonds and looked anxiously at the Earth girl.

"Right!" said Lon, his eyes keen. "Turn him loose!"

Caryl bent to loose the small-man. The girl's fingers flew, freeing him. The small-man stood up and shook himself. He was not quite as tall as Caryl's shoulder. An earthly dwarf of his height would have been grotesque. But he had the build of a graceful and well-muscled boy of eleven or twelve. His face, though, was that of a mature and intelligent adult.

He spoke to Lon, went to one of his bound companions—Lon already had his tube-weapon—and passed over the ammunition for the thing. He went to the other and surrendered his weapon

also and his ammunition. Then he pointed to the bonds. Lon nodded. He released the other two.

Lon gravely returned to him the weapons and ammunition he had just surrendered.

Lon was a little tense but the small-man's expression was reassuring. At first it was blank amazement. Then he regarded Lon in keenly intelligent estimation. Then he grinned. He nodded cordially and spoke to the others. Their whole air changed. Lon grinned faintly. Caryl's father beamed upon the small-men as happily as if he had invented them.

Burton grunted, "They seem to get the idea. Now, if we're friends, are they going to invite us to lunch?"

It was a curious situation. The other two small-men girls began to stir. Caryl went to release them. One of the small-men went to help her. He grinned slyly as if amused at her size. She smiled back. The atmosphere of the camp was oddly, confidently relaxed. The first girl to waken climbed into the plane. She came out with bowls and tiny but humanlike spoons. Burton counted.

"Bowls and spoons for all," he said happily. "We eat!"

But Lon was thinking hard. "This is a break!" he told Caryl's father. "If they're descended from the same ancestors we are they must have something like the same mental processes.

"We can establish some sort of communication without having to figure out a brand-new type of psychology first." But then he added in an odd change to despair, "But they're not likely to be able to put up a fight against the slug-ships!"

Caryl smiled at Lon. "I'm not so sure!" she said reassuringly. "What do they use instead of fire? Would they use non-lethal weapons if they were primitive? Remember, they wouldn't have thought of making a bargain—of giving up their weapons for freedom—unless it would have been one they'd have made with us if things had turned out the other way about. They're civilized, Lon!"

"I hope so," growled Lon. "We've got to get started on some system of talking. I'll see what I can do."

HE beckoned to one of the small-men and cleared a bit of ground of the ferny stuff. The humus underneath was honest black loam, the decay-product of plants whose basis was cellulose whatever their forms might be. He patted the cleared earth smooth. He began to sketch, explaining as he went along, though the words would be useless as such. But he knew that the tones of his voice would help convey his meaning.

Another of the small-men came to look—the third. Burton and Caryl were at the metal ring which served as an open fire without smoke or fire or odor. The three girls grinned shyly at Caryl and laughed outright at Burton. He made something of a spectacle of himself to make them laugh more.

One of the girls brought a steaming bowl to a small-man. He nodded absently and took it. Another offered a bowl to Lon. He nodded absently and took it while he sketched. He went on with his painstaking explanations, tasting the contents of the bowl in the intervals when the three small-men absorbently discussed his sketches. He felt that most of his meaning, at least, was getting across.

It was a lengthy business to convey the idea of space-travel by diagrams and gestures. It was more difficult to tell them the story of an attack by the slug-ship, their escape, their landing on this planet and the atom-bomb that had vaporized the *Marintha*. But he did his best.

"Now comes the tough part," he said over his shoulder to Caryl's father. The biologist had come to stand behind him. "Telling what has happened in pictures is tough enough. Telling what's likely to happen is something else!"

One of the small-men suddenly reached over and touched Lon's shoulder. He put his hand to his ear. The other small-men, their faces serious, stiffened in listening attitudes. Lon strained his own ears.

The tiny, humming background-noise ceased abruptly. For half a minute there was oppressive, ear-cracking stillness everywhere. Then, quite suddenly, the humming began again. The small-men relaxed. But their expressions were very intent. One spoke in their liquid, trilling language.

Another leaned forward and began to speak just as Lon had done, drawing sketches with curious precision in the smoothed-over loam and accompanying each sketch with a careful and sometimes lengthy explanation of which only his intonation had meaning. But it helped amazingly in the conveyance of his message.

A long time later—a very long time later—Lon got up from the ground, filled with a sick rage.

Caryl turned to him, smiling. "Lon, I'm making friends with these girls. They're darlings! And—Lon! What's the matter?"

He said thickly, "These people know things! The plane that passed over us spotted us and told these folk to look out for us. So they checked my story as I went along. I don't know what sort of civilization they've got but they know things! They know all about the slug-ship.

"They've just told me that it sent back word even from overdrive—we humans can't do that—and more slug-ships started to follow while it was still pretending it couldn't overtake us. That was while it believed us streaking for home.

"The first slug-ship's still hovering overhead. It's dropped another atom-bomb on their biggest city—they had time to get the people out—and smashed it completely. And there will be a good-sized slug-ship fleet along tomorrow and still more are on the way! They know things! But they're apparently helpless! They're not trying to do a thing!"

His hands clenched and unclenched in impotent fury.

"But how could they know, Lon?" asked Caryl blankly. "How could these people even know about another atom-bomb dropping? They haven't radio or

anything like that! We'd have heard it!"

"Don't ask me how they know!" raged Lon. "But they do! They made a star-map with the Crab Nebula on it and pointed out the solar system the slug-ship came from! There's no question. They *know!*"

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## CHAPTER V

### *Reverse—View*

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THE plane flew with vast leisure over the jungle-roof. Lon was horribly restless. Somehow, he had no uneasiness about the friendship the small-people now displayed.

They seemed to think it diverting that the people of Earth and themselves had started out by conflict, that they had had almost won by knocking out three of the Earthfolk and that then Lon had turned the tables on them without any animus—as evidenced by the return of their weapons as soon as they made overtures for an understanding.

The return of their weapons had been decisive. It turned their ambush and counter-ambush into a sporting event, which was very much to the small-people's taste because they had scored as well as the Earthlings.

But Lon was horribly restless. He had told them, with sketches and diagrams and gestures, of the danger that hung over their planet. They had given him further details, making the danger more imminent and greater than before. But they seemed undisturbed, like children. He couldn't make out the status of their civilization.

This plane, now—when it took off it simply shot straight upward with a hissing noise and then it went off across the jungle without any noticeable haste or urgency. There was no motor that he could detect. The wings, in particular, were hopelessly inadequate to perform the function they very visibly did. Inside there was no instrument-

board, there were no controls except a couple of levers made apparently of plastic. Altogether the device looked very much more like a make-believe construction than the product of advanced technology. But it worked! It flew!

Their weapon was of the crudest possible sort—a tube with one open end, with no handle, no sight, no particular provision for accuracy. To be sure it was essentially a short-range weapon and made a gas-cloud on impact so that great accuracy wasn't necessary.

But again it had the quality of a child's make-believe. And when they told him that another atomic bomb had been dropped on their largest city it had been with the solemnity of children relating an imaginary catastrophe which was part of a game they played. It was as if the city could be replaced or restored as easily as by merely imagining it. How had they known about that bomb business, anyhow? They had no radios. Lon had heard no sound at all except their voices.

Hold on! There was the time when they had all stopped and listened. The humming background-noise like the normally unnoticed sound of insects in the country and of traffic in a city had stopped as if a switch were opened. There was dead, oppressive silence for almost a minute. Then the noise abruptly recommenced.

What did that mean? The same thing had followed the first bomb. He had noticed the shocking silence after the blast of the bomb had ended. It lasted much longer that time and it had ended in exactly the same way—with the abrupt restoration of the background-noise.

Caryl said, beside him, "You're bothered, Lon?"

"Plenty!" he said grimly, "Absolutely nothing has happened to make things better! The slug-ship people are on the way. These people seem to be helpless. From our standpoint it is utterly necessary that a message be got somehow to Earth.

*[Turn page]*

"Sooner or later another Earth-ship is going to run into the slug-creatures and they'll swarm to Earth as they're swarming here. We've got to warn our people! We've got to! Some sort of defense has to be contrived—or better, some means of attack.

"Nobody can win a fight simply by defense! Earth's got to be warned to get set for fighting! We're the only people who could warn them, and we haven't the ghost of a chance! We'll be dead soon after that slug-fleet gets here!"

"Maybe not," said Caryl. "These people know what's coming, you say. And they certainly don't look worried! They act as if they're having a wonderful time!"

"I wish I could," said Lon. "I crawl inside when I think—and I can't think of anything else! These people know they're helpless! They're not trying to do a thing!"

"Maybe," said Caryl, "they've already done it."

Lon turned to stare. "Now, what do you mean by that?"

"I don't know," admitted Caryl. "But they're not savages. Did you notice the thing they cooked with? It was just a ring of metal. They laid it on the ground. They put the pot on it. The air inside the ring glowed. They cooked.

"Just before we started off one of the girls picked it up and stored it in the plane here. It wasn't even hot! That's a sort of civilization we haven't attained yet. Maybe they're ahead of us in civilization and have defenses so they're not worrying."

"An atom-bomb blew up their biggest city," said Lon sourly. "They wouldn't let that happen if they could help it! And look at the control-system for this plane! It's childish! There's not an instrument in sight! How can people be civilized without instruments?"

"Why," asked Caryl meditatively, "do we use so many instruments?"

"To be sure our machines are working properly," said Lon. "So we can tell if anything goes wrong."

"Suppose they know nothing can go

wrong?" suggested Caryl. "Then they wouldn't need instruments."

"They'd need radar, anyhow," insisted Lon. "They'd need weather-warning devices. They'd need things to keep them from flying into mountains in the dark!"

"Maybe they've got them," said Caryl. "But don't ask me where they are! I think these people are confident instead of oblivious to danger. And the girls are darlings! They act like beautifully raised children! They're adorable!"

"I would trade a lot of cuteness," said Lon grimly, "for one small space-ship with some weapons I could fight with!"

The small plane went on in leisurely fashion over the jungle. It did not fly high. It was rarely more than a hundred feet above the tree-tops. And it did not fly in the manner of atmosphere-fliers on Earth. It made no attempt at level flight.

CROSSING a valley, for example, it coasted down the descending slope and climbed the ascending slope on the farther side. It seemed to have plenty of power but it flew low as if the pilot considered there was greater safety close to solid ground.

But he did not pay close attention to his piloting. He turned his head and talked to the others in very lively fashion, not looking ahead for minutes at a time. Yet the plane—so simple that it looked crude and childlike—went on with perfect steadiness.

They descended a steep slope and flew out over water. The surface was almost glassy, but ahead over the farther shore there were storm-clouds to which the pilot paid no attention at all. They flew beyond the water and under the storm-cloud. Presently there were great sheets of rain all about them. But there was little or no wind.

The plane flew almost as steadily as before, and the six small-folk chattered gaily enough. Caryl listened closely. Lon became lost in gloomy thought. Burton leaned forward.

"Lon," he said vexedly. "I don't understand this! I've known a lot of peo-

ple, and only pretty smart ones—and vision-screen actors—have much expression in their voices. But these people talk well! They put all sorts of shading into their tones.

"That chap is dry"—he nodded toward one of the small-men—"and that girl says things demurely and all the others laugh. I'm pretty sure it's not what she says but the way she says it that counts. I'm beginning to have hopes. These people aren't savages!"

Caryl's father chuckled. "As a biologist," he said contentedly, "I have observed that the function of an organ is not always in proportion to its visibility. The pancreatic islands, the endocrine system—none of those very important organs is as obvious as a man's nose. We can do without noses, but not without our pituitary bodies!"

"Perhaps these people have reduced their devices to a proper place—tucked out of sight. Small, and highly efficient, and requiring no attention. As, for example, on occasion we have to blow our noses but we never have to pay any attention to our interstitial glands.

"It may be that our small friends put their technical apparatus out of sight and pay no attention to it, just as we ignore our gall-bladders. It would imply a finer mechanism and a superior symbiosis of mechanism to the race it serves."

Lon shrugged. He looked out of a side-port. Overhead lightning flashed and thunder roared. Storm-torn clouds were shown by the lightning-flashes, flung about by conflicting winds. But the same lightning-flashes showed the teeming rain descending almost vertically.

The foliage—so near below—seemed merely to huddle quietly under a totally tranquil downpour. Storm-winds unquestionably blew aloft but near the ground they simply did not. And that was something so improbable as to make him bewildered. It was not a thing to be easily believed even while one watched it.

A long time later they emerged from the farther edge of the storm-clouds. There was bright sunshine. Below them

was continued jungle. Another range of mountains arose ahead, and the small plane continued toward it. One last small hill flowed beneath them—and there was a city.

Lon's heart sank. As a city, the sight was utterly disappointing. There were no great buildings. There was no architecture. There were no parks, nor any paved ways, nor any wheeled vehicles in view. It was simply an expanse of small dwellings of undistinguished appearance.

None was over a single story in height. They were scattered over a very large area. They were not even rectangular but had straight walls and curved ones as if at their occupants' fancy. There were, here and there, small patches of the communally-growing trees and occasional irregular patches of brushwood.

At first glance it looked rather like the casual encampment of savages who would move on when the idea pleased them. On second glance the effect of impermanence vanished. There was informality in the arrangement and in the structures themselves but there was a pattern too. And the houses looked better as one studied them a second time.

But Lon did not look again. He had eyes only for a huge metal sphere on the ground just where the hillside began to rise steeply toward a crest some thousands of feet high. The sphere was all of forty feet in diameter, and it was plainly constructed of metal plates welded to an inner stronger frame.

**A**S he looked, an enormous section of the mountainside lifted, disclosing a monstrous opening all of sixty feet high and a hundred broad. There was blank darkness within it. And as the opening yawned the metal globe moved smoothly over green turf—not even tracking it—and disappeared in the darkness.

The great door tilted down and settled into place. There was nothing in view but green-clad hillsides and the curiously tranquil jungle with its clumped communities of trees, and the

sprawled-out city which at first glance looked like the casual encampment of savages.

The plane slowed in its flight and settled down without a run. It was close by one of the houses. There was a small shelter before it—obviously intended as a storage-place. It was, in fact, a private hangar. And Lon saw similar shelters close to or incorporated in each of the two or three other buildings near enough to be examined.

The pilot casually opened the exit-port in the plane's side and slid out. The four Earth-people wormed their way uncomfortably out and to the ground. The small-people chattered cheerfully, and one of the girls began to hand out an assortment of small game.

There were two of the big-eyed air-gliding creatures with the ganoid scales. There was a feathered thing with incredible iridescent plumage. There was almost a colony of tiny creatures with irresistibly humorous solemn faces and tiny paws folded as if in prayer.

The small-man girl smiled at them as she handed them over. The six small-folk had evidently been upon a hunting-party by plane when the survivors of the *Marintha* fell in with them but whether they hunted for food or sport or pets could not be told.

Certainly the number of small creatures around the houses was greater than in the jungle. Many more things of small size could be seen at a glance than they'd seen in all their journeying.

"I'm stumped!" said Lon helplessly. "But they're civilized! Only a civilized race could make a door like that and a metal object that large! But—"

Other little people appeared, walking lightly toward them. They looked at the Earth-folk with enormous interest but no surprise whatever. Which was disturbing, because the hunting-party members had been starkly astonished—or had they? They were in ambush. Maybe they were astonished only at being overcome. In any case word had come on ahead about them. But how?

The newcomers grinned at the six who had found the Earthlings. Trilling speech surrounded them. There was laughter. It was such good-humored laughter as old acquaintances exchange when one of their number has had a humorous mishap befall him.

The pilot of the plane brought one of the small-men to Lon and spoke in an apparent form of introduction. The other small-man grinned, his eyes crinkling deeply at the corners. The small-folk eyes were longer than Earth eyes. Lon put out his hand.

The small-man looked at it and put out his own. Lon shook it. The small-man looked surprised, then chuckled. He put out his hand again.

For minutes the four Earthlings were kept busy shaking hands. Each newcomer learned of the odd custom and immediately tried it with each of the four Earth people. Once they had made the round they tried it all over again. They considered it humorous. Presently they were shaking hands with each other to delighted laughter.

"Confound it!" growled Lon, sunk in gloom again. "They're only children! They haven't a serious thought in their heads!"

"The highest standard of education ever known," said Caryl's father drily, "was in ancient Athens, and they were notoriously always looking for some new thing. It occurs to me, Lon, that the difference between a savage and a citizen of the highest possible culture wouldn't be so great on the surface."

"They'd both have leisure and they'd both be completely unworried about everyday affairs. They'd both feel completely secure. We might be looking at either status. It's the in-between people like us of Earth who worry and fret."

ONE of the girls who'd been in the plane came back from the near by house. She carried a sheet of what looked like milk-white plastic. She handed it casually to the man to whom Lon had been presented and he sketched quickly. Lines and shadings appeared with startling clarity. He showed it to

Lon. Lon gave a little sigh of relief.

"I'm going in where that metal globe disappeared," he, told Caryl. "They want to talk machinery to me. You can enjoy yourself with their cuteness!"

He strode away, following his new guide. It was a walk of some length but there was no ground-transportation. The life of the small-men was evidently lived at a very leisurely tempo, which there was no way to speed up in time of emergency like the present.

There was a small door let into the hillside. Inside was a long, deep tunnel of a size to cramp a man of Lon's height. The light overhead baffled him entirely. It looked like a ribbon of plastic which glowed without heat and made the tunnel as bright as day.

Then, too, the question arose of why an underground installation had been built in the first place. If for safety against attack, it would promise real help for the Earthlings. It would imply warfare and weapons and very probably space-ships.

Or—but this idea Lon regarded with doubt—there might be some other form of life in symbiosis with the small-people and this other form of life might have intelligence and prefer to be underground.

The guess was far-fetched. Both were. And both were wrong. Presently the tunnel ended and there was a truly gigantic cavern, with cross-ribbons of the same illuminant on its hundred-foot-high ceiling, and there were several cryptic masses of motionless metal in the center. The motionless objects were electrical, Lon was sure.

Two of them were seventy feet high—the height of a seven-story building—and sixty around their bases, and they were of bewildering simplicity. But flickering blue glows—straight corona-effects—hovered about certain of their parts and somehow there was the feeling of incalculable power in them.

Small-men labored within the forty-foot globe. They popped into view from its interior, and went to a small door on the far side of the cavern, and came back carrying small loads which they

took into the inside of the globe again. They turned their heads to look at Lon and grin at him as he followed toward another small door not far from the one they used.

Here was a closed room with a soft carpet and a blank end-wall. A beaming little man—quite the oldest of the small-men Lon had seen—rubbed his hands exuberantly as Lon came in. He waved his hand at the blank wall.

The lights went out and a picture in color appeared there. It was vastly more true in tinting than Earthly vision-screens. It began with a picture of a bomb-crater—a space a half-mile across blasted clean of everything and lined with a molten glassy stuff.

The picture was taken from the air. The plane from which it had been taken plainly wavered and wabbled in the air-currents on which it floated. Lon knew somehow that this was the bomb-crater left by the bomb which had vaporized the *Marintha*.

The picture held for a space. Then it flicked off. And then there appeared an extraordinary view of swirling vapor which Lon blinked at blankly. It had all the violence of an explosion, only it wasn't one. It was an implosion—an explosion in reverse.

Lon was too confused to realize what he was seeing until all the swirlings ended and suddenly the tumult cleared away and he looked down from a seemingly quite steady platform in mid-air at the vanished *Marintha*. He caught his breath sharply.

Then he saw moving figures. He saw himself and Caryl and Burton and Caryl's father. The figures were unmistakable but the action was impossible. All four human figures were running and scrambling backward toward the small doomed space-ship.

They reached its side and leaped up backward, landed on its upper side and slithered down into its interior. Then the port closed, and the ship up-ended, turned end-for-end and moved skyward.

Now the point-of-vision of the viewing instrument followed. Up and up the ship went, tumbling in its rise. The sky

above it turned dark and streaks of fire that looked like frozen lightning winked into being and struck it. It continued to rise and others missed it—all on one side—and it retreated into space.

"You saw this?" demanded Lon aloud in his astonishment. "But why run the film backward?"

**H**E stared in utter incredulity as the adventures of the *Marintha* were followed in reverse on the screen—back, all the way back to the attack by the slug-shaped ship off a chlorine planet near the Crab Nebula. And then back beyond that through weeks of journeying toward that system—and then the images grew hazy and indistinct and then there were no more.

The lights came on and the two small-men looked at him hopefully. Lor knitted his brows.

"You ran the film backward," he said, groping. "Was that—was that the way you saw it? Good gosh! Can you track a thing back in time?" His voice rose in pitch. "Can you focus on a thing today and track it back into yesterday and see what happened? Did you go back as far as your instruments will take you?"

He was struck speechless. The two small-men nodded to each other. They seemed satisfied. The screen lighted again. Lon saw the projected record take up again at the moment the slug-ship had first fired on the *Marintha*.

Here the focus was changed somehow to the atmosphere-fin which had been the first object blasted from the *Marintha*'s hull. That stayed in focus on the screen. And he saw the unpleasant yellow planet rotating slowly beyond the bit of wreckage.

He saw the other slug-shaped ships rising from its surface and flashing into overdrive with that strange momentary flashing of all the colors of the rainbow at once. Then the planet's rotation seemed to speed up—indicating the passage of time—and it slowed again and another and much larger fleet took off.

"You've edited the film," said Lon numbly. "So this is how you know all

about us! The first of your people didn't seem to know. They listened—I see! They checked to see whether I'd be telling the exact truth. And I did.

"They knew because that plane went and shot the crater, and then you were able to go back in time and see what caused it. Or maybe you had to wait until your plane got back with your record and you didn't broadcast it to them until you'd seen what the record said." He grew confused. "I'm getting mixed up! Go ahead!"

He prepared to see more marvels. He did. The viewing device which had been able to separate and cling to a shot-off bit of metal fin, weeks in the past and thousands on thousands of parsecs away, now showed the undestroyed *Marintha* stationary in space.

Its viewpoint approached the ship and entered it. Lon saw the now-vaporized little yacht in a series of cross-sections as if it had been sliced through again and again. This was television of a new sort entirely.

Later, he learned that this particular device required another time-stratum than its own to work in. It could not examine in the present, but only in the past of an object on which it was focused. And it could not move into the future by as much as the thousandth of a second. But it was television on a scale unimaginable to earthly science.

"All right," said Lon dazedly, when this was done with. "What do you want now? What's the exhibition for? I'm probably crazy and having delusions but go ahead! What now?"

He was literally dazed by the incredible things he had seen and by their implications. He was almost stunned by these vistas of a science mankind had not dreamed of. Obviously, he realized numbly, if time is a dimension like length and breadth, apparatus could be imagined to explore it when given a conducting medium into the past. But it was so new a concept that his mind balked. It was not even dreamed of among men. But here it worked!

He waved his hands helplessly. The screen lighted again. There was a bit

of machinery in the *Marintha*, quite stationary and very much enlarged. The viewing-device sectioned it all through. The lights came on.

The two small-men, chattering hopefully, led Lon through a door into an adjoining room. It was a workshop of sorts, though there was no single tool in it that he could recognize. There were metal parts on a bench. The small-men pointed to them and very hopefully waited to see what he would do.

It was night and Lon's expression was one of sheer stark raving disbelief when he joined Caryl and the others in the house near which their plane had landed. There were many of the little folk there, and the sound of the girls' voices was like the clear, fluting voices of birds. Caryl was trying to learn the language and it seemed to be an uproarious performance. But she saw Lon's white incredulous face and came to him quickly.

"What's the matter, Lon?" she asked anxiously. "You've had a shock!"

"Shock?" said Lon bewilderedly. "That's no word for it! These people have everything! With their equipment we men—there's no limit to what we could do! But"—he said it in a querulous, unbelieving voice—"of all the stuff in the *Marintha*'s equipment that they could have chosen—they've been trying to duplicate her garbage-disposal unit and make it work! And that's what they want me to help them with!"

slender delicately formed girls of the small race. She had adopted their costume as a mildly venturesome jest and ruddy tinted rays of the just-risen sun made her a startlingly effective figure with the clustered elfin others about her. High delighted laughter arose as she fled at the sight of Lon.

He stayed outside. The air smelled wonderfully fresh and new. All the vegetation was covered with glittering dew-drops, each one seeming a ruby in the crimson sunlight. And there were streaks of cloud to the eastward and all the horizon was a glory of colored light.

Burton and Caryl's father came out a little later. Lon was staring about him with a sort of baffled anger because this was a very beautiful world and it was horrible to think that today, quite certainly, it was to undergo an attack its people could not possibly resist. Very probably the chlorine-breathers of the slug-ship fleet would not even try to land upon it.

But if a mere patrol-ship was equipped to do battle so many light-years from home and carried the material for at least two atomic-bomb warheads for guided missiles as a matter of course—then surely such a fleet as was now on the way would be able to saturate this planet's whole atmosphere with atomic-bomb debris.

They might do it merely from the same sort of blood lust that had appeared in the unwarned attack of the *Marintha*'s pursuer. But an alien race with space-ships would always represent a possible danger to any other culture. It would require no unprecedented arrogance to make the chlorine-breathers merely decide in cold blood to wipe out any possible enemy.

"Morning," said Burton. He breathed deeply of the fragrant morning air. "Days must be pretty long on this planet and the nights too. I usually knock off my eight hours but this morning I feel more rested than usual. I wonder if our friends serve breakfast? The condemned man is ready for his morning meal."

"The slug-fleet's due today," said Lon

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## CHAPTER VI

### *Alien Science*

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THE sunrise next morning was a very beautiful one. Lon heard flute-like trillings and he heard Caryl's laugh. He got up and slipped into his clothes. He had to duck to go through the toy-sized doors of the house—the ceilings were hardly two inches above the top of his head—and his exit into the morning was undignified.

Outside Caryl loomed above the

hardly." And our friends were putting garbage-disposal units together when I left the cave. Quite skilfully, with the help of some shapeless objects I have to assume were machine-tools and which seemed to be learning the whole process quite readily. Those tools are marvels. But—garbage-disposal units!"

Caryl's father said meditatively, "Somehow I have confidence in our small friends. They are human, remember. Not our species, of course—it wouldn't seem likely—but human. And it's human to worry. They'd be worrying if there were any reason for it."

Lon shook his head. "After I showed them the trick of putting the things together I talked to them by way of pictures and whatnot. They've no defense against atom bombs. None whatever. They don't use atomic power.

"They've some tricky way of using the surface heat of their planet. They transform it into electric energy direct. Their sun replaces all they can use a hundred times over. And they broadcast it. That cave is one of their transformer-stations."

"You told us last night," said Burton, yawning. "It's some sort of skin-effect business so the power's all over the planet on the surface and nowhere else. Did you find out what slowed the *Marintha's* fall, Lon?"

"Their broadcast power," said Lon moodily. "It's tricky, making a skin-effect current over a globe, even when you put your current sources underground, as they naturally have to. But the field has some side effects. It tries to make a sort of vertical stasis.

"It resists the up-and-down motion of all energy-containing objects but not their lateral movement. The effect varies as the square of the vertical speed of the object and also diminishes with distance. The resistance to vertical movement begins to be appreciable at about six feet a second and goes up.

"There are all sorts of consequences. We hit the fringe of the effect at a hundred-twelve miles a second. It started to slow us before we hit atmosphere, though we didn't know it. The closer we

got to the ground, the lower the speed it began to work at and of course the greater effect on an object of given velocity."

**B**URTON said drily, "If I shot that antique gun of ours horizontally, the bullet would travel a long way. But if I shot it straight up the bullet would be held up and the gun would burst. Right?"

"Probably," said Lon. "It means they can't have strong vertical wind-currents, hence no strong lateral ones. They don't have violent wind-storms and no hurricanes at all. It means that an air-jet in a tube pointed down has a terrific reaction. The broadcast power tries to keep the air from descending too fast.

"So they lift their planes straight up by turning compressed air loose in tubes pointed straight down and then driving them ahead by similar blasts aimed slanting down and backward. Since the wings push air down they have a terrific lift, too. All of which is a load on their power-plants, though.

"They have to be terrifically powerful because they inherently have to slow up all breezes on the planet's surface. But they couldn't slow up the blast of an atomic bomb. That was too much power applied too suddenly. The two bombs that have gone off blew their power-fuses.

"The first time all their planes crashed. The second time they had warning. Didn't do too much harm, though, because they fly low to get maximum lift from the stasis-effect. Anyhow their trees are spindly and mostly broke the falls. They got their fuses replaced a lot quicker the second time. Remember?"

Burton whistled. "That noise? The background noise like humming that you can always hear. It went off and on again while we were up in the pass."

"That's another side-effect," said Lon. He shrugged. "Yes. It carries broadcast stuff, too. They use code at about twenty thousand cycles audio-frequency—too shrill for our ears to catch but not for

theirs. Almost like the squeak of a bat, which most children can hear but most adults can't. They can listen to it or ignore it. Convenient."

Caryl's father said warmly, "It's as I said, Lon! They've put technology in its place! Their machines are small and efficient and they keep them out of sight and live very comfortably—as unworried and as unweariedly as savages. They're as completely adapted to the mechanics of their way of life as savages used to be on Earth.

"But we still struggle with our contraptions. We're still conscious of our machinery. We have to watch it and oil it and supervise it and tinker with it. We're practically savages by comparison!"

"We are?" said Lon savagely. "But they're playing with garbage-disposal units! With ion-rockets! I left half a dozen of their best brains puttering around with those crazy plastic things they use for automatic tools, trying to understand how a meteor-detector works!"

"They've got machines making them and they're taking them apart trying to understand them. And they're sweating over the mechanism of a Doole-Boyd storage battery! They found out how to make them from that gadget that takes pictures in the past but they don't know how they work!"

There was silence for a moment. Burton whistled tunelessly.

"The thing that hurts," said Lon bitterly, "is that if we men—Earthmen, that is—had a tenth of what they've got Earth would be safe! A couple of months with the gadgets these folks have and we could go to that yellow planet and smash it!"

"We could make the Galaxy safe for humankind. But they can't! With a slug-ship fleet due here today to start the business of wiping them out, they're trying to fathom the boundless mystery of a storage battery!"

He looked very tired. It was bitterness. The small folk had a science which was capable of anything but they had never needed to defend themselves, so

they had no weapons more dangerous than the ones Earth-ships had considered adequate. Earth was no better off.

"Still," said Caryl's father, "it's barely possible that they don't understand our machinery because it's too primitive. Prehistoric man used to make some queerly-shaped pieces of flint that we call scrapers for lack of a better name. But we really have no idea what they were used for.

"And how many civilized men would be able to understand a fire-drill or how it worked if he simply saw the device? Or an Aztec fire-wheel? He'd never have had need for a machine to make a fire with. Without special information would a civilized man be able to guess the purpose of a boomerang? Again—he'd never need anything like that! Maybe these people are bewildered for the same reason. Maybe they've never needed the things we depend on, Lon!"

LOON shook his head. He had given the small-men what information they wanted about devices they had incredibly photographed on the *Marintha* after she had ceased to exist. But he saw no hope of any sort.

He was prepared to do battle with his bare hands, not only for distant Earth but for Caryl's life and his own. But he was doomed, apparently, to mere impotent waiting for the death the slug-ships would presently pour down upon this planet.

There were figures moving about the other houses of this settlement of the small-folk. A plane rose in the still-rosy light of dawn. It looked childishly crude. It went over toward the hillsides where the huge concealed doorway opened upon a most unlikely cavern. It settled to the ground again.

Another plane rose and moved to the same place and settled. Others, by ones and twos and it seemed hundreds. The first planes to land then rose again. They went winging off leisurely into the dawn.

There was at least one plane attached to each of the quaintly individualized dwellings of this community, and every

one rolled out of its shelter and flew comfortably to the one place, there landed and presently rose again and went off. They had not all the same destination. They scattered in every possible direction.

Presently the unhurried mass-movement seemed to dwindle, and as it ended other planes began to arrive from somewhere else. Another city, most likely. This was a swarming of the planes which seemed toys for make-believe. There were so many of them that they looked like a flight of low-flying locusts. Actually, they were well into the hundreds in number.

Some of them landed. The others hovered as if in no hurry at all. But nevertheless there was continuous movement. When one grounded plane rose again and went wheeling around the column of the ones which waited, another settled.

There was a steady thick stream of the planes heading back in the direction from which all had come.

"They're doing something!" said Burton. "Let's go look."

They walked. There was no ground-transportation here. And the thick mass of planes from what might be called the south had diminished to a very small number before they reached the glade by the hidden door. A third flight of planes, numbering at least a thousand, was coming into sight over the jungle from the north.

It was full morning now and the red tints to eastward had almost faded away. Planes were landing all about as they neared the place on which all the inexplicable air-traffic centered. The great door was not quite closed.

It was open a bare half-dozen feet, and under its ponderous valve a string of busy small crude-seeming machines rolled out and rolled back. They were something like tractors with long low platform bodies.

They rolled upon treads which were not quite wheels but were certainly not caterpillar-tracks.

Each, as it came out, was heavily burdened with curious objects of plastic

some four feet long by a foot in diameter—very large objects for men their size to handle.

The small-men guiding the trucks grinned amiably at the three Earthmen. A truck stopped and small-men hopped out of planes and each one seized one of the ungainly objects and staggered back to his plane with it.

He pushed it through the door. He went back for a second and third and fourth, which he disposed of in the same way. Then he climbed back into his plane and it went straight up with a hissing sound and swept away on its return journey.

There happened to be just one of the objects left on the nearest truck, and Lon approached it blankly. The driver grinned amiably at him. He looked like an impish child, sitting on the slightly raised seat with the make-believe-like stick in his hand for the truck's only control.

Lon peered in one open end of the plastic device. It was essentially a foot-across tube of plastic, open at both ends. But Lon could look inside:

He said helplessly, "There's a meteor-detector at one end with a garbage-disposal unit behind it and I think a storage battery behind that. At the other end there's an ion-rocket tube with some deviation-coils to shift the reaction-beam of the rocket. That's all!"

"What the heck do they want? Maybe it'll fly after a fashion with an ion-rocket to push it. But what do they want with flying garbage-disposal units?"

**A** SMALL-MAN reached out his arms and Lon surrendered the object. The little man nodded in friendly fashion and went staggering to his plane with it. More trucks came out. The four-foot-by-one-foot tubes were coming out of the cavern by hundreds and thousands. A remarkable job of mass-production had been performed overnight by the automatic tools underground. But Lon simply could not make head nor tail of it.

One of the small-men who had worked with Lon the night before beckoned to

him. Lon went with him. Small toylike planes continued to arrive empty and depart loaded for more than an hour. In all, some thousands of the tubes were carried away.

No more than a dozen remained on a last not-unloaded truck when all the planes had gone and the great metal globe came out from under the then fully opened door. They remained after the globe was gone.

**B**UT about noon, one of them was used. A small-man, sitting at ease on the truck, suddenly got down from the seat, briskly up-ended one of the tubes so that one end pointed skyward and pressed on a small stud in its side. For seconds nothing happened.

Abruptly the tube began to rise in the air with a swiftly fanning bluish luminescence behind it. It went upward steadily but without haste. It seemed to accelerate slightly as it dwindled with attained height. It vanished, still picking up speed. But it seemed all very commonplace and leisurely and matter-of-fact.

It was all of fifteen minutes before there appeared any consequence of its having taken off. Then a roiling, writhing tumult of yellow vapor appeared in the air a mile or two to the eastward. It descended with deliberation while vast columns of spouting orange-colored smoke spurted furiously, now up, now down, and now in every direction between.

The smoke moved much faster when parallel to the surface of the planet. It formed, in fact, a weirdly-shaped pancake of ominous yellow with writhing, unsubstantial arms. But it descended slowly.

When it reached the ground, nothing happened—nothing happened at all. Which, for a guided missile with an atomic-bomb warhead, was very remarkable indeed. Lon would have appreciated it but he was not present to watch.

He was somewhere else. He was out in space, his eyes burning, surging ahead into battle.

## CHAPTER VII

### *Sporting Life*

**T**HE small folk were—so Lon considered with one part of his mind—a very sporting people. They had given him an intensive half-hour course of instruction in the handling of the forty-foot globe they had built and turned it over to him to fight.

Possibly they considered that, as a more primitive cousin and an experienced handler of space-craft, he might have a better instinctive grasp of the principles of space-fighting than they had. Or it might have seemed to them the sportsmanlike thing to do.

In any case they had done it, and there were half a dozen of them in the globe with him.

Their manner was that of sparkling-eyed excitement. Caryl's father and Burton were also on board the clumsy object. And when Caryl appeared—in her normal Earth-ship costume and flushing hotly when Lon first glanced at her—Lon explained curtly that the small-men had improvised a space-ship and that the three Earthmen were included in its crew. She very firmly climbed aboard too.

She would have had to be ejected by force, and it was not worth while. Lon at the time had no hope except to die fighting. The planet of the small-men, and Earth after it, seemed to him to be doomed. If Caryl were to die anyhow, she might as well do it in the space-ship with the others of the *Marintha*'s crew. At any rate death in space would be clean and quick.

He took the ship up, first startled by its lack of response to power until the small-man beside him—he had been the pilot of the plane the day before—smiled deprecatingly and touched a sketch beside the instrument-board. Then Lon realized that vertical speed was limited by the power-field in a space-ship close to the planet.

The *Marintha* had crash-landed on this planet less than thirty hours before and the spoken-language problem was still unsolved. But a vocabulary of sketch-symbols had grown up which were actually ideographs. A sketch of a Doole-Boyd battery circuit, for example, needed only to be pointed at to indicate the subject under discussion.

It was rather amazing to see the number of tiny replicas of Lon's own sketches fixed in plain view for communication purposes. And not only sketches of objects were there. A sort of ideological shorthand had developed. There were verbs and even a few adjectives. For example, a nonworkable circuit, drawn and then crossed out, was plainly a symbol of "No" or "No good" or a negative generally.

A particularly clear simplification of an Earth-style device—actually not used—similarly meant "Yes" or "Good" or a general affirmative. The system was not as fast or as clear as really fluent speech, but with gestures and voice-intonation it served surprisingly well.

Lon then cut down the power. Taking off would be a lengthy process. There was nothing to be done until the stasis-effect of the power-field grew less. He took time to gaze about the interior of the ship. It was a simple hollow shell, braced with internal girders and surprisingly devoid of visible machinery.

At intervals about its curved wall there were small seats for the small-men, each equipped with straps against acceleration-shocks. There were larger ones for Lon and Burton and Caryl's father and one small-man was busily at work improvising another for Caryl beside Lon.

To right and left of Lon there were vision-screens which were remarkably clear and alive. Above and below were others and a smaller one which showed the view behind him—a back-view device. Merely by moving his eyes he could see clearly on every side of the ship.

Burton and Caryl's father had been provided with vision-screens and controls for weapons they suspected were duplicates of the slug-ship's rod-light-

ning projectors. The controls were imitations of sighted guns.

The Earthmen should be better with them than the small folk, who on their planet used gas-projectors requiring no accuracy in the hunt. Lon was to fight the ship. He had only a hazy notion of the effectiveness of the devices he had been given but there was nothing to be done save try them to whatever limits they might have.

The green land-areas and mountains of the planet seemed to flow together. Blue sea invaded the space below the ship. It began to rise more swiftly. Presently the blue sky darkened. Tiny specks of light which were stars appeared.

Then the sky was purple and abruptly black with the great ringed sun flaring luridly in emptiness. A thousand million stars seemed to watch as the improvised round space-craft bounced up out of atmosphere into space itself.

HERE there was evidently no hindrance to acceleration. Lon tried out the ship—cautiously at first, then with increasing freedom. The controls were designed for instinctive reaction, to take full advantage of the deep-rooted human instinct to believe oneself the center of all the universe.

It meant that one always tended to pull oneself toward any object desired, to push away from an undesirable one. There was a round comfortable hand-grip in a convenient position. When Lon pulled himself toward it the ship shot forward. When he pushed away the ship checked or retreated. To push the grip down made the ship rise. To pull up made it descend.

Even sidewise movement was possible and the globe and all its drive-units had plainly been designed so that its center of gravity and of thrust was always the pilot's seat. A lateral twist of the control even spun the ship about on its axis, and a vertical twist turned it upside down.

It was infinitely easy to learn to handle controls like that. It was hardly minutes before Lon felt a magnificent

confidence. The ship was, as far as its motion was concerned, practically an extension of himself.

He nodded grimly to the small-man who was his co-pilot. He touched the sketch of the slug-ship. He raised his eyebrows. The small-man threw a switch. A red ring of light appeared on his right-hand vision-plate. The slug-ship apparently would be in its center.

Simultaneously fainter blue circles appeared elsewhere over the vast swelling curved surface of the planet below. Lon glanced at them, but the small-man tapped the red ring with his finger. Then he tapped two or three of the blue rings and pointed to a sketch of the globe-ship itself.

"Sister ships, eh?" grunted Lon. "You chaps did work!"

He knew there were other caverns under the surface of the world below him. The demands for power for the broadcast-field which had to control even the surface-winds of the whole planet would be so enormous that many power-stations must exist to supply it.

But it had not occurred to him that his every look and gesture and intonation would have been conveyed to half a hundred or more such technological headquarters and that what the small-men in one knew all the others would know too. The communication-system—though he had seen no sign of it—must be remarkable.

The globe-ship shot swiftly toward the enemy which had trailed the *Marintha* over an improbable number of light-

years in overdrive. Detectors should be ringing on that ship now. It turned and hurtled toward him to offer battle.

At more than a thousand miles a rod-lightning beam shot out. It missed by hundreds of yards. Lon jerked the globe sidewise nearly into the space it had missed. A ravening group of six rods instantly stabbed through the spot he had left. His eyes gleamed.

"Ranging, eh?" he growled. "Two can play at that!"

He jerked the globe upward and called, "Burton! Take a pot-shot and hold the trigger down!"

A bar of seemingly solid incandescence leaped from his own ship toward the enemy. Lon saw that it missed. By pure reflex action his hand twisted the hand-grip before him, as if to correct the error in sighting. And it did.

The globe-ship spun slightly. The raging beam of pure energy sliced across the slug-ship and great gouts of vaporized metal flashed into being. The slug-ship plunged like a wounded thing and stabbed back furiously.

They plunged upon each other at incredible acceleration. Lon twisted his ship, using the energy-beam like a monstrous blade to slash at the misshapen other craft. Once, twice, three times he struck it. The fourth time there was a seeming explosion, and a huge mass of mistiness streamed out with the violence of a rocket-jet.

"Hulled him!" said Lon, his eyes burning. "Now—"

[Turn page]

Then he groaned. The slug-ship, encountering an enemy capable of resistance, suddenly flared that incredible familiar color which is all colors at once and yet definitely not white. It is the flashing iridescence which accompanies the first phase of an overdrive field in formation.

The slug-ship was going into overdrive because it could not make a mere sporting event of destroying the human vessel. It was not yet badly hurt but—

The grinning little man beside Lon made a chuckling noise. His small sinewy fingers snapped home a plunger. The overdrive-field iridescence vanished and the slug-ship was still in normal space. Its flight into the stressed cosmos of overdrive was halted. Its retreat was cut off.

Its rod-lightning beams crashed again in a frenzy. It split space furiously with the monstrous pencils of power. It was less than a hundred miles away now and only the erratic dancing leaps of the globe-ship baffled its raging cannonade.

But Lon fought his ship as in single personal combat, with a shining sword-blade of energy before him. He fenced zestfully like a man with a rapier dancing about an opponent who flung spinning knives while the slender blade ripped and ripped at him.

He slashed and slashed, delicately. A second sudden burst of vapor—a colossal expanding cloud of chlorine atmosphere—the rod-lightning ceased. The slug-ship ceased to accelerate. It seemed dead in space. It hurtled on and on. Sixty miles, fifty, forty, thirty, twenty—no sign of life.

**I**NSTINCTIVELY, Lon ceased his slashings. He watched intently. The small-man beside him was bubbling with laughter, despite the crazy gyrations in which Lon kept the globe-ship lest this be a trick.

"It looks like he's dead," he said dubiously.

But as the last word left his lips the slug-ship fired again. At less than five miles range it could not miss. The six rods of pure destructive energy stabbed

despairingly, ragingly out.

They hit the globe-ship squarely, all six of them. Lon caught his breath. There was a perceptible physical shock of impact. And the *Marintha* had been pierced through and through by every such bolt to touch her.

This ship was not. There was an instant in which it seemed that all of space was somehow straining. It felt almost like the odd shock of going into overdrive. Then the rod-lightning turned from mere incandescence into a blinding blue-white color. The rods ceased to exist. And the slug-ship glowed red, then white and flew apart in tormented metal vapor as it reached its point of closest approach to the globe, and then went hurtling onward through unresisting emptiness.

"Holy hoptoad!" said Lon, dazed. "You wanted him to hit us! When his beams hit you tied a knot in them and sent stuff back that simply vaporized his whole ship!" The twinkling mirth-filled eyes of the small-man beside him were fullest confirmation.

"But why fight him?" The small-man reached out and shook hands, his eyes zestfully excited. "Confound it!" said Lon slowly. "I'll bet you wanted to have a fight first for the sport of it!"

Then the blue rings on the vision-screens moved swiftly toward him and long rod-lightning beams reached out from each one and waved gleefully in emptiness and winked out. And shortly the globes of the small-man fleet were clustered about Lon's own ship, weaving and spinning in sportive dizzy evolutions. And the evolutions were those which Lon had used in his single combat. It was plain that the small-men approved of Lon quite heartily.

There were sixty or seventy of the globe-ships—Lon was never sure—and they made a respectable space-fleet. It was not a fleet which Earth could have built so readily nor equipped with such weapons. When tiny red circles began to wink into being all over the vision-screens he would have gathered them into some sort of formation to lead them to the attack.

But there was—he realized it with a sinking heart—no possible formation which would intercept attack upon the planet. The slug-ships, newly-arrived and avid for destruction, were coming out of overdrive all through a half-million-mile sphere of emptiness. Each one went hurtling toward the green planet at full acceleration.

But the globe-ships swept out to meet them. There were slug-ships by hundreds, and the defenders were outnumbered five and six to one, but their gallant sword-beams stabbed out and slashed through the chill void between the planets, and the massed beams of the slug-ships darted out furiously.

The globes fought as Lon had done, zestfully dancing like motes amid their enemies and seeking to engage in something like formal duels. But the slug-ships were not concerned with punctilio. Here and there a globe and a single slug-ship fought it out to the end but in general it was the policy of the attackers to concentrate in overwhelming numbers upon individual small-man ships and overwhelm them with lightnings.

Which was a mistake. The englobing monsters sent their blasts ravening home—and nothing whatever happened to the target-globes. But the slug-ships glowed incandescent and exploded as their walls went soft from heat.

Those who had not been so unfortunate as to score a hit now instantly glittered with the overdrive-field energy in immediate attempt to flee since they had encountered dangerous resistance. But they could not escape. Overdrive was dead to them. Surrender apparently did not occur to them.

All the vast emptiness in which the battle proceeded, now suddenly became filled with writhing, curling coils of vapor. Guided missiles went shrieking soundlessly among the stars. And one after another of the slug-ships flamed and burst and the survivors acted like cornered rats—and there were thousands of smoke-trails streaking toward the planet.

Lon snapped feverish orders and Bur-

ton and Caryl's father—who alone understood him—tried desperately to snipe the deadly things, revealed by their trails of yellow vapor. Burton did detonate one and for an instant there was a flare of atomic fire much brighter than the unshielded ringed sun.

And Lon was flinging the globe-ship down to try to intercept more, when his co-pilot chuckled and shook his head. He looked as if he liked Lon rather more than before just then but he pointed to a smoke-trail as it sped planetward and turned a control Lon had not noted.

The screen became an enormous magnifying telescope. It brought the diving guided missile to view as a dot, then as a somehow revolting wormlike form, large enough so that the absolute absence of any detail on its surface could be seen.

AND then, suddenly, an equally improbable thing came darting to meet it. This other thing was an open-ended tube with a rapidly fanning blue corona-discharge glow at its tail. It was, in effect, a section of flying plastic stove-pipe.

It hurtled upon the guided missile, made contact and clung. And suddenly there were swirling vapors and tiny flames. The guided missile checked in its course. Its furiously jetting rocket-trail did not cease but the plastic-tube device clung to it and flames gnawed at the alien thing.

Lon swore softly, staring. "A garbage-disposal unit!" he said, stunned. "You fixed up a meteor-detector in a stove-pipe to find flying missiles in the sky. You added an ion-rocket to drive it and a garbage-disposal unit to break down some included wetted trash to oxygen and hydrogen and carbon and ash."

"And you've got those gadgets meeting the atom-bombs as they come down! They play what amounts to an oxy-hydrogen jet on them! It won't destroy the explosive, of course, but it will melt and wreck any detonation-system. And when they land you'll pick up what's left and have a very nice supply of atomic explosive."

His co-pilot did not understand his Earthman speech. But when Lon put out his hand the small-man shook it exuberently.

An hour later the globe-ship landed. Lon felt distinctly rueful about the whole business, but Caryl's father was pleased.

"After all, Lon," he observed, "even if we did bring the slug-ships after us we brought these folks some interesting if primitive devices. And they needed them. The slug-creatures would have found them sooner or later just as they are bound to find Earth."

"When we arrived they were in the situation of a civilized man at the mercy of a savage armed with a bow and arrow. A superson absorber will defend one against a superson pistol, but it would be useless against an arrow.

"For that one needs armor—a primitive defense against a primitive weapon. You gave them the armor they needed. Incidentally you—we—all of us—have made what should be a valuable contact for Earth. Another human race—"

Lon frowned. "They're so far ahead of us," he said uneasily, "that they could conquer us if they wanted to. And that's bad!"

"Lon!" said the older man severely. "They're civilized! Civilized men don't want to conquer other men!"

That, it turned out, was wholly true. The further proceedings of the small-men against the people of the chlorine planet were essentially civilized. All over their planet, by hundreds of thousands, the stove-pipe-like devices had been ready.

Of the more than two thousand atomic missiles discharged against the planet exactly two reached the surface and detonated. The others were all intercepted and made harmless before they landed. And the small-men gathered up the warheads and—after interested discussion with Lon—contrived two remote controlled space-navigators.

There had been a dozen or more of the slug-ships hulled and captured relatively intact by the globe-ships besides the enormously greater number vapor-

ized. Three of the hulled ships were included in each of the navigators. One of the navigators went up and headed for the Crab-nebula neighborhood in overdrive. It was intended to be intercepted by the second slug-ship fleet.

If the slug-creatures attempted to open communication with it—if they landed upon it—if they adopted any other policy than that of instant and unwarmed attack—they would find three of their first fleet, neatly holed and wrecked, returned to them with a full half of the first fleet's atomic explosive.

They would have a warning against further attack in the carcasses of their shattered ships. But they would also have assurance that the destroyers of the first fleet desired nothing of them, hence the return of so much infinitely valuable atomic explosive.

But if the slug-fleet instantly and savagely attacked the robot navigator, without first attempting communication, the results would be catastrophic. Half the atomic explosive intended to blast a planet would go off in the middle of the fleet.

Rather worse, with it would explode a considerably greater mass of matter which normally could not be detonated at all, but would break down to sheer, raw energy when an atomic explosion acted on it like a primer.

The second navigator took to space a week after the first. If the first ship was able to give its message, well and good. The second would reinforce it. But if the first ship were attacked, the second would go on past the thinning vapor which would be all that was left of a slug-ship fleet and presently deliver exactly the same message and the same choice of peace or destruction to the chlorine-breathers' planet. The small-men were amiably prepared to leave the chlorine-breathers alone. But after all, if they wanted to fight—

**B**UT Lon and Caryl and Burton and Caryl's father did not wait to learn of the result of that scrupulously just ultimatum. They headed back to Earth in the globe-ship Lon had cap-

tained, a trifle more fully equipped for long-distance space-voyaging with cabins and bunks and a galley and food-supplies.

No small-men would consider accompanying them. They had arranged their planet and its climate and its vegetation to suit them. They had at every instant a complete service of everything they wanted, including companionship and leisure and an environment to which they were exactly suited. They were wholly comfortable and satisfied.

Lon had promised to return with all the facts they could possibly be interested in about all sciences and all other worlds. But they would never care about leaving their own. It would be unspeakably boring for them to be away from home.

They liked the four Earth-people, though. They loaded what space was

available with gifts they thought would be appreciated. And Lon hated to leave because he was just beginning to grasp some of the principles of the small-men's science. Caryl liked it even less. She got along famously with the girls and was beginning to learn the language.

But they had to go, of course. They had to warn Earth of the possible continued existence of a bloodthirsty chlorine-breathers' culture, and of the measures that should be taken for self-protection.

And too there was a small formality they wanted to go through which could only be managed back on Earth. They intended to return to the planet of the small-men.

They meant to spend much of their honeymoon there. But Caryl wanted to be married in a veil.