

ASTOUNDING SCIENCE FICTION

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Pipeline to Pluto

by MURRAY LEINSTER

Mustrated by Kramer

Far, far out on Pluto, where the sun is only a very bright star and a frozen, airless globe circles in emptiness; far out on Pluto, there was motion. The perpetual faint starlight was abruptly broken. Yellow lights shone suddenly in a circle, and men in spacesuits waddled to a space tug—absurdly marked Betsy-Anne in huge white letters. They climbed up its side and went in the airlock. Presently a faint, jetting glow appeared below its drivetubes. It flared suddenly and the tug lifted,

It was true that freight was put in the Pipeline's ships on Earth and practically simultaneously freight was taken out on Pluto. But—a fact many dupes didn't understand—it didn't make an instantaneous trip, to hover expertly a brief distance above what seemed an unmarred field of frozen atmosphere. But that field heaved and broke. The nose of a Pipeline carrier appeared in the center of a cruciform opening. It thrust through. It stood half its length above the surface of the dead and lifeless planet. The tug drifted above it. Its grapnel dropped down, jetted minute flames, and engaged in the monster towring at the carrier's bow.

The tug's drivetubes flared luridly. The carrier heaved abruptly up out of its hidingplace and plunged for the heavens behind the tug. It had a huge classmark and number painted on its side, which was barely visible as it whisked out of sight. It went on up at four gravities acceleration, while the spacetug lined out on the most precise of courses and drove fiercely for emptiness.

A long, long time later, when Pluto was barely a pallid disk behind, the tug cast off. The carrier went on, sunward. Its ringed nose pointed unwaveringly to the sun toward which it would drift for years. It was one of a long, long line of carriers drifting through space, a day apart in time but millions of miles apart in distance. They would go on until a tug from Earth came out and grappled them, and towed them in to their actual home planet.

But the Betsy-Anne, of Pluto, did not pause for contemplation of the two-billion-mile-long line of orecarriers taking the metal of Pluto back to Earth. It darted off from the line its late tow now followed. Its

radio-locator beam flickered invisibly in emptiness. Presently its course changed. It turned about It braked violently going up to six gravities deceleration for as long as half a minute at a time Presently it came to rest and there floated toward it an object from Farth. a carrier with great white numerals on its sides. It had been hauled off Earth and flung into an orbit which would fetch it out to Pluto. The Betsy-Anne's grappel floated toward it and ietted tiny sparks until the towring was engaged. Then the tue and its new tow from Farth started back to Pluto

There were two long lines of white-numbered carriers floating sedately through space. One line drifted tranquilly in to Earth. One drifted no less tranquilly out past the orbits of six planets to reach the closed-in, underground colony of the mines on Pluto.

Together they made up the Pipe-

The evening Moon-rocket took off over to the north and went straight up to the zenith. Its blue-white rocket-flare changed color as it fell behind, until the tail-end was a deep, rich crimson. The Pipeline docks were silent, now, but opposite the yard the row of flimsy eating-and drinking-places rattled and thuttered to themselves from the lower-than-sound vibrations of the Moon-ship.

There was a youngish, battered man named Hill in the Plute Bar, opposite the docks. He paid no attention to the Moon-rocket, but he looked up sharply as a man came out of the Pipeline gate and came across the street toward the har. But Hill was staring at his drink when the door opened and the man from the dock looked the small dive Besides Hill-who looked definitely tough, and as if he had but recently recovered from a rayaging illness—there was only the hartender, a catawheel-truck driver and his girl having a drink together, and another man at a table by himself and fidgeting nervously as if he were waiting for someone. Hill's eves flickered again to the man in the door. He looked suspicious. But then he looked back at his alses

The other man came in and went

to the bar.

"Evenin', Mr. Crowder," said the bartender.

Hill's eyes darted up, and down again. The bartender reached below the bar, filled a glass, and slid

it across the mahogany.

"Evenin'," said Crowder curtly. He looked deliberately at the fidgety man. He seemed to note that the fidgety man was alone. He gave no sign of recognition, but his features pinched a little, as some men's do when they feel a little, crawling unease. But there was nothing wrong except that the fidgety man seemed to be upset because he was waiting for someone who han't come.

Crowder sat down in a booth, alone. Hill waited a moment, looked sharply about him, and then stood up. He crossed purposefully to the booth in which Crowder sat.

"I'm lookin' for a fella named

Crowder," he said huskily. "That's you, ain't it?"

Crowder looked at him, his face instantly masklike. Hill's looks matched his voice. There was a scar under one eye. He had a cauliflower ear. He looked battered, and hard-boiled—and as if he had just recovered from some serious injury or illness. His skin was reddened in odd patches.

"My name is Crowder," said Crowder suspiciously. "What is it?"

Hill sat down opposite him.

"My name's Hill," he said in the same husky voice. "There was a guy who was gonna come here tonight. He'd fixed it up to be stowed away on a Pipeline carrier to Pluto. I bought 'im off. I bought his chance. I came here to take his place."

"I don't know what you're talking about," said Crowder coldly.

But he did. Hill could see that he did. His stomach-muscles knotted. He was uneasy. Hill's gaze grew scornful.

"You're the night super of th' Pipeline yards, ain't you?" he demanded truculently.

Crowder's face stayed masklike. Hill looked tough. He looked like the sort of yegg who'd get into trouble with the police because he'd never think things out ahead. He knew it, and he didn't care. Because he had gotten in trouble—often—because he didn't think things out ahead. But he wasn't that way tonight. He'd planned tonight in detail.

"Sure I'm the night-superintendent of the Pipeline yards," said Crowder shortly. "I came over for a drink. I'm going back. But I don't know what you're talking about."

Hill's eves grew hard.

"Listen, fella," he said truculently—but he had been really ill, and the signs of it were plain—"they're payin' five hundred credits a day in the mines out on Pluto, ain't they? A guy works a year out there he comes back rich don't he?"

"Sure!" said Crowder. "The wages got set by law when it cost a lot to ship supplies out. Before the Pipeline got going."

"An' they ain't got enough guys to work, have they?"

"There's a shortage," agreed Crowder coldly. "Everybody knows it. The liners get fifty thousand credits for a one-way passage, and it takes six months for the trip."

Hill nodded, truculently,

"I wanna get out to Pluto," he said huskily. "See? They don't ask too many questions about a guy when he turns up out there. But the spaceliners, they do, an' they want too many credits. So I wanna go out in a carrier by Pipeline. See?"

Hill downed his drink and stood

up.
"There's a law," he said uncompromisingly, "that says the Pipeline can't carry passengers or mail.
The spacelines jammed that through.
Politics."

"Maybe," said Hill pugnaciously,

"but you promised to let a guy stow away on the carrier tonight. He told me about it. I paid him off. He sold me his place. I'm takin' it,

"I'm night superintendent at the yards," Crowder told him. "If there are arrangements for stow-aways, I don't know about them. You're talking to the wrong man."

He abruptly left the table. He walked across the room to the fidgety man, who seemed more and more uneasy because somebody hadn't turned up. Crowder's eyes were viciously angry when he bent over the fidgety man.

"Look here, Moore!" he said savagely, in a low tone. "That guy is on! He says he paid your passenger to let him take his place. That's why your man hasn't showed up. You picked him out and he sold his place to this guy. So I'm leaving it right in your lap! I can lie myself clear. They couldn't get any evidence back, anyhow. Not for years yet. But what he told me is straight, he's got to go or he'll shoot off his mouth! So it's in your lap!"

The eyes of Moore—the fidgety man—had a hunted look in them. He swallowed as if his mouth were dry. But he nodded.

Crowder went out. Hill scowled after him. After a moment he came over to Moore.

"Lookahere," he said huskily. "I wanna know somethin'. That guy's night super for Pipeline, ain't he?" Moore nodded. He licked his

lips.

"Lissen!" said Hill angrily.

"there's a Pipeline carrier leaves here every day for Pluto, an' one comes in from Pluto every day. It's just like gettin' on a 'copter an' goin' from one town to another on the Pipeline ain't it'"

Moore nodded again—this time

"That's what a guy told me," said Hill pugnaciously. "He said he'd got it all fixed up to stow away on a carrier-load of grub. He said he'd paid fifteen hundred credits to have it fixed up. He was gonna leave tonight. I paid him off to let me take his place. Now this guy Crowder tells me I'm crazy!"

"I... wouldn't know anything about it," said Moore, hesitantly. "I know Crowder, but that's all."

Hill growled to himself. He doubled up his fist and looked at it. It was a capable fist. There were scars on it as proof that things had been hit with it.

"O.K.!" said Hill. "I guess that guy kidded me. He done me outta plenty credits. I know where to find him. He's goin' to a hospital!"

He stirred, scowling.

"W-wait a minute," said Moore.
"It seems to me I heard something,

Carriers drifted on through space. They were motorless, save for the tiny drives for the gyros in their noses. They were a hundred feet long, and twenty feet thick, and some of them contained foodstuffs in air-sealed containers—because everything will freeze, in space, but even ice will evaporate in a vacuum. Some carried drums of rocket fuel

for the tugs and heaters and the generators for the mines on Pluto. Some contained tools and books and visiphone records and caviar and explosives and glue and cosmetics for the women on Pluto. But all of them drifted slowly, leisurely, unhurriedly, upon their two-billionmile journey.

They were the Pipeline. You put a carrier into the line at Farth headed out to Pluto. The same day you took a carrier out of space at the end of the line, at Pluto. You out one into the Earth-hound line. on Pluto. You took one out of space the same day, on Earth. There was continuous traffic between the two planets, with daily arrivals and departures from each. But passengertraffic between Earth and Pluto went by space liners, at a fare of fifty thousand credits for the trip. Because even the liners took six months for the journey, and the Pipeline carriers-well, there were over twelve hundred of them in each line going each way, a day apart in time and millions of miles apart in space. They were very lonely, those long cylinders with their whitepainted numbers on their sides. The stars were the only eyes to look upon the while they traveled, and it took three years to drift from one end of the pipeline to the other.

But nevertheless there were daily arrivals and departures on the Pipeline, and there was continuous traffic between the two planets.

Moore turned away from the pay-visiphone, into which he had talked in a confidential murmur while the screen remained blank. The pugnacious, battered Hill scowled impatiently behind him.

"I'm not sure," said Moore uneasily. "I talked to somebody I thought might know something, but they're cagey. They'd lose their jobs and maybe get in worse trouble if anybody finds out they're smuggling stowaways to Pluto. Y'see, the space lines have a big pull in politics. They've got it fixed so the Pipeline can't haul anything but freight. If people could travel by Pipeline, the space liners 'ud go broke. So they watch close."

He looked uneasy as he spoke. His eyes watched Hill almost alarmedly. But Hill said sourly:

"O.K.! I'm gonna find the guy that sold me his place, an' I'm gonna write a message on him with a blowtorch. The docs'll have fun readin' him, an' why he's in the hospital!"

Moore swallowed.

"Who was it? I've heard some-

Hill bit off the name. Moore swallowed again—as if the name meant something. As if it were right.

"I... I'll tell you, guy," said Moore. "It's none of my business, but I... well... I might be able to fix things up for you. It's risky, though, butting in on something that ain't my business—"
"How much?" said Hill shortly.

"Oh . . . f-five hundred," said Moore uneasily.

Hill stared at him. Hard. Then he pulled a roll out of his pocket. He displayed it. "I got credits," he said huskily. "But I'm givin' you just one hundred of 'em. I'il give you nine hundred more when I'm all set. That's twice what you asked for. But that's all, see? I got a reason to get off Earth, an' tonight, I'll pay to manage it. But if I'm double-crossed, somebody gets hurt!"

Moore grinned nervously.

"No double-crossing in this," he said quickly. "Just . . . well . . . it is ticklish."

"Yeah," said Hill. He waved a battered-knuckled hand. "Get goin! Tell those guys I'm willin' to pay. But I get stowed away, or I'll fix that guy who sold me his place so he'll tell all he knows! I'm goin' to Pluto or else!"

Moore said cautiously:

"M-maybe you'll have to pay out a little more . . . but not much! But you'll get there! I've heard . . . just heard, you understand . . . that the gang here smuggles a fella into the Pipeline yard and up into the nose of a carrier. They pick out a carrier loaded with grub. Champagne and all that. He can live high on the way, and not worry because out on Pluto they're so anxious to get a man to work that they'll square things. They need men bad, out on Pluto! They pay five hundred credits a day!"

"Yeah," said Hill grimly. "They need 'em so bad there ain't no extradition either. I'm int'rested in that, too. Now get goin' an' fix me up!"

The Pipeline was actually a twobillion-mile arrangement of specks

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in infinity. Each of the specks was a carrier. Each of the carriers was motorless and inert. Each was unlighted. Each was lifeless. But—some of them had contained life when they started.

The last carrier out from Earth. to be sure contained nothing but its proper cargo of novelties, rocket fuel, canned gnods and plastic base. But in the one beyond that, there was what had been a hopeful stowaway. A man, with his possessions neatly piled about him He'd been placed up in the nose of the carrier and he'd waited, mousy-still, until the space tug connected with the tow ring and heaved the carrier out to the beginning of the Pineline. As a stowaway, he hadn't wanted to be discovered. The carrier ahead of that-many millions of miles farther out-contained two girls. who had heard that stenographers were highly paid on Pluto, and that there were so few women that a girl might take her pick of husbands. The one just before that had a man and woman in it. There were four men in the carrier beyond them.

The hundred-foot cylinders drifting out and out and out toward Pluto contained many stowaways. The newest of them still looked quite human. They looked quite tranquil. After all, when a carrier is hauled aloft at four gravities acceleration the air flows out of the bilge-valves very quickly, but the cold comes in more quickly still. None of the stowaways had actually suffocated. They'd frozen so suddenly they probably did not realize

what was happening. At sixty thousand feet the temperature is around seventy degrees below zero. At a hundred and twenty thousand feet it's so cold that figures simply haven't any meaning. And at four gravities acceleration you reach a hundred and twenty thousand feet before you've really grasped the fact that you paid all your money to be flung unprotected into space. So you never quite realize that you're going on out into a vacuum which will gradually draw every atom of moisture from every tissue of your body.

But, though there were many stowaways, not one had yet reached Pluto. They would do so in time. But the practice of of course. smuggling stowaways to Pluto had only been in operation for a year and a half. The first of the deluded ones had not quite passed the halfway mark. So the stowaway business should be safe and profitable for at least a year and a half more. Then it would be true that a passenger entered the Pipeline from Earth and a passenger reached Pluto on the same day. But it would not be the same passenger. and there would be other differ-Even then, though, the racket would simply stop being profitable, because there was no extradition either to or from Pluto.

So the carriers drifting out through emptiness with their stowaways were rather ironic, in a way. There were tragedies within them, and nothing could be done about them. It was ironic that the carriers gave no sign of the freight they bore. They moved quite sedately, quite placidly, with a vast leisure among the stars.

The battered youngish man said coldly:

"Well? You fixed it?"
Moore grinned nervously.

"Yeah. It's all fixed. At first they thought you might be an undercover man for the passenger lines, trying to catch the Pipeline smuggling passengers so they could get its charter canceled. But they called up the man whose place you took, and it's straight. He said he gave you his place and told you to see Crowder."

Hill said angrily:
"But he stalled me!"
Moore licked his lips.

"You'll get the picture in a minute. We cross the street and go in the Pipeline yard. You have to slip the guard something. A hundred credits for looking the other way."

Hill growled:

"No more stalling!"

"No more stalling," promised . Moore. "You go out to Pluto in the next carrier."

They went out of the Pluto Bar. They crossed the street, which was thin, black, churned-up mud from the catawheel trucks which hauled away each day's arrival of freight from Pluto. They moved directly and openly for the gateway. The guard strolled toward them.

"Slim," said Moore, grinning nervously, "meet my friend Hill."

"Sure!" said the guard.

He extended his hand, palm up.

Hull out a hundred-credit note in it

"O.K.," said the guard. "Luck on Pluto, fella"

He turned his back. Moore snickered almost hysterically and led the way into the dark recesses of the vard. There was the landing field for the space tugs. There were six empty carriers off to one side. There was one in a loading pit, sunk down on a hydraulic platform until only its nose now showed above-ground. It could be loaded in its accelerating position, that way, and would not need to be upended after reaching maximum weight.

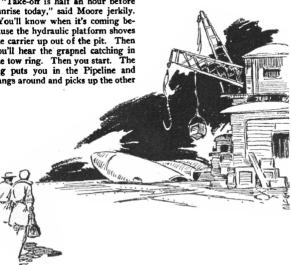
"Take-off is half an hour before sunrise today," said Moore jerkily. "You'll know when it's coming because the hydraulic platform shoves the carrier up out of the pit. Then you'll hear the grapnel catching in the tow ring. Then you start. The tug puts you in the Pipeline and hangs around and picks up the other carrier coming back."

"That's speed!" hies Hill "Them scientists are great stuff. huh? I start off in that, an' before I know it I'm on Phyto!"

"Veah" said Moore He smirked with a twitching, ghastly effect. "Before you know it. Here's the door where you go in."

Crowder came around the other side of the carrier's cone-shaped nose. He scowled at Hill, and Hill scowled back

"You sounded phony to me." said Crowder ungraciously. "I wasn't going to take any chances by admitting anything. Moore told you



it's going to cost you extra?"
"For what?" demanded Hill.

bristling.

"Because you've got to get away fast." said Crowder evenly. cause there's no extradition from Pluto We're not in this for our health Two thousand credits more."

Hill snarled.

"Thief-" Then he said sullenly. "OK"

"And my nine hundred," said Moore eagerly.

"Sure." said Hill, sardonically. He paid. "O.K. now? Whadda I do now?"

"Go in the door here." said Crowder. "The cargo's grub. Get comfortable and lay flat on your back when you feel the carrier coming up to be hitched on for towing. After the acceleration's over and you're in the Pipeline, do as you please."

"Yeah!" said Moore, giggling nervously. "Do just as you please." Hill said tonelessly:

"Right. I'll start now."

He moved with a savage, infuriated swiftness. There was a queer, muffled cracking sound. Then a startled gasp from Moore. a moment's struggle, and another sharp crack.

Hill went into the nose of the carrier. He dragged them in. staved inside for minutes. came out and listened, swinging a blackjack meditatively. Then he went over to the gate. He called cautiously to the guard.

"Von! Slim! Crowder says come quick-an' quiet! Somethin's happened an' him an' Moore got their hands full"

The guard blinked, and then came quickly. Hill hurried behind him to the loading pit. As the guard called tensely:

"Hev. Crowder, what's the matter_"

Hill swung the blackiack again. with a certain deft precision. The guard collapsed.

A little later Hill had finished his work. The three men were bound with infinite science. They not only could not escape, they could not even kick. That's quite a trickbut it can be done if you study the art. And they were not only gagged, but there was tape over their mouths beyond the gag, so that they could not even make a respectable groaning noise. And Hill surveved the three of them by the light of a candle he had taken from his pocket-as he had taken the rope from about his waist-and said in husky satisfaction:

"O.K. O.K.! I'm givin' you fellas some bad news. You're headin' out to Pluto"

Terror close to madness shone in the three pairs of eyes which fixed frantically upon him. The eyes seemed to threaten to start from their sockets

"It ain't so bad," said Hill grimly. "Not like you think it is. You'll get there before you know it. No kidding! You'll go snakin' up at four gravities, an' the air'll go out. But you won't die of that. Before you strangle, you'll freeze-an'

fast! You'll freeze so fast y'won't have time to die, fellas. That's the funny part. You freeze so quick you ain't got time to die! The Space Patrol found out a year or so back that that can happen, when things are just right—an' they will be, for you. So the Space Patrol will be all set to bring you back, when y' get to Pluto. But it does hurt, fellas. It hurts like hell! I oughta know!"

He grinned at them, his mouth twisted and his eves grim.

"I paid you fellas to send me out to Pluto last year. But it happened I didn't get to Pluto. The Patrol dragged my carrier out o' the Pineline an' over to Callisto herause they hadda shortage o' rocket fuel there. So I' been through it, an' it hurts! I wouldn't tell on you fellas, because I wanted you to have it, so I took my hawlin' out for stowin' away an' come back to send you along. So you' goin', fellas! An' you' goin' all the way to Pluto! And remember this. fellas! It's gonna be good! After they bring you back, out there on Pluto, every fella an' every soul vou sent off as stowaways, they'll be there on Pluto waitin' for you! It's gonna be good, guys! It's gonna be good!"

He looked at them in the candlelight, and seemed to take a vast satisfaction in their expressions. Then he blew out the candle, and closed the nose door of the carrier, and went away.

And half an hour before sunrise next morning the hydraulic platform pushed the carrier up, and a space tug hung expertly overhead and its grapnel came down and hooked in the tow ring, and then the carrier jerked skyward at four gravities acceleration.

Far out from Earth, the carrier went on, the latest of a long line of specks in infinity which constituted the Pipeline to Pluto. Many of those specks contained things which had been human-and would be human again. But now each one drifted sedately away from the sun, and in the later carriers the stowaways still looked completely human and utterly tranquil. What had happened to them had come so quickly that they did not realize what it was. But in the last carrier of all, with three bound, gagged figures in its nose, the expressions were not tranquil at all. Because those men did know what had happened to them. More-they knew what was vet to come.

THE END.

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