

WORLDS OF TOMORROW

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ALL NEW STORIES

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THIRD PLANET

By MURRAY LEINSTER

**The aliens had lost their lives
to nuclear war — but their loss
might be the salvation of Earth!**

It was, as usual, a decision on which the question of peace or atomic war depended. The Council of the Western Defense Alliance, as usual, had made the decision. And as usual the WDA Coordinator had to tell the Com Ambassador that the Coms had won again. The WDA would not risk atomic war over a thirty-mile shift of a national border in southeast Asia.

"Perhaps," said the Com Amba-

sador politely, "it will be easier for you personally if I admit that our Intelligence Service has reported the decision of your Council." He paused, and added, "in detail."

The Coordinator asked wearily, "How much detail?"

"First," said the Ambassador, "you are to insist that no decision has been reached. You are to play for time. If I do not agree, you are to offer to compromise. If I do not agree, you are to accept the settle-



ment we suggested. But you are to ask urgently for time in which to remove the citizens we might feel ought to be shot. This is not an absolute condition, but you are to use every possible means to persuade me to grant it."

The Coordinator ground his teeth. But the Council wouldn't go to war for a few thousand citizens of an Asiatic country — who would probably be killed in the war anyhow. There would be millions killed in Western countries if the war did come.

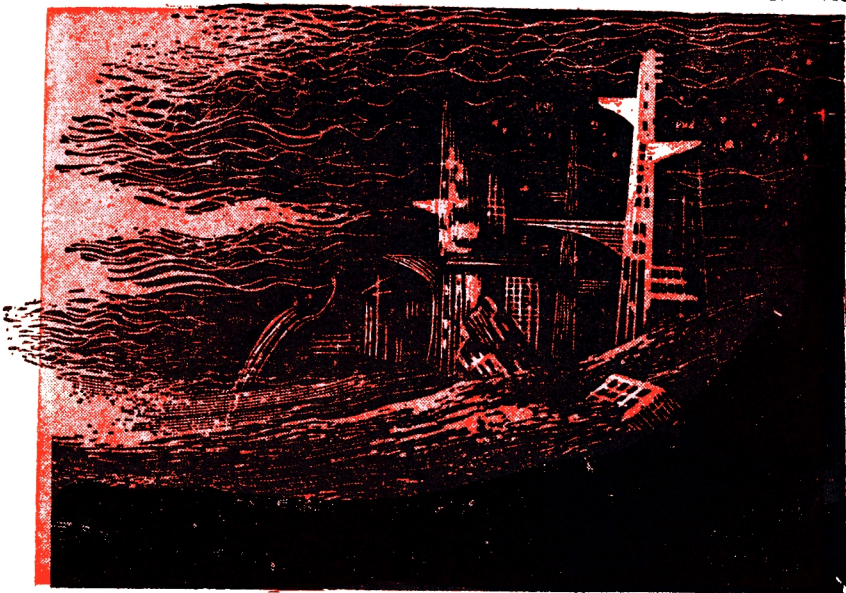
"I have much respect for you," said the Ambassador politely. "so I agree to three days of delay during which you may evacuate disloyal citizens by helicopter. On the fourth day our troops will move up to the

new border. It would be unfortunate if there were clashes on the way."

"We can't get them out in three days!" protested the Coordinator. "It's impossible! We haven't enough copters!"

"With warning to flee," said the Ambassador. "many can reach the new border on foot."

The Coordinator ground his teeth again. That would be a public disgrace — and not the first one — for the WDA for not protecting its friends. But the public in the Western nations did not want war. It would not allow its governments to fight over trivial matters. Its alliance could not make threats. On the other hand, the public in the Com nations had no opinions its governments had not decreed. The Com



nations could threaten. They could even carry out threats, though made for trivialities. So the WDA found itself yielding upon one point after another. Eventually it would fight, and fight bravely, but too late.

The Coordinator said heavily, "You will excuse me, Mr. Ambassador. I have to see about getting as many copters as possible to southeast Asia."

Some hundreds of light-years away, the Survey ship *Lotus* floated in space, a discreet number of millions of miles from the local sun. It was on a strictly scientific mission, so it would not be subject to Com suspicion of having undesirable political intentions. At least, they hadn't demanded to have an ob-

server on board. Com intelligence reports were notoriously sound, however, and possibly spies had assured their employers that the *Lotus's* mission was bona fide. Her errand was the mapping and first-examination of a series of sol-type solar systems. This was the ninth such system on the list. The third planet out from the sun, here, lay off to starboard. It was near enough to have a visible disk to the naked eye, and moderate magnification showed ice-caps and permanent surface markings that could be seas and continents. As was to be expected, it was very much like a more familiar third planet out—Earth.

The skipper gave Nolan the job of remote inspection while the gross examination of the system went on.

Nolan had a knack for such work, and much of it naturally fell to him.

"Okay!" he said resignedly "Another day, another world!"

"My private nightmare," said the skipper, with humor, "is bug-eyed monsters. Try not to find 'em here, Nolan. Eh?"

He'd said that eight times before on this voyage. Nolan said, "My private nightmare is getting home and finding out that while we've been finding new worlds for men to live on, they've started a war and made Earth a place to die on. Try to arrange that it doesn't happen before we get home. Eh?"

He'd said that eight times before on this voyage, too.

"I wish us both luck. Nolan," said the skipper. "But that ball out yonder looks plausible as a nest for bug-eyed monsters!"

He shook his head and went out. He was still being humorous. Nolan set up his instruments and went to work. As he worked, he tried to thrust away the thoughts that came to everybody on Earth every day. They were as haunting, some light-centuries from Earth, as back at home. There was the base the Coms were building on the moon. The WDA had an observatory there, but the Coms were believed to be mounting many more rockets than telescopes. And there was that unsatisfying agreement made between the Coms and WDA just before the *Lotus* took off. Each promised solemnly to notify the other of all space take-offs before they hap-

pened. The idea was to prevent a mistake by which a Pearl-Harbor-style attack might be inferred when it wasn't really happening. The fact that it could be prepared against was evidence of the kind of tension back on Earth.

But the *Lotus* was far from home. She lay some seventy-odd millions of miles out from the sol-type star Fanuel Alpha, whose third planet Nolan was to look over.

He sent off a distance-pulse and took angular measurements of the planet's disk. The ratio of polar to equatorial diameters was informative. The polar flattening said that the day lasted about thirty hours. Almost like Earth's. The equatorial diameter of 8200 miles was much like Earth's. The inclination of the axis of rotation indicated seasons — not exaggerated, but much like the seasons on the third planet of Sol. The size of the ice-caps indicated the overall planetary temperature. There were clouds. In fact, there was a cloudmass in the southern hemisphere that looked just like an Earthly tropic storm undergoing the usual changes as it went away from the equator. This was very much like Earth! And the dark masses which were seas...

Nolan frowned. Those mud-colored patches were water. Undoubtedly. A narrow-band light filter proved it. But the areas which were neither sea nor cloud mass? There were three levels of brightness to be seen on the disk outside

the polar areas. One was sea-bottom. One was cloud. The other...

Nolan fretted a little. There was something wrong. The solid ground surface of the planet was too light in color. It was such items that a person with a knack for it would notice sooner than a man without the knack. Vegetation should be more nearly midway between sea-bottom and cloud mass in color.

Nolan fitted in the chlorophyll filter. On the planet of a sol-type sun, vegetation has to use chlorophyll or else. Through this filter the clouds would show, of course. They were white and reflected all colors of light. But no color that chlorophyll didn't reflect could pass through the filter.

The cloud masses showed clearly. Nothing else appeared. The filters would have shown vegetation. It didn't. It said there wasn't any.

Nolan stepped up the magnification. He saw other things. He didn't like them. He got some maximum-magnification pictures and interpreted them with increasing grimness.

He went to make his report just as the system constants began to reach the skipper. The local sun's mass was 1.3 sols. The solar rotation period was thirty-four days. There were sunspots of perfectly familiar kinds. The Lauriac Laws about the size and distribution of planets in a sol-type system were borne out. One was small, and its sunward side was probably at a low red heat. This was like Mercury. Planet Two, like its

analogue Venus in the home system, would be resolutely unoccupiable by man. Planet Four — analogous to Mars — was smaller than Three and had a very thin atmosphere. There were gas-giants in orbits six and seven. Then a novelty. Lauriac's laws predicted things about fifth planets, too, but they'd never been verified because fifth planets were unstable. They blew up. Only fragments—asteroids—had so far been noted where fifth planets of sol-type suns ought to be. But there was a fifth planet here, rolling magnificently through emptiness. It matched the Lauriac predictions. It had an atmosphere, which should contain oxygen. It was the first sol-system fifth planet ever observed.

There was a babble in the skipper's office as the discoverers of the fifth planet told him about it.

Nolan said curtly, "I've something more urgent to report. Planet Three ought to be like Earth. It was. It isn't, any longer. It's dead!"

Nobody paid attention. There was a fifth planet! It was unparalleled! All the theories about the absence of fifth planets could now be checked!

"I'm telling you," said Nolan sharply, "that the third planet's dead! It was alive, and something happened to it! It has seas and clouds and ice-caps, and they're water! But its land surface is pure desert! Where life can exist, it does. Always! Life did exist here. Now it doesn't." He turned to the skipper, "Maybe bug-eyed monsters killed it,

skipper. It looks to me like murder!"

Then they stared at him. He spread out his pictures. He pointed out this item and that. They were conclusive. Nobody else might have realized the facts behind them quite so soon, but when put together they fitted.

"Familiar, eh?" asked Nolan sardonically. "You recognize the pictures like them before. They weren't pictures like them before. They weren't made with cameras, like these, but artists drew them from descriptions of what would happen. Here it's happened! I think," he added, looking at the skipper, "that this is more important than fifth planets. I think we'd better go over and get what information we can and take it home. Death like this implies life a lot like men. If non-human creatures can do something as human as this, we'd better get the word back home so something can be done to get ready before we find them — or they find us."

The skipper went carefully over the pictures. On one he put his finger on a feature Nolan hadn't mentioned. He seemed to wince.

"I think you win, Nolan," he said painfully. "We'll send a drone down. I doubt we can land, but this ought to be checked. Immediately. Maybe I should add — inconspicuously."

"Confidentially," said the Com Ambassador to the Coordinator of the WDA, "confidentially I agree that it is a trivial matter. But we are a new nation. Our people lack per-

spective. They rejoice in the strength and vigor of the nation of which they are citizens. They will not allow that nation to display what they consider weakness in any matter. One has to allow for a certain exuberance in the people of a nation newly freed from the tyranny of capitalists and warmongers such as still enslave the people of your countries. We cannot yield in this matter."

The Coordinator said:

"To be confidential in my turn, we both know that what you just said simply isn't true. Your government decides what its public shall think. It makes sure they don't think anything it doesn't want them to."

The Com Ambassador shrugged his shoulders. He was very polite. He did not even pretend to resent being called a liar.

"Now, my country intends to move forward in this matter in ten days," he observed. "And it would be deplorable if our soldiers were fired on."

II

It turned out that it wouldn't have mattered if the *Lotus* had sent screaming notifications of its presence throughout all nearby space. There were detectors out, of course, but they reported absolutely nothing as the *Lotus* moved on toward Planet Three. There was static from storms upon the planet. It grew louder as the survey ship approached. But there was no sign of anything alive.

The *Lotus* cruised some two hundred miles above seas and cloud masses and desert, photographing as she followed a search pattern that covered all the sunlit hemisphere. There were mountains in the tropics which by all the rules of meteorology should have had rain forests at their feet. They didn't. There was a river system which ran like the Nile for a thousand miles or more, through deserts like those of Egypt. There should have been at least a ribbon of vegetation along its banks. There wasn't. Where it reached the sea was an enormous delta.

A drone went down and reported temperatures and humidity and the composition of the atmosphere, and the radiation background count. One would have thought the records those of Earth. The background count was a trifle high — 3.9 instead of 3.6 — but there was eighteen per cent of oxygen in the atmosphere. The only oddity, there, was nearly a full per cent of helium. When the drone came up it brought samples of soil and sea water. There was no life in either. The soil was mostly mineral dust, but an electron microscope disclosed abraded fractions of pollen grains and the like. The sea water sample had evidently been picked up by the drone's dredge from some shallow. There were tiny, silicious shells in it. Plankton. They had been alive, but were so no longer.

"I think," said Nolan. "that I make a landing. Right?"

The skipper said crossly, "Yes.

"You're the best man for it. You notice things. But I doubt you'll learn very much." He tapped the written report that the radiation background count was 3.9. "It happened a long time ago. A long, long time ago!" Then he said with a totally unsuccessful attempt at humor, "Try and find out that it was bug-eyed monsters, eh? It looks too much like Earth! I'd rather blame monsters than men!"

Nolan growled and went to prepare for the landing. Two other men would go with him, of course. The *Lotus* wouldn't descend. It cost fuel to make landings. Unless there was some remarkable specimen that a drone couldn't handle the ship would stay aloft.

So a drone took three of them down to ground, a second drone following with equipment. They had weapons, of course. Men never land anywhere without weapons. They had the material for a foam-house camp. They had a roller-jeep, running on huge inflated bags. It would run efficiently on anything from sand to swamp mud, and float itself across bogs or rivers. They had cameras and communicators. Nolan had picked Crawford for geology and Kelley for communications. They could get other specialists from the ship, if desirable.

The ground where they landed was desert: nothing more. There were enormous dunes like gigantic frozen swells of sand. Sometimes there were miles between crests. They landed close to the mud banks

northern icecap to avoid the deep gorges in which rivers ran farther south. On the first day they set up their camp.

Mountains reared to the north of them, covered almost to their bases with ice. These they need not explore. Instruments would do most of the landing-party work, in any case. But they inflated small balloons and sent them skyward, to learn about currents of the upper air, and Crawford took painstaking photographs of dune formations, and they set up a weather radar. They checked the water recovery from the camp's air-conditioner. It would supply their needs. When night drew near, with all instruments recording, they watched the sunset.

It was amazing how splendid and how magnificent a sunset could be. Not many men see sunsets these days. The three of them, aground at the ice-cap's edge, saw enormous mile-long dunes reaching away as far as it was possible to see. They cast black shadows. Then glories of crimson and gold rose from the western horizon of this dead and empty world. There was ice and snow upon the mountains, and unbelievable tints and blends of colors appeared there. After a long, long time the light faded away. Then there was nothing to see but the stars, and nothing to listen to at all. This world was dead. They went in their camp-house and shut out the dark and the silence.

On the second day, Nolan went

in search of permafrost. Their instruments faithfully recorded everything they needed except such items as this. Nolan found permanent ice in a valley of the northern mountains. It was perpetually frozen ground which might not have thawed in a thousand thousand years. He dug down through surface ice to the permanently frozen soil beneath it. That soil was not desert sand. And preserved in it Nolan found the blackened roots of plants, and the blackened blades of something like grass, and even some small, indefinite objects which had been seeds or fruit.

They hadn't died with the planet. They were far older than that catastrophe. But they were proof that once this world lived and thrived.

During what was left of the daylight, Nolan and Kelley went south to a river gorge and photographed it for the record. The river had cut a gorge a full two hundred feet deep in the wind-deposited dust which was everywhere. There were now-dry gullies which undercut the dunesides and at times dumped mud into the slowly flowing liquid of the river. There were no colorings save dust and mud. The river itself was mud. It flowed very, very slowly and without elation.

They came back depressed. An airless planet holds no life, but it defies life to establish itself. A methane-ammonia planet fights the intrusion of men with monstrous frigid storms. But this world was designed for life. That it was dead

was tragedy. Its rivers flowed sullen, syrupy mud which moved reluctantly toward the lifeless seas.

Kelley wouldn't look at the sunset this second night. He went into the camp and turned on music. Crawford watched for a little while only. There were clouds. There were breezes. One knew that here and there rain fell in gentle showers which should have nourished grasses and flowers and filled the air with fragrance. But instead it fell upon impalpable dust and turned it to mud which flowed slowly into gullies and into rivers which were also mud and moved onward, until perhaps after years the soil would become part of a mud-bank in the ocean.

Nolan came into the foam-walled house and said shortly, "We'll finish up tomorrow and leave."

Kelley said abruptly, "Nobody's made any guess about why everything died, here. But we all know!"

Crawford said reflectively, "It must've taken a lot of intelligence to murder this planet. When d'you suppose it happened?"

"Ten thousand—twenty thousand years ago," said Nolan. "The whole place must have been radioactive, air and all. But if they used cobalt the background count could be down to 3.9 in ten or twenty thousand years."

"We haven't," said Kelley, "seen any craters. Even the pictures from out in space didn't show bomb-craters."

"When everything died and turned to dust," said Nolan, "there'd be dust

storms. There still must be. They'd cover anything! There was a terrific civilization in part of what's now the Sahara, back on Earth. By pure accident they've found a patch of highway and a post-house. Everything else is covered up. Cities, highways, dams, canals. . . And that's heavy sand instead of fine dust! The *Lotus* found some shadows on a photo. They want us to look and see what cast them. We'll look at it tomorrow and then leave."

Crawford said deliberately:

"We three have had a preview of what Earth will be like before too long! I wonder if it would do any good on Earth to show them what we've found?"

"It's being argued on the ship," said Nolan. "Some say we'd better suppress the whole business."

Crawford considered.

"The Coms aren't a very believing people," he said slowly. "But our people are. If we report this, our people will believe it. But the Coms can tell their people it is lies. Our people will want peace more than ever if they see what a war will mean. But the big-shot Coms will just take that as a reason to demand some more concessions, and more, and more. Like demanding to build a base on the moon. . ."

"I'm going to bed," said Nolan. He added ironically, "I hope you have pleasant dreams!"

He did go to bed, but he slept very badly. The others slept no better. All three of them were

up before sunrise. They saw it. And to Nolan the coming of the light seemed somehow like an eager arrival of the new day, anxious to see if some tiny thread of green somewhere lifted proudly from brown earth to greet it. But none ever did. Or would.

"We should be through by noon," said Nolan.

They set out in the jeep. They abandoned the camp. They would abandon the jeep, too, presently, when they went up the ship that waited in orbit.

They headed west, and Kelley took over the microwave set that sent a wide-fanning beacon skyward. The *Lotus* was in orbit now. Every ninety minutes she was overhead. She'd completed the mapping of the planet. Every square foot of its surface had been photographed from aloft.

They drove. The ungainly inflated bags which took the place of wheels rolled unweariedly, at first over dew-wetted dust and then over the minor gullies which, so near the ice-cap, were not yet gorges. They went on for twenty miles, and the abomination of desolation was all about them.

"We shouldn't tell about this back home," said Kelley abruptly. "If the Com people saw it, they'd know that no —" his tone was ironic — "national aspiration justified the risk of this. But they wouldn't see it. And our people might look at it and decide that anything was better than this. But it isn't."

Nolan said nothing. He didn't believe that the discovery of this dead planet could be kept a secret for very long.

The mountains drew back to northward and the desert took their place. The *Lotus* went by overhead, unseen. But it gave a message to Kelley.

"We're on course," he reported. "The ship just said so. Ten miles more."

In ten miles they came upon a city, or what had been one. It was partly buried in the omnipresent dust. That is, they saw part of a city's remnants showing in the mile wide trough between dunes hundreds of feet high. There were other remnants between two other dunes, and still more in yet other troughs beyond. Structures of stone had existed, and portions of them remained. They had cast shadows the *Lotus* had discovered from aloft. The stone remains were abraded by the dust-carrying winds of a hundred centuries. Their roofs had been crushed when monster dunes formed over them. They had been reexposed to the sunshine when winds moved the dunes away. There was no metal left. No glass. No artifacts. They had been buried tens or hundreds of times, and uncovered as many. There was nothing left but skeletons of stone which cast angular shadows, though their fragments were rounded by centuries of patient wind erosion.

It had been a very great city, but Nolan made the only observation

that could tell anything about its occupants.

"The builders of this city," he said tonelessly, "used doors about the same size we do."

And that was all they could find out. Presently:

"New York will be like this eventually," said Crawford. "And Chicago. And everywhere else."

Kelley spoke suddenly into the microwave transmitter. He said sharply to the ship, invisibly overhead:

"Yes! Send down the drone! We've had it!"

The Council-member from Brazil made an impassioned speech in the supposedly secret meeting of the Western Defense Alliance. He pointed out with bitter factuality that no past yielding to Com demands had gained anything. Further yielding would be suicidal. He made a fierce demand that the WDA present a united front against this fresh diplomatic pressure. That it refuse, flatly and firmly and with finality, to make a single concession on a single point. It was a good speech. It was an excellent speech. It and others like it should have been made a long time before. The Coordinator of the Western Defense Alliance nodded at its end.

"I agree," he said, "with every word the representative from Brazil has spoken. I think we all agree. The practical thing to do, of course, is to send a combined expeditionary force to maintain the independence

of Sierra Leone. This force should be formed of contingents from every Western Defense Alliance nation, and it should have orders to prevent the entry of Com troops into Sierra Leone territory. I do not think that anything less will prevent the extinction of another member nation of the Western Defense Alliance. Will any Council member propose such action for a vote?"

There was a pause. Then babblings. It would mean war! It would mean atomic war! Tens or hundreds of millions of human beings would die over a matter affecting less than two hundred thousand! It was ridiculous! Public opinion —

The Council meeting ended with no vote upon the matter. Without even a proposal on which a vote could be taken.

Two days later, Com troops from one of the African Com nations moved in and occupied Sierra Leone. A great many of its citizens were shot, some for opposing the new state of affairs, but some seemingly just on general principles.

III

The *Lotus* went on toward Planet Five, leaving a world which should have been alive and wasn't, to go to a world which should not exist, but did. On the way there was argument which became embittered. In theory, the discoveries made by a Survey ship became automatically available to all the world. But the discovery of

Three in the state it was in would have political results on Earth.

It was — and is — a fact that nobody really believes in death until he sees a dead man. And nobody can believe in the destruction of a planet unless he's seen the corpse or color photographs of it. But that was precisely what the *Lotus* had to carry back to Earth. The WDA nations would see those pictures and read the facts. They would believe in atomic war and the complete sterilization of a world. The Com nations would not see the pictures. They would continue to believe that the West — the WDA — was decadent and enslaved to tyrannical warmongers, and obviously could not resist the splendid armed forces of the Com association. And they wouldn't really believe there could be more than isolated, crazy resistance to their valiant troops. So they'd back their leaders with enthusiasm, and the Western peoples at most would be merely desperate.

The *Lotus* arrived at Planet Four — which by the Lauriac laws should have been similar to Mars. It was almost its twin. It had ice-caps of hoarfrost and its atmosphere was thin and barely contaminated by oxygen. A base could be maintained here, of course, provided one had a source of supply. A base here, incidentally, would have much the value of the Com base on Luna.

The *Lotus* did not find that base. It found no cities or signs of settlement. But it did find a bombcrater, miles across and it seemed miles

deep. There was an accumulation of reddish dust at its bottom, trapped from the thin winds that blew over this half-frozen world.

The *Lotus* went on to Planet Five.

The sun, so far out, was very small and its warmth was barely perceptible. But there was vegetation. The surface temperature was above freezing. The Lauriac Laws had predicted that the central metallic core would be small, and the greater part of its mass should be stony. The radioactives in Earth's thin rocky crust produce a constant flow of heat from the interior to the surface. It is considered that it is enough heat to melt a fraction of an inch of ice in a year. On this planet, with a crust many hundreds instead of mere scores of miles thickness, the internal heat was greater. The world was not frozen, and life existed here. It was a pallid, unnatural sort of life which had developed to live in starlight with a feeble assist from a very bright nearby star which happened to be its sun.

There was a base here, too. Kelley located it when he found a resonant return of certain frequencies from the ground. It was not a reflection, but resonance. And so they found the base.

It had been built by engineers the humans on the *Lotus* could only admire. There were gigantic doors which could admit the *Lotus* herself. They were rusted shut and had to be opened with explosives. There were galleries and tunnels and lab-

oratories. There were missile launchers and missile-storage chambers. There was a giant dome housing a telescope men had not even dreamed of equalling. It was not an optical telescope.

Ultimately they found a mortuary, where the members of the garrison were placed when they died. The *Lotus* was not equipped for the archeological and technological studies the base called for. Its function was to scout out things for especially qualified expeditions to study. And, of course, there was the political situation back on Earth...

On the fourth day after landing, the skipper sent for Nolan. The skipper sweated a little.

"Nolan," he said querulously, "we've found something."

"A bug-eyed monster?" asked Nolan dourly.

"No." The skipper mopped his forehead. "Back yonder, on Three, you took a few looks from twenty million miles and figured out what had happened there. We'd have worked it out eventually, but you saw it at once. You're lucky that way. Now we've found something. It's an — instrument. We're short on time. Come with me and make some guesses."

He led the way, explaining jerkily as he went. The thing was in a room by itself, with its own air system and apparently its own food store. It was inside four successive systems of locked doors — all of them inches-thick stainless steel. It

was intended that the last door could be opened from inside. It was evidently the very heart of the armed base on Planet Five. Anything sealed up like that would have to be either incredibly valuable or incredibly dangerous.

Nolan followed through the shattered doors, and presently the skipper made a helpless gesture. There was the discovery. It looked more like an old-fashioned telescope than anything else. It had a brass barrel, and it was very solidly mounted, and there were micro-micro adjustments to point it with almost infinite exactitude. It had been sealed in a completely air-tight environment, and what moisture was present had combined with other metals. It wasn't rusted. There was an eyepiece, placed in an improbable position, and there was a trigger. It wasn't like a gun-trigger, but it couldn't have any other purpose. There was no porthole for it to fire through. The compartment in which it had been sealed was deep underground.

Nolan said uneasily:

"It's a weapon, of course."

"Of course!" said the skipper. He mopped his forehead. "I — I think we should take it home. It might make a difference to WDA. But we don't know what it does! It could be a mistake..."

Nolan walked around it. He saw that it could be aimed in almost any direction. But not quite. There was a direction that stops prevented it from pointing to. Nolan said:

"What's in that direction?"

The skipper jumped. When Nolan asked the question he began to suspect many answers. He said in a stricken voice, "That's where the missiles were launched—and where the others are stored.

Nolan stared at the thing. It looked hateful. It had the savage feel of a frozen snarl.

"The power-pile?"

The skipper nodded. He mopped his face again.

"Right alongside. We figured they wanted to shield the rest of the base from radioactives."

Nolan said carefully:

"It could be that they wanted to shield the radioactives from something in the base. Maybe something that would act on radioactives is involved." He said painfully, "Men can't change the rate of fission except by building up a critical mass. But maybe—possibly bug-eyed monsters could."

The skipper perspired. He'd have worked out the same thing in the long run, but Nolan saw it right away. He went away and got the ship's engineers. They brought an X-ray for finding flaws in metal. They took pictures of the inwards of the brass-barreled instrument in its place. They traced two separate, incomprehensible circuits. But they were separate.

At long last the skipper nodded permission for Nolan to try the eyepiece, to see what it showed with heavy metal and much soil and vege-

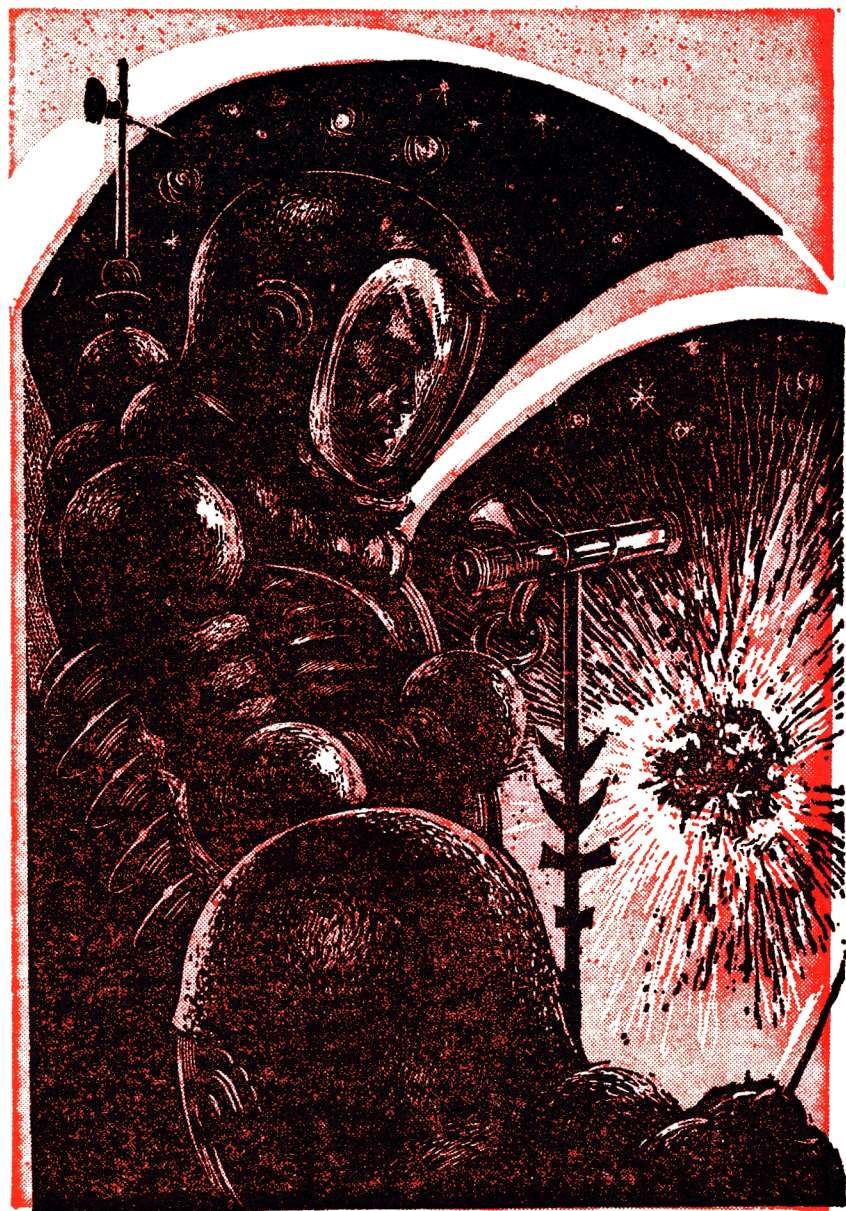
tation atop it. They taped the trigger so it could not be moved. The controls affecting the eyepiece they left free. The skipper almost dripped sweat as Nolan turned on the eyepiece circuit, peering in.

For a long time he saw nothing whatever. Then a tiny disk moved slowly into the eyepiece's field. It was barely larger than a point. Nolan moved one of the eyepiece controls. The disk enlarged. It enlarged again. A tiny red dot appeared in the center of the field of vision. As the disk enlarged, the red dot grew larger and became a tiny red circle.

Nolan fumbled. He shifted the position of the instrument with a micro-control. He moved the faintly glowing disk until it was enclosed in the red circle. He enlarged. . . Presently the disk was very large, and the red circle ceased to enlarge. It enclosed only a part of the disk.

Nolan felt cold chills down his spine. He swallowed and asked for the angular relationship of Planet Four to Three. The skipper sent someone to find it out. But Nolan had found Planet Four before the answer came. The first disk was in some fashion a representation of Planet Three—the Earthlike world which was dead. The second was a representation of Four. There was a bright spot near the equator of Four—the equator being located by the flattening of the poles. It would be just about where a gigantic atom-bomb crater still existed.

Nolan drew back and took a deep breath.



"Apparently," he said unsteadily, "this eyepiece detects radioactives, coverting something that I can't imagine into visible light after it's passed through a few feet of metal and a good many more of dirt. There's a red ring which makes me think of a gun-sight. And there's a trigger. Skipper, would you send half an ounce or so of ship-fuel out to space in a drone? I think we're going to have to pull this trigger."

The skipper wrung his hands. He went away. And Nolan stood staring at nothing in particular, appalled and sickened by the thoughts that came to him.

Presently the skipper came back and mumbled that a drone was on the way up. Nolan searched for it with the eyepiece. He found it. The sensitivity of the eyepiece was practically beyond belief. What it worked on — what it transmuted and amplified to light — was wholly beyond his imagination.

The drone went four thousand miles out. Nolan absently asked for somebody to be posted out of doors, watching the sky. He got the vivid spark that was the half ounce of ship-fuel in the center of the red luminous ring. He turned his eyes away and pulled the trigger.

There was no sound. There was no vibration. There was no indication in the underground room that anything at all had happened. There was only a violent flare in the eyepiece, from which Nolan had just drawn back.

Someone came shouting from out

of doors that there had been an intolerable flash of brilliance in the sky.

A few moments later the word came that the drone control board indicated that the drone had ceased to exist.

The Com Ambassador sighed a little when he saw the expression on the Coordinator's face. Interviews with the titular head of the alliance of all Western nations became increasingly a strain on his politeness. But the Coordinator said grimly:

"I think I can guess what you're here to tell me!"

The Com Ambassador said politely:

"It is painful to — ah — beat around the bush. May I speak plainly?"

"Do," said the Coordinator.

"Our base on the Moon," said the Ambassador with a fine air of frankness, "some time ago reported military preparations on Earth, among the WDA nations. Those preparations could have no purpose other than an unwarned attack upon us. We felt it necessary, then, to take countermeasures of preparation only. We modified the plans for our moon base to have it contain not only the telescopes and such observational equipment, but to have an adequate armament of missiles. It is now so armed."

The Coordinator whitened a little, but he did not look surprised.

"Well?"

"I have to inform you," said the Com Ambassador, "that any military action directed against any Com nation, or its troops, or the Union of Com Republics, will be met by atomic bombardment from the moon as well as — ah — our standard military establishments. This, of course, does not mean war. To the contrary, we hope that it will end the possibility of war. We trust that all causes of tension between our nations will one by one be removed, and that an era of perpetual peace and prosperity will follow."

The Coordinator's lips twisted in an entirely mirthless smile.

"Military action against Com troops," he observed, "means resistance to invasion or occupation, doesn't it?"

"It would be wiser," said the Ambassador carefully, "to protest than to resist. At least, so it seems to me."

The Coordinator of the Western Defense Alliance said:

"Tell me something confidentially, Mr. Ambassador. How long before you expect — no. You wouldn't answer that. Ah! How long do you think it will be before I am shot?"

The Com Ambassador said politely:

"I would hesitate to guess."

The *Lotus* started back to Earth with the enigmatic weapon fastened firmly in its cargo hold. Great pains had been taken to keep it from being knocked or shocked or battered in its transfer to the ship. Firmly anchored, Nolan had in-

sisted that the stops, which prevented it from being aimed below the horizon or toward the radioactives in the base, be adjusted so it could not be aimed at the *Lotus's* own engines or fuel-stores. There were no mistakes to worry about, of course.

Even this precaution, however, roused doubt and uneasiness, especially among the scientific staff. It was highly probable that when the *Lotus* reported in from space, the Coms would ask to examine such specimens as she brought back. The request would be expressed as scientific interest, but a refusal would be treated as a concealment of dire designs. There were those on the ship who felt that the weapon should be dismantled and made to seem meaningless, to avoid any chance of a humiliating squabble with the Coms.

The skipper roared at them. It was the only time on the voyage when he displayed anger. But he glared at those who proposed the act of discretion. He drove them out of the cabin in which the suggestion was made. He turned to Nolan, who definitely was not a party to it. His manner changed. He said querulously:

"Nolan, why do you want that thing mounted so it could be used if necessary?"

"That's the way it was mounted on Planet Five. To box it or case it might injure it. To take it apart might mean that it could never be got together in working order again."

"Is that the real reason?" demand-

ed the skipper. "It's a good reason, but is it the real one?"

"No," admitted Nolan. "It isn't."

The skipper fumed to himself.

"We might get home," he said fretfully, "and find things just as we left them. Then there'd be no harm in the mounting. We'd at least try to diddle the Coms and get it ashore without their knowing it was important. We might get home and find that war'd broken out and Earth was dead like the Third Planet back yonder, only not all yet turned to desert. Then the mounting wouldn't matter. Nothing would! Or we could find that the Coms had smashed the West and were all cockahoop about what they'd managed to do in a sneak attack. So it had better stay mounted. I covered everything, didn't I?"

Nolan wasn't feeling any better than anybody else on the *Lotus*. The jitters that affected everybody but conditioned Coms had been bad when the *Lotus* went about its business. But when the ship headed for home, nerves got visibly worse. They didn't know what they'd find there. With the third planet of Fanuel Alpha in mind, it was all too easy to believe in disaster.

"There's one thing," said Nolan painfully, "that bothers me. I've been trying to think like a Com top brass. The WDA is a well meaning organization, and it's gained time, no doubt. But aside from the Com missiles ninety-five per cent of the atomic warheads on Earth are in the hands of just one WDA nation.

It happens to be ours. It's been bearing most of the load of defense costs for the West. It's the richest country in the world. There's practically no poverty in it."

"What has poverty to do with a possible war?" demanded the skipper.

"Everything," Nolan said uncomfortably. "The Coms take over a country. They march in. There are rich people and poor people. The Coms start to humiliate and destroy the rich. The poor people hated them. So the Coms are popular long enough to get things going right. But if they tried that in our country —"

"It wouldn't work," said the skipper. "Not for a minute."

"It wouldn't," agreed Nolan. "Most of our people think of themselves as well to do, and the rest can hope to become so. So the Coms would have to try to govern two hundred million indignant and subversive underground resisters. They couldn't hold down such a country. They wouldn't try!"

The skipper blinked.

"If you mean they'd leave our country alone —"

"I don't," said Nolan. "They'd destroy it. They'd have to. So they might as well destroy it out of hand and destroy most of the fighting potential and a lot of resolution in the West. A well handled atomic-missile bombardment and some luck, and they could take over the rest of the world without trouble. I think that's the practical thing for

them to do. I think they'll do it if they can."

The skipper grimaced. Then he said, almost ashamedly:

"Maybe we're talking nonsense, Nolan. Maybe we've just got bad cases of nerves. Maybe things have gotten better since we left. We could arrive back home and find nobody even dreaming of war any more!"

"That," said Nolan, "would scare me to death. That would be the time to make a sneak attack!"

Which was pessimism. But nothing else seemed justified. It was not even easy to be hopeful about the value of the fifth-planet weapon to the Western Defensive Alliance. The WDA couldn't use it in a preventive war. Their people wouldn't allow it. The initiative would always remain with the Coms.

The *Lotus* moved Earthward. She carried a more deadly instrument for war than men had ever dreamed of. But the ship's company daily jittered a little more violently.

The war might have been fought and be over by now. If it had, the Coms would have won it.

The Coordinator for the WDA handed the Com Ambassador his passport

"I'm sorry you've been recalled," he said heavily "Because I think I see the meaning of the move."

"I am only called home for conference and instructions," said the Ambassador politely. "I shall miss our friendly chats. We have had a very fine personal relationship,

though we have disagreed so often."

The Coordinator absently shifted objects on his desk. He said suddenly:

"Mr. Ambassador, have I ever lied to you?"

The Ambassador raised his eyebrows. Then he smiled.

"Never!" he said pleasantly. "I have marveled!"

The Coordinator took a quick, sharp breath.

"I shall not lie now," he said abruptly. "I hope you will believe me, Mr. Ambassador, when I tell you one of our best-kept military secrets."

The Ambassador blinked and then shrugged politely.

"You always astonish me," he said mildly.

"Your High Command," said the Coordinator grimly, "has decided not to try to take over the nation around us. It is considered impractical. So this nation is to be destroyed, to shatter the backbone of the WDA and make resistance anywhere else unthinkable."

The Ambassador said reproachfully:

"Ah, but you begin to believe your own propaganda!"

"No," said the Coordinator. "I have simply told you the facts you undoubtedly already know. Now I tell you our best-kept military secret. We know that we cannot deal with you. We know that you might be successful in an overwhelming, unwarned attack. We know that if you decide upon war, it will be directed

primarily at this nation. So we have set up some very special atomic bombs where it is extremely unlikely that you will find them. They are 'dirty' bombs. They are designed to make the maximum possible amount of radioactive dust — of fallout. Timing mechanisms are set to detonate them. Every day a man goes and sets back the timing mechanism in each place where a bomb is established. On the day that a man fails to do so the bombs will certainly explode."

The Coordinator said almost briskly:

"We calculate that the bombs will make the atmosphere of the whole Earth lethally radioactive. They will raise the background count on Earth to the point where nothing can live: no plant, no animal, no fish in any sea. This will only happen if this nation is destroyed. It will fight if it is attacked, of course, but your chances of substantial success are good. But if you are successful the Earth will die. I may add that the people of the Com nations will die also, to the last individual."

The Ambassador started to his feet.

"But you could not do that!" he protested, white-lipped. "You cannot!"

The Coordinator shrugged and shook his head.

"I have not lied to you before, Mr. Ambassador. I do not lie to you now." Then he said formally, "I hope you have a pleasant journey home."

IV

The *Lotus* came out of the usual sequence of arrival-hops no more than six light-seconds from Earth. A million miles, more or less; perhaps four times the distance of the Moon. Nolan examined the planet's sunlit face and said steadily:

"Nothing's happened yet."

There was almost agonized relief. Only the skipper did not seem to relax. He went stolidly to the control-room and got out the scrambler card that matched just one other scrambler card in the world. He put it in the communicator. To speak to Earth by scrambler would be an offense. It would be protested by the Coms. They would insist that a survey ship should have nothing secret to report and that anything secret must be inimical to the Com Association of Nations.

The skipper formally reported in, in the clear, and then insisted on completing his report by scrambler. He did complete it, over the agitated protest of the ground. Then there was silence. He mopped his forehead.

"Nolan, better get down to the eyepiece. The Coms could send something up to blast us. I'll get the detectors out. You be ready! You're sure you can handle things?"

"This is a little bit late to raise the question," said Nolan. "I think I can do it, though."

He went down into the hold. He turned on the eyepiece. He saw the distinct, luminous disk which was

Earth in the not-at-all-believable field of the impossible instrument. He saw points — not dots — of extremely vivid light. Obviously the size of a radioactive object did not determine the brightness of its report to the weapon from Planet Five of Fanuel Alpha. Something else controlled the brilliance.

He saw the groupings of many dimensionless points of light. There were the patterns which meant the silos holding the monster atomic missiles of the West. He could distinguish them from the much more concentrated firing-points of the Com nations. The oceans had few or no bright points at all. There were only so many atomic-powered ocean-going vessels. Nolan could tell well enough which were the Western accumulations of radioactives for defense purposes, and which were the Com stores of warheads.

His throat went dry as he realized the power in his hands. Neither he or anyone else could make one blade of grass grow, but he could turn the third planet of this sun into a desert and a dreariness like the third planet of another sun far, far away.

The skipper came into the hold. He locked the entrance door behind him.

"I got to the Coordinator," he said in a shaking voice. "I started enough trouble by reporting by scrambler. He talked to me. I showed him pictures. He's telling the Coms most of what I reported, saying that if they like they can try to blast us. If they try, and don't

succeed, we can try to figure out what to do next."

The Com premiership was in some ways the equivalent of the office of Coordinator of the Western Defense Alliance. But the men who held the two posts were quite unlike and the amount of authority they could exercise was vastly different. The Com premier read, again, the newly arrived message from the Coordinator. The high officials he'd sent for came streaming into the room. Most of them had flimsies of the message in their hands. The Premier beamed at them.

"You have the news," he said humorously. "The WDA Coordinator first threatened to make all Earth's air radioactive if we attacked the — ah — leading member of the WDA and destroyed it. He has evidently decided that this threat is not strong enough. So he assures us that a Western survey ship has come back from an exploring voyage with a cargo of artifacts from a non-human civilization. Among the artifacts there is what he says is the absolute weapon. He says that the skipper who has brought it back claims that it can end the tension between the WDA and us — by ending us!" The Premier chuckled. "He invites us to verify the skipper's claim by attempting to blast the survey ship, whose coordinates of position he gives us. I think he has made a rather substantial error of judgment."

His eyes twinkled as he looked from one to another of the high officials he had summoned.

"We accepted the invitation," said the Premier. "Naturally! General?"

He looked at a tall general officer with twin silver rockets in his lapels. The general said proudly:

"Yes, Excellency! Our space-radar located an object at the survey ship's stated position. We sent six rockets with atomic warheads at it. We used satellite-placing rockets for maximum acceleration. They are well on their way now. Of course they can be disarmed or destroyed as well as maneuvered to intercept this survey ship if it attempts to flee. They will reach the target area in just under three hours."

The Premier nodded, very humorously.

"Since we accepted their invitation, naturally the Western staff concludes that we are disturbed. That we will wait to see what our rockets learn. It would be interesting, but our scientists tell me that the alleged weapon is impossible. Utterly impossible! So it is merely a trick. And we will not wait for our rockets to arrive. We might be late for our dinners, and we would not like that!"

The high officials made sounds of amusement

"So we put our own ending to the comedy," said the Premier blandly. "The circuits are joined?" He asked the question of a craggy-faced service-of-supply colonel. The colonel managed to nod, and was strick-

en numb by the importance of the gesture.

"Then," said the Premier humorously, "we will destroy our enemy."

He waddled across the room. He put a pudgy forefinger on a button. He pushed it.

Even here, deep underground, there were roaring sounds as rockets took off for the west. All over the Com nations, carefully distributed rocket-firing sites received signals from the one pushbutton. They sent bellowing monsters up into the sky.

Three Com rockets reached their targets, and Nolan never quite forgave himself for it. They were murderous. They wiped out cities. But that was all. The rest of the rockets went off prematurely. A spread of half a hundred, crossing the North Pole, detonated just out of atmosphere. Others went off over the Atlantic. Not a few made temporary suns above the Pacific. Nolan brought moving specks within the thin red circle of his instrument, and pulled the trigger. The points flamed momentarily and left patches of luminosity behind them. And that was that.

But they continued to rise. On Earth they made noises like dragons. There was panic from their starting points. Those first out had not reached their targets! So the Com launching-sites flung more and more missiles skyward. One of them reached a city of the West. A second. A third.

The only possible answer was to

blast them as they rose. Then to blast them before they rose. Nolan's task became the terribly necessary one of preventing radioactives from moving away from Com territory and into WDA nations — specifically one WDA nation. He did not think of the consequences of his actions except in terms of preventing excessively bright mathematical points of light from getting to the areas where there were so many fewer points of similar light which did not move at all. He tried to stop only those that moved.

But three got by him, and he could do nothing but detonate all the radioactives in Com territory. He had to! When that was done, there were six warheads coming up from Earth. He detonated them. There were massed warheads moving toward Earth from the Moon. It seemed that they practically tore space apart that they went off together. Then the moon base began to fire rockets, hysterically, at the *Lotus*, and it was necessary to detonate the radioactives in the moon base.

It had been estimated that an atomic war might be over in three hours. But prophecies are usually underestimates. Between the first and last explosions on Earth, in space and on the moon — there was a truly gigantic crater where the Com base had been — some thirty-seven minutes elapsed. Then the war was over.

There were some survivors in Com territory, of course. But they

couldn't retaliate for the destruction of their nations. Their own bombs had done the destruction. They couldn't even gloat that the rest of Earth shared their catastrophe. It didn't. Most of the bombs exploded high, and over ocean. No less than three-fifths of all fallout landed in the sea and sank immediately. For the rest, the background count on Earth nowhere went above 4.9, and people could be protected against that.

The survey ship *Lotus* came gingerly down to ground. There was no longer any reason for tension. Its crew reported in and scattered to the various places they called home. They were very glad to be back. In the course of time they were all suitably bemedalled and admired and told that their names would live forever. Of course, it was not true.

Nolan didn't pay much attention to this. He left the Survey. He went to live in a small town. He married a small-town girl. And he never, never, never took any one of the excursions so many WDA people took to see the result of atomic explosions in Com territory. when their attempt to murder one Western nation backfired. Nolan had caused that backfiring. He very passionately did not want to see its results.

He'd seen all he wanted of that sort of thing on the third planet of a sol-type sun, some light-centuries from Earth.

END