

**THRILLING**

AND

# **WONDER**

**STORIES**

25c  
AUG.

FEATURING: TWO SHORT NOVELS  
**ALARM REACTION**  
By **RAYMOND F. JONES**

**EARTHLIGHT**  
By **ARTHUR C. CLARKE**



A THRILLING  
PUBLICATION

EARLE  
BERGEY

# THRILLING WONDER STORIES

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SAM MERWIN, JR., Editor

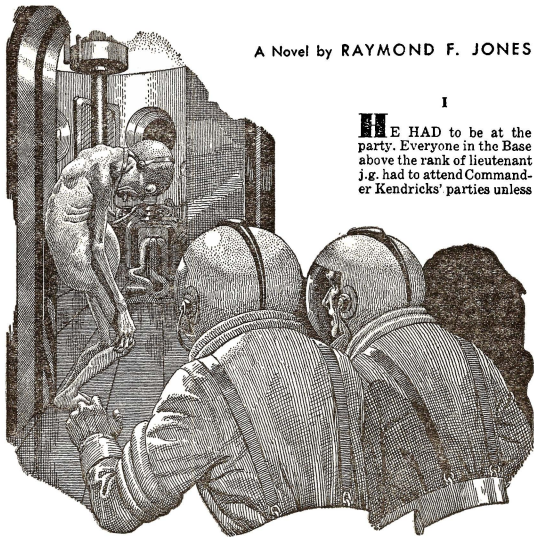
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*The damaged ship carried the secret of intergalactic drive, but  
if humanity learned it thousands of worlds would die*

A Novel by **RAYMOND F. JONES**

**I**

**H**E HAD to be at the party. Everyone in the Base above the rank of lieutenant j.g. had to attend Commander Kendricks' parties unless



# ALARM REACTION

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sick or on duty. But no one could force him to have a good time and Glenn Baird was damned if he'd make the attempt on his own.

He saw Nancy coming toward him and sauntered out through the wide glass doors into the garden. He still had a cocktail glass in his hand where it had been for the last half hour. He had never yet been able to get rid of one decently at Kendricks'.

Now he gave this one a hasty toss into the thick foliage beside the door and moved on to a garden seat in a secluded nook. He could imagine how Caroline Kendricks had coyly designed this for a lovers' rendezvous. Maybe he was getting old, he reflected, or perhaps his trousers were just worn thin in back but that cement slab was damned cold for romance.

Of one thing he was certain—it was not that being married to the same woman for almost six years had taken it out of him. Nancy, coming toward him with the moonlight behind her, was easily good for a tenpoint jump in his blood pressure.

She sat down close to him. "What's the matter, Glenn? Aren't you having a good time?"

"Oh, cut it out, Nan. Has Kendricks got to the jump he made at ninety thousand feet on his first round-the-world nonstop attempt?"

"No, darling," Nancy laughed. "He's only to the one about swimming fourteen miles through the crocodile-infested waters of—"

"That means he's on his sixth cocktail. Two more and he'll be so fuzzy we can go home. Be a good girl and go in and keep score for me."

SHE moved suddenly and sat on his lap. "Seat's cold," she said. Her white arms lay on his shoulders and he could smell the clean fragrance of her flesh, unobscured by the heavy fashionable perfumes that made the room inside as oppressive as a tropical greenhouse.

"Are you sure you shouldn't stay?" she said. "These parties are just as important as good work at the Base in getting ahead. I'm learning Navy awfully fast, darling. You've got to be Kendricks' kind of man to get ahead here."

"Then I'll stay right where I am," Glenn said bitterly. "I'll see the whole Navy go to hell before I'll be John Kendricks' kind of man."

## Intergalactic Man

MOST of us in any way concerned with science fiction have at times wondered just how far advanced our species will have to be to make successful contact with the alien species that may inhabit other planets of other stars. Knowing how persistently the old cave-man theory that every stranger is an enemy remains in the so-called enlightened era, it has occurred to us that interplanetary and interstellar expansion, coming too early, might mean little more than a ghastly expansion of human wars and conquests.

On the other hand, such able thinkers as H. G. Wells and Olaf Stapledon have considered the possibility of humanity developing not only physically but spiritually and ethically to deal intelligently with extra-tellurian species. Both of them seem at times to have found hope for some sort of forced evolution that would drag us out of our self-made kennel residences.

But evolution, forced or otherwise, is a mighty slow process when measured by the brief flicker of the human life-span. Over the years, the centuries, even the millennia, people don't seem to change much. In the days of ancient Egypt or China they were doing pretty much the same things they do today and for the same motives.

On the other hand, a species that has produced and given recognition to a Confucius, a Buddha, a Christ, a Gandhi, a Marcus Aurelius and an Einstein can hardly be all bad—a fact which Mr. Jones points out brilliantly in this novelet of intergalactic contact right here on Earth. Captain Baird and his Nancy, Lieutenant Prentiss, Dr. Gibbs and even Commander Kendricks are all very human indeed. As such they are simultaneously sublime and horrible when faced with an enormous crisis. And as such they are entirely understandable to all of us.

—THE EDITOR.



"It's only a step on your way up—but Kendricks can keep you in it for the rest of your life if you don't play things just a little his way. Being nice at his parties doesn't take much out of you."

Nancy slid to her feet as Glenn stood up. "You'll never know," he said. "You'll never really know how much it takes out of me—hanging around for two or three hours while Kendricks spouts off and all the kid lieutenants and their giggly wives cluster around. It takes one hell of a lot out of a man."

"Then let's leave it, Glenn! We don't have to stay. If it isn't turning out to be what you hoped for let's put in for a transfer from Pacific Base! I don't care where they send us as long as we can stay together and be happy. Let's go to Ceres again if that will make you happy."

She clung tightly to his arm as they moved toward the noise and smoke and sticky lighting of the house. He smiled down at her small, earnest face, the moonlight full upon it. He bent down and kissed her quickly before they came into view of the doorway.

"No, I won't take you back to Ceres." They had spent the first two years of their marriage there—then almost four years on the Moon. He had promised himself he would never take her away from civilization again.

"It was kind of fun out there," said Nancy. "Only of course there's Jimmy now and school—"

"Sure, we've got a family to look after. We won't go to Ceres—or any other place like it. I'm not running away from Kendricks. That would be just what he'd like. Then he could put his son-in-law in my place and maybe make it stick this time. Anyway I'm old fashioned enough to believe that you can get somewhere by honest effort—even in a military organization."

"Oh, darling, then you *are* old fashioned! I've learned more about the Navy in three months at Pacific Base than you have in your whole ten-year career."

He wished she wouldn't talk like that.



**CAPTAIN GLENN BAIRD**

*—who is forced to risk his Space Navy career in order to save an alien species from hideous destruction*

She said it only because she actually *didn't* understand the petty deadly intrigue of Navy officialdom. It bothered him more than if she had been one of the clever old-in-service Navy wives who used rank like a rapier.

Nancy had never known what home base life was until now. Glenn had seen plenty of it before they were married. He'd tried to explain the difference between Pacific Base and the other places they'd been. But she didn't know what he was talking about.

She didn't know about rank. She didn't know that home base wives flaunted rank like any land-locked Admiral. She couldn't understand that it wasn't like Ceres, where the Commander's wife had midwived the birth of Jimmy when the base surgeon and every assistant were called away because a lock port blew during a cruiser take-off.

Nancy didn't understand how absurd it was for her to offer to care for the Kendricks' youngest during the Commander's three-week vacation—an ex-





Glenn wondered how far this ship from beyond the galaxy had traveled in its voyage of discovery

clusive camp had been planned for him.

That was when they first came to the Base and some of the women finally explained with kindness some of these details when they saw that Nancy was merely innocent of intrigue, that her naive behavior was not some clever campaign to beat their game.

So Nancy thought she understood now. But she didn't. She still didn't understand that it was more than some stupid kind of play acting, a feminine counterpart of military foppery. She could not comprehend how utterly serious, how completely deadly, was the little tight society of Pacific Base.

And so she came up with bizarre remarks such as saying that Glenn was old fashioned for believing that hard work alone would win advancement. Bizarre—like a child having come upon a glittering dagger, fascinated by its brilliance, not knowing its proper use.

CAROLINE KENDRICKS fluttered up as they came to the doorway. "I should have known where you two

would be," she said with sly insinuation that made Glenn shudder. "Anyone would think you were just engaged. But, Captain—Commander Kendricks has been looking for you. Something very urgent at the Base, it seems. He'll see you in the library."

Glenn frowned. He gave Nancy's hand a squeeze and moved away. "Excuse me, darling. I'll see what it is."

The "library" was a small office in the front of the house, where Commander Kendricks kept a desk and a telephone. On the walls were paintings of the space-ships he had commanded. On the desk were six or eight volumes of Navy Regulations. These constituted the library.

Glenn knocked and was ordered in.

"Mrs. Kendricks said you were looking for me."

The Commander nodded, managing to convey an implication of displeasure that Glenn had not been at his side the moment he was needed.

There was no sign of liquor in Kendricks' face now. He wore his normal

space tan and his hands and eyes were steady. Glenn had the impression that he always ordered uniforms a trifle small to emphasize his own great bulk. Now he sat stiffly behind the desk as if momentous happenings were beneath his jurisdiction.

"Central Headquarters just notified Base that a stranger in distress is on the way in," said Kendricks. "She's not a member of the Galactic Council but has references from Paramides. She asks use of our repair facilities. Central gave permission. I've notified Base. You will report there at once and see that proper facilities are provided."

"Yes, sir. When is she due in?"

Kendricks made no answer. His round hard face remained set. In such a pose the lines began to show in definite depth.

"Is that all you have to say, Captain? 'When is she due in?' Is that the only chord of response this information strikes in you?"

Glenn flushed. He had grown used to baitings these past three months—sometimes he felt capable of anticipating them. But the suppressed rebellion against the unwritten law that required his presence at the party, the inescapable inanity of small talk he had heard ten thousand times before—these had shut off all rational processes in his mind tonight.

"I beg your pardon, sir," he said evenly. "I understood your information to be that a stranger in distress has been granted haven, that—"

And then he had it. Knew what cue he had missed.

"We will, of course, alert every member of the Analysis Crew to the possibility of a Fourth Order drive," he finished lamely.

"I trust so—I trust so. You have not been with us very long, Captain. Perhaps you cannot be expected to understand the importance of this prime objective. It may underline it for you if I point out that the *only* reason for allowing a completely unidentified stranger into this base is the possibility of subsequently finding ourselves in pos-

session of a Fourth Order drive. Do you understand that clearly?"

"Yes, sir."

"It remains to be seen." Kendricks glanced at the six dialed chronometer on his wrist. "Half an hour at the most. He was in the thirty-thousand-mile orbit when Central called. You'll have to hurry."

Glenn saluted and turned to the door.

"I notified Dr. Gibbs, also," said Kendricks. "You'll likely need him. The stranger indicated illness aboard but not the extent. He could communicate only by Galactic Code obtained at Paramides."

"Yes, sir."

## II

**I**N THE way to the car with Nancy Glenn felt the cool wash of ocean breezes upon his face. He inhaled deeply to get the scent of stale heavy perfume and liquor vapor out of his lungs.

"I wish I could get away with the things Doc Gibbs does," he said. "Doc is worth his weight in champagne at a party but he thumbs his nose at Kendricks by staying away."

"You can—when you get to a position like Gibbs. That's the privilege of rank, thumbing your nose at men like Kendricks. Until then you have to be nice at stupid parties. *That's Navy.*"

"It's not Nancy Baird," said Glenn seriously. "You didn't talk like that before you came to Pacific Base."

"I told you I had learned more Navy in three months than you had in ten years."

Glenn got in the car beside her. His resentment against her unnatural cynicism mingled with the little raging fires that Kendricks could so carefully ignite within him. But, as he drove away, these both succumbed to the immense and secret pleasure that came with anticipation of the job ahead.

It was for this and almost for this alone that he had come to Pacific Base. When word of transfer had come his exultation had not been for getting

Nancy home, not for getting Jimmy to a civilized school—at least not in the first few hundredths of a second.

Even on Moon Base they had talked of the frantic work going on at Pacific to acquire a Fourth Order drive. The theoretical physicists had proven beyond doubt that Fourth Order was feasible—but they couldn't tell the engineers how to build one.

But somewhere in the immensity of the Universe there would inevitably be a race who knew Fourth Order drives. It fired an imagination and a yearning Glenn could not ignore. The one place at which it might be contacted would be Pacific Base. For that hope he had come. For that single hope he would stay—and take anything that Kendricks could dish out. Kendricks and his son-in-law, Lieutenant Prentiss, whom Central had by-passed in picking Glenn.

He took the beach road. Although it was heavy with traffic even at this time of night it was the shortest route to the great naval base five miles away. There, as Chief of Technical Operations, Glenn would direct the berthing and accommodations of this stranger from far worlds—and direct negotiations for technical exchanges.

To walk through a hull fabricated a hundred-million light years away, to touch its machinery, to put tools to it, to set it functioning again—that was worth all the indignities Kendricks and military fops like him could throw in his way.

"I'll probably be the rest of the night," he said to Nancy. "You take the car on home. I'll give you a call in the morning and let you know what's next."

"Oh, no! The last time something like this happened you didn't show up for three days. I'm staying right with you until you get things organized. Then we're going home and get some sleep."

He looked out over the sea where breakers rolled slowly under the white moon, their white caps frantically unravelling. Then he sucked in his breath sharply and pulled the car over to the shoulder of the highway.

"What's the matter?" said Nancy.

He bent close to the windshield to look upward. "Up there," he whispered.

Nancy saw it then. In the sky ahead of them a cluttered shadow moved slowly against the stars. Tiny, but they could make out two spheres and a snub cylinder whose great bulk could be estimated even at this distance. Navy tractors were towing the stranger, whose power was cut because its pilot could not know the field.

"How far has it come?" Nancy whispered. She understood the awe in Glenn and felt it too as if by reflection from him.

"Don't know but we've got almost everything tagged within a hundred-million light years. It's probably from farther away than that."

Beside them cars roared on the highway. Laughter from moonlight beach parties was carried up on the winds. The sea rolled in as it had done for a billion years on this and other shores. And there was an ache in Glenn Baird's throat as he contemplated awesome times and distances while he watched the shadows in the sky disappear behind a glowing cloud.

"You'd better hurry," suggested Nancy.

"We've got time. It'll still take a half hour to get the ship down at the field." But Glenn started off, edging into the line of traffic.

THE approaches to the Base were choked with cars. Every late driving citizen within fifty miles must have glimpsed the ship and guessed what it was, Glenn thought. He signaled a police officer at the approach to the Base and flashed his Navy insignia. The officer held back the lines of snarling cars while he sped through.

On the field daylight flamed from a thousand glaring beams. A circle of intense brilliance marked a spot before one of the great shops where the ship would be landed. Glenn jerked the car to a stop behind the Analysis Building and ran toward his own offices, dragging

Nancy by the hand.

Assistant Chief of Technical Operations Walter Prentiss was on evening duty. He sat before a battery of phones, replacing one as Glenn entered. His face was as expressionless as a computing machine panel.

"Anything of emergency class?" demanded Glenn.

Prentiss shook his head. "Operation is proceeding. Analyzer crew alerted and standing by. Environmental data complete." He tossed a slip of paper across the desk, bearing the latter information. "In fact," he added carelessly, "you might just as well have stayed at the party. Everything is perfectly routine."

Glenn kept his eyes on the paper he'd picked up from the desk. He read as if wholly absorbed in the data concerning the kind of atmospheric conditions carried by the stranger ship. But he didn't miss Prentiss' casual words.

Walter Prentiss had expected the promotion to CSTO, the job Glenn now held. And his expectation was warranted. He was competent. He had a mind like a machine. And he was old in the ways of nepotism. He had a good mentor in his father-in-law, Commander Kendricks.

**I**T HAD hit him and Kendricks hard when Central had by-passed him in replacing the Technical Chief for Pacific Base. But Glenn's own record had some very bright spots on it, and these had won him the post.

Prentiss had not given up yet, however—Glenn knew this for certain. And Kendricks never would. The rejection of his recommendation was a blow for which he would always hold Glenn personally responsible.

Glenn forced these snarling thoughts out of his mind. There was a job to do tonight, a big job—maybe a Fourth Order job. "Ambulance standing by?" he said.

Prentiss nodded. "Gibbs is out front preparing it to these atmosphere specifications."

"Get four suits ready then. You and I will make the entry. Gibbs will go along. Who's heading the Analyzer Crew?"

"Martin."

"Him too then. Let's go."

The tractors were bringing the huge vessel in over the sea approach. It hung a thousand feet in the air, vertical now, landing vanes extending downward. A great spotlight picked it up, glinting on the vast faintly-scarred hull. From the thousands of cars parked about the horizons of the field came a raucous bellow of welcome and exuberance.

Glenn swore in annoyance at the distant racket. He was thankful for the ban on private flying within a ten-mile radius of Base or there would have been as many ships in the air as there were cars on the ground.

He moved across the hall to the communications room, Nancy following closely. The communicators were in contact with the towing ships and with the stranger itself. The latter was severely restricted to the basic Galactic Code, which had been picked up at Parmides.

Glenn stepped to the Code operator. "Tell them we'll be ready to open the lock upon landing. We'll make immediate entry with cyberlogue equipment."

"I'm afraid they won't understand the cyberlogue reference, sir."

"Of course they won't! But give them the general idea that we will talk to them. Have they reported an understanding of lock sterilization?"

"Yes, they have already performed that operation, they said. They understand the necessity of not introducing alien germ life to our planet."

"Good. Get them to open that lock then. That's the most important thing."

Nancy trailed with him to the shop building. There he stopped her. "This is as far as you go. I wish you'd take the car on home."

"I'll wait. It won't be three days this time." She smiled confidently.

"It might be."

NEAR the spot of light that was the target for the landing tugs he found Dr. Gibbs. The director of Base hospital was placidly sucking a long cigar that flared in regular intervals in a glare of light. He stood beside the huge double-trucked van that was his ambulance. In it could be duplicated the atmospheres of any of ten thousand worlds. Now his technicians were busily setting it for the conditions required by the stranger.

"Gibbs!" exclaimed Glenn. "Come on. You're coming aboard with us."

The doctor moved slowly, taking time to drop his cigar carefully and put out the ashes. "Such excitement," he murmured. "Everybody so anxious to give our friend up there a hand—and jam it in his pocket when his back is turned. I'm a medical man. I don't want any part of highway robbery."

"What's eating you, Doc?" Glenn said irritably.

Gibbs never leaned on rank. He could be addressed like a human being. He came towards Glenn in leisurely resignation. "Everybody so anxious to rob the poor suckers of their Fourth Order drive—if they've got one."

"Nobody's going to rob anybody. We'll negotiate for anything we can use of theirs."

"Negotiate!" Gibbs chuckled. "That means wrapping the club in a piece of silk before you hit a guy with it."

Glenn put an arm around Gibbs' shoulders and hurried the older man toward the dressing room. Prentiss and

Martin were already there. Shortly all four were dressed in lightweight space garb which would make possible entry into the alien ship.

The strangers were oxygen breathers, they had indicated in Code. They used it, however, at three Earth atmospheres pressure and included trace compounds such as hydrogen cyanide. In addition their air temperature was around a hundred and fifty-eight degrees with ninety percent humidity. A human being could not survive long in such environment without a suit.

Mechanically, they checked intercom equipment with each other and read off meter indications of air temperatures and pressures. Then they marched out to the apron in front of the shop.

Nancy was back against the wall of the building with the group of mechanics, technicians and engineers. Glenn wished he had insisted on her leaving. But it was too late now and he couldn't have made her go anyway.

Sometimes there were accidents, Glenn reflected. His head bent back, looking up at that great glistening piston sliding carefully out of the sky. Sometimes a tractor slipped and a hull toppled. Sometimes a power plant...

There was the force of hydrogen bombs locked within that alien hull. But it didn't do any good to think of these things. Ordinarily he didn't. It was just that he wished Nancy was home.

He could see the great landing vanes

[Turn page]



oscillating slowly. Their lower edges were less than twenty meters above the field now and the tractor operators were jockeying carefully over that target of light. The gunmetal sheen of the vessel seemed to swell in frightening proportions as it inched downward. Glenn considered the landing apron. There was six feet of reinforced concrete overlaying a massive rock foundation but the entire mass of the ship would be focussed upon the three points where the landing vanes touched.

The thing was at least five hundred meters high, he thought, and a fifth that in diameter. So slowly was it descending that there was a moment's illusion of its hanging suspended and drawing the Earth up to it by the great gravity of its mass.

Then abruptly there came a subdued sound in the Earth like the faroff *whoom* of an immense bomb. The stranger had touched.

### III

**S**AIID Glenn, "Let's go." His voice sounded harsh to his own ears as if he had broken a spell.

He shouldered the pack straps of the cyberlogue equipment and led the way toward the ship. There was no sign yet of an entrance but he knew where it would be found. He had glimpsed a ladder against the expanse of one of the vanes. Its rungs looked as small as matchwood from a distance but as the men approached, it was seen that the span of the rungs was almost right for a man.

That was good. It meant beings that climbed and walked like humans. It could have been much different. Some strangers were so grotesquely proportioned that it was virtually impossible for a man to work within their ships.

Glenn put a gloved hand to the first rung which was at head height. The cyberlogue heavy on his back, he swung himself up, hand over hand, then started climbing. One by one Prentiss, Gibbs, and Martin followed. The searchlight

caught their transparent helmets and set them glowing. To the hundreds of watchers it looked as if a crazily disjointed glowworm were inching its way up that massive vane.

Glenn paused for breath when he reached the level of the shop roof twenty meters above the floor. The vane had scarcely begun to taper and the reaction ports between the junction of the three vanes was that much farther above him.

He climbed again at a breath-conserving pace. His eyes scanned the surface of the meteor-pocked metal. None of the pocks was more than a millimeter deep. The stuff was good, he thought in admiration. As good as any in the Galaxies of the Council.

The end of the ladder appeared and there a deeper shadow yawned in the dark metal. The door of the airlock had been swung inward.

His heart beat faster. He couldn't help it. It was like when he was a kid and his father took him down to the Navy yard for the first time to see a ship from outside the home Galaxy. The scope of vast distance separating the creatures of the universe, the power of their minds to bridge such space . . .

Every time it was the same. It made his throat ache with awe.

How far had this ship come? The light of its star, now reaching Earth, had started across space before sentient man appeared on this planet. But the stranger had outstripped the light of its own sun several millionfold.

Now they were here and dependent upon man for succor. Sick, they had said, and their ship in disrepair.

Glenn hoisted himself into the lock with the assistance of handrails. He turned and helped his companions as they appeared above the level of the lock floor. Lights glowed in the ceiling of the chamber.

They turned and surveyed the surrounding walls in silence. Glenn wondered how they felt at such a moment as this. Prentiss, he knew, regarded the ship as an entity by itself. He admired or criticized a mechanism without re-

gard to the minds of the creators. For him there existed only science—without the scientist.

Martin was a gadgeteer—a very good one or he would not be heading up the Analysis crew. He was fascinated by mechanisms, absorbed in their cleverness. It mattered not at all whether they were the optimum or what kind of mind devised them.

Gibbs was of wholly different cast. He came closest to understanding the things Glenn felt as he walked the deck of this stranger. But Gibbs had no delight in mechanisms of metal and glass. He was awed only by the variant means through which Nature had adapted sentient life to the universe—and the sometimes unbelievable similarity of such life in far-removed corners of creation.

Glenn wheeled the lock door shut after examining its mechanism for a moment to be sure he could open it again.

They waited expectantly. The chamber of the ship should begin to fill automatically with the atmosphere in the mail huff sections, provided the mechanism of the stranger permitted any extrapolation at all. They were not wrong. In a moment there came the hiss of in-rushing air.

The opposite door opened, giving view of a second lock, a duplicate of the one they were in. But they were still alone.

"Where's the welcoming committee?" said Martin. "This is no way to treat a friend."

THE air began to fill suddenly with an opaque fog that swiftly cut their vision. Automatically they locked arms with one another as long training demanded. "What do you think?" said Dr. Gibbs.

"Your department," said Glenn. "Sterilizing us and the chamber before letting us in, just as we would do in similar circumstances."

"I was hoping that was it. A very intelligent class of life."

The vapor faded slowly. With its passing they saw that a door leading to

the main interior of the ship had been opened. Within that opening stood one of the strangers.

For a long moment the two species of life regarded one another. The stranger was roughly anthropomorphic. He was grotesquely pot-bellied and very thin in all of his four limbs. His bones seemed sharply outlined as if there were great skeletal strength without corresponding muscular development. The totally hairless body was covered with a skin that resembled fine ivory-tinted leather. He wore no clothing or ornament.

Glenn advanced slowly and cautiously, taking care not to make any overt move that could be misinterpreted as hostile. He slung the cyberlogue equipment from his shoulders and set it down. He took a cord from it and plugged into an outlet on the chest panel of his suit. Then he took from the case a small adjustable communication set and handed it to the stranger.

The latter grasped it and turned it over in his hands for a moment. Then he seemed to nod in a gesture of excitement and clamped it carefully to his head so that the tiny speaker was over his diminutive ear canal. The nut-sized mouthpiece was close to the leathery lips.

Glenn spoke. "I am Glenn Baird. We welcome you to this galaxy and this sun and its planets. We offer you sanctuary."

The stranger's face lighted as the instrument at Glenn's feet translated the words into basic semantics, from which the stranger's own mind could devise meaning.

"I am Emdor," he said at once. "On Paramides they talked to us with such equipment as this and said that men of Earth had made it. They said that here we could find all we need to set our ship in order again."

The voice came mechanically, transcribed by the instrument. All of them could hear through the relay function of Glenn's intercom set.

"I accept your good will with thanks

on behalf of my people," Emdor continued. "We are the Centrasi from far beyond your galaxy cluster. But I fear that we have come too late. There is no salvation for us and my companions are already far beyond any assistance."

"You are ill?"

"Yes. Already two have died."

"Are you—?"

"Let me," Gibbs interrupted. "Time is important now."

To Emdor he said, "Is it an illness with which you are familiar or something strange you may have contracted in your travels?"

"It is a new and strange thing. Nothing such as we have known before."

The men could sense now, even through the mechanical voice of the cybologue, the weakness and difficulty with which Emdor was speaking.

"How many are there aboard?" said Gibbs quickly.

"Six remaining—"

"Six! We expected hundreds in such a ship!"

"No. It requires only a small crew. There were only eight of us to begin the journey."

"Where do you come from?" Prentiss demanded abruptly.

"From—I can't express it clearly to you—it would be from behind space, I might say."

"Please!" Gibbs snapped. "This is a case for medical precedence." To Emdor he went on, "This illness—have you narrowed it down to any reasonable limits through past experience? Have you any treatment that alleviates?"

"None whatever. It is wholly beyond our previous experience and knowledge."

"You have been gracious and kind to permit us to come here. Now I would ask one final favor. It is too late to accomplish what we had hoped. Even as our ship came into your field I hoped there would yet be time for you to attempt repairs for us but now there is none."

"This final favor—accept our thanks and take your departure. We will take our ship away again. We can lift on

primary power, pointing towards our home world. It will be many thousands of lifetimes before our corpses are found but in time they will come to rest upon our own soil. This is all we ask of you."

**A**BRUPTLY Emdor's eyes closed and he collapsed in the doorway.

"Find their suits!" ordered Gibbs. "Locate the other five Centrasi. Dress them all up and find some way down without carrying them down that ladder. There's got to be an elevator or freight hoist of some kind."

Glenn accepted the natural orders of Dr. Gibbs in the emergency. They made Emdor as comfortable as possible, then moved on down the corridor, searching carefully. They quickly found the locker of space-suits. Martin and Prentiss were left to dress the Centrasi and find an elevator or hoist to the ground level.

Glenn and Gibbs moved on toward the interior of the ship. Side doors along the corridor showed a score of tempting byways but they seemed to be in a hallway of central importance and continued. At the end they found an elevator which apparently traversed the length of the ship.

They entered. Glenn studied the controls for a moment. They were simple enough to him, who had made a career of working with alien mechanisms, but to Gibbs they looked like a miniature powerhouse switchboard.

The small transparent capsule of the car rose slowly as Glenn touched the controls. They rose past deck after deck crammed with mechanisms. Even those brief glimpses told Glenn he had never seen anything in all his life so vast and complex. If the Centrasi were too ill to assist with the analysis or give information about the ship it would take hundreds of thousands of man-hours to analyze this structure and repair it.

It would be done, of course. The Navy would not rest until the last bit of connecting wire had been tagged and the working of the whole great engine determined to the final detail. But it would not be out of love for the Centrasi. The

creatures would be long dead by then unless Gibbs found a cure for them.

The analysis would be made on the million-to-one chance that this might be the long-sought Fourth Order drive.

The car rose faster as Glenn accelerated past endless decks without observing signs of life or evidence of the control room. He supposed finally that it would be found in the nose of the ship at the highest level.

It was.

The elevator halted automatically. The men stepped out to the deck of the control room. A lighted screen before the pilot's position showed the entire field as viewed from the five-hundred-meter height of the ship's nose. The shapes, the lights, the distant swarms of curious onlookers—all were there on the screen. Even the tiny knot of people with whom Nancy stood. Glenn tried to pick out her face on the screen but he couldn't be sure at that distance.

He turned quickly away to the more

important business. There were no signs of Emdor's companions. "Look for the crew's quarters," he said. "You could expect them on the level below or even on this one, since there were so few of them."

"Over here," said Gibbs quickly from the other side of the room. He beckoned and pointed through a doorway.

The five Centrasi were sprawled on low cushioned beds in attitudes of collapse. Gibbs stepped forward impulsively.

Glenn caught his arm. "Take it easy. Watch for weapons. If one of them should come to he might come out fighting, not recognizing who we are."

Gibbs nodded and they approached the first bunk cautiously. There was no sign of life. Carefully they picked up the Centrasi and carried him to the elevator. It was scarcely large enough to permit laying the creature on the floor. No more than three of them could be taken at once.

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"You go on," suggested Gibbs. "Prentiss can be getting them into suits while we're bringing out the next two."

At full speed the elevator was sickeningly swift in its fall. Belatedly Glenn considered the effect upon his charges but it seemed to him that nothing they did now would make any difference to the dying Centrasi.

Prentiss and Martin had Emdor dressed in the suit when Glenn reached their level. "We located another hatch," he said. "There is an elevator all the way to the bottom of the vane but no airlock down there. The interior of the vane can be sealed off so we can let our atmosphere into it and consider letting out the ship's atmosphere at a later time."

"Good," said Glenn. "I'll be right back with Doc Gibbs and the other two. Then we'll call it a night."

The five Centrasi remained unconscious during the removal to the ambulance. Gibbs supervised his medical technicians as they transferred the strangers. The ambulance had been prepared with Centrasi atmosphere in case the creatures needed it but their suits were left on for the short run to the hospital, where a ward was also ready.

Gibbs climbed to a step of the van and glanced upward at the towering hull of the ship. He grinned cynically at Glenn. "There's your plum. All you have to do is pick it for Pop Kendricks. If it turns out to be Fourth Order he'll pat you on the head and maybe give you a one-grade promotion."

"And don't worry about the owners of the thing. The poor devils are in no condition to object to anything!"

#### IV

**S**HIPS were admitted to foreign repair bases of members of the Galactic Council on what was virtually a salvage basis. In the beginning there had been some logical necessity behind it. But now all that Gibbs said of it was true—legalized highway robbery when it was enforced. Glenn knew it was an archaic reminder of barbaric days. But

the custom was still on the books to be used when occasion demanded—occasions like this one.

In the early days of space travel there were worlds whose technique and science were hopelessly mismatched against others. Engineering on these separate worlds had sprouted off in ten thousand variant directions, some good, some bad.

There were sporadic outbreaks of warring among these early mismatched cultures—but not nearly so many as might have been expected. There was a degree of unexpected maturity in men and their fellow creatures by the time they had succeeded in spanning the gulf between their worlds.

They formed a Council and agreed to cooperate and exchange. A ship demanding haven of an alien world was required to allow examination of its mechanisms and devices for copying if that was desired to bring technology to a more even level throughout the Council worlds.

It was a good enough system in its day, Glenn knew. A day when the Council was young and the idea of cooperation had to be forced on some members and when intergalactic technical societies were only a dream.

But that day was long gone now. Engineering exchange had passed far beyond such sporadic contact. An unbelievably complex patent system covered the galaxies and protected all cultures and dispensed invention to all who wished it.

The old haven-salvage custom was useful only for pirating—as in the case of Fourth Order.

It didn't matter that its creators might not be members of the Council. But there were other ways, Glenn knew, besides the plunder and legal blackmail of haven-salvage laws. There was still negotiation—and that didn't mean what Gibbs had implied it was.

Glenn stood at the base of the ship with Prentiss and Martin after Gibbs left. Prentiss looked up. His eyes were already greedy and Glenn wished he

could somehow keep Prentiss from defiling the ship with his presence from here on out.

Prentiss spoke suddenly to Martin. "You can get your crew aboard for preliminary inspection. I'll go along."

He was right in assuming the initiative in Glenn's presence—technically right. It was his shift but only the hidden conflict that swirled between them would have driven him to ignorance of the courtesy due his superior.

"You seem to forget who is in command here." When Glenn recognized his own tired brittle tones he regretted the words. But there was no recalling them. The eyes of Prentiss were bright with the triumph of having forced Glenn to throw his rank.

"I'm sorry," said Prentiss. "I assumed we could go ahead with routine procedure now that the Centrasi are out of the way."

"The Centrasi are *not* out of the way. Their vessel is still their property. Post a guard and let no one aboard tonight. We will decide the disposition of the vessel after Dr. Gibbs determines the condition of its owners. Good night!"

He hung his spacesuit in the dressing room. He was well aware of leaving behind him the technical organization of the department facing a blank wall. It was like an admiral leading his fleet to the site of expected combat and surprising them with April Fool.

It was what Gibbs had said. He could not get the image of the bland cynical doctor out of his mind. Gibbs saying, "Everybody so anxious to rob the poor suckers . . ."

He had to keep the men from scratching through the fine Centrasi ship like a horde of pack rats. He had to give himself a chance to bargain with Emdor. And muddling his decision was his own burning desire to know for himself whether the Centrasi had unlocked the Fourth Order mystery.

NANCY greeted him with high excitement in her eyes as he approached her. She clutched his arm

tightly and fell into step with him, walking towards the car. Her face was turned up to his and aglow as if she felt everything that he had sensed as he walked through the great ship.

"How was it, darling?" she whispered. "It must be a wonderful ship inside. What are the people like?"

He told her briefly the things he had seen, describing the Centrasi and his contact with them.

Nancy shuddered faintly. "It's horrible for them to be in such a state so far from home. Maybe you'll never find out where they come from at all if they die now."

"Very likely we won't," said Glenn. "Their star charts will probably be so unfamiliar that we can't possibly back-track them. Emdor made a crazy statement about their origin. He said they came from the back-side of space."

"What does that mean?"

"I haven't the faintest idea. Sounds almost like cross-continuum flight but that's impossible."

"You told me once that impossible is a nasty word."

He laughed softly and put his arm around her waist for a quick instant as he opened the car door for her. But when he appeared on the other side and climbed behind the wheel his face was serious.

Nancy saw it at once. "Now what is it, darling? Why the sudden heavy visage?"

"That guy, Prentiss. He's right behind me with a knife on this job. It's the first big one I've had and he's going to queer it and put himself in my shoes if he can. Besides the technical end I'm going to have to fight him all the way. I don't see why somebody didn't drown him when he was a pup—and his papa-in-law to boot."

Nancy was silent as he drove through the broad gates of the Base. They came to the short stretch of beach road that led to their own turn-off. In the moonlight and the sea and the sand there seemed to be little of the troubles that Glenn spoke of.

"It's my fault," she said at last. "It's all my fault."

The car swerved as he jerked his head about suddenly. "Huh? What the devil are you talking about?"

"Oh, darling, don't you remember what you used to say when we first went out to Ceres—'It's a black-and-white situation. Treat it that way and don't get mixed up with the sterile puny grays.'"

Glenn smiled. "Yeah, I remember. But what has that got to do with this?"

"Prentiss. He's making a black-and-white situation, and you're trying to be gray about it. You know what you have to do to perform your job. You know what the proper treatment of the Centrase is. But you're trying to *adapt* to the presence of Prentiss and to the fact that his father-in-law is your Commander and will get you thrown out on your ear if he can find an excuse. So you're trying to play it in the middle, a nice pale gray. You're forgetting that in a situation of this kind Prentiss and Commander Kendricks are both as black as hell."

"Whoa! Now wait a minute, lady. I picked up the wrong gal at the Base. You're not the one I had at Kendricks' party tonight."

"No, I'm not. That's what I mean. I've been a gray too ever since I came here. I hadn't realized what I was doing to you. I've been gray about this whole business of rank, trying to match daggers with these harpies who've played the game of Navy rank all their lives. I've made you be gray about such things as Kendricks and his parties, about Prentiss."

"I'm sorry, darling. It's no good at all. Neither of us can be that way. We're trying to adapt to an impossible situation and feel proud about it. When we were on Ceres you used to say that most of the adaptability people brag about is nothing but plain damned cowardice. Do you still feel the same about it?"

"Yeah—of course I do." Glenn nodded slowly. "That's why I felt so

bad seeing you trying to be like these dames scrabbling for rank instead of being just plain Nancy Baird.

"And you're right—I've been doing the same kind of thing, worrying about Prentiss and Kendricks. From the first minute I walked into the Base they acted as if I were some poor relation being forced to live with a rich uncle. It isn't that way at all, is it? I've got as much right on the Base as either of them as long as I do a real Navy job here, haven't I?"

"Sure. It's as simple as black and white and to hell with the in-between grays who haven't got the guts to be either."

"To hell with Prentiss and Kendricks," murmured Glenn fervently.

**I**T WAS two o'clock in the morning when they reached home. From the bedroom window they could see the spotlighted hull of the Centrase ship like a glorious tower of light. But Glenn did not linger to watch.

They prepared quickly for bed. The moonlight was streaming in a glorious band across the floor but Glenn merely shuffled his arm gently until Nancy's head settled just right in the hollow of his shoulder. Then he closed his eyes and was half asleep almost at once.

"What's Fourth Order?" Nancy said abruptly.

"What's—*huh*? Darling, let's go to sleep. I've got to be at the Base by seven."

"I know but you can tell me in just a word or two. I heard about it on Ceres and I heard it on the Moon and while you were inside the ship I heard all the mechanics and engineers talking about Fourth Order this and Fourth Order that and would you find it in this new ship. You've never really explained it to me. What is it anyway?"

"A word or two, darling! Look, it's Einstein and Martell and Laughten and Cramer. It's space-time and multi-dimensions and higher continua—and it's two o'clock in the morning. Honey, will you please shut up and go to sleep!"



"Oh, I don't mean all that! You don't have to give me an engineering lecture. Just what Fourth Order *does*—that's all I want to know."

He chuckled softly and kissed the top of her head. "What would I ever do without you, darling? Who else would demand a thumbnail sketch of the world's most complex physical theory at two o'clock in the morning?" He paused, hugging her close.

"Well?"

"Fourth Order—it's a kind of a dream," he said slowly. "And it's poetry too. Poetry in mathematics, if you can imagine that."

"Glenn!"

"You remember Columbus in the history books. It's the same kind of a dream of going all the way around, of seeing all there is to see. A theory that you can find your way back home if you just keep on going in the same direction away from home—keep on going long enough.

"A long time ago they had a theory that nobody could go any faster than light. That was before space flight was ever a reality. Some gentlemen named Lorentz and Fitzgerald along with Albert Einstein cooked up the theory behind that. But when Laughten built the first super-gee ship and buzzed right on through the wall of light, as they called it then, he caused a lot of hasty revising of theories.

"So they built a new one that said we couldn't go faster than the speed of light to the  $c$  power—you understand what that means, honey—and we pedaled along with Second Order flight for a long time. Eventually it was knocked over by Cramer, who came up with our present day drives, the Third Order kind, which added still another  $c$  exponent to the theoretical limit. This is the drive that is almost universal among members of the Galactic Council and so far as is known nobody has anything better.

"But the physicists were pretty wary about setting any more limits to the speed obtainable in open space. So they

got together and tinkered with the old theories and poked among the ruins for a long time. In the end they shoveled it all overboard and came up with some brand new stuff.

"This time they said there *was* a still higher velocity obtainable, something that would make Third Order look like a three-legged cat. Furthermore they said that a ship traveling at Fourth Order velocity could actually circumnavigate space. Remember your elementary physics and the curvature of space? The curvature is real. Go far enough and fast enough and you'll end up in your own back yard—after traveling around all the space there is.

"That's what Fourth Order can do—at least that's the dream we have of it. And if it's possible, then maybe somebody knows how to do it. That's why we want to examine so carefully the ships that come from so terribly far. Now, do you understand, darling?"

He shook her gently and she gave no answer. Then he caught the deep and even rhythm of her sleeping breath. He grinned tenderly and closed his own eyes. He would have to do it all over again at breakfast.

## V

**H**E REACHED the hospital at seven. Like everything else connected with Pacific Base the hospital was immense. But its size did not come from mere numbers of beds. It contained more machinery than a medium-sized powerhouse and more apparatus than a chemical plant.

Every other-world patient required a new set of conditions—incredible temperatures and deadly atmospheres. Deadly from human viewpoint but vital to intergalactic visitors. Many of the alien crews were injured by shipboard accidents that put their vessels out of commission. Many were sick of strange illnesses that were never identified. Nearly a thousand dead were buried in the cemetery in the hills beyond the field.

As Glenn went up the steps he wondered if the six Centrasi would soon occupy anonymous graves on that dismal hill. To him, as to Nancy, it seemed uncommonly tragic for creatures like these to sicken and die so far from their native world after so magnificent a journey had carried them to Earth.

He passed through the pleasant corridors, whose walls held back a hundred lethal atmospheres. Gibbs was already in the office. "Didn't you go home at all?" said Glenn.

"For a couple of hours. An old man doesn't need much sleep."

"How are they?"

"One died but Emdor revived. I put a crew of technicians on the job as soon as we got over here. We have a fairly complete picture of the Centrasi bio-chemical makeup now. That's what enabled me to revive Emdor."

"The outlook is not good, however, and I don't think they'll survive. Something is seriously disturbing their endocrine system and there just isn't time enough to find the cause—and then the cure."

The day seemed to darken visibly for Glenn. He shook off the depression that the lonely fate of the Centrasi induced. "Can I talk to Emdor?" he said. "That's the important thing at the moment."

"Can't your bright young technicians figure out how his ship works? Do you have to get him to show you how to run it even while you're in the process of swiping it?"

"We aren't going to steal," said Glenn evenly. "Nobody's been in the ship since last night."

"If you *don't* steal it Kendricks will fire you. That's your job, didn't you know—to steal anything anybody brings here that's of value to us?"

"I think I know my job and I'll do it my own way. Can I see Emdor?"

"Come along."

They took the elevator to the third floor, where the Centrasi ward was located. An orderly was in constant attendance to keep the Centrasi under observation and call the nurses or doctors

when necessary. He saluted as the two men entered the anteroom before the ward.

Through a large, double-thick glass panel the Centrasi could be seen. The four who remained unconscious were inert upon the low couches provided for them. Emdor was sitting up in a slumped position of despair.

"I'm going to make a physical examination of Emdor while I'm here," said Gibbs. "Do you want to come in—or talk with him from here?"

"I'll go in with you."

Gibbs opened the sliding doors of a small chamber. They entered and closed the doors. A light came on automatically as the pressure was sealed. From a cabinet they took rubberized pressure suits and donned them. Small refrigeration and air supply units were shouldered. Gibbs checked the talk circuits. "Ready?"

Glenn nodded inside the semi-flexible helmet. Gibbs turned up the pressure valves. While they waited for conditions to be equalized with those inside the ward the room and their suits were bathed in sterilizing vapor. A green light flashed at last and Gibbs opened a door leading to the ward.

GLENN learned long ago that it was unwise to assign human values to facial expressions of extra-galactic visitors but it was difficult to refrain in the case of the Centrasi.

Large melancholy eyes were devoid of lids, which gave them an expression of dejected staring. Every line of their bodies seemed to communicate an impression of overpowering burden which they could scarcely bear.

Dr. Gibbs stepped to the cyberlogue in the ward. "We wish to make an examination. Will you permit, Emdor?"

The Centrasi arose from the low couch. He approached the examination desk in the corner of the ward. Dr. Gibbs motioned him towards the screen of the color fluoroscope.

It fascinated Glenn and touched him with a faint sense of inferiority to

watch the doctors examining and treating one of the alien visitors. Their problem was an infinitely more complex one than that of the physicists and engineers who merely tried to analyze mechanical and electronic engines.

The color fluoroscope showed a clear, detailed image of the interior of the Centrasi body. "Emdor's heart," said Gibbs. He pointed towards the pulsing organ located in the right lower abdominal cavity. "It has increased in size detectably in the short time they have been here. Though I have no normal by which to compare there appear to be pathological nodules. And there is definite thickening of the arteries."

"That sounds like degenerative disease, doesn't it?"

Gibbs nodded. "It has that aspect but the question remains as to why it is developing—and with such terrible rapidity. They tell me that the symptoms of lassitude, exhaustion, increased pulse and respiration rates were unknown un-

til a few weeks ago. Their observation of these symptoms began shortly after their first contact with one of our galaxies."

"They must have picked up a bug—but what bugs cause such symptoms?"

Dr. Gibbs shook his head. "They're more careful explorers than that. I'm willing to believe that they did their work under perfectly sterile conditions with respect to themselves. You saw how it was when they approached us."

"What else can produce such degeneration?"

"There are factors which are known to cause it—but it's very difficult to see how they exist in the present case. We'll have to wait for more work on it before we reach any conclusions."

Glenn watched in silence while Gibbs finished his examination and made careful notes. It seemed to Glenn that the eyes of the Centrasi held a pleading expression, a desire to speak some thought

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that he dared not or could not utter.

When Gibbs had finished Emdor said, "My request—the request I made to be set under way in the direction of our home world—will you not grant that?"

Glenn regarded the pleading Centrasi compassionately. He could not hold these creatures against their will, important as was the possibility of their possession of Fourth Order. Actually the decision was no longer his once the visitors had landed. Kendricks would hold them and Prentiss would—and all the forces of Galaxy law passed in a barbarian age would see that the visitors remained until their ship was ransacked for Fourth Order.

Glenn shook his head. What was the matter with him? He wanted to see Fourth Order as much as any of the rest of them. But he felt the eyes of Gibbs on the back of his neck and he remembered what Nancy had said—"Black and white—you can't make a compromise with things that are right and become a dirty gray. Not if you want to keep on feeling like a human being."

**T**HE CENTRASI were sentient creatures on a plane with man. And the law of affinity between sentient beings of the universe was higher than the barbarous rules of an obsolete day in the history of space-flight.

"Your request will be granted," said Glenn slowly, "in case of your death. But we cannot justify ourselves in allowing you to depart with an almost certainly fatal illness. You must allow us an attempt to help you even with our limited knowledge of your requirements. We offer you all the services that we can command.

"In addition we shall attempt the repair of your ship, so that if you do survive you shall be able to return to your home world. In return, we ask a favor of you—that we be allowed to copy such of your mechanisms as are new and useful to us. Will you grant us such an agreement?"

Emdor was silent for a long time. He looked carefully at Glenn and Dr. Gibbs

through the transparent helmets that protected their faces. His expression was as if Glenn had just delivered a threat—an ultimatum he could not ignore. Glenn felt sick that he should take it in such a light.

But Emdor finally spoke. "I will agree to that. You are welcome to anything you find of use to you—in the ship. I trust your honor to send us on our way home when we are dead."

"Thanks—thank you, Emdor. I will see that the bargain is kept."

It would cost him his Navy career if he did have to keep it, he thought. If the Centrasi died their ship would be lawful salvage and the Navy's right to keep it would be backed up by all the archaic galactic law within a hundred million light years. But it would be kept—the promise would be kept if the Centrasi died.

Gibbs was watching, assaying his sincerity in the tight bargain he had made for himself. Now, he had to find Fourth Order if it existed in the ship. And Gibbs had to see that at least one of them survived to take the ship home.

"We know you are too sick to assist in determining the trouble in your ship," said Glenn, "but if you will allow us to take a Basal Cyberlogue recording of your mind we will have at our command all the information your brain contains regarding the ship. With the aid of that we should be able to make the repairs."

"No—I am sorry," said Emdor sadly. "But that would be of no assistance. We are not technically trained, my companions and I—not in the structure of the ship and its engines. We are astrographers, not engineers. Likewise we are not physicians or perhaps we could assist with the recovery of our own physical bodies.

"No, in these fields of knowledge, you would find our minds blank. We can contribute nothing that would be of advantage. The mechanisms of the ship are so wholly automatic and ordinarily self-repairing that it is not considered necessary that its users understand its

engineering. Because of this we are certain that the damage is tremendous and your chance of repairing it hopelessly small."

"You don't understand how much we can glean from a Basal Cyberlogue," said Glenn. "The mere fact that you have piloted the ship indicates knowledge in your minds that will shorten our work considerably. There are thousands of facts you are aware of which would help us."

"No."

For the first time there came to Em-dor's face an expression of resistance. It was a sudden flame of rage, so out of keeping with his other expressions that Glenn and Dr. Gibbs were taken aback.

Then the Centrasi crumpled. He had been standing before them and now his body twisted and collapsed upon the low couch.

Gibbs turned swiftly to a shelf beside the cyberlogue. He grasped a hypodermic and measured a precise quantity of fluid from a bottle. He turned the Centrasi over.

"You'd better beat it," he said to Glenn. "This is going to be a long tough haul. I'll be with them most of the day. I'll give you a report this afternoon."

"Okay, I'll be waiting for it. You can't let the poor devils die. And you know what happens to me if they do."

"Beat it."

## VI

**OUTSIDE** the hospital Glenn mounted one of the small tricycle scooters used for transportation about the field. He headed for the shops and the Centrasi vessel a mile away.

As he approached the ship he saw an antlike stream of figures moving between it and the shop. Entry was being made into the ship. His order to post guard had been violated.

Rage obscured his thinking for a moment but reason took over during the delay required to reach the spot. There was only one explanation—Prentiss. The voracious engineer had overstepped

himself this time.

Glenn parked the scooter and strode into the engineering office. Prentiss was not at his desk but Glenn knew that an open phone line would have been run into the ship. He placed the call.

His assistant answered within a few seconds, his countenance faintly insolent behind the protecting helmet of his suit.

"I ordered a guard posted, and the ship to remain unviolated," said Glenn.

"Why was it not done?"

"It was—for a time," said Prentiss blandly. "The order was then countermanded."

"By whom?"

"Commander Kendricks."

"On whose recommendation?"

Prentiss did not even blink. "Mine," he said.

"Keep your line open," said Glenn. "I'm calling the Commander."

It took longer to get Kendricks but his face appeared at last as if he had just been interrupted in the midst of negotiations affecting the destiny of worlds and of nations. He glanced at the two faces appearing on his screen. "Who? Oh, Prentiss!"

"I'm calling, Commander," said Glenn evenly. "I ordered a guard posted on the Centrasi ship. The order was broken without my consent."

"Captain Baird, five precious hours were wasted as a result of your purposeless order. Five hours in which—"

"Commander, may I ask—does this mean that I am removed from supervision of this project?"

For an instant that seemed to stretch into ages Glenn saw the affirmative answer hesitate on Kendricks' lips. Then the Commander shook his head. He could not risk Glenn's dismissal on so trivial a matter. After all he had come to Pacific Base on Central's recommendation. That made a difference.

"No, you are in command of the Centrasi project, Captain. But there are some matters in which—"

"Then I must ask that my command be recognized. Otherwise I shall be

forced to submit my resignation as of this moment. Confirmation in writing will go forward to Central and—"

Kendricks' eyes darkened. "In view of your inexperience at so large a base as Pacific and in view of your lack of understanding of urgency and procedure in such instances as the present—your lack of adequate reason for not going ahead with analysis at once—perhaps it would be possible to find a more suitable place at Pacific, one in which you could become more thoroughly acquainted with the atmosphere and tenor of the place as a whole."

"I was not consulted about my reasons for issuing the order," Glenn said.

"Please explain them. I was not aware that you had a definite purpose in mind."

"The ship is the personal property of the Centrasi. Furthermore it belongs to a race of which we have absolutely no knowledge. From all appearances they have a technology equal to or perhaps superior to anything found in the galaxies of the Council.

"Prudence would dictate the most diplomatic approach. With this in mind I ordered their vessel protected from intrusion pending an agreement by which we could gain access to their technological processes—including Fourth Order if it exists there."

Kendricks glared inquiringly at his son-in-law. "I was informed," he said, "that the Centrasi were virtually helpless and in no condition to discuss the matter."

"They were—last night. But since we boast so loudly of our medical facilities it seems justified to place some degree of faith in them. In this case, at least. Dr. Gibbs was successful in reviving the Centrasi leader."

"And you were able to negotiate an agreement? Let me see it?"

Glenn shook his head. "They have granted permission to copy any useful mechanism we encounter in their ship. But it is verbal, although completely recorded through the cyberlogue and witnessed by Dr. Gibbs."

THE acknowledgment of defeat in the matter brought a red suffusion to Kendricks' face and neck. Suppressed rage showed in the eyes that he turned again upon the image of Prentiss.

"Very good, Captain Baird," he said. "I apologize for the intrusion into your command. You may proceed. Report directly to me the moment there occurs a variation in circumstances."

"Yes, sir. Thank you, Commander Kendricks."

He cut both lines quickly.

Black and white. He was sweating now and his hand was trembling faintly as he took it from the phone switch. He had won that round, he thought, but if he had taken time to think about it carefully he would never have gone so far out on a limb as to give Kendricks the chance to saw it off.

But Nancy was right. It was black and white and you could win by playing it that way instead of being a dirty gray. He could not restrain a minor glee in knowing that Prentiss was at this moment getting a dressing down from his father-in-law. Sometimes nepotism could pay off too well.

But there was nothing permanent about the triumph—yet. They were out for his scalp and there seemed nothing in the long run that would keep them from getting it. At the moment that didn't matter, however—he had made a promise to Emdor.

That *did* matter.

He dressed and went out to the ship. A freight hoist had been adapted to the hauling of men and materials into the vessel. So far the ship had not been exhausted of the Centrasi atmosphere due to the possible effect upon the machinery. Prentiss would not slip on a technical detail of that kind, Glenn reflected.

He found Prentiss alone in a long gallery packed with devices of incredible complexity. The gallery stretched away from them a hundred feet on either side. It was crammed with cables whose individual wires almost certainly numbered into the millions. Close

spaced, islands of components interrupted the streaming flow of wire. A thousand connectors dipped into an opaque housing and reappeared on the other side, regrouped, rearranged, carrying on their joint flow to yet another island where they parted, never to find each other again in all that vast stream.

As the two men looked upon this magnificent machine the complexity of their rivalry seemed to diminish for the moment. It was the single common hold their minds could grasp simultaneously. It was the one spot of common ground in all their lives.

"There's Fourth Order here," said Prentiss almost worshipfully. "There's got to be. There's never been a ship like this before in all the galaxies. There's never a ship that could go beyond the galaxies with such freedom as to permit a crew of only eight. It couldn't be anything but Fourth Order."

"I hope so," said Glenn. "But whatever it is we're going to take a devil of a long time to plow through all this and find out what makes it go. We've always designed and engineered with the basic belief that the greatest machine is the simplest. Unless all this equipment is absolutely necessary you'd think the Centrasi designed with just the opposite view."

"We'll find it," said Prentiss confidently. "We'll find Fourth Order if it's here. If it isn't this is no more than a mess of junk that doesn't matter."

With this reminder of Glenn's obligation to the Centrasi the moment of unity passed.

"I suppose Gibbs has no objection to my interviewing the Centrasi now that they are revived," said Prentiss. "I'd like to see what information can be obtained from them."

"I have already taken care of that," said Glenn with sudden defensive coldness. "The crew are astrographers. They know nothing of the ship."

"That just doesn't hold water! If they told you that, then they're lying!"

Glenn regarded his assistant for a moment. Prentiss' eyes were challeng-

ing, hostile, but Glenn chose to ignore it. "You'd better take off," he said. "You'll be handling the night shift to-night and I don't want anything done on the shift without your immediate supervision."

"Is that an order to leave?" said Prentiss.

"What would you do if it isn't?"

"I'd like to stick around for another couple of hours at least to get some degree of orientation."

"Suit yourself in that. What I said was only a suggestion."

"Thanks," said Prentiss stiffly. "I'll leave by noon."

## VII

**I**T WORRIED Glenn too—the thought that Emdor had lied. He left the ship and went to the communication office after removing his suit. A discrepancy had bothered him ever since he had spoken with Emdor in the hospital. It had to be checked.

He found the original transcripts of the communications with the stranger on the previous night. His memory had been correct. Kendricks had advised him that the Centrasi wanted to use the Base facilities for repairing their ship. That was the way the original was worded. The Centrasi had wanted to do the work. That didn't jibe with Emdor's denial of technical abilities.

Somehow it jolted the problem out of straight black and white, shoving it in amongst the indefinable grays, making characters like Prentiss and Kendricks out of the Centrasi.

There was, or course, the possibility—the immense possibility of error through the transcribing of the Galactic Code. That was a clumsy tool at best. Nevertheless the message stood. Gibbs called while Glenn worried over and around the discrepancy.

"Emdor is hanging on," he said. "But two more are dead. I thought you'd like to know. None of them can last much longer."

"How long have the two been dead?"



"About ten minutes."

"Are you doing an autopsy?"

"It hasn't been started but we'll get right at it."

"Then there's still time—there's enough life in the brain cells. Use the intensifier on the cyberlogue and make a recording of everything you can pick out of the dead brains. Go deep."

"But Emdor said—"

"He can't kick about reading the dead ones. They've got information that can help us, I'm sure. Get the tapes over here to me as soon as you finish running them."

"Kendricks must have got to you. Glenn, stay on the level with these Centrasi. They're decent guys."

"I will, Doc. Don't worry. But I'm beginning to wonder if they've been on the level with us. I think they know more than they admit. I think—I'm pretty damned sure now—that they are deliberately trying to keep something from us."

"Even if it involves their own sacrifice? That would be a pretty big and important something."

"That's what I'm worried about. Get me those tapes as quickly as possible. I'm not violating any promise to the Centrasi and I won't—as long as they stay on the level with us."

"They'll be ready after lunch."

The tapes were on Glenn's desk when he returned from the cafeteria at noon. He went at once with them into the analysis section, picking up a tape there covering Fourth Order theory.

The great machines of the analysis section were somewhat analogous to the ancient punched-card machines. They could check the immense store of information gathered from the brains of the dead Centrasi—check this information against the master Fourth Order tape to determine if there was any information of any kind concerning Fourth Order in the Centrasi brains.

Glenn donned a helmet by which he could observe the record of the Centrasi's life as the plastic roll slowly unwound between the million-fingered

electronic scanning beam. It was a tremendous thing—reliving the alien life of the dead Centrasi. It renewed Glenn's conviction that Gibbs was right—the Centrasi were decent guys.

There were scenes of a pleasant world and impressions of quiet life devoid of the tensions and conflicts that seared the galaxy of the Council worlds. There were the words of great books, and the sound of exquisite music.

Glenn saw other Centrasi who loved the dead creature—and who were loved by him. These would never see him again for there would be another strange grave on the hill beyond the Base. But there was nothing in all that to give an Earthman fear because of what the Centrasi might be hiding. There was no clue at all as to why anything should be hidden—of great weapons or the whisper of conquest, which could so incite the dread of war within Council worlds, there was not an inkling.

There was not time enough to relive a whole life moment by moment. Reluctantly Glenn sped the tape ahead at a pace that he could not follow. There was only one thing he had to find at this moment.

ON THE screen before him he watched anxiously for a sign. The signal of congruence would appear there if one of the millions of neural patterns of the Centrasi conformed with the Fourth Order array on the master tape.

He had been there an hour and a half when the green fantasies on the screen began to slow their irrelevant contortions. He straightened in his chair. His hand touched a knob for sharper outline.

A structure of infinite complexity was slowly building on the face of the screen in three-dimensional perspective. He watched it, scarcely breathing, awed by the complexity of that figure and what it signified.

They had Fourth Order. There was no question about it. But the figure continued building and it told an even

broader tale.

These eight who had come to Earth were engineers—Fourth Order engineers. So vastly competent with it were they that they could have designed and built the entire ship from base elements. They could have designed its great Fourth Order engines from scratch.

And this they had lied about.

Slowly Glenn reached for the switch to cut the motor of the machine. He took the tapes out after rewinding and moved away.

He wondered now what his promise to Emdor meant. The Centrasi had said they could duplicate anything found *in the ship*. He remembered how the Centrasi had emphasized that, how terrified he had been at the thought of a brain recording.

Glenn understood now. Earthmen could never—for decades, at least, perhaps centuries—they could never achieve Fourth Order. It would be like an aborigine trying to copy a common automobile engine by merely examination and duplication. The parts would be there. He could observe and measure. But the machine could not be duplicated from that alone. It could not be understood without all the vast science of metallurgy and chemistry and engineering behind it.

So with the Centrasi ship. Men could take it apart, measure it, analyze it—but they could never make it go. There were unknown and unsuggested sciences which would stand indefinitely between them and Fourth Order machines that would work. The essential things were locked in the brains of the Centrasi. And the Centrasi were willing to die to keep them there.

It made no sense. He glanced down at the can of tapes in his hand. He ought to march triumphantly into Kendricks' office and lay them before the Commander. It would assure his career and put him forever beyond Kendricks' petty nepotism. He would never have to be afraid of Prentiss again.

[Turn page]

But he couldn't do it—not now anyway. He had to know why the Centrasi considered it worth their lives to keep the secret of Fourth Order from men. If it was worth their lives, would it be worth his career? He wondered.

WHEN he reached his own office again there was a second message from Gibbs. "Come over as soon as you can. I'll show you what's killing the Centrasi. Emdor is alone. The rest are gone."

Glenn locked the tapes in the desk and took the scooter across the field. The sun was low in the sky, and he rode almost all the way in the shadow of the towering Centrasi ship. Gibbs was at his desk, seemingly idle when Glenn walked in.

"What have you found?" said Glenn. "Can we cure Emdor?"

"What have you found? Fourth Order?"

Glenn nodded. "They've got it. They lied to us. They know the stuff from the ground up."

"I know. They don't want us to have it."

"Why?"

Gibbs hesitated. "It's the damndest most complex series of factors that you could ever hope to run into. Look at this."

He held up a brown object the size of a walnut. "Know what that thing is?"

Glenn shook his head.

"It's one of their adrenal glands."

"I wouldn't be likely to know it from a football. Is there anything wrong with it?"

"They have an endocrine system almost identical with ours—which is not as surprising as it might be. We know that evolution can be parallel in widely scattered galaxies."

"And so?"

"A normal adrenal is yellow. The outer structure, the cortex, is normally filled with fat droplets containing a score or so of hormones. The brownish color of this one indicates that it has been drained of its hormones."

Gibbs picked up another specimen. "Here is a thymus gland—almost atrophied. And here is a color picture of the stomach lining. Bleeding ulcers. Finally here is a section of kidney tissue. It has turned into a hormone-producing gland. We call it endocrine kidney. It raises the blood pressure."

"But what caused such terrific damage?" exclaimed Glenn. "And what can be done about it before it becomes fatal?"

"We call it AR," said Gibbs. "Alarm reaction. Back in the twentieth century when it was first identified it was responsible for about eighty percent of the deaths among Caucasian peoples outside of the major bacteriological pathologies and cancer. Men are still dying of it, though not to the extent they were in that day."

"I never heard of it."

"No, it's not often spoken of by name. It's called by some name to describe the affliction of the organ it destroys—heart, kidney, pancreas or whatnot. Strictly speaking it's a jungle disease, an illness that can afflict only the inhabitants of a jungle where life is precarious from moment to moment and there is no assurance of survival from one day to the next."

Glenn laughed sharply. "That's not our civilization you're speaking of—or is it!"

"A civilization can be pretty well defined by what its members die of. And any community in which AR exists is a jungle society regardless of technological accomplishments."

"But the Centrasi?"

"All organisms of the basic type of endocrine structure which they share with us are subject to the alarm reaction. It works this way—any kind of stress situation causes the pituitary gland to release a protein substance called adrenocorticotrophic hormone, ACTH for short. In turn this discharges the hormones from the adrenals into the blood stream."

"This is a normal process, designed to enable the body to meet stress. If the

condition of stress is such that it cannot be overcome, however, as in a perpetual jungle environment, this endocrine process defeats its own purpose. The protective mechanism turns upon the body itself and destroys it.

"The hormones destroy the thymus, produce enlarged heart and sclerotic blood vessels, destroy the kidneys. The organism finally dies of exhausted resources if no relief is obtained from the stress situation—literally killed by its own defenses. That is the alarm reaction.

"It was first demonstrated in rats by forcing them to endure extremes of temperature, activity and wakefulness. But, more significantly, AR can be set off in higher creatures by any kind of stress—psychic stress in particular. The initial trigger action is a neural stimulus of the pituitary."

"What is the cause of this neural stimulus in the Centrasi?"

"We are."

FOR a moment Glenn sat motionless as if still awaiting Gibbs' answer. The words were like a delayed explosion. Then he half rose from his chair and leaned across the desk. "What the devil are you talking about? We haven't done anything to them!"

"I think we have—we do. Scanning through the tapes we ran off from the dead brains I found proof of it. You see, the structure of the universe seems to be formed of widely scattered galaxy clusters. Our own Council is composed of the civilizations of one such cluster.

"But we know that the distance from any Council world to the next cluster is so fantastic as to make hopeless any contact with even Third Order ships. The Centrasi come from a similar cluster all the way across the curvature of space."

"That could be what Emdor meant by saying he came from the back-side of space," Glenn mused thoughtfully.

"Perhaps. I don't understand the technical aspects of it. At any rate the

Centrasi come from a cluster such as ours at an immense distance. They have just found Fourth Order. This ship was an exploratory one attempting to go all around the curve of space just as you say you would like to do. And then they broke down with some kind of mechanical trouble they couldn't repair in space.

"Their race is so old, and they have had a stabilized evolution for so long that they have never encountered any form of life but their own in all the recorded history of their race. This single Centrasi race has colonized hundreds of thousands of planets.

"Behavior has become so stabilized and eccentricities so thoroughly removed from their makeup that wherever they go in their own galaxy cluster they know what to expect from a fellow creature. They know how he will react, what their mutual obligations are. Does that give you an idea of what we have done to them?"

Glenn stared at the Doctor. "Stress—they can't predict our behavior. Our very presence is a continuing stress . . ."

Gibbs nodded. "We cannot know all the details of the psychobiological chain involved but it is safe to conclude that contact with sentient life other than their own is sufficient to set off the alarm reaction in them. They are in the peculiar position of having to live out their existence in utter isolation or die.

"It would be a major evolutionary change for them to adapt to other species. They might do it on a long-term biological basis but it would involve the destruction of their present culture in the process.

"It appears that their first contacts set it off, perhaps on Paramides. Then they went through the resistance stage of AR in which they built up adrenal reserves again and partially regained a biochemical balance. There was recovery of the thymus and sugar and chloride levels in the blood.

"Now these things are deteriorating again. They are in the final stage of exhaustion preparatory to actual death.

We're like a disease to them. Can you understand that fully, Glenn? Each one of us is a single germ. We infect them as surely as if they had breathed a deadly virus."

Glenn's eyes were focused far across the field where a giant gray structure nosed towards the sky. "They've got Fourth Order," he said almost in a whisper. "They've got Fourth Order for sure. They could take us all the way around the curve of space. We could see all there is to see, know all there is to know in the whole universe."

Gibbs sighed and shifted lower in his chair. "Another year or two now and our expeditions will be overrunning their galaxies. In time it is just barely possible that some individuals of their race might develop a resistance to the situation but it's not likely.

"We won't give them time for that anyway. We'll rush in, trying to bargain and trade, selling them soap and deodorants. We'll sap their scientific resources. And they'll be utterly helpless. It will be another case of 'Lo, the poor Indian.' On a galactic scale this time."

Glenn reached across the desk and took the small brown object in his hand. The adrenal felt cold now and faintly resilient like old rubber—the coldness and fleshy resilience of something too long dead. He glanced from it to the great ship again.

"It's so intangible," he murmured. "You can't get hold of it with your brain. That ship out there—it's more alive than this hunk of meat. Yet this little thing stands in the way of obtaining that ship. Your mind can't get hold of something as intangible as that."

Gibbs nodded slowly. "Intangible—too intangible for characters like Kendricks. He'd snort in derision. And Prentiss would laugh in your face if you told him that a piece of flesh no bigger than a pigeon egg barred him from Fourth Order. Yes, it's intangible like all the other things men's minds have fought to grasp for the last ten thousand

years—intangible like love and loyalty and freedom.

"The Centrasi won't fight us, either. That's the part we'll like best. We'll just come on the scene and they'll wither away as if a plague had cut them down—all because of a great intangible."

Glenn didn't move his eyes from the ship but he spoke slowly at last. "No—it won't be that way, Doc. It won't be that way. We don't need Fourth Order that badly. In fact, I don't think we need it at all."

## VIII

**D**R. GIBBS sat motionless in the chair as if a hair trigger had been suddenly set within him. Then his bony frame leaned carefully across the desk. "Do you mean that, Glenn? Do you *really* mean it?"

"Sure I mean it. There's no other thing I could mean. It's straight black and white."

"Huh?"

Glenn grinned faintly. "That's what Nancy would call it—black and white. You know something's right, you go ahead and do it. You don't get all fouled up with considerations and alternatives and 'adaptions to the situation.' It's plain black and white and there's no in between."

"That Nancy of yours is a smart little girl, but some things are inherently in between, I'm afraid—like this situation. Kendricks knows too much. You can't keep it secret."

"We can keep it secret. No one actually knows the ship is Fourth Order except you and me. We'll get rid of the ship."

"How?"

"Look—Emdor knows what's happening. He knows all about AR or has deduced enough to know that his people have got to abandon contact with other races. So he and his companions are sacrificing themselves to keep us from finding his home world.

"We'll tell Emdor we understand.

We'll put him aboard the ship and send it off. Let him explode it in space if he wants to. But we'll be rid of the ship. Men like Prentiss and Kendricks and all their blundering ravaging kind will never set foot on the Centrasi worlds. We'll tell them that Emdor escaped with one of our medical pressure suits and took off. It could happen at change of shifts tonight."

Gibbs seemed to be holding his breath as if witnessing a vision. "It might work—it just *might* work! And Emdor would surely cooperate on a plan like that! But you—you're taking a tremendous risk. You'd be stripped of rank—court martialled and disgraced if it ever became known."

"I'll take that chance. It's black and white."

They were silent a moment, enjoying a new understanding of each other—their eyes fixed on the mute emblem of defeat, the sick exhausted adrenal gland of the Centrasi. The phone buzzed abruptly. Gibbs reached for it with impatience and listened a moment. Then he rose in a half crouch of sudden defense.

"What is it?" Glenn demanded.

Slowly Gibbs put the phone down, his face burdened with defeat. "Emdor—they got to him. Prentiss came in. I guess Kendricks was in on it too. Prentiss had a pass to contact the Centrasi and the orderly let him through. Now Emdor's out cold, maybe dead. That's military organization for you! Everything according to altitude. If the man above you says hell is frosted over, it's so. Come on, let's get up there."

Glenn joined him and they raced along the hallway. They took the steps two at a time rather than wait for the elevator. "I should have foreseen this," grunted Glenn. "Prentiss told me he thought the Centrasi were lying about not understanding the ship. I should have known he'd try to get to them."

"And so Earth gets Fourth Order and the Centrasi get extinction. A fine piece of work!"

"We'll see. It may not be as bad as that."

The ward looked empty as they approached. Then they saw Emdor slumped on the floor, his limbs sprawled helplessly. Gibbs cursed the orderly who had admitted Prentiss and then apparently vanished in terror.

"Look! He's got the cyberlogue turned on and he's got the intensifier fastened to his head. Look at that wire trailing under him."

They hurried into the dressing chamber and slipped into the pressure suits. It seemed an eternity of waiting for equalization and sterilization. At last the door opened. Gibbs rushed in and turned the Centrasi over. A moment's examination showed that Emdor was dead.

Gibbs examined the cyberlogue intensifier fastened to the skull. It was an instrument which could probe the lowest depths of a sentient brain.

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"Leave it there," said Glenn. "I want to have a look."

He moved to the machine and adjusted the controls. He plugged an intensifier into his own suit and cautiously advanced the probe depth. Bleak frustration clouded his face as he searched through the still lucid thought patterns in the dying cells of the Centrasi brain. At last he jerked the plug out.

"What is it?" said Gibbs.

"Prentiss, all right. He induced a heavy neural shock with the intensifier, momentarily breaking down Emdor's careful defenses. If he used a recorder he got everything he needed to know about Fourth Order. Emdor was a principal engineer in the work. Prentiss can build one from scratch with the data from Emdor's mind."

"Then there's not a chance in the world of supressing this."

THEY stared in silence at the dead Centrasi, whose sacrifice had been so vain. Glenn thought of that incredibly distant world of beauty and charm and ancient civilization that was old when Neanderthal walked the Earth. He thought of men of Earth traveling to those fair worlds with commerce and huckstering and greedy exploitation.

"How long do you suppose we can get good reception from Emdor's neural patterns?" he said abruptly.

"About twenty minutes."

"Keep the body right here as it is. There may be just one slim chance if I can get back in that time. Wait for me."

He rushed to the lock chamber and stripped off the suit while Gibbs demanded to know what he was going to do. But Glenn went on without offering an answer. He skipped down the stairway again and sped away on the scooter, cutting into the shadow of a hundred-thousand-ton ship that was being towed out to the take-off area.

And then he was beneath the oval of the Centrasi ship. He donned a suit and lifted himself into the vessel with the freight hoist.

His guess had been right. He found Prentiss and Kendricks in the main drive chamber. Through the helmet plastic their faces wore defensive surprise as he entered the chamber. It changed swiftly to hostility as he strode toward them.

Kendricks seized the initiative at once. "It is just as well that you followed Lieutenant Prentiss over here," he said. "You will be interested to learn that he has been successful in wresting the secret of Fourth Order from the Centrasi."

"I know. I saw Emdor—dead. I would be more interested in knowing when it became a policy of the Council to approve deliberate murder in exchange for technical data."

Prentiss' face went white. "I'll jam that down your throat! Emdor was nearly dead. He would have gone off in the next ten minutes and carried his secret with him. It was wholly accidental that—"

"Medically, it was murder. Gibbs can testify that the shock of the intensifier killed him. And you have forgotten the well-known fact that if he really had any secret to which we were entitled it could be obtained from his dead brain as well as his live one."

Prentiss smiled. "And you forget that there is no proof that I *didn't* get it from a dead brain. No one can determine whether he died five minutes before or after I entered."

"There's no proof except the indelible record you left in his mind!"

It was incredible, Glenn thought. Prentiss was terrified and his thinking processes were utterly devastated. He was not thinking in any respect like the cold technical precise Prentiss who could direct the analysis of a ship like this.

Kendricks stepped forward. "I think nothing irregular will be found in the conduct of Lieutenant Prentiss," he said evenly. "It would be comforting for you to be able to say as much for yours. It appears that you were instru-



mental in keeping all others from interviewing the Centrasi with the object of deliberately suppressing the knowledge they might have given out.

"What motives you had remain to be determined but these facts, if proven by court martial, would make it difficult to avoid termination of your Navy career in complete disgrace. Perhaps it would be just as well if you eliminated any suspicion from your mind regarding the irregularity of Lieutenant Prentiss' actions."

So that was it, Glenn thought. Kendricks was worried too—and scared. And he was willing to bargain. But he held all the bargaining power. He held the secret of Fourth Order and that revelation would smother any accusations Glenn might utter against the two.

There was nothing that he could barter against their knowledge of Fourth Order. But he had to make a try. "Yes—I knew they had Fourth Order," he said slowly. "And I intended to suppress it."

Like an old skin the gloom vanished from the faces of Kendricks and Prentiss. They smiled with braggart confidence.

"Let me show you why," said Glenn softly.

He took the damaged adrenal gland from a pocket of the suit and held it up before them. "There is our barrier to Fourth Order." Then he told the story Gibbs had given him, the story of a great race whose psychic reaction made of man a lethal disease in their midst.

The two of them looked as if convinced of Glenn's insanity before his plea was half finished.

**P**RENTISS exclaimed, "Do you think we're going to be stopped from utilizing the greatest mechanical development in the history of the galaxies—stopped by that chunk of meat that's smaller than my fist? You must be crazy! We're going to have Fourth Order in this end of the universe and it's very sad if the race that invented it

can't stand visitors!"

"You and Dr. Gibbs have stepped far beyond the bounds of your authority," said Kendricks icily. "It is fantastic for you to pass judgment on this situation. And it is equally absurd to think that we would deliberately harm another race by improper use of Fourth Order—even if it were possible in the unbelievable manner you suggest.

"We will take all necessary precautions. There is no barrier, however, that cannot be overcome in time. We will visit the Centrasi and confer with them. Between our two races the problem can most certainly be solved."

"The moment one of our ships lands on a Centrasi world their race is doomed. We're a disease! Each of us is a single germ which can infect them with a virulent charge of AR. There can be no conferring with them without destroying them. Why can't we just let them alone? Surely the rest of the universe is big enough for us. Our existence doesn't depend on going there and selling them shiploads of soap and confetti."

"Your attitude clearly indicates your incapacity to handle matters of this scope, Captain. As of this moment you are relieved of your charge. Lieutenant Prentiss will supervise the analysis of this ship from here on. Please report to my office in the morning, Captain Baird."

"All right. I know when I'm licked," said Glenn wearily. He pocketed the specimen adrenal gland and turned away. Then he paused. "There's just one thing I'd like to show you—something that you overlooked in the Centrasi brain. Will you come with me while there is still time to pick it up?"

"What do you mean?"

"Emdor's mind is still alive enough for probing. Come and listen to just this one thing. It's evidence—you can't withhold from me the privilege of presenting evidence of value in the proceedings against me."

"Very well," said Kendricks. "We will

examine anything you have."

He moved readily as if anxious to prove his magnanimity and fairness of mind now that he had triumphed in the matter. Prentiss came reluctantly for to him it was only an added irritation.

Gibbs was waiting in the ward when they came. "You stayed pretty long," he said to Glenn. "I don't know about this now."

"Let's hurry," said Glenn. "Please put on the intensifier pads," he directed Kendricks and Prentiss. He looked through the glass to check if the other line were securely on the dead skull of Emdor.

Prentiss watched in hostile silence and sat down before the panel. Kendricks sat opposite with an air of tolerant amusement. Glenn faced the control panel. The impressions available from Emdor's mind were truly feeble now. He prayed that he hadn't taken too long, that they wouldn't be too weak.

It was eerie, journeying back through the dead creature's brain—like walking through the long abandoned corridors of a ghost city, seeing it alive with scenes long vanished. He adjusted the machine carefully, searching through the millions of neural patterns for the one he needed.

Then he found it—that area of incredible fear, that violent pattern of stress that had killed the mighty intelligences.

Prentiss caught it suddenly. He looked up in a moment of understanding fright, half rising from his chair. "You can't!" he screamed.

Swiftly, Glenn spun the dial of the intensity control to its utter maximum.

With a low moan Prentiss slumped back into the chair, his face blanched. Kendricks, not anticipating the sudden blast, stiffened and was still, his breath heavy and gasping.

Glenn cut the switch. Beyond the glass wall that separated the anteroom from the ward, Gibbs stared. "What did you do to them? What happened?"

Glenn's lips made a thin tired line be-

fore he spoke. "I let them feel what it's like to be a Centrasi—on Earth. You'd better come out and have a look at them now."

GIBBS joined him in a few moments. He looked at the stiff unconscious bodies of the two men. "You knew what you were doing. It *could* be murder."

"I don't know. I had to take the chance. See how they are, Doc."

Gibbs bent over them with a stethoscope. "It's difficult to know what the total reaction will be. If you blasted them with the full power of the cyberlogue while it was probing the stress pattern in Emdor's mind it may set up an AR in them that can't be stopped."

"They don't have the Centrasi psychic makeup. It couldn't feed on itself like a chain reaction. They will recover if they're still alive."

"Then what the devil did you hope to accomplish?" Gibbs exploded.

"We'll see. Maybe I was wrong—maybe not."

They were placed in a hospital room on beds. Glenn watched over them in the dimmed light of a lamp. He prayed mentally for their recovery before the midnight change of shift.

An hour before midnight he left for a moment to call Nancy for the third time. "I'm sorry, darling if I've messed things up for us," he said wearily. "It looks bad. This may have been a black-and-white deal, but right now it looks wholly black. But I had to do it."

"Let me come down there with you."

"No. Go to bed and get some sleep. I'll call you in the morning. If they haven't revived by then . . ."

They were awake when he returned to the room. Prentiss was sitting up and his eyes were those of a man who has seen the gates of hell. "You were right," he said hoarsely. "We have no right to destroy them like that. They'd never have a chance against us. We can do without Fourth Order."

Kendricks was lying still but his eyes were open. He nodded. "Walt's right—

and you were right, Captain. What can we do?"

Glenn had to fight to overcome the moment's weakness that threatened to overpower him at this reprieve for both himself and the Centasi. "Come on," he said. "It won't take long."

They returned to the ship and Glenn looked up to the great bulk of it looming in the darkness. There was longing in his heart and an ache in his throat. It was like a Columbus, he thought, gazing upon a fully-fitted ship that would take him to all the far dreams he had ever dreamed—gazing upon it and deliberately turning his back forever to those dreams.

He would never ride this ship now along the far curve of space.

They went inside and Prentiss showed him the records from Emdor's mind, the details that would make Fourth Order available to man. It was a vast and complex thing and Glenn felt sure that Prentiss would remember no significant part of it. They left it where it was.

**T**HEN Glenn stepped to the intercom system they had spread throughout the ship and gave warning to the analyzer crew. "Evacuate ship! The Centasi have escaped and are in control. They are lifting ship in ten minutes. Evacuate ship at once!"

When the warning had been obeyed the three of them went to the main power room. They fitted up a time control to the great piles that drove the ship. They fitted them so that every moderator would be jerked at once. And then they put the plant in operation on primary power.

Leaving the ship they fled as if pursued and joined the host of analysts who stood waiting for the unknown. And

then Glenn saw Nancy. She was coming toward him from the parking area by the building. She ran toward him and he put his arm around her. She searched his face with anxious eyes.

"It's all right, darling," he whispered. "It worked out just the way we hoped."

They turned then to face the great ship. Inside it a timer switched the controls. The giant unmanned vessel lifted majestically into the air and soared far beyond Pacific Base into the moonlit sky.

Glenn's eyes were on Prentiss and Kendricks. Their throats worked, and he sensed that their eyes were not dry. His own were certainly not. He looked upward again, following their gaze, but the ship was already beyond vision in the night sky. Then, moments later, he saw it—a soundless flash of light that for an instant was the brightest pinpoint in the heavens.

They would hate him forever, he thought. It would be deep and murderous when that vision out of the tortured mind of Emdor wore away and they began to wonder why they had done this.

But they could never escape the knowledge that it *was* their own hands that had set the timers to jerk the moderators, sending that atomic engine into space to consume in its own fires. They would never betray him.

That knowledge would silence them forever.

And then he looked again at their faces and astonishment crept over him. There were deep understanding and comprehension there. He had been wrong, he thought. Prentiss and Kendricks would always understand why none of the races of the galaxies needed Fourth Order now. This night they had matured.