

# ASTOUNDING

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COVER BY ROGERS

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# NOT THE FIRST

By A. E. van Vogt

*The tale of a ship sent out to explore the depths of space, the first beyond man's Solar System—and, it might be, the ultimate last!*

Illustrated by Jack Binder

CAPTAIN HARCOURT awakened with a start. In the darkness he lay tense, shaking the sleep out of his mind. Something was wrong. He couldn't quite place the discordant factor, but it trembled there on the verge of his brain, an alien thing that shattered for him the security of the spaceship.

He strained his senses against the blackness of the room—and abruptly grew aware of the intensity of that dark. The night of the room was shadowless, a pitchlike black that lay like an opaque blanket hard on his eyeballs.

That was it. The darkness. The indirect night light must have gone off. And out here in interstellar space there would be no diffused light as there was on Earth and even within the limits of the Solar System.

Still, it was odd that the lighting system should have gone on the blink on this first "night" of this first trip of the first spaceship powered by the new, stupendous atomic drive.

A sudden thought made him reach toward the light switch.

The click made a futile sound in the pressing weight of the darkness—and seemed like a signal for the footsteps that whispered hesitantly along the corridor, and paused outside his door. There was a knock,

then a muffled, familiar, yet strained voice:

"Harcourt!"

The urgency in the man's tone seemed to hold connection to all the odd menace of the past few minutes. Harcourt, conscious of relief, barked:

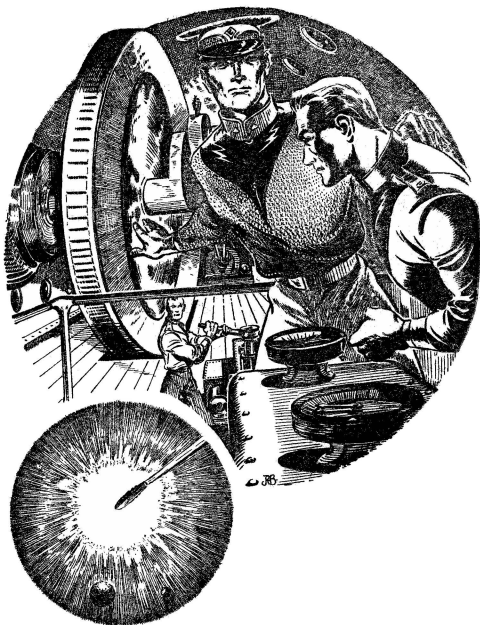
"Come in, Gunther. The door's unlocked!"

In the darkness, he slipped from under the sheets and fumbled for his clothes—as the door opened, and the breathing of the navigation officer of the ship became a thick, satisfying sound that destroyed the last vestige of the hard silence.

"Harcourt, the damnedest thing has happened. It started when everything electrical went out of order. Compton says we've been accelerating for two hours now at Heaven only knows what rate."

There was no pressure on him now. The familiar presence and voice of Gunther had a calming effect; the sense of queer, mysterious things was utterly gone. Here was something into which he could figuratively sink his teeth.

Harcourt stepped matter-of-factly into his trousers and said after a moment: "I hadn't noticed the acceleration. So used to the—Hm-m-m, doesn't seem more than two gravities. Nothing serious could result



*"There's less than twenty minutes now to get that functioning—and the star to end us if you don't."*

in two hours. As for light, they've got those gas lamps in the emergency room.

For the moment it was all quite convincing. He hadn't gone to bed

till the ship's speed was well past the velocity of light. Everybody had been curious about what would happen at that tremendous milepost—whether the Lorenz-Fitzgerald con-

traction theory was substance or appearance.

Nothing had happened. The test ship simply forged ahead, accelerating each second, and, just before he retired, they had estimated the speed at nearly two hundred thousand miles per second.

The complacent mood ended. He said sharply: "Did you say Compton sent you?"

Compton was chief engineer, and he was definitely not one to give away to panics of any description. Harcourt frowned: "What does Compton think?"

"Neither he nor I can understand it; and when we lost sight of the Sun he thought you'd better be—"

"When you *what?*"

Gunther's laugh broke humorlessly through the darkness: "Harcourt, the damned thing is so unbelievable that when Compton called me on the communicator just now he spent half the time talking to himself like an old woman of the gutter. Only he, O'Day and I know the worst yet.

"Harcourt, we've figured out that we're approximately five hundred thousand light years from Earth—and that the chance of our ever finding our Sun in that swirl of suns makes searching for needles in haystacks a form of child's play.

"We're lost as no human being has ever been."

IN THE utter darkness beside the bank of telescope eyepieces, Harcourt waited and watched. Though he could not see them, he was tautly aware of the grim men who sat so quietly, peering into the night of space ahead—at the remote point of light out there that never varied a hairbreadth in its position on the crossed wires of the eyepieces. The silence was complete, and yet—

The very presence of these able men was a living, vibrating force to him who had known them intimately for so many years. The beat of their thought, the shifting of space-toughened muscles, was a sound that distorted rather than disturbed the hard tensity of the silence.

The silence shattered as Gunther spoke matter-of-factly:

"There's no doubt about it, of course. We're going to pass through the star system ahead. An ordinary Sun, I should say, a little colder than our own, but possibly half again as large, and about thirty thousand parsecs distant."

"Go away with you," came the gruff voice of physicist O'Day. "You can't tell how far away it is. Where's your triangle?"

"I don't need any such tricks," retorted Gunther heatedly. "I just use my God-given intelligence. You watch. We'll be able to verify our speed when we pass through the system; and velocity multiplied by time elapsed will—"

Harcourt interjected gently: "So far as we know, Gunther, Compton hasn't any lights yet. If he hasn't, we won't be able to look at our watches, so we won't know the time elapsed; so you can't prove anything. What is your method, if it isn't triangulation—and it can't be. We're open to conviction."

Gunther said: "It's plain common sense. Notice the cross lines on your eyepieces. The lines intersect on the point of light—and there's not a fraction of variation or blur.

"These lenses have tested perfect according to the latest standards, but observatory astronomers back home have found that beyond one hundred fifty thousand light years there is the beginning of distortion. Therefore I could have said a min-

ute or so ago that we were *within* one hundred and fifty thousand light years of that sun.

"But there's more. When I first looked into the eyepiece—before I called you, captain—the distortion *was* there. I'm pretty good at estimating time, and I should say it required about twelve minutes for me to get you and fumble my way back in here. When I looked then the distortion was gone. There's an automatic device in my eyepiece for measuring degree of distortion. When I first looked, the distortion was .005, roughly equivalent to twenty-five thousand light years. There's another point—"

"You needn't go on," Harcourt interjected quietly. "You've proved your case."

O'Day groaned: "That'll be maybe twenty-four thousand light years in twelve minutes. Two thousand a minute; that'll be thirty light years a second. And we've been sittin' here maybe more'n twenty-five minutes since you 'n' Harcourt came back. That'll be another fifty thousand light years, leavin' one hundred thousand light years, or thirty thousand parsecs between us 'n' the star. You're a good man, Gunther. But how will we ever identify the blamed thing when we come back? It would be makin' such a fine gun-sight for the return trip if we could maybe get another sight farther on, when we finally stop this runaway or—"

Harcourt cut him off grimly: "There's just one point that you two gentlemen have neglected to take into account. It's true we must try to stop the ship—Compton's men are working at the engines now. But everything else is only preliminary to our main task of thinking our way back to Earth. We shall probably find it necessary, if we live,

to change our entire conception of space.

"I said—if *we live!* What you scientists in your zeal failed to notice was that the most delicate instruments ever invented by man, the cross lines of this telescope intersect directly *on* the approaching Sun. They haven't changed for more than thirty minutes, so we must assume the Sun is following a course in space directly toward us, or away from us.

"As it is, we're going to run squarely into a ball of fire a million miles plus in diameter. I leave the rest to your imaginations."

THE DISCUSSION that blurred on then had an unreal quality for Harcourt. The only reality was the blackness, and the great ship plunging madly down a vast pit toward its dreadful doom.

It seemed down, a diving into incredible depths at an insane velocity—and against that cosmic discordance, the voices of the men sounded queer and meaningless, intellectually, violently alive, but the effect was as of small birds fluttering furiously against the wire mesh of a trap that has sprung remorselessly around them.

"Time," Gunther was saying, "is the only basic force. Time creates space instant by instant, and—"

"Will you be shuttin' up," O'Day interrupted scathingly. "You've had the solving of the problem of our speed, a practical job for an astronomer and navigation officer. But this'll be different. Me bein' the chief of the physicists aboard, I—"

"Omit the preamble!" Harcourt cut in dryly. "Our time is, to put it mildly, drastically limited."

"Right!" O'Day's voice came briskly out of the blackness. "Mind

ya, I'm not up to offerin' any final solutions, but here may be some answers:

"The speed of light is not, accordin' to my present thought, one hundred eighty six thousand three hundred miles per second. It's more'n two hundred thousand, maybe fifty thousand more. In previous measurements, we've been forgettin' the effect of the area of tensions that makes a big curve round any star system. We've known about those tensions, but never gave much thought to how much they might slow up light, the way water and glass does.

"That's the only thing that'll explain why nothin' happened at the apparent speed of light, but plenty happened when we passed the real speed of light. Come to think on it, the real speed must be somethin' less than two hundred fifty thousand, because we were goin' slower'n than when the electric system blanked on us."

"But man alive!" Gunther burst out before Harcourt could speak. "What at that point could have jumped our speed up to a billion times that of light?"

"When we have the solvin' of that," O'Day interjected grimly, "The entire universe'll belong to us."

"You're wrong there," Harcourt stated quietly. "If we solve that, we shall have the speed to go places, but there's no conceivable science that will make it possible for us to plot a course to or from any destination beyond a few hundred light years.

"Do not forget that our purpose, when we began this voyage, was to go to Alpha Centauri. From there we intended gradually to work out from star to star, setting up bases where possible, and slowly working out the complex problems involved.

"Theoretically, such a method of plotting space could have gone on indefinitely, though it was generally agreed that the complexity would increase out of all proportion to the extra distance involved.

"But enough of that." His voice grew harder. "Has it occurred to either of you that even if by some miracle of wit we miss that Sun, there is a possibility that this ship may plunge on forever through space at billions of times the velocity of light.

"I mean simply this: Our speed jumped inconceivably when we crossed the point of light speed. But that point is now *behind* us. And there is no similar point ahead that we can cross. When we get our engines reversed, we face the prospect of decelerating at two gravities or a bit more for several thousand years.

"All this is aside from the fact that, at our present distance from Earth, there is nothing known that will help us find our way back.

"I'll leave these thoughts with you. I'm going to grope my way down to Compton—our last hope!"

THERE was blazing light in the engine room—a string of gasoline lamps shed the blue-white intensity of their glare onto several score men. Half of the men were taking turns, a dozen at a time, in the simple task of straining at a giant wheel whose shaft disappeared at one end into the bank of monstrous drive tubes. At the other end the wheel was attached to a useless electric motor.

The wheel moved so sluggishly before the combined strength of the workers that Harcourt thought, appalled: "Good heavens, at that rate, it'll take a day—and we've got forty minutes at utmost."

He saw that the other men were putting together a steam engine from parts ripped out of great packing cases. He felt better. The engine would take the place of the electric motor and—

"It'll take half an hour!" roared a bull-like voice to one side of him. As he turned, Compton bellowed: "And don't waste time telling me any stories about running into stars. I've been listening in to you fellows on this wall communicator."

Harcourt was conscious of a start of surprise as he saw that the chief engineer was lying on the steel floor, his head propped on a curving metal projection. His heavy face looked strangely white, and when he spoke it was from clenched teeth:

"Couldn't spare anyone to send you up some light. We've got a single, straightforward job down here: to stop those drivers." He finished ironically: "When we've done that we'll have about fifteen minutes to figure out what good it will do us."

The mighty man winced as he finished speaking. For the first time Harcourt saw the bandage on his right hand. He said sharply:

"You're hurt!"

"Remind me," replied Compton grimly, "when we get back to Earth to sock the departmental genius who put an electric lock on the door of the emergency room. I don't know how long it took to chisel into it, but my finger got lost somewhere in the shuffle.

"It's all right," he added swiftly. "I've just now taken a 'local.' It'll start working in half a minute and we can talk."

HARCOURT NODDED stiffly. He knew the fantastic courage and endurance that trained men could show. He said casually:

"How would you like some tech-

nicians, mathematicians and other such to come down here and relieve your men? There's a whole corridor full of them out there."

"Nope!" Compton shook his leonine head. Color was coming into his cheeks, and his voice had a clearer, less strained note as he continued: "These war horses of mine are experts. Just imagine a biologist taking a three-minute shift at putting that steam engine together. Or heaving at that big wheel without ever having been trained to synchronize his muscles to the art of pushing in unity with other men.

"But forget about that. We've got a practical problem ahead of us; and before we die I'd like to know what we should have done and could have done. Suppose we get the steam engine running in time—which is not certain; that's why I put those men on the wheel even before we had light. Anyway, suppose we do, where would we be?"

"Acceleration would stop!" said Harcourt. "But our speed would be constant at something over thirty light years per second."

"That's too hard to strike a sun!" Compton spoke seriously, eyes half closed. He looked up: "Or is it?"

"What do you mean?"

"Simply this: this sun is about twelve hundred thousand miles in diameter. If it were at all gaseous in structure, we could be through so fast its heat would never touch us."

"Gunther says the star is somewhat colder than our own. That suggests greater density."

"In that case"—Compton was almost cheerful—"at our speed, and with the hard steel of our ship, we could conceivably pass through a steel plate a couple of million miles in thickness. It's a problem in fire power for a couple of ex-military men."

"I'll leave the problem for your old age," Harcourt said. "Your attitude suggests that you see no solutions to the situation presented by the star."

Compton stared at him for a moment, unsmiling; then: "O. K., chief, I'll cut out the kidding. You're right about the star. It took us fifty hours to get up to two hundred forty thousand miles per second. Then we crossed some invisible line, and for the past few hours we've been plumping along at, as you say, thirty miles a second.

"All right, then, say fifty-three hours that it took us to get here. Even if we eliminate that horrible idea you spawned, about it taking us thousands of years to decelerate, there still remains the certainty that—with the best of luck, that is—with simply a reversal of the conditions that brought us here, it would require not less than fifty-three hours to stop.

"Figure it out for yourself. We might as well play marbles."

THEY CALLED Gunther and O'Day. "And bring some liquor down!" Compton roared through the communicator.

"Wait!" Harcourt prevented him from breaking the connection. He spoke quietly: "Is that you, Gunther?"

"Yep!" the navigation officer responded.

"The star's still dead on?"

"Deader!" said the ungrammatical Gunther.

Harcourt hesitated; this was the biggest decision he had ever faced in his ten violent years as a commander of a spaceship. His face was stiff as he said finally, huskily:

"All right, then, come down here, but don't tell anyone else what's up. They could take it—but what's the

use? Come to Compton's office."

He saw that the chief engineer was staring at him strangely. Compton said at last: "So we really give up the ship?"

Harcourt gazed back at him coldly: "Remember, I'm only the co-ordinator around here. I'm supposed to know something of everything—but when experts tell me there's no hope, barring miracles, naturally I refuse to run around like an animal with a blind will to live.

"Your men are slaving to get the steam engine running; two pounds of U-235 are doing their bit to heat up the steam boiler. When it's all ready, we'll do what we can. Is that clear?"

Compton grinned, but there was silence between them until the two other men arrived. O'Day greeted them gloomily:

"There's a couple of good friends of mine up there whom I'd like to have here now. But what the hell! Let 'em die in peace, says Harcourt; and right he is."

Gunther poured the dark, glowing liquid, and Harcourt watched the glasses tilt, finally raised his own. He wondered if the others found the stuff as smooth and tasteless as he did. He lowered his glass and said softly:

"Atomic power! So this is the end of man's first interstellar flight. There'll be others, of course, and the law of averages will protect them from running into suns; and they'll get their steam engines going, and their drives reversed; and if this process *does* reverse itself, then within a given time they'll stop—and then they'll be where we thought we were: facing the problem of finding their way back to Earth. It looks to me as if man is stymied by the sheer vastness of the universe."



"Don't be such a damned pessimist!" said Compton, his face flushed from his second glass. "I'll wager they'll have the drivers of the third test ship reversed within ten minutes of crossing that light-speed deadline. That means they'll only be a few thousand light years from Earth. Taking it in little jumps like that, they'll never get lost."

HARCOURT saw O'Day look up from his glass; the physicist's lips parted—and Harcourt allowed his own words to remain unspoken. O'Day said soberly:

"I'm thinkin' we've been puttin' too much blame on speed and speed alone in this thing. Sure 'n' there's no magic about the speed of light. I didn't ever see that before, but it's there plain now. The speed of light depends on the properties of light, and that goes for electricity and radio and all those related waves.

"Let's be keepin' that in mind. Light and such react on space, and are held down by nothin' but their own limitations. And there's only one new thing we've got that could've put us out here, beyond the speed of light; and that's—"

"Atomic energy!" It was Compton, his normally strong voice amazingly low and tense. "O'Day, you're a genius. Light lacks the energy attributes necessary to break the bonds that hold it leashed. But atomic energy—the reaction of atomic energy on the fabric of space itself—"

Gunther broke in eagerly: "There must be rigid laws. For decades men dreamed of atomic energy, and finally it came, differently than they expected. For centuries after the first spaceship roared crudely to the Moon, there has been the dream of the inertialess drive; and here, somewhat differently than we pictured it,

is that dream come alive."

There was brief silence. Then, once again before Harcourt could speak, there was an interruption. The door burst open—a man poked his head around the corner:

"Steam engine's ready! Shall we start her up?"

There was a gasp from every man in that room—except Harcourt. He leaped erect before the heavier Compton could more than shuffle his feet; he snapped:

"Sit down, Compton!"

His gray gaze flicked with flame-like intensity from face to face. His lean body was taut as stone as he said:

"No, the steam engine does not go on!"

He glanced steadily but swiftly at his wrist watch. He said:

"According to Gunther's calculations, we're still twenty minutes from the star. *During seventeen of those minutes we're going to sit here and prepare a logical plan for using the forces we have available.*"

Turning to the mechanic, he finished quietly: "Tell the boys to relax, Blake."

THE MEN were staring at him; and it was odd to notice that each of the three had become abnormally stiff in posture, their eyes narrowed to pin points, hands clenched, cheeks pale. It was not as if they had not been tense a minute before. But now—

By comparison, their condition then seemed as if it could have been nothing less than easygoing resignation.

For a long moment the silence in the cosy little room, with its library, its chairs and shining oak desk and metal cabinets, was complete. Finally Compton laughed, a curt, tense, humorless laugh that showed

the enormousness of the strain he was under. Even Harcourt jumped at that hard, ugly, explosive jolt of laughter.

"You false alarm!" said Compton. "So you gave up the ship, eh?"

"My problem," Harcourt said coolly, "was this: We needed original thinking. And *new* ideas are never born under ultimate strain. In the last twenty minutes, when we seemed to have given up, your minds actually relaxed to a very great extent.

"*And the idea came!* It may be worthless, but it's what we've got to work on. There's no time to look further.

"And now, with O'Day's idea, we're back to the strain of hope. I need hardly tell you that, once an idea exists, trained men can develop it immeasurably faster under pressure."

Once more his gaze flicked from face to face. Color was coming back to their faces; they were recovering from the first tremendous shock. He finished swiftly:

"One more thing: You may have wondered why I didn't invite the others into this. Reason: twenty men only confuse an issue in twenty minutes. It's we four here, or death for all. Gunther, regardless of the time it will take, we must have recapitulation, a clarification—quick!"

Gunther began roughly: "All right. We crossed the point of light speed. Several things happened: our velocity jumped to a billion or so times that of light. Our electric system went on the blink—*there's something to explain.*"

"Go on!" urged Harcourt. "*Twelve minutes left!*"

"Our new speed is due to the reaction of atomic energy on the fabric of space. This reaction did not begin till we had crossed the point of

light speed, indicating some connection, possibly a natural, restraining influence of the world of matter and energy as we knew it, on this vaster, potentially cataclysmic force."

"*Eleven minutes!*" said Harcourt coldly.

Greater streams of sweat were pouring down Gunther's dark face. He finished jerkily: "Apparently our acceleration continued at two gravities. Our problems are: to stop the ship immediately and to find our way back to Earth."

He slumped back in his chair like a man who has suddenly become deathly sick. Harcourt snapped:

"Compton, what happened to the electricity?"

"THE BATTERIES drained of power in about three minutes!" the big man rumbled hoarsely. "That happens to be approximately the theoretical minimum time, given an ultimate demand, and opposed only by the cable resistance. Somewhere it must have jumped to an easy conductor—but where did it go? Don't ask me!"

"I'm thinkin'," said O'Day, his voice strangely flat, "I'm thinkin' it went home.

"Wait!" The flat, steely twang of the word silenced both Harcourt and the astounded Compton. "Time for talkin' is over. Harcourt, you'll be enforcin' my orders."

"Give them!" barked the captain. His body felt like a cake of ice, his brain like a red-hot poker.

O'Day turned to Compton: "Now get this, you blasted engineer: Turn off them drivers *ninety-five percent!* One inch farther an' I'll blow your brains out!"

"How the devil am I going to know what the percent is?" Compton said freezingly. "Those are engines, not delicately adjusted labora-

tory instruments. Why not shut them off all the way?"

"You damned idiot!" O'Day shouted furiously. "That'll cut us off out here an' we'll be lost forever. Get movin'!"

Beetlike flame thickened along Compton's bull neck. The two men glared at each other like two animals out of a cage, where they have been tortured, ready to destroy each other in distorted revenge.

"Compton!" said Harcourt, and he was amazed at the way his voice quavered. "*Seven minutes!*"

Without a word, the chief engineer flung about, jerked open the door and plunged out of sight. He was bellowing some gibberish at his men, but Harcourt couldn't make out a single sentence.

"There'll be a point," O'Day was mumbling beside him, "there'll be a point where the reaction'll be minimum—but still there—and we'll have everything—but let's get out into the engine room before that scoundrel Compton—"

His voice trailed off. He would have stood there blankly if Harcourt hadn't taken him gently and shoved his unsteady form through the door.

THE steam engine was hissing with soft power. As Harcourt watched, Compton threw the clutch. The shining piston rod jerked into life, shuddered as it took the terrific load; and then the great wheel began to move.

For hours, men had sweated and strained in relays to make that wheel turn. Each turn, Harcourt knew, widened by a microscopic fraction of an inch the space separating the hard energy blocks in each drive tube, where the fury of atomic power was born. Each fraction of widening broke that fury by an infinitesimal degree.

The wheel spun sluggishly, ten revolutions a minute, twenty, thirty

—a hundred—and that was top speed for that wheel with that power to drive it.

The seconds fled like sleet before a driving wind. The engine puffed and labored, and clacked in joints that had not been sufficiently tightened during the rush job of putting it together. It was the only sound in that great domed room.

Harcourt glanced at his watch. Four minutes. He smiled bleakly. Actually, of course, Gunther's estimate might be out many minutes. Actually, any *second* could bring the intolerable pain of instantaneous, flaming death.

He made no attempt to pass on the knowledge of the time limit. Already he had driven these men to the danger point of human sanity. The violence of their rages a few minutes before were red-flare indicators of abnormal mental abysses ahead. There was nothing to do now but wait.

Beside him, O'Day snarled: "Compton—I'm warnin' ya."

"O. K.! O. K.!" Compton barked sulkily.

Almost pettishly, he pulled the clutch free—and the wheel stopped. There was no momentum. It just stopped.

"Keep jerkin' it in an' out now!" O'Day commanded. "'N' stop when I tell ya! The point of reaction must be close."

In, out; in, out. It was hard on the engine. The machine labored with a noisy, shuddering clamor. It was harder on the men. They stood like figures of stone. Harcourt glanced stiffly at his watch.

Two minutes!

In, out; in, out; in—went the clutch, rhythmically now. Somewhere there was a point where atomic energy would cease to create a full tension in space, but there

would still be connection. That much of O'Day's words were clear. And—

ABRUPTLY the ship staggered, as if it had been struck. It was not a physical blow, for they were not sent reeling off their feet. But Harcourt, who knew the effect of titanic energies, waited for the first shock of inconceivable heat to sear at him. Instead—

"Now!" came the shrill beat of O'Day's voice.

Out jerked the clutch in its rhythmical backward and forward movement. The great space liner poised for the space of a heartbeat. The thought came to Harcourt:

"God heavens, we can't have stopped completely. There must be momentum!"

In went that rhythmically manipulated clutch. The ship reeled; and Compton turned. His eyes were glassy, his face twisted with sudden pain.

"Huh!" he said. "What did you say, O'Day? I bumped my finger and—"

"You be-damned idiot!" O'Day almost whispered. "You—"

His words twisted queerly into meaningless sounds. And, for Harcourt, a strange blur settled over the scene. He had the fantastic impression that Compton had returned to his automatic manipulation of the clutch; and, insantly, the wheel and the steam engine had *reversed*.

A period of almost blank confusion passed; and then, incredibly, he was walking backward into Compton's office, leading an unsteady, backward-walking O'Day. Suddenly there was Compton, Gunther, O'Day and himself sitting around the desk; and senseless words chattered from their lips.

They lifted glasses to their

mouths; and, horribly, the liquor flowed from their lips and filled the glasses.

Then he was walking backward again; and there was Compton lying on the engine-room floor, nursing his shattered finger—and then he was back in the dark navigation room, peering through a telescope eyepiece at a remote star.

The jumble of voice sounds came again and again through the blur—finally he lay asleep in bed.

Asleep? Some part of his brain was awake, untouched by this incredible reversal of physical and mental actions. And as he lay there, slow thoughts came to that aloof, watchful part of his mind.

The electricity had, of course, gone home. Literally. And so were they going home. Just how far the madness would carry on, whether it would end at the point of light speed, only time would tell. And obviously, when flights like this were everyday occurrences, passengers and crew would spend the entire journey in bed.

Everything reversed. Atomic energy had created an initial tension in space, and somehow space demanded an inexorable recompense. Action and reaction were equal and opposite. Something was transmitted, and then an exact balance was made. O'Day had quite evidently thought that at the point of change, of reaction, an artificial stability could be created, enabling the ship

to remain indefinitely at its remote destination and—

BLACKNESS surged over his thought. He opened his eyes with a start. Somewhere in the back of his brain was a conviction of something wrong. He couldn't quite place the discordant factor, but it quivered there on the verge of his brain, an alien thing that shattered for him the security of the spaceship.

He strained his senses against the blackness—and abruptly grew aware of the intensity of that dark. That was it! The darkness! The indirect night light must have gone off.

Odd that the light system should have gone on the blink on this first "night" of this first trip of the first spaceship powered by the new, stupendous atomic drive.

Footsteps whispered hesitantly along the corridor. There was a knock, and the voice of Gunther came, strained and muffled. The man entered; and his breathing was a thick, satisfying sound that destroyed the last vestige of the hard silence. Gunther said:

"Harcourt, the damnedest thing has happened. It started when everything electrical went out of order. Compton says we've been accelerating for two hours now at Heaven only knows what rate."

For the multi-billionth time, as it had for uncountable years, the incapable cosmic farce began to rewind, like a film—held over!

THE END.

