## THE WANDERING BUOY

Actions—even enormously sophisticated actions—do not reveal the motivation that led to them. And even actions can be hair-raisingly mysterious. A. BERTRAM CHANDLER

## Illustrated be Leo Summers

It really shouldn't have been there. Nothing at all should have been there, save for the sparse drift of hydrogen atoms that did nothing at all to mitigate the hard vacuum of interstellar space, and save for the Courier Adder, proceeding on he lawful occasions.

It shouldn't have been there, but it was, and Grimes and his officers were pleased, rather than otherwise, that something had happened to break the monotony of the long voyage.

"A definite contact, Captain," said von Tannenbaum, peering into the spherical screen of the mass proximity indicator.

"Hm-m-m . . ." grunted Captain Grimes. Then, to the electronic communications officer, "You're quite sure that there's no traffic around, Sparks?"

"Quite sure, Captain," replied Slovotny. "Nothing within a thousand light-years."

"Then get Spooky on the intercom, and ask him if he's been in touch with anybody . . . or anything."

"Very good, Captain," said Slovotny rather sulkily. There was always rivalry, sometimes far from friendly, between electronic and psionic communications officers.

Grimes looked over the navigator's shoulder into the velvety blackness of the screen, at the tiny, blue-green spark that lay a little to one side of the glowing filament that was the ship's extrapolated trajectory. Von Tannenbaum had set up the range and bearing markers and was quietly reading aloud the figures. He said, "At our present velocity we shall be up to it in just over three hours."

"Spooky says that there's no psionic transmission at all from it, whatever it is," reported Slovotny.

"So if it's a ship, it's probably a derelict," murmured Grimes.

"Salvage . . . " muttered Beadle, looking almost happy.

"You've a low, commercial mind, Number One," Grimes told him. As I have myself, he thought. The captain's share of a fat salvage award would make a very nice addition to his far from generous pay. "Oh, well, since you've raised the point you can check towing gear, spacesuits and all the rest of it. And you, Sparks, can raise Lindisfarne Base on the Carlotti. I'll have the preliminary report ready in a couple of seconds . . ." He added, speaking as much to himself as to the others, "I suppose I'd better ask permission to deviate, although the galaxy won't grind to a halt if a dozen bags of mail

are delayed in transit . . ." He took the message pad that Slovotny handed him and wrote swiftly, To Officer Commanding Couriers. Sighted unidentified object coordinates A1763.5 x ZU97.75 x J222, approx. Request authority investigate. Grimes.

By the time that the reply came Grimes was on the point of shut ting down his Mannschenn Drive and initiating the maneuvers thai would match trajectory and speed with the drifting object.

It read, Authority granted, but please try to keep your nose clean for a change. Damien.

"Well, Captain, we can try," said Beadle, not too hopefully.

With the Mannschenn Drive shut down radar, which gave far more accurate readings than the mass proximity indicator, was operable. Von Tannenbaum was able to determine the elements of the object's trajectory relative to that of the ship, and after this had been done the task of closing it was easy.

At first it was no more than brightening blip in the screen and then, at last, it could be seen visually as Adder's probing searchlight caught it and held it. To begin with it was no more than just another star among the stars, but as the ship gained on it an appreciable disk was visible through the binoculars, and then with naked eye.

Grimes studied it carefully through his powerful glasses. It was spherical, and appeared to be metallic. There were no projections on it anywhere, although there were markings that looked like painted letters or numerals. It was rotating slowly.

"It could be a mine . . ." said Beadle, who was standing with Grimes at the viewport.

"It could be . . ." agreed Grimes. "And it could be fitted with some sort of proximity fuse . . ." He turned to address von Tannenbaum. "You'd better maintain our present distance off, Pilot, until we know better what it is." He stared out through the port gain. Space mines are a defensive rather than offensive weapon, and Adder carried six of the things in her own magazine. They are a dreadfully effective weapon when the conditions for their use are ideal—which they rarely are. Dropped from a vessel being pursued by an enemy they are an excellent deterrent—provided that the pursuer is not proceeding under interstellar drive. Unless there is temporal synchronization there can be no physical contact.

Out here, thought Grimes, in a region of space where some sort of interstellar drive must be used, a mine just didn't make sense. On the other hand, it never hurt to be careful. He recalled the words of one of the instructors at the Academy. "There are old space men, and there are bold spacemen, but there aren't any old, bold spacemen."

<sup>&</sup>quot;A sounding rocket . . . " he said.

<sup>&</sup>quot;All ready, Captain," replied Beadle.

"Thank you, Number One. After you launch it, maintain full control throughout its flight. Bring it to the buoy, or the mine, or whatever it is, very gently—I don't want you punching holes in it. Circle the target a few times, if you can manage it, and then make careful contact." He paused. "Meanwhile, restart the Mannschenn Drive, but run it in neutral gear. If there is a big bang we might be able to start precessing before the shrapnel hits us." He paused again, then, "Have any of you gentlemen any bright ideas?"

"It might be an idea," contributed Slovotny, "to clear away the laser cannon. Just in case."

"Do so, Sparks. And you, Number One, don't launch your rocket until I give the word."

"Cannon trained on the target," announced Slovotny after only a few seconds.

"Good. All right, Number One. Now you can practice rocketship handling."

Beadle returned to the viewport, with binoculars strapped to his eyes and a portable control box in his hands. He pressed a button, and almost at once the sounding rocket swam into the field of view, a sleek, fishlike shape with a pale glimmer of fire at its tail, a ring of bright red lights mounted around its midsection to keep it visible at all times to the aimer. Slowly it drew away from the ship, heading towards the enigmatic ball that hung in the blaze of the searchlight. It veered to one side to pass the target at a respectable distance, circled it, went into orbit about it, a minuscule satellite about a tiny primary.

Grimes started to get impatient. He had learned that one of the hardest parts of a captain's job is to refrain from interfering—even so . . . "Number One," he said at last, "don't you think you could edge the rocket in a little closer?"

"I'm trying, sir," replied Beadle. "But the thing won't answer the controls."

"Do you mind if I have a go?" asked Grimes.

"Of course not, Captain." Implied but not spoken was, "And you're welcome!"

Grimes strapped a set of binoculars to his head, then took the control box. First of all he brought the sounding rocket back towards the ship, then put it in a tight turn to get the feel of it. Before long he was satisfied that he had it; it was as though a tiny extension of himself was sitting in a control room in the miniature spaceship. It wasn't so very different from a rocket-handling simulator.

He straightened out the trajectory of the sounding rocket, sent it back towards the mysterious globe and then, as Beadle had done, put it in orbit. So far, so good. He cut the drive and the thing, of course, continued circling the metallic sphere. A brief blast from a braking jet—that should do the trick. With its velocity drastically reduced the missile should fall gently towards its target. But it did not—as von Tannenbaum, manning the radar,

reported.

There was something wrong here, thought Grimes. The thing had considerable mass, otherwise it would never have shown so strongly in the screen of the MPI. The greater the mass, the greater the gravitational field. But, he told himself, there are more ways than one of skinning a cat. He actuated the steering jets, tried to nudge the rocket in towards its objective. "How am I doing, Pilot?" he asked.

"What are you trying to do, Captain?" countered von Tannenbaum. "The elements of the orbit are unchanged."

"Hm-m-m." Perhaps more than a gentle nudge was required. Grimes gave more than a gentle nudge—and with no result whatsoever. He did not need to look at Beadle to know that he was wearing his I-told-you-so expression.

So . . .

So the situation called for brute strength and ignorance, a combination that usually gets results.

Grimes pulled the rocket away from the sphere, almost back to the ship. He turned it—and then, at full acceleration, sent it driving straight for the target. He hoped that he would be able to apply the braking jets before it came into damaging contact—but the main thing was to make contact, of any kind.

He need not have worried.

With its driving jet flaring ineffectually the rocket was streaking back towards Adder, tail first. The control box was useless. "Slovotny!" barked Grimes. "Fire!"

There was a blinding flare, and then only a cloud of incandescent, but harmless, gases still drifting towards the ship.

"And what do we do now, Captain?" asked Beadle. "Might I suggest that we make a full report to Base and resume our voyage?"

"You might, Number One. There's no law against it. But we continue our investigations."

Grimes was in a stubborn mood. He was glad that Adder was not engaged upon a mission of real urgency. Those bags of Fleet mail were not important—Revised Regulations, Promotion Lists, Appointments . . . It would not matter if they never reached their destination. But a drifting menace to navigation was important. Perhaps, he thought, it would be named after him. Grimes' Folly . . . He grinned at the thought. There were better ways of achieving immortality.

But what to do?

Adder hung there, and the thing hung there, rates and directions of drift nicely synchronized, and in one thousand seven hundred and fifty-three Standard years they would fall into, or around, Algol, assuming that Grimes

was willing to wait that long—which, of course, he was not. He looked at the faces of his officers, who were strapped into their chairs around the wardroom table. They looked back at him.

Von Tannenbaum—the Blond Beast—grinned cheerfully. He remarked, "It's a tough nut to crack, Captain—but I'd just hate to shove off without cracking it."

Slovotny, darkly serious, said, "I concur. And I'd like to find out how that repulsor field works."

Vitelli, not quite yet a member of the family, said nothing.

Deane complained, "If the thing had a mind that I could read, it'd all be so much easier . . ."

"Perhaps it's allergic to metal," suggested von Tannenbaum. "We could try to bring the ship in towards it, to see what happens."

"Not likely, Pilot," growled Grimes. "Not yet, anyhow. Hm-mm . . . you might have something. It shouldn't be too hard to cook up, with our resources, a sounding rocket of all-plastic construction and . . ."

"There has to be metal in the guidance system . . . " objected Slovotny.

"There won't be any guidance system, Sparks. It will be a solid fuel affair, and we just aim it, fire it, and when we see what happens . . ."

"Solid fuel?" demurred Beadle. "Even if we had the formula we'd never be able to cook up a batch of cordite or anything similar . . . "

"There'd be no need to, Number One. We should be able to get enough from the cartridges for our projectile small arms. But I don't intend to do that."

"Then what do you intend, Captain?"

"We have graphite—and that's carbon. We've all sorts of fancy chemicals in our stores, especially those required for the maintenance of our hydroponics system. Charcoal, sulphur, saltpeter . . . Or we could use potassium chlorate instead of that . . ."

"It could work," admitted the Beadle dubiously.

"Of course it will work," Grimes assured him.

It did work—although mixing gunpowder, especially in free fall conditions, wasn't as easy as Grimes had assumed that it would be. To begin with, graphite proved to be quite unsuitable, and the first small sample batch of powder burned slowly, with a vile sulfurous stench that lingered in spite of all the efforts of the air-conditioner. But there were carbon water filters, and one of these was broken up and then pulverized in the galley food mixer—and when Grimes realized that the bulkheads of this compartment were rapidly acquiring a fine coating of soot he ordered that the inertial drive be restarted. With acceleration playing the part of gravity things were a little better.

Charcoal 13%, saltpeter 75%, sulphur 12% . . . That, thought Grimes, trying hard to remember the History of Gunnery lectures, was about right. They mixed a small amount dry, stirring it carefully with a wooden ladle. It was better than the first attempt, using graphite, had been—but not much. And it smelled as bad. Grimes concluded that there was insufficient space between the grains to allow the rapid passage of the flame.

"Spooky," he said in desperation, "can you read my mind?"

"It's against Regulations," the telepath told him primly.

"Damn the Regulations. I sat through all those Gunnery Course lectures, and I'm sure that old Commander Dalquist went into the history of gunnery very thoroughly, but I never thought that the knowledge of how to make black powder would be of any use at all to a modern spaceman. But it's all there in my memory—if I could only drag it out!"

"Relax, Captain," Spooky Deane told him in a soothing voice. "Relax. Let your mind become a blank. You're tired, Captain. You're very tired. Don't fight it. Yes, sit down. Let every muscle go loose . . . "

Grimes lay back in the chair. Yes, he was very tired . . . He did not like the sensation of cold, clammy fingers probing about inside his brain. But he trusted Deane. He told himself very firmly that he trusted Deane . . .

"Let yourself go back in Time, Captain, to when you were a midshipman at the Academy . . . You're sitting there, on a hard bench, with the other midshipmen around you . . . And there, on his platform before the class, is old Commander Dalquist . . . I can see him, with his white hair and his white beard, and his faded blue eyes looking enormous behind the spectacles . . . And I can see all those lovely little models on the table before him . . . The culverin, the falcon, the carronade . . . He is droning on, and you are thinking, How can he make anything so interesting so boring? You are wondering, What's on for dinner tonight? You are hoping that it won't be that beef stew again ... Some of the other cadets are laughing. You half heard what the commander was saying. It was that the early cannoneers, who mixed their own powder, maintained that the only possible fluid was a wine drinker's urine, their employer to supply the wine . . . And if the battle went badly, because of misfires, the gunners could always say that it was due to the poor quality of the booze . . . But you are wondering now if you stand any chance with that pretty little nurse . . . '

Grimes felt his prominent ears turning hot and scarlet. He snapped into full wakefulness. He said firmly, "That will do, Spooky. You've jogged my memory sufficiently. And if any of you gentlemen think I'm going to order a free wine issue, you're mistaken. We'll use plain water, just enough to make a sort of mud, thoroughly mixed, and then we'll dry it out. No, we'll not use heat, not inside the ship. Too risky. But the vacuum chamber should do the job quite well . . ."

"And then?" asked Beadle, becoming interested in spite of himself.

"Then we crush it into grains." "Won't that be risky?"

"Yes. But we'll have a plastic bowl fitted to the food mixer, and the chief

can make some strong, plastic paddles. As long as we avoid the use of metal we should be safe enough."

They made a small batch of powder by the method that Grimes had outlined. Slovotny fitted a remote-control switch to the food mixer in the galley, and they all retired from that compartment while the cake was being crushed and stirred. The bowlful of black, granular matter looked harmless enough—but a small portion of it transferred to a saucer—and taken well away from the larger amount remaining in the bowl—burned with a satisfying whoof! when ignited.

"We're in business!" gloated Grimes. "Adder Pyrotechnics, Unlimited!"

They were in business, and while Grimes, Beadle and von Tannenbaum manufactured a large supply of gunpowder Slovotny and Vitelli set about converting a half dozen large, plastic bottles into rocket casings. They were made of thermoplastic, so it was easy enough to shape them as required, with throat and nozzle. To ensure that they would retain the shape after firing they were bound about with heavy insulating tape. After this was finished there was a rocket launcher to make—a tube of the correct diameter, with a blast shield and with the essential parts of a projectile pistol as the firing mechanism.

Then all hands joined forces in filling the rockets. Tubes of stiff paper, soaked in a saturated solution of saltpeter and allowed to dry, were inserted into the casing and centered as accurately as possible. The powder was poured around them, and well tamped home.

While this was being done Spooky Deane—who, until now, had played no part in the proceedings—made a suggestion. "Forgive me for butting in, Captain, but I remember—with your memory—the models and pictures that the instructor showed the class. Those old chemical rockets had sticks or vanes to make them fly straight and . . ."

For a moment this had Grimes worried. Then he laughed. "Those rockets, Spooky, were used in the atmosphere. Sticks or vanes would be utterly useless in a vacuum." But he couldn't help wondering if vanes set actually in the exhaust would help to keep the missiles of a straight trajectory. But unless he used metal there was no suitable material aboard the ship—and metal was out.

Grimes went outside, with von Tannenbaum, to do the actual firing. They stood there on the curved shell plating, held in place by the magnetic soles of their boots. Each of them, too, was secured by lifelines. Neither needed to be told that to every action there is equal and opposite reaction. The backblast of the homemade rocket would be liable to sweep them from their footing.

Grimes held the clumsy bazooka while the navigator loaded it, then he raised it slowly. A cartwheel sight had been etched into the transparent shield. Even though the weapon had no weight in free fall still had inertia, and it was clumsy. By the time that he had the target, gleaming brightly in the beam Adder's searchlight, in the center of the cartwheel he was sweating copiously. He said into his helmet microphone, "Captain to Adder.

I am about to open fire."

"Adder to Captain. Acknowledged," came Beadle's voice in reply

Grimes's right thumb found the firing stud of the pistol. He recoiled involuntarily from the wash of orange flame that swept over the blast shield—and then he was torn from his hold on the hull plating, slammed back to the full extent of the lifeline. He lost his grip on the rocket launcher, but it was secured to his body by stout, fireproof cords. Somehow he managed to keep his attention on the fiery flight of the rocket. It missed the target, but by a very little. To judge by the straight wake of it, it had not been deflected by any sort of repulsor field.

"It throws high . . . " commented Grimes.

He pulled himself back along the line to exactly where he had been standing before. Von Tannenbaum inserted another missile into the tube. This time, when he aimed, Grimes intended to bring the target to just above the center of the cartwheel. But there was more delay; the blast shield was befogged by smoke. Luckily this eventuality had been foreseen, and von Tannenbaum cleaned it off with a rag.

Grimes aimed, and fired.

Again the blast caught him—but this time he hung in an untidy tangle facing the wrong way, looking at nothingness. He heard somebody inside the ship say, "It's blown up!"

Blown up? What had blown up?

Hastily Grimes got himself turned around. The mysterious globe was still there, but between it and Adder was an expanding cloud of smoke, a scatter of fragments, luminous in the searchlight's glare. So perhaps the nonmetallic missiles weren't going to work after all—or perhaps this missile would have blown up by itself, anyhow.

The third rocket was loaded into the bazooka. For the third time Grimes fired—and actually managed to stay on his feet. Straight and true streaked the missile. It hit, and exploded in an orange flare, a cloud of white smoke which slowly dissipated.

"Is there any damage?" asked Grimes at last. He could see none with his unaided vision, but those on the control room had powerful binoculars to hand.

"No," replied Beadle at last. "It doesn't seem to be scratched."

"Then stand by to let the pilot and myself back into the ship. We have to decide what we do next "

What they did next was a matter of tailoring rather than engineering. Adder carried a couple of what were called "skin-divers' suits". These were, essentially, elasticized leotards, skin-tight but porous, maintaining the necessary pressure on the body without the need for cumbersome armor. They were ideal for working in outside the ship, allowing absolute freedom of movement—but very few spacemen liked them. A man feels that he

should be armored, well armored, against an absolutely hostile environment. Too, the conventional spacesuit has built-in facilities for the excretion of body wastes, has its little tank of water and its drinking tube, has its container of food and stimulant pellets. (Grimes, of course, always maintained that the ideal suit should make provision for the pipe smoker . . .) A conventional spacesuit is, in fact, a spaceship in miniature.

Now these two suits had to be modified. The radio transceivers, with their metallic parts, were removed from the helmets. Plastic air bottles were substituted for the original metal ones. Jointures and seals between helmet and shoulder pieces were removed, and replaced by plastic.

While this was going on Beadle asked, "Who are you sending, Captain?"

"I'm sending nobody, Number One. I shall be going myself, and if any one of you gentlemen cares to volunteer . . . No, not you. You're second in command. You must stay with the ship."

Surprisingly it was Deane who stepped forward. "I'll come with you, Captain."

"You, Spooky?" asked Grimes, not unkindly.

The telepath flushed. "I  $\dots$  ] feel that I should. That  $\dots$  . That thing out there is awakening. It was as though that rocket was a knock on the door  $\dots$  . "

"Why didn't you tell us?"

"I . . . I wasn't sure. But the feeling's getting stronger. There's something there. Some sort of intelligence."

"Can't you get in touch with it?"

"I've been trying. But it's too vague, too weak. And I've the feeling that there has to be actual contact. Physical contact, I mean."

"Hm-m-m."

"In any case, Captain, you need me with you."

"Why, Spooky?"

Deane jerked his head towards the watch on Grimes's wrist. "We'll not be allowed to take any metal with us. How shall we know when we've been away long enough, that we have to get back before our air runs out?"

"How shall we know if you're along?"

"Easy. Somebody will have to sit with Fido, and clock-watch all the time, really concentrating on it. At that short range Fido will pick up the thoughts even of a nontelepath quite clearly. I shall remain en rapport with Fido, of course."

"Hm-m-m," grunted Grimes. Yes, he admitted to himself, the idea had its merits. He wondered whom he should tell for the clock-watching detail. All

spacemen, except psionic radio officers, hate the organic amplifiers, the so-called "dogs' brains in aspic," the obscenely naked masses of canine thinking apparatus floating in their spherical containers of circulating nutrient fluid.

Slovotny liked dogs. He'd be best for the job.

Slovotny was far from enthusiastic, but was told firmly that communications are communications, no matter how performed.

The inertial drive was restarted to make it easier for Grimes and Deane to get into their suits. Each, stripped to brief, supporting underwear, lay supine on his spread-out garment. Carefully they wriggled their hands into the tight-fitting gloves—the gloves that became tighter still once the fabric was in contact with the skin. They worked their feet into the bootees, aided by Beadle and von Tannenbaum, acting as dressers. Then, slowly and carefully, the lieutenant and the navigator drew the fabric up and over arms and legs and bodies, smoothing it, pressing out the least wrinkle, trying to maintain an even, all-over pressure. To complete the job the seams were welded. Grimes wondered, as he had wondered before, what would happen if that efficient adhesive came unstuck when the wearer of the suit was cavorting around in hard vacuum. It hadn't happened yet—as far as he knew—but there is always a first time.

"She'll do," said Beadle at last. "She'd better do," said Grimes. Grimes got to his feet, scowling.

If one is engaged upon what might be a perilous emprise, armor is so much more appropriate than long underwear. He said, "All right. Shut down inertial drive as soon as we've got our helmets on. Then we'll be on our way."

They were on their way.

Each man carried, slung to his belt, a supply of little rockets—Roman candles, rather—insulated cardboard cylinders with friction fuses. They had flares, too, the chemical composition of such making them combustible even in a vacuum.

The Roman candles functioned quite efficiently, driving them across the gap between ship and sphere. Grimes handled himself well, Deane not so well. It was awkward having no suit radio; it was impossible to give the telepath any instructions. At the finish Grimes came in to a perfect landing, using a retro blast at the exact split second. Deane came in hard and clumsily. There was no air to transmit the clang, but Grimes felt the vibration all along and through his body.

He touched helmets. "Are you all right, Spooky?"

"Just... winded, Captain."

Grimes leading, the two men crawled over the surface of the sphere, the adhesive pads on gloves, knees, elbows and feet functioning quite well—rather too well, in fact. But it was essential that they maintain contact with the smooth metal. Close inspection confirmed distant

observation. The 100-foot-diameter globe was utterly devoid of protuberances. The markings—they were no letters or numerals known to the Earthmen—could have been painted on, but Grimes decided that they were probably something along the lines of an integrated circuit. He stopped crawling, carefully made contact with his helmet and the seamless, rivetless plating. He listened. Yes, there was the faintest humming noise. Machinery?

He beckoned Deane to him, touched helmets. He said, "There's something working inside this thing, Spooky."

"I know, Captain. And there's something alive in there. A machine intelligence, I think. It's aware of us."

"How much time have we?"

Deane was silent for a few seconds, reaching out with his mind to his psionic amplifier aboard Adder. "Two hours and forty-five minutes."

"Good. If we could only find a way to get into this oversized beach ball..."

Deane jerked his head away from Grimes's. He was pointing with a rigid right arm. Grimes turned and looked. Coming into view in the glare of the searchlight, as the ball rotated, was a round hole, an aperture that expanded as they watched it. Then they were in shadow, but they crawled towards the opening. When they were in the light again they were almost on top of it. They touched helmets again. "Will you come into my parlor...?" whispered Grimes.

"I... I feel that it's safe..." Deane told him.

"Good. Then we'll carry on. Is that an airlock, I wonder? There's only one way to find out..."

It was not an airlock. It was a doorway into cavernous blackness, in which loomed great, vague shapes, dimly visible in the reflected beam of Adder's searchlight—then invisible as this hemisphere of the little, artificial world was swept into night. Grimes was falling; his gloves could get no grip on the smooth, slippery rim of the hole. He was falling, and cried out in alarm as something brushed against him. But it was only Deane. The telepath clutched him in an embrace that, had Deane been of the opposite sex, might have been enjoyable.

"Keep your paws off me, Spooky!" ordered Grimes irritably. Yet he, too, was afraid of the dark, was suffering the primordial fear. The door through which they had entered must be closed now, otherwise they would be getting some illumination from Adder's searchlight. The dense blackness was stifling. Grimes fumbled at his belt, trying to find a flare by touch. The use of one of the little rockets in this confined space could be disastrous. But there had to be light. Grimes was not a religious man, otherwise he would have prayed for it.

Then, suddenly, there was light.

It was a soft, diffused illumination, emanating from no discernible source.

It did not, at first, show much. The inner surface of the sphere was smooth, glassy, translucent rather than transparent. Behind it hulked the vague shapes that they had glimpsed before their entry. Some were moving slowly, some were stationary. None of them was like any machine or living being that either of the two men had ever seen.

Helmets touched.

"It's aware of us. It knows that we need light..." whispered Deane.

"What is It?"

"I... I dare not ask. It is too... big?"

And Grimes, although no telepath, was feeling it too, awe rather than fear, although he admitted to himself that he was dreadfully afraid. It was like his first space walk, the first time that he had been out from the frail bubble of light and warmth, one little man in the vastness of the emptiness between the worlds. He tried to take his mind off it by staring at the strange machinery—if it was machinery—beyond that glassy inner shell, tried to make out what these devices were, what they were doing. He focussed his attention on what seemed to be a spinning wheel of rainbow luminescence. It was a mistake.

He felt himself being drawn into that radiant eddy-not physically, but psychically. He tried to resist. It was useless.

Then the pictures came—vivid, simple.

There was a naked, manlike being hunkered down in a sandy hollow among rocks. Manlike? It was Grimes himself. A flattish slab of wood was held firmly between his horny heels, projecting out and forward, away from him. In his two hands he gripped a stick, was sawing away with it, to and fro on the surface of the slab, in which the pointed end of it had already worn a groove. (Grimes could feel that stick in his hands, could feel the vibration as he worked it backwards and forwards.) There was a wisp of blue smoke from the groove, almost invisible at first, but becoming denser. There was a tiny red spark that brightened, expanded. Hastily Grimes let go of the fire stick, grabbed a handful of dried leaves and twigs, dropped them on top of the smoulder. Carefully he brought his head down, began to blow gently, fanning the beginnings of the fire with his breath. There was flame now—feeble, hesitant. There was flame, and a faintly heard crackle as the kindling caught. There was flame—and Grimes had to pull his head back hastily to avoid being scorched.

The picture changed.

It was night now—and Grimes and his family were squatting around the cheerful blaze. One part of his mind that had not succumbed to the hypnosis wondered who that woman was. He decided wryly that she—big-bellied, flabby-breasted—was not his cup of tea at all. But he knew that she was his mate, just as he knew that those almost simian brats were his children.

It was night, and from the darkness around the camp came the roars and

snarls of the nocturnal predators. But they were afraid of fire. He, Grimes, had made fire. Therefore those beasts of prey should be afraid of him. He toyed with the glimmerings of an idea. He picked up a well-gnawed femur—that day he had been lucky enough to find a not-too-rotten carcass that had been abandoned by the original killer and not yet discovered by the other scavengers—and hefted it experimentally in his hand. It seemed to belong there. From curiosity rather than viciousness he brought it swinging around, so that the end of it struck the skull of the woman with a sharp crack. She squealed piteously. Grimes had no language with which to think, but he knew that a harder blow could have killed her. Dimly he realised that a hard blow could kill a tiger...

He...

He was outside the sphere, and Deane was with him. Coming towards him was a construction of blazing lights. He was afraid—and then he snapped back into the here-and-now. He was John Grimes, Lieutenant, Federation Survey Service, Captain of the courier Adder. That was his ship. His home. He must return to his home, followed by this Agent of the Old Ones, so that observation and assessment could be made, and plans for the further advancement of the race.

The ship was no longer approaching.

Grimes pulled a Roman candle from his belt, motioned to Deane to do likewise. He lit it, jetted swiftly towards Adder. He knew, without looking around, that the sphere was following.

Although blinded by the searchlight he managed to bring himself to the main airlock without mishap, followed by Deane. The two men pulled themselves into the little compartment. The outer door shut. Atmospheric pressure built up. Grimes removed the telepath's helmet, waited for Deane to perform a like service for him.

Deane's face was, if possible, even paler than usual. "Captain," he said, "we got back just in time. We've no more than a few minutes' air in our bottles..."

"Why didn't you tell me?"

Deane laughed shakily. "How could I? I was being... educated. If it's any use to me or to anybody else, I know how to make wheels out of sections of tree trunk..."

Beadle's voice crackled from an intercom bulkhead speaker. "Captain! Captain! Come up to Control! It's... vanished!"

"What's vanished?" demanded Grimes into the nearest pick-up.

"That... That sphere..."

"We're on our way," said Grimes.

Yes, the sphere had vanished. It had not flickered out like a snuffed candle; it had seemed to recede at a speed approaching that of light. It was gone, and no further investigation of its potentialities and capabilities

would be possible.

It was Deane who was able to give an explanation of sorts. He said, "It was an emissary of the Old Ones. All intelligent races in this Galaxy share the legends—the gods who came down from the sky, bearing gifts of fire and weaponry, setting Man, or his local equivalent, on the upward path..."

"I played God myself once," said Grimes. "I wasn't very popular. But go on, Spooky."

"These Old Ones... Who were they? We shall never know. What were their motivations? Missionary zeal? Altruism? The long-term development of planets, by the indigenes, so that the Old Ones could, at some future date, take over?

"Anyhow, I wasn't entirely under Its control. I was seeing the things that It meant me to see, feeling the things that It meant me to feel—but, at the same time, I was picking up all sorts of outside impressions. It was one of many of Its kind, sent out—how long ago?—on a missionary voyage. It was a machine, and—as machines do—it malfunctioned. Its job was to make a landing on some likely world and to make contact with the primitive natives, and to initiate their education. It was programmed, too, to get the hell out if It landed on a planet whose natives already used fire, who were already metal workers. That was why It, although not yet awakened from Its long sleep, repelled our metallic sounding rocket. That was why you, Captain, got this odd hunch about a non-metallic approach.

"Your plastic rocket woke It up properly. It assumed that we, with no metal about us, were not yet fire-making, tool-using animals. It did what It was built to do—taught us how to make fire, and tools and weapons. And then It followed us home. It was going to keep watch over us, from generation to generation, was going to give us an occasional nudge in the right direction. Possibly It had another function—to act as a sort of marker buoy for Its builders, so that They, in Their own good time, could find us, to take over.

"But even It, with Its limited intelligence, must have realised, at the finish, that we and It were in airless space and not on a planetary surface. It must have seen that we, using little rocket-propulsion units, were already sophisticated fire-users. And then, when we entered an obviously metallic spaceship, the penny must finally have dropped, with a loud clang.

"Do you want to know what my last impression was, before It shoved off?"

"Of course," said Grimes.

"It was one of hurt, of disillusion, of bewilderment. It was the realisation that It was at the receiving end of a joke. The thing was utterly humourless, of course—but It could still hate being laughed at."

There was a silence, broken by Beadle. "And Somewhere," he said piously, "at Some Time, Somebody must have asked, 'Where is my wandering buoy tonight?' "

"I sincerely hope," Grimes told him, "that this Somebody is not still around,

and that He or It never tries to find out."