A QUESTION OF SALVAGE

Malcolm Jameson

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A QUESTION OF SALVAGE

By Malcolm Jameson

The salvage fleets had no place for a man with a conscience —but sometimes one showed up, and sometimes they left "junk" behind, when the ether storms were strong—

I.

Sam Truman, mate and acting captain of the *Kwasind*, leaned back against the guard rail of the two-hundred-foot stage of the firing rack which cradled the ugly sphere of his powerful salvage tug. He was staring moodily at two of his black gang, clinging like flies to a pair of bulbous towing bitts sticking out of the hull above him. They had finished burnishing the rugged knobs and were now testing the connections of their heater units. Lower down, two monstrous electric cables led into the tug, through which the squat storm craft was sucking the huge stores of reserve energy she would be needing any moment. From beneath, far down where the nadirward nozzle of the main rocket tube threatened the seared and pitted slag of the dockyard, wisps of acrid smoke trailed. The tube was hot, white-hot. On ten seconds' notice the *Kwasind* could soar into the void.

The *shoosh* of nearby spacecraft caused him to wheel. Ah, a hygiocopter. And another, and another—three of the redbanded ambulances of the ether taking off. There must be trouble in the space lanes already. Then, out of the clear Martian sky he saw the halting descent of a shiny superliner, saw the raw flare of its check rockets mushrooming, watched it settle unevenly onto the public skyport a mile away. The outward bound hygiocopters checked their swift rise, wheeled like circling gulls, and came back to follow the crippled liner to the plain.

"Sizzlin' Syzygies!" came a voice from behind. "She's all stove in. Must be dusty out to crinkle a packet like the *Kop*."

Dumpy little Ben Tiggleman, engineer of the *Kwasind*, had come out of the bowels of the salvage tug and was gazing open-mouthed at the newly landed *Copernicus*. A de luxe job like that, with a dozen of the top-hattedest bigwigs of the System and no knowing how valuable a cargo, did not turn back after ten hours out of port for small reasons.

But the two salvage men could guess the reason. Last night the stars had trembled and danced. Refraction bad, the "seeing" not good, they would have said centuries before, but nowadays men knew better. That was why the *Kwasind* and her five husky sisters were being warmed up, standing by. Sam Truman raised his binoculars and studied the grounded liner.

Her crumpled nose and those sagging plates between each pair of frames spelled but one thing—terrific pressure. She must have banged into an etheric typhoon and hit close to the eye of it. Nothing else could have flattened down her screens and dished her in like that. And if the powerfully compensated "Pride of the Skies" had suffered so, it would be but a matter of hours until the ether would be flooded with SOS's. Inter-Planetary Salvage's tugs would all be out, combing the cosmic flotsam for prizes. The first vessel to slam a glimmering green hawser-beam on wreck or derelict walked away with half her value.

"Wonder why she didn't squawk?" queried Ben. "We coulda gone—hours ago."

"And have it go out over the Omnivox?" replied Sam with a hard laugh. "That would be bad for the passenger trade, scare off the cash customers. As far as landsmen go, this is still a hush-hush business. Weather in the void? Silly! You have to have an atmosphere for that. Remember what they taught you in school?" A couple of IPS yard hands, loitering nearby, overheard and laughed.

"Well," said Ben Tiggleman, his gaze wistfully lingering on fifty millions of potential salvage, "I hope we snag a good one before it's over."

Sam Truman knew what was in his mind. Four hours earlier Mrs. Ben had been rushed to the maternity ward of Herapolis General Hospital, leaving a flock of little Bens behind her in the hovel they called home. Like most salvage men in minor jobs, Ben was always broke. Worse, he was in the clutches of a loan shark. But he shook his head and grinned and started to duck back into the whirring recesses of his engine compartment.

"How are my sky hooks coming along?" Truman called after him.

"Oh! Four are loaded and on ice; and one is on the fire, soaking up the ergs. Boy! You're sure packing power into those babies. I hope they work like you think, because it ain't going to be any fun if one of 'em backfires."

Sam Truman watched his engineer go, then returned to his moody contemplation of the *Kwasind's* hull. She was ready to rise, all right, but he couldn't take any joy in the thought. It was too much like the soaring of a buzzard in search of fresh carrion. He remembered the last big storm too well—crushed and helpless ships swirling in the maelstrom of turbulent ether, while these tugs cruised comfortably among them, picking and choosing only those that promised fat salvage fees. "We are not in business for charity," was one of the mottoes of IPS. "Leave sentiment to the Space Guards—they get paid for it."

Another man in his job would have been atingle with what was before him. The work was exciting, and on occasion could be very, very profitable. Yet to his mind, there was something ghoulish about it. Now that he was familiar with the policies of the company, he hated the salvage business with all his soul. For the dozenth time he was on the verge of stalking into the manager's office and hurling his resignation into his fat, greedy face. Only, he reminded himself, today was not the day for it. He simply could not—it would look yellow. Moreover, it was futile. His quitting would not save a single one of the white-faced, praying passengers going to their doom because parsimonious ship owners refused to guarantee the minimum fee. A cargo of uranium ore was as good as cash in the salvager's hand, but what could you get out of two score rescued humans, with any assurance, but gratitude?

After this blow, perhaps, he would quit. Then—But that "then" was the tough part of it. That was the real deterrent. What could a man—a kick-out from the Space Guard and blacklisted by the Ecliptic Line—what could he do next if he did?

If he chucked the job, there was nothing left—nothing. For to a young man steeped in the traditions of skycraft, a planetbound job was no job at all. It wasn't even living. He just couldn't think of life without the joy and lift that comes of plunging into space with the controls of a thousand thunders under the fingertips. What surface job offered the thrill of hand-jetting across ten miles of bucking emptiness to make fast a line to an inert wreck? What about the grim satisfaction of licking a "low" with a cumbersome tow behind, surging and tearing at the hawser beam? No, he told himself dismally, he would have to hang on. And like it. At least until he could make a killing and buy a ship of his own.

At that dream, he brightened. For the moment he was captain—only acting captain, to be sure, but still the captain. As such, he was entitled to one third the fee, not the lousy fraction of the ten percent that was flung to the crew to divide. If today he could swallow his scruples and do like the rest—pass up the unpromising jobs and concentrate on real loot—well! Next Settlement Day he could tell the whole gang what he thought of them and walk out. A pack of jackals, the lot of them. Ben Tiggleman, alone, seemed to have decent instincts.

He was roused out of his introspection by that worthy's sticking his tousled head out of the hatch and yelling.

"The dope's coming through now—have a look at your telescribe."

Sam quit the stage and made his way through the tortuous passages to the hemispherical control room in the heart of the great tug. He picked up the fallen tape and read: "—series of etheric disturbances of great intensity following trough through asteroid belt, bearing eight four, absolute. Maximum 'low' located in third quadrant, not far from Mars, moving outward. It is described as an elongated ellipsoid of about five million miles along major axis and the gravitic equivalent at center is estimated to be of the order of several thousand megabars. Correspondingly strong 'highs' have been detected both above and below it as well as in front of and behind it, so that extraecliptic travel lanes are as impassable as the usual ones. Gravitic gradients throughout Mars-Jupiter sector at new record and zeta emanation abundant. Triple storm warnings authorized throughout this area.

"Communications with asteroids in that vicinity now completely disrupted. Fragmentary report from Juno at 0456 today, Systemic Standard Time, expressed fears for safety of residents on Juno and Pallas. Lighthouse tender *Cyclops* believed to have been dashed ashore on one of the posterior Trojans, where severe storm conditions also prevail—

"FLASH, Mars: Liner *Copernicus* limped back into Herapolis a few hours after taking off for Earth. Several of the crew severely compressed and many suffering from zeta burns. Some structural damage was suffered by the vessel owing to pounding by gravitic waves, but she returned to base without assistance.

"Special Bulletin for Space Guard and salvage vessels: The following is a partial list, as reported by their owners, of ships now en route through the storm zone: SS. *Stephen Clark*, out of Titan for Mars, 1000 tons rhodium, no passengers: SS. *Moon of Mars*, Herapolis to Callisto City, miscellaneous cargo, twelve passengers; SS. *Rattlesnake*, Io to—"

Sam's fingers skipped along the tape as he hurriedly examined the list. Ordinarily, the mercenary aspects of salvage had no appeal for him, but today—today was different. There was a chance to clean up. One good tow would do it, then he could duck the dirty job for all time. He would have his own ship. He could patent and market his sky anchors. And he could put Ben, good old Ben, back on his feet, too. His share as captain would be ample for all those things.

So far, there were no distress notices that promised great reward, but that meant practically nothing. He knew from past experience that owners were slow to report treasure ships. They only gave up half when threatened with the loss of all; a worth-while bit of salvage had to be in a desperate spot before she would squeal. Those frantic appeals would come later. On a day like this, in the pounding, pulsating void above, great fortunes were sure to be lost—and gained.

There was a dull roar and a swish outside. That meant his neighbor in the firing rack had taken off; *Thor* was first out. Hardly had the *Kwasind's* floor plates quit rattling when a second boom was felt and heard—another tug had shot skyward. Sam glanced sharply at the annunciator on the bulkhead that relayed his orders from the dispatcher's office. It still glowed "Stand by." He smiled a grim smile as he understood. They were giving the regularly appointed captains the edge on him. It was common knowledge that most of them had an arrangement with the manager—they kicked back part of their fee. In fact, it had been suggested to him, if he wanted—

There were footsteps in the corridor from the hatch, and he heard the high-pitched, twittering voice of the half-breed Martian that acted as assistant manager. Sam Truman swung around to see what he brought. With him was a tall, heavyset man in the uniform of a captain of the IPS. He was no captain that Sam had seen about, yet there was something vaguely familiar about him—that dark complexion, that air of half-concealed arrogance—

"This is Mr. Truman, your mate," the Martian was saying, "and he should be all set to go. But you had better keep an eye on him," and he chuckled shrilly, "he's an *altruist*. So take over, Captain Varms, and good luck."

"I've known Mr. Truman for many years," asserted the new captain with studied insolence, "and I know quite well how to handle him."

Eric Varms!

II.

"Blast out! Mr. Mate," said Captain Varms, coolly impersonal. "I'll give further orders when we're outside." He stripped off his gloves and tossed them onto the chart rack, then began to study the meteorological instruments grouped on one of the indicator panels. He frowned importantly as he glanced knowingly from mesotron detector to argonometer. "Promises to be dirty weather upside," he coughed wisely.

Sullenly, his cheeks flushed with impotent anger, Sam Truman jabbed the key home that set off the warning howlers outside the hull. Tiny lights twinkled on the monitor as the gas-tight doors slid shut and locked themselves. Ben Tiggleman's "Ready" light glowed over the firing lever. Sam unlocked the main rocket release, clutched the safety grips, and shoved the lever home. With a shuddering rush the *Kwasind* launched herself at the zenith.

Sam clung there throughout the acceleration, his jaws clamped hard shut, boiling within. It was bad enough to be superseded in command at the very last moment—a typical IPS trick—but the crowning irony of it was to have to play second fiddle to Eric Varms. Eric Varms, whose astragation problems he had worked for him in the old academy days and whom he had taught the rudiments of skymanship. Eric Varms, his jinx—his Nemesis!

That was the same Varms who, while they were still both snotties, had squealed to the commandant to save his own skin and told where to find the bottle of forbidden Venusian "dragon juice," saying that Sammie Truman had brought it into Lunar Barracks. His lips sealed by the midshipman code of honor, Sam refused to deny it. For that they bilged him, cut off his career in the Space Guard. And it was Varms, five years ago when they were both senior mates in the Ecliptic Line and up for examination for the post of master, who had preceded him in putting the little trial ship Elsie through her paces. Eric had done all the stunts and come through all right. It was Sam's turn. "She's all yours," was what Eric said when he stepped out, "now go and bust yourself."

Prophetic words. Sam groaned to recall them. He was too cocky, too sure of himself that day—he should have inspected her. There *must* have been some dirty work there. No magnon circuit ever behaved like that one did, nor could the leads to the telltales on the monitor board have come disconnected by themselves.

That had been a ghastly crash. Not only was the trial ship wrecked beyond repair, but several bystanders were hurt, matters which cost the Ecliptic Line heavily. Sam himself spent the next several months in the hospital, too much in pain to know or care that a hostile Court of Inquiry was pawing through the fragments of the broken *Elsie* and listening to the insinuations of his rival for the vacant captaincy.

When he recovered sufficiently to face the browbeating spacedogs that made up the Court, they had already made up their minds. "Culpable negligence" was their verdict and the penalty was summary dismissal from the Line. Jobless and discredited, he had gone off to the outer planets in search of work only to lose berth after berth as his record caught up with him. So hounded, he could never accumulate money enough for a ship of his own—the only decent means left him to pursue the career he had chosen and loved.

In desperation he had turned to that last refuge of the disgraced spaceman—the salvage racket. Distasteful as some of its features were, when catastrophe struck there was opportunity; when the ether tied itself in knots the scavengers of the void found good hunting.

But now, just as the chance for liberation was in sight, Eric Varms' path had to cross his again. His ancient enemy was to be his captain and walk away with that fat share of the fee!

To the eye there was nothing to indicate that an etheric storm of hurricane proportions was raging, but already they felt the beating surges of gravitic waves. The ship never wavered as she flung headlong into the void, nor was there thud or quiver. Men simply felt their weight come and go as a weirdly disturbing internal rhythm, indescribable to one who has never experienced it. It was not at all like the sickening feeling one gets when dropped suddenly, or the oppressiveness of being pitched upward, for the gravitic reference there is the Earth below. Here it was a man's own middle, his own bodily center of gravity. One moment he felt as if he would collapse internally from the weight of his outer flesh, the next as if about to fly apart.

Sam's hand lay on the compensator switch and he looked expectantly at his captain. Whatever Sam's personal estimate

of him, the law of the sky gave him the exclusive right to command. Varms caught the query in the glance and sneered.

"If that jiggling worries you, go ahead and turn it on. I always did that in the liners. It kept the passengers from getting jittery."

Sam nearly choked, but he managed to swallow the retort. He knew now that he would have to go to the mat with this man, but the time was not yet. The tug must be made safe first.

He closed the compensator switch. He had already noted the period of the vibrations and long practice told him their strength, so his tuning knob was already set. As new waves of gravitic force welled out of the ship's gravigens, matching the incoming waves trough to crest and neutralizing them out of existence, the uncomfortable coming and going of weight ceased.

Those first rhythmic impulses were no more than annoying to men used to them, and, of course, luxury liners had small compensators with which to damp them out—the little ripples that were often found in normal ether. But Eric Varms' allusion to it revealed that his superciliousness was as much due to sheer ignorance as to his characteristic maliciousness. Sam had been willing to smother his personal animosity toward the man for the duration of the storm, but rank incompetence might any moment ruin them all. In a typhoon like this one, when big liners were tossed about like leaves in a terrestrial autumn, waves of overwhelming force might strike them any instant. Then it would be, not a matter of comfort, but survival.

"Look here, Varms," Sam Truman blurted out, determined to have the showdown at once.

"*Sir*, mister, when you address a superior," barked the new salvage captain, savagely.

Sam Truman glared back just as savagely.

"I never omit it," he said, coldly and evenly, "when I'm talkin to one. But that mess of gold sewed to your cap don't make you my superior, Eric Varms. In this game, and on a day like this, it's what you know that counts, and guts—"

"Y-you—" Varms strode toward him, fists clinched and scowling. Sam leaped away from the control panel and squared off, watching warily. If Varms wanted to do it this way, all right.

It was at that instant the big wave hit. That titanic surge of gravity froze them both where they stood, each glassy-eyed at the other, watching helplessly as their superficial muscles contracted like iron, squeezing the breath from both of them in one stinging gasp. Their too-ready fists smashed into their own sides under the impact of it, and the skins of their faces shrank until they grinned at one another like a pair of jocular death's heads. It passed as swiftly as it came, and the instant its crushing grip relaxed, Sam's hand was at the controller, cutting in an additional gravigen. He turned to the shaken captain, still standing wobbly in the center of the control room where the gravitic blast had caught him. Sam balled his fist and held it up to Varms' view.

"We would be hard little carbon dolls, by now—just that big—if I hadn't had the first machine running. The counterthrust of that took most of the curse off it. No man living, or ship, could have stood up under that baby—a thousand megabars, if it was an ounce."

Eric Varms was dazedly exploring bruised ribs with fluttering hands. Ben Tiggleman cased into the room from the motor spaces, looking a little startled. Sam waved to him to be silent.

"Now Varms, as I started to say," Sam proceeded calmly, as if nothing had happened, "before this *Kwasind* and us in it is smashed to a briquette you could load on a truck, let's have an understanding. First off, we don't care a damn how you got your job. We can guess, but we'll skip it. You're the skipper—that's conceded. Under the mutiny laws we're hooked and we have to take it, even if you don't know what it's all about—"

Varms stiffened belligerently, and a hand stole toward his holster.

"Take it easy, Varms. Bluster won't buy you anything. That popgun of yours, considering what's going on around us don't mean a thing. I can yank this switch over a notch or so and you'll think that last little squeeze was a love hug.

"Now there's no use in your fourflushing any longer. Hard talk never made a salvage man yet. When you made that crack down in the dockyard about the weather, I had your number. This kind of weather don't register on instruments below an atmosphere. The only thing there that meant anything was the maculometer, and you didn't see that. Sunspots is one thing that's wrong up here. Anyhow, you couldn't know anything about weather in the Ecliptic Line; they ground their ships every time a Force-3 gradient is reported. All we want you to do is keep your trap shut and leave the heavy thinking to us.

"We're all of us in this thing for the living we get out of it, and mass suicide don't come under the head of living. Somebody's got to have charge of this bucket that knows what to do. In the salvage racket you're not allowed even *one* mistake. The first one is *finish*!"

Captain Varms gulped and stared at his shoe. He knew his mate had him, and the engineer, silent, but with the suspicion of a grin on his face, was evidently against him, too.

"I'm open to suggestions," he said, craftily. After all, why not? If these birds wanted to do all the work, and the manager said they knew how, let them. He would get the lion's share of the money, anyway, and that was all he cared about. To hell with their opinion of him. And also he could watch and learn. There would be time enough later on to straighten 'em out. Sam Truman hesitated a moment before answering. It was no easy thing to explain a phenomenon that happened so infrequently and irregularly that even the scientists were baffled. It was only known that whenever solar magnetic radiation was unusually strong and there were also present exceptionally powerful cosmic rays, etheric disturbances resulted. It was believed that when the two sets of rays impinged at one critical angle, "highs" were developed, at another, "lows." Between the two a state of gravitic stress existed. Lately there had been an unusually fierce Nova in Scorpio, and sunspots were at the maximum for more than a century.

"We're going into a 'low' now," Sam began. "You can forget about the 'highs.' It's practically impossible to get into them, but if you did, like being grounded on a fairly heavy asteroid when one swept over you, you would get so light you might burst. Men, ships, rocks—everything has a tendency to fly apart. About all you have to remember about them is that they are the source of *positive* gravitic impulses. They fling 'em out. Gravitrons, they're called, and they come in waves—a pulsating radiation.

"A 'low' is a cat of another stripe. It is the complement of a 'high' and works on exactly contrary principles. In them, everything gets heavy—intrinsically heavy, if you know what I mean—about itself. And the sweep of the gravitrons tends to take you right to the center of the 'low'—blast as you will. Rockets are not much help if you get in far enough. And down in the middle are pressures you can't do anything about. It can suck in a fair-sized comet and squeeze it into an asteroid a mile or so in diameter. When a thing like that happens, the stress is relieved and the whole shebang dissipates. After that you have fine weather—until the next one.

"I don't know whether you ever broke away from the gin mills in Europa long enough to get into the museum there, but if you had, you would have seen the metallic lump there known as the 'False Asteroid.' It's an egg about twelve feet long and weighs close to ten thousand tons. That's what's left of the cruiser *Alcyon*, crew and all. They made a secondary X-ray analysis of it and have its components tabulated to the last gram. Alongside it is another table, computed from the plans and specifications of the *Alcyon*, including the stores aboard and the people in her—chemically described. The two tables are the same. That gives you an idea of the pressures at the heart of a 'low.'"

Sam paused. Varms, his brow knit in a scowl, moved restlessly, but did not interrupt. Sam went on:

"We can't go to the center of one, strong as we are, but we can go closer than anybody else. This crock is packed to the skin with reversible gravity generators, tractor-beam projectors and zeta-ray absorbers. No commercial ship has space for them, and the Guard vessels have two thirds of it replaced by armament.

"Right now, all the ships and meteorites and cosmic gravel in this vicinity are swirling in big cubical spirals toward the eye of the nearest 'low.' If they get in too far, it's just too bad, but we can grab off some in the edges. Now and then one will be flung against an asteroid that's too big to move, and there they stick. They're salvage. First come, first served. The trick there lies in getting at them. There are bad gravitic eddies around a heavy planetoid and sometimes they will rebound right in your face.

"A lot of ships are still trying to fight their way out rockets versus metagravity. If they think they can make it, they'll refuse a tow; if they know they're sunk, you've got a customer. You hook on, then, and pull them out—if you can.

"Once you have a heavy tow hanging on behind—and it's the heavy ones that pay—you have to pull double or worse, and that against a gravity that's likely to be as good as Jupiter's while it lasts. It don't help you a damn bit that it's a phony gravity, either. It acts like the real thing. I know it's purely local, too, but then, that happens to be the locality we work in. What if the strength of it does diminish with the seventh root of the distance, and not the square, as normal honest-to-God gravity does? You might as well say that ether, being a fiction and nonexistent, can't bat you around the way it does.

"And to make it perfectly tough, the closer in you get the worse the zeta rays are. Get out from behind a screen and watch your flesh begin to glow. It don't hurt—at first—and that's the bad part of it. But in a few minutes, if you're not crushed first, the meat drops off you, cooked and smoking. I'm not trying to scare you, I'm just telling you what you're up against. "The point is that it's going to take all gadgets in this crock, *and those handled right*, to get us out of here with anything that's worth the fuel to tow her in. Bungle once, and we're done. You can see now what a hell of a crust you—"

"Ah, quite so," yawned Varms, elaborately. "A most entertaining and instructive lecture, I'm sure. Since you understand your duties so thoroughly, you may take over while I rest up for an emergency. Call me if you need me."

Sam glowered at the retreating back, then smiled contemptuously at the face-saving gesture. His outburst had had the effect he desired, but there was little of the satisfaction of victory. He and Ben still had to do the work of this parasite and be content with the little end of the reward. But salvage was hard enough on body and conscience without the complications of incompetent meddling. To the extent he had forestalled that, he was satisfied.

Chubby Ben Tiggleman delivered a solemn wink of approval. Their previous captain had been much of the same type.

III.

A small gong tapped three times. An object nearby, something with real gravity, not the immaterial, cosmic ray generated pseudogravity that made up the etheric weather waves. Sam clicked on the periscope elements of the side toward it and brought its image onto the visiplate. It was a small ship, about ten miles to port, bucking heavily, as if tossed by enormous walls of palpable fluid. From her tail a narrowing streak of brilliance stabbed, only to be pinched surprisingly to a sharp point a few miles astern of her.

The brilliance of the exhaust bore witness to the recklessness with which her master was squandering fuel. Its constriction from the ordinary flare of rocket exhaust was eloquent of the all-pervading tendency to self-compression. Pressure everywhere were high by then, even the troughs of the waves must be higher than normal Earth pull.

"She's making pretty heavy weather of it, isn't she?" said Ben, looking over Sam's shoulder. "Little tramp, I guess, with enough low-grade ore to pay the overhead and a handful of passengers for profit. Probably a group of school-teachers getting an eyeful of the wonders of the Universe on their summer vacation, or some retired farmers having their fling."

"They'll be flung, all right," said Sam grimly. That was the kind of distress that look the joy out of salvage work. The ship was obviously a waif of the spaceways, probably mortgaged to her dome plate, while her passengers, if any, were nobodies—small fry that had scraped their last bit of money together to pay for one grand outing. He knew from the lack of Line markings that she was no fit prospect for IPS.

Just then the thin flaming line of its wake darkened to a streak of black—then vanished. With the practiced eye of the

born skyman, Sam photographed on his memory the pattern of the stars beyond her. There was a bright one close to her stern and a pair of others just forward of the bow. Presently the bright one astern was occulted by the storm-tossed craft and the interval to the forward pair widened. The struggling ship, which had been doing hardly more than hold its own against the grasping lines of force, was making sternboard. In a short while, she would be plunging unrestrained into the maelstrom of the enveloping "low."

Her SOS came in startlingly clear. Sam noted her visicode number and focused his radiophone so he could speak with her captain. In a second he was looking at a cloudy picture of an old-fashioned control room, cluttered with obsolete instruments. Facing him was an elderly man, staring with haggard eyes from beneath a cap that showed his rank but not the device of any rated line. Behind him stood a vague huddle of people, probably gathered in the control room to take advantage of the one small compensator such liners usually carried. Sam thought there was a woman or so among them, but his reception was so bad he could not be sure.

"*Berenice* out of Io for Earth, Captain Tribble speaking. After fuel bins empty. I need four hours to break out reserve supply from the nether bunkers and preheat it. Can you hold me up that long?"

"Who pays the bill?" asked Truman reluctantly.

A look of despair crossed the anxious captain's face.

"You can have my equity in the ship," he said heavily. "It's all I have. There are eight hundred tons of tribonite on board, and five passengers. I daresay they might raise a little money. Of course I know tribonite isn't—"

His words trailed away. He knew he was asking the impossible. Inter-Planetary's reputation was firmly established. Cash on the barrel head was the rule—that is, salable stuff in sight—or an ironclad guarantee.

"Heat up your contracathode, I'm coming alongside."

Sam Truman surprised even himself as he snapped out the decision. It must have been the expression of all the longsmoldering rebellion in him; his detestation of the porky manager back at Herapolis, his contempt for the sleeping Eric Varms, his hatred for the policies of the IPS and his loathing for the part he himself had so often been compelled to play. All of that welled up within him for force that reckless gesture. They could pay no adequate fee, of course. Sam knew that. IPS would fire him. Then it occurred to him that they would probably also fire their newly hired skipper, Varms. He should have been on the job, not asleep. Sam smiled grimly at that thought—a captain can't pass the buck.

The squat, ugly sphere came slowly up in the dead wake of the *Berenice*. Ben Tiggleman was at the hawse-beam controls, hand on switch. The towing bitts of the *Kwasind*, a pair of mushroom-shaped cathodes, were already white-hot, so that they could hold and maintain the tricky electronic beam. As the tug drew abreast of the plunging Berenice, Sam Truman noticed her primitive contracathodes still dull and colorless. Savagely he snapped the communications switch.

"Bear a hand with the heat," he yelled. "I can't hook onto you like that."

The captain of the Berenice showed his worried face.

"All my auxiliaries are dead except the compensator—"

"Then send a couple of men out with torches!"

"No zeta shields either. They'd burn up before they started. Can't you hold me with a magnetic grapnel?"

Sam swore heartily. It was true that the *Berenice* was bathed in the faint rose luminescence of zeta fire, but a magnetic grapnel! As well use a rope of sand. He wanted to help these people, but their captain seemed to lack resourcefulness.

"They want it fed to them with a spoon," observed Ben, dryly, but Sam was climbing into a spacesuit.

"I won't take a boat for this, close aboard as she is. I'll heat their damn bitts for 'em, by hand. The minute I give the sign, slap the hawser down; then haul short and wait for me. As soon as I'm back in the lock, give her the gun. Gravity's running heavier here than I thought."

He was halfway to the wallowing *Berenice* when a heavy gust sent him flying far past her stern. Under the impact of it

his bones ached as after the blast of a heavy gun. The little compensator in his suit was not nearly so adequate as the one in the tug, but after that first mighty wallop he found himself still alive, although it was difficult to breathe. He supposed that the proximity of the two vessels, each possessing real gravity, had caused the pseudogravitic waves to bunch between them.

His hand rocket was blazing fiercely and it was easy to check his headlong fall away from the two ships, but when he tried to fight his way back he found he was gaining nothing on them. He snapped on his torch to add its reaction to the other, but the additional forward progress was negligible. An occasional extra heavy surge would catch him and throw him back as far as he had come. Ben, he knew, must be watching him, and if need be would drop down in the *Kwasind* and pick him up. But that would be wasteful of time and would require a new approach to the helpless excursion ship.

A daring thought popped into his head. A plain bitt, hot enough, would hold a hawser-beam, so would his helmet. He turned his torch against it, hoping fervently its insulation was efficient enough to prevent him from cooking his brains. Feeling no more than moderate discomfort, he continued cautiously until he could bear it no more. He doubted if the peak of it was more than a dull red, but it was worth a try. He sang out to Ben to throw him a small line.

He clamped his jaw and let the sweat roll. The experiment wouldn't take but an instant. If the line refused to catch, he would have to try something else. He watched feverishly the snaky, lashing thread of green fire that was flung at him from the fat sphere ahead. Five times it whipped about him before it found its mark. Then, with a jerk that nearly decapitated him, it snapped taut. He was yanked ahead violently, induced currents of electricity thrilled through him, galvanizing his limbs into jerky grotesqueries that were agonizingly painful. In the kaleidoscope of wild sensations he was experiencing, the nightmare conception that he was being hanged and electrocuted simultaneously stood out as his most salient agony.

By the time he had gained a little command of the whirling sensations that almost maddened him, he perceived that the *Kwasind* must have pulled ahead, for he was dangling at the end of the fiery fiber just over the nose of the hapless *Berenice*. Ben evidently cut the switch—the green thread of light faded into an attenuated puff of smoke and Sam was slammed hard against the bow of the drifting ship. He flung an arm around the cold, hard bitt and drew himself up to a squatting position beside it.

The faint rosy aura was all about the hull he knelt on, and the rigid hairs of brush discharge stood abundantly on top of the bitts, but he disregarded them. His suit was reasonably proof against them and he had not yet felt the ominous tingle that would indicate a leak. He applied his torch to the bitts and little by little they warmed—dull red through cherry to a pale straw. He yelled into the mike and jumped clear. Having just suffered the shock from the thin thread of his own little tow-line, he had no desire to be struck by the heavier hawser. The writhing serpent of maddened electrons again lashed at him, a fatter spark and far more deadly, but he was well clear as it groped the nose of the *Berenice* in its hunt for the one excited spot that would hold it. Then it caught the bitts and clung. The *Kwasind* hauled it taut and quivering, then slowly backed down along it as a spider on her web. Seeing his work done, Sam plunged into space, jet and torch both burning, and breasted his way yard by yard to the open lock in the underside of his tug.

Ben Tiggleman was too old a tug hand to be much impressed by the bit of unique lassoing Truman had just done, but as he examined the heat-blistered helmet of the suit Sam had taken off, he did ask:

"How was it?"

"Terrible!" grinned Sam, ruefully rubbing his neck. Stiff with electric cramps, he poured himself a beaker of water and downed it, grimacing.

"Give her the works," he added. "In a few hours that old galoot back there ought to be able to carry on by himself. We can cast him off, and if friend Varms is still snoozing, we will have done our good deed for the day and won't have to catch hell for it."

"She's three bells and a jingle already," said Ben. "The old girl won't do any more."

Sam hobbled to the periscope and had a look at his tow. She was rearing and yawing, alternately riding ahead on the shiny green line or bucking it like a caught fish reluctant to come into the boat. There were plenty of times when he couldn't see her at all for the blast of the tug's rockets, but the flames were so compressed usually that he could see enough.

"Steady as you go," he said to Ben, and sat down on the transom to relax. He closed his eyes and lay very still for a time. He had taken a worse pounding than he had bargained for. The almost damped-out cosmic surges swept through him rhythmically, gently urging him to sleep. But within an hour a buzzing called attention to the telescribe. The long expected flood of distress signals was beginning to come in. He got up wearily to listen. As soon as they were rid of the *Berenice*, they would be going after one of those.

The first two were distant—in the Jovian area. Then came a cry from the *Proteus*. She and the *Comet Dust* were out of control and caught in the same vortex. They were being whirled to their mutual destruction, circling one another, ever approaching. In the end they would be pressed together into one amorphous lump. A vibrant call came from the Estrella Verde, four weeks out of Oberon, bound for the docks of the Assay Office with an unspecified cargo but one valued at forty-odd millions. She was short of fuel and caught in the sweep of the trans-systemic tide of "highs" and "lows." Her last call stated she was falling helplessly head-on into a duster of asteroids. She reckoned the asteroids to be the anterior Trojans, but she could not identify the one immediately ahead of her. Then came an urgent message from the Spanish Star Line, her owners, guaranteeing her value and begging that a salvage vessel be sent to her with all dispatch.

Captain Varms, disturbed by the insistence of the buzzers, stumbled into the control room. His eyeballs were red with heavy slumber and his hair rumpled. He picked up the telescribe tape and sleepily looked at it.

"Ah," he said, as the import of the last item waked him more fully. "This *Estrella Verde* looks good. How are we heading?"

He scowled when he swung the periscope forward and saw the ruddy dot of Mars ahead. Then, perceiving the laboring of the *Kwasind* under the burden of her tow, he nipped the instrument around so he could look astern. He wanted to know what was on the line and Sam told him.

"Yes, yes," snapped Varms, testily, "but what's in it for us? Oh! Some more of your damned sentimentality, eh? Well, here's the answer to that."

Before either Sam or Ben could move a muscle, with a single sweep of his arm he struck open the hawser switch. The electronic capstan shrieked as it ran wild for the few seconds before its automatic brakes choked it into silence. Circuit breakers popped like cannon. The quivering green ribbon, stretching out astern on whose slender strength the lives of the poor humans in the *Berenice* hung, ceased to

exist. The tramp slid away in the typhoon, once more helplessly adrift and without hope.

"In another hour you could have cast them off decently," said Sam as calmly as he could, though he was near to choking with rage. "I think there are women aboard her as well as her crew."

"Women!" sneered Varms. "So that's your game? Well, it's money *I* want. Give me enough of that and I can have my pick of women."

He came closer to his mate, full again of his old-time swagger.

"I've taken a lot of your lip, mister, and I fell for your line and let you have charge of the tug. And this is what you do. You're stupid—that's what's the trouble with you—stupid. Stupid as hell. You don't know what it's all about and never did. You were that way back at the academy when we hung the blame for that jug of hootch on you and they booted you off the Moon. And that day at the Ecliptic trials. You took off to do stunts—the high-and-mighty Mr. Truman, almost a captain, you thought. It was going to be a walk-away—the job was in the bag. You didn't even have brains enough to take a look-see at your ship. Did you think that I, your senior, was going to take it lying down? Why, you poor damn fool ___" Sam's self-control crashed under the overload. His right flashed out and thudded against Varms' chin, and he followed it with a hard left that sent the captain spinning against the opposite bulkhead. Then, restraining the furious impulse that suddenly had seized him, he stood fast, watching the other with loathing while he staggeringly recovered and wheeled. But when Varms faced him again it was with a gun in his hand.

"That will be all from you, Truman," he raged, his face livid with anger. But seeing Sam made no further hostile move, he quieted his tone. More coldly he taunted:

"Once a sucker, always a sucker. You've struck your superior officer now. For that I could shoot you down where you stand—I'd be commended for it. But I think I'd rather not. I like the idea of the Iapetian mines better, down there in the radioactive ores. It's not so quick, but it's very, very thorough. And it's unquestionably legal—"

Ben Tiggleman had done it as neatly as a cat pounces on a mouse. One swift leap past Varms, snatching the gun from his hand as he went by, and he was in another corner, covering the captain in his turn.

"What do you want done with him?" he asked of Sam, but not taking his eye off of Varms.

"Nothing, now," said Sam, quietly. "Chuck the gun out of the tube, Ben. We can handle him without it." "You can't get away with this," muttered Varms as Ben contemptuously broke the gun apart and tossed its parts into the garbage slot.

"Oh, no?" countered Sam. "Let's wait and see what the courts say. If you want to be technical, so will I—it's a game two can play. That's not a bad idea of yours about the Iapetian mines, only it will be you who go, not I. I did think, though, that you were a better sky-lawyer. They told you, no doubt, when they hired you that you had the right to refuse assistance to anybody that couldn't pay, but what you evidently don't know is that *once you put a line on something*, you're responsible. When you cut that ship adrift you committed murder—wholesale murder."

"I didn't authorize the tow," retorted Varms.

"You are the captain of record and on board," said Sam pointedly. "The *Kwasind* did take on the tow. Laugh that off."

Truman spat disgustedly and strode from the room.

In his own quarters he sat for a long time on the edge of his bunk trying to think out the best thing to do. He did not regret for one moment his outburst of violent anger. He felt he owed his new skipper more than a pair of pokes, even if his position was technically weak. He had long suspected Varms as the cause of his misfortunes, but now, as always, he lacked proof. He shrugged that off as ancient history. Immediately, what was best to do? He could, of course, turn back to Mars where they could air their dirty linen in the courts. Yet, as he considered that, he was not so confident that he could make his threat good. The law was as he had stated it, but there was still Martian procedure to be reckoned with. The *Berenice* had been sent to her destruction by Varms' act; true. But with her had gone also her crew and passengers. The only surviving witnesses would be himself and Ben Tiggleman and at Herapolis they would be handicapped by being at the same time under the charge of mutiny. Inter-Planetary Salvage, sore at having no fees from the vessel, could be counted upon to be vindictive —and its influence was strong.

Then too, it would hardly be fair to Ben and the rest of the boys to turn back now. The recent months had been lean ones and they were all depending on today's prize money for their subsistence for a long time to come. After all, his quarrel with Varms was largely a personal one and it would be unjust to make the others suffer from it. Sam concluded to let his reckoning with his old opponent wait and in the meantime to stay out of his way as much as possible. At least Varms was a licensed officer—he might muddle through the storm somehow. In the mood Sam was at the moment he didn't really care; the *Kwasind* could lose all standing, for all it mattered to him.

Too restless to sleep and resolved to stay out of the control room, at least until some emergency required his presence there, he wandered through a back passage and into the generator compartment. The twisting, blazing sphere of iridescent flame dancing within the interlaced hoops of the mesotronic charger was a vivid reminder to him that hitherto he had had no chance to test out his sky anchors. In view of the conditions on board, it was unlikely that he could use them at all, yet he remained fascinated by their possibilities. But what would become of them if Varms and the slippery legal crew of IPS got the better of him? Perhaps it would be better to destroy them as they were. He could not stomach the thought of others appropriating *that* product of his brain.

But could he destroy them? Once those quintillions of quintillions of electrons were knit into one tight little ball, dispersing them otherwise than he had planned might be impossible. Their power of devastation, if suddenly released, was unthinkably vast.

He gazed thoughtfully at the writhing ball of concentrated lightning, as visible through the plates of thick lead that surrounded it as an ordinary light through panes of glass. All about it, radically pointed electrodes were pouring further billions of units of energy into the flaming mass. Already a yard in diameter, it would blaze for many hours, if allowed to dissipate in space, a miniature sun.

Suddenly, he resolved to dispose of them. Better that. Inert and frozen, they might safely be tossed into the rocket exhaust. He beckoned to one of Ben's men.

"Kill that, and freeze it down."

He watched it shrink, the instant the flow of electric energy was cut off. First it dwindled to a ball, the size of an apple, the sparkling white of nearly melting steel. Then it shrank to half that size, still glowing ruddily. In the end, it would be a pellet the size of a marble, weighing many tons on Earth, cold and inert in a bath of liquid hydrogen. In that condition, it might be fairly safe to handle.

It would take hours, he knew, for that vibrant spherelet to become quieted enough to be plunged into the cold solution that held its mates. In the meantime there was nothing he could do but wait. Unwilling to resume the useless bickerings with his captain, Sam went back to his own room, threw himself into his bunk and slept.

He stirred occasionally, half awake, disturbed by the mysterious heavings and queer motions of the storm-tossed tug. At such times he would wonder idly how an outfit as shrewd as IPS could have entrusted, for all its cupidity, one of its money-making craft to a man so inexperienced in the ways of gravitic gales. But hour after hour the laboring vessel got on—somehow—though he knew from the wail of the compensators that they must be well into the perilous depths of a "low".

In time, a persistent tingling and itching brought him fully awake. There was fever in his blood—he was nauseated and dizzy. He painfully opened his eyes and saw what he already feared—the dread rose glow of the zeta fire. His furniture was bathed in it, and when he struggled to his feet he saw his flesh was faintly luminous. He managed to get the big jar of ointment out of his locker and spread its contents on his skin. The tingling eased, and he followed the ointment with windings of black adhesive tape until he was as swathed as an ancient mummy—he left no opening except for eyes and nostrils. The hafnium carbide with which it was impregnated would keep out further rays—if they got no more intense.

He put on his spacesuit and flicked its compensator to going, too. In his preoccupation with measures against the rays he had hardly noticed the pulsations that racked him, but his ribs were painfully aware of the recurrent pressure. Varms must have taken them into the very middle of things.

He went into the control room, half expecting to meet Varms' flailing fists with his own, but the captain was seated dejectedly at the master panel and staring at the visiplate. As Sam entered the room, a huge compression wave smashed them both, but receded as Varms managed to shove a lever all the way over. He had learned a few things, evidently, Sam thought bitterly. He knew from the vibrations of the floor plates that the emergency set of tubes was blasting, and he could see that the control room, like his own, was filled with the pale rose zeta fire. Varms' hands and head glimmered with the tell-tale luminescence.

"You had better go in my room and grease yourself with anazet," Sam said to him. "Then put tape on, like I have. The roll is lying in my bunk."

"There's a fortune down there," said Varms, huskily, pointing to the visiplate, "and we can't reach it. Every time I get down to a certain level, something grabs us. With all this power you'd think—"

"Snap out of it man—you're dying. All the fortunes in the Universe won't be any good to you in another ten minutes unless you do as I tell you. Let the fortune wait."

Sam shoved him out of his seat and led him halfway to the door, and saw him go falteringly from the room. A swift check with the rotor room showed that Ben and the boys were alert and in good condition; there were no pink rays down there. Sam went back to the instrument panel and made some adjustments to the set-up that materially improved conditions within the hull. The rosy fire died out and it was easier to breathe. Then he began to study the visiplate.

There was a planetoid landscape below—a wilderness of high-flung crags and black ravines. In places were accumulations of white crystalline matter, but nowhere were there signs of life. He had no idea what the body was named, but its hallmark of peaks and chasms was an easy one to read. It was one of the Trojans, the wildest and roughest of all the little worlds. The *Kwasind* was evidently in an orbit about it, for as he looked, the scenery shifted. In one spot he saw what may have been once a warning beacon and lighthouse, but it was crushed beyond sure recognition.

When he was nearly back to where he had first taken over, he saw the particular bit of carrion the buzzard had had his eye on. Hung in the crotch of twin jagged peaks lay a huge spaceship, easily identifiable as one of the Spanish Star Line, despite its crumpled bow and caved-in stern. Sam could see the details plainly even though the distance was great, for Varms had been using the highest magnification. The middle section appeared to be intact, which was not surprising. That was where they carried their cargo. Tightly packed ore yielded very little to compression.

The *Kwasind* went on, then slid away on what under ordinary conditions would have been an orbit about the asteroid, but Sam soon saw that that body was receding at a terrific rate. He found he had to use the utmost power to bring the tug back onto a closed curve. The extreme eccentricity of her path was unquestionably due to the peculiar combination of gravitic forces. There was the natural attraction of the planetoid, tremendously heightened by the effect of the storm; and there was also the drift across it of pseudogravitic forces, tending to force the tug down on the "high" or weather side of the little body. On the lee side, the two forces were opposed. The waves of the storm threatened to tear the *Kwasind* away from the asteroid altogether.

V.

Sam Truman became so fascinated by the difficulties of the problem that he forgot entirely his recent fight with the captain and lost sight of his own anomalous position on board. The vision of the immensely valuable, yet quite inaccessible, *Estrella Verde*, was a challenge to his professional pride. He found himself avidly wanting to go down to the wreck and make fast a line to it. The greed that so strongly motivated Varms did not enter into his calculations—he needed money, certainly, who doesn't?—but the thing that piqued him was being so near and yet so far from that mess of crumpled alloy that they all wanted to take hold of.

He glanced through the log and took off from figures figures of the compensators consumption, and rocket use. He plotted curves. They were not reassuring. They were still rising and that meant the height of the storm was still to come. It was already impossibly dangerous to go close to the wreck. Perhaps he would have to wait until the little planet had made a half revolution, and brought the fallen *Estrella Verde* to the lee side. But he did not know the name of the planetoid.

He ran back through the telescribe record and found the first SOS, that had been sent ten hours before. Presumably the ship was wrecked under the same conditions as existed now; therefore, it would be five hours before it could be safe to approach her. But could he hold the *Kwasind* in the vicinity that long? Any moment the gale might tear her away and fling her headlong spaceward. It would take many hours to fight back.

He paced the deck, frowning in mental calculations of time, stresses and rocket power. At the buzz of the teletype monitor he mechanically seized its tape and absent-mindedly read what was on it. Then, alert, he reread it. It was an intercept from IPS to the *Thor*, the *Thor* having already brought in one prize and was out now cruising for another. They were giving him the location of the *Estrella* wreck none of the other tugs had reported salvaging it, and it was a nice prize. *Thor* said she knew about it and was on her way there.

Sam sprang into action. Ben came in response to his imperious ring.

"It's now or never, Ben. Slip those anchors into the electric oven and start exciting them. We'll try skyhooks over that ship. If they hold, you'll be on Easy Street."

"And if they don't?"

"Ben, the *Thor's* on the way here! We've got to get a line on that baby before she comes, or it'll be the same old fight over again. We lost every other time. Her skipper didn't marry the manager's daughter for her beauty. You know what a chance we have when it comes to rulings on split fees."

With great difficulty Sam brought the *Kwasind* up into the torrent of gravitic impulses and inched his way back to the planetoid. He dreaded getting around between the little Trojan and the oncoming waves, but there was nothing else to do—unless he wanted to chuck the whole job as being too tough, and scurry for shelter.

The moment the tug was steady on her course and there was no more he could do to coax her, he left the controls and went to watch the heating of his little pellets. They were dazzling white by the time he put his eye to the peephole in the furnace wall. A few hundred degrees more and they would be ready to act.

Sky anchors had long been the dream of astragators. And also the subject of many jests. Some sort of celestial drag was needed, but no one had perfected one.

"I know what's in 'em, I helped you make 'em," said Ben, "but I still don't see—"

"Just like the force screens in battle cruiser work," said Sam, confidently. "They accumulate balls of pure energy and fire them out on tractor threads. The yank of the tractor thread, when it has run its full length, sets off the radiation. The tendency of the energy is to escape from the nearest center of gravity, see? But its nucleus is held fast by the tractor thread, and it can't get away except by dissipating itself in radiation. As long as it lasts, it not only exerts a pull on the cruiser, but repulses whatever comes against it from the outside. They shoot out a cloud of them all around, which balances the stresses on the cruiser and gives it perfect protection."

"Yeah, but—"

"Get your tongs and a gang of men and let's load these into the heaving line tubes in the upper hemisphere. You'll have to attach a tractor line to each of them, like harpoons. Come on, I'll show you." Sam ran back and checked his position. They were almost over the broken carcass of the *Estrella Verde*. He had already computed roughly what the gravitational pull was, and knew about what to expect from each of his anchors.

"Number one tube—three—five. Fire!" As he called, he cut his rockets. It was the supreme gamble. Ben had already pressed the three buttons and was crowding up beside Sam at the visiplate, focused upward.

Three skyrockets, each at a slight angle from the vertical and equally spaced horizontally, soared upward. Each of the three blobs of radiant energy trailed a shimmering ribbon of pale-green fire, the lines that were to hold them. Harpoons they were, of blazing light, and as the green lines tautened at the end of their runs, the snubbed spherelets burst into huge globes of fiercely iridescent light.

"Hang on!" yelled Sam, as the *Kwasind* shivered under the shock. It was something like a collision with a heavy solid. The tug swayed, sickeningly, after slowing to a stop and then reversing its motion like a gigantic pendulum. Sam threw the periscope through a full half circle to bring the planetoid into view. Its image was large on the plate and growing at a rapid rate. That meant they were falling, straight down onto it.

"Two more, any two!" sang out Sam.

That time there was scarcely any shock, but the image of the planetoid ceased to grow visibly. Sam set a pair of huge dividers and measured its breath. In a full minute it grew but a few degrees. "We are still falling," he observed, but there was enormous relief in his voice. "That's what I want to do—until we are nearly to the wreck. But we're under control now. The last one will do it. Gosh! It's lucky we made six." And he grinned happily at Ben.

Ben had not lost the puzzled look, though.

"Now look," laughed Sam, exhilarated at his success. "You remember toy balloons when you were a kid? Well, imagine five of 'em with a brick tied to 'em. That's us. Those five chunks of energy up there are trying their best to get away from the nearest center of gravity, and at this spot that happens to be the asteroid under us. They're not strong enough to do it, so we are slowly falling. When we get down to the right height, all we have to do is fire the last one, and we'll be all set. Any little adjustments necessary we can make with rockets."

Ben Tiggleman understood. He also understood why Sam did not want to descend all the way. They were in the same situation that a ship in water would be under similar circumstances—hanging to a seaward anchor off a rocky lee shore. To get closer, unless very delicately and accurately done, was to invite being dashed to pieces on one of the pinnacles. Moreover, all that was needed was to get a line to the wreck and as soon as the storm abated, haul off to skyward with her in tow. "Now," said Sam, "there's one thing we *don't* know. That is, how long will those anchors last? We gave them a fourhour charge, but they may discharge at a faster rate. And when they have dissipated—*Bang!* With all rockets going, the best we can hope for is an easy crash, and you can see for yourself what kind of ground is under us. I am going down and fasten a hawser to that wreck. Then, if there's a break in the weather, all we have to do is pull out."

Ben nodded, but he could not fail to see that their situation was still pretty risky. He hadn't thought about the short life of the anchors. But then, they might get out—the weather might improve. And the *Thor* was on the way. He agreed that the line should be run, and quickly.

"I'll need a surfboat for this, and a couple of the boys," said Sam.

Unexpectedly, Varms, swaddled in hafnium tape, appeared in the control room.

"What's going on here?" he inquired, petulantly. Apparently the filtered rays had not operated on him long enough to set up the inflammation that would rot away the flesh.

Ben looked rattled, but Sam took the bull by the horns, deciding on the instant to try another tack. The proof of his anchors hung in the balance. If they worked, impossible rescues became easy. "If I can salvage that ship you wanted without your having to lift a finger, will you make a concession?"

"You are going to the Iapetian mines, if I never see another dollar," snapped Varms, viciously. "Concede nothing. Whine all you want—"

"As far as your fight and mine is concerned, Eric, I don't want your concessions. At Mars, it will be whole dog or none. But it's Ben and the boys I'm speaking for. They need money. And you'll get yours, too. What I'm asking you to do is to leave Ben alone—both now and when we get back. He hasn't hurt you any, so forget his part in our row. If I'm going down to that *Estrella* to tie a line on her, I've got to have somebody up here handling this end that I can depend on. Lay off of him until I get back—that's all I ask. *You* can't lose."

"Oh, that dumbbell," said Varms, contemptuously. "I'd forgotten he was alive. No, go ahead and do your stuff if you're so damn anxious to show off. As you say, we can settle when we get to Herapolis. As far as your fat boy friend goes—"

That was all Sam wanted. His concern was immediate; he didn't want Varms jockeying with the controls while he was hanging outside on a sliver of an electron beam. As to Varms' promise not to charge Ben with mutiny, Sam attached no value to it at all, but it was at least a try. He was willing to rely on Varms' greed not to interfere with his own efforts to salvage the *Estrella*, once he had pointed out the folly of his trying to interfere.

Sam's motives were not altogether as altruistic as he thought them. He did want to see the boys go back with something to show for their work, but primarily he was concerned about the success of his anchors. Now that he had put them to the test, he wanted to see it through, and that with the minimum of interference.

The quiet inside the suspended ship was deceptive. Ben had already fired the sixth and last of the sky-hooks, and she hung motionless a bare thousand feet above the wreck, all her original orbital velocity gone—the pendulum motion ceased. Sam followed his tow men into the boat and, before they cast off. worked it under the belly of the *Kwasind* and welded on the end of a tractor line to ease their descent.

It was well they did, for gravity was strong and its surges violent. Yard at a time Ben fed them slack, lowering them away. Down below, the threatening needles of the two peaks stabbed at them, and between they could see the dim outlines of the stranded treasure vessel. Patches of pink fire were everywhere, evidence that the storm was still going strong.

Sam fended off the torn and warped plates of the *Estrella Verde's* smashed nose. The boat came to a grating landing on the cold rocks beside it. He stepped out and looked at the monstrous ship, looming doubly large in the half light and by contrast with the thin crags of Trojan rock.

Above, like some fantastic fireworks display, the black button of the *Kwasind* stood atop the thin green line that led up from the boat, and branching upward from it were the brilliant taut lines that clung to the anchors. Those glittering objects formed a marvelous six-point constellation in the skies, flaming fiercely as they radiated away their pent-up force into the heavens. Sam signaled his safe arrival, and the green link between him and the tug flickered and went out.

VI.

Sam's practiced eye surveyed the broken ship. There was no possibility of towing her out intact. The bow was a mass of tangled wreckage, while the stern section appeared to be torn clean away. But the cargo segment amidships appeared to be sound and its end bulkheads undamaged. Sam decided to attach the hawser to it directly.

He and his helpers crawled out over the convex surface of its top where the rosy flames danced six inches high on the iron of the hull. Dragging their torch behind them, they made their way to the spot where the line was to be made fast.

Sam feared for their eyes, for those they could not tape. As a precaution, they took turns holding the torch, a few minutes each, while the relief pair nestled together, each sheltering his eyes against his mate's body. It was awkward and tedious work, and all the while the gravitic surges played upon their helpless bodies as on accordions. But in time the preheating was done and Sam gave Ben the signal. Scurrying to a safe distance, they watched the fat, greasy stream of verdant brilliance smash down like a bolt of lightning and seize the wreck. Now the *Kwasind* was steadied from below as well as from above. Even better, she was secure in her legal rights. Let the *Thor* come.

Tiresome as the descent and the heating had been, it had not actually taken long. The slow-moving asteroid still presented the wreck to the full force of the gale which showed little sign of abating. It would be hours before the *Kwasind* could lift. Desiring to make sure that the end doors of the cargo section were dogged tight, Sam decided to stay down a little longer and phoned aloft to Ben to that effect. Ben assured him everything was all right in the ship and the strain on the anchors evenly distributed. He also said there was no need of haste, as he had reported having a line on the *Estrella* and the *Thor* had turned elsewhere for her prey.

Sending the men to the shelter of the surfboat, Sam undertook the inspection of the cargo holds. To his satisfaction, the doors at the end were sound and unimpaired, but before closing them for the trip in, he wandered through the longitudinal passage between them to examine the cargo itself. He was curious as to its nature, since it had been reported to have such an enormous value.

The first two bins, to his amazement, contained nothing but tribonite—virtually ballast. Although some of the other bins were filled with rhodium ore, all of it together could hardly have been worth five million. Yet they had reported the ship as valued at ten times that! Could the SOS have been garbled? Puzzled, he determined to explore the torn and disrupted bow. Somewhere in its wreckage there would be the ship's papers. Those would surely show what things of value there were on board.

Before crawling beneath the warped plates of the bow structure, he stepped outside and gazed critically upward at his six blazing sky anchors. He was gratified to see they were holding up well, and any remaining anxiety he had as to their dependability left him. He found a rent in the forward hull and squirmed through it.

In the gloomy and misshapen compartments ahead of him he found many horrible vestiges of the storm's ravages. There were some of those sickening dolls—a dozen of them —pygmy caricatures of men. They were corpses, bodies of normal men like himself, but crushed uniformly by the overwhelming gravity that had had its way when the compensators stopped and the hull walls failed. He shuddered and passed them by. He had seen such things before, but he had yet to become callous to them.

On what had been the floor of the control room he found among the debris what he had been looking for. In one place was the log, in another the manifest and muster roll. Playing his flashlight on them, he thumbed their pages, but nowhere did he find mention of other than the cheap ores he had already seen. He had almost come to the conclusion that the amount stated in the distress call had been an error when he came upon an entry made the day before the ship cleared Oberon. It referred to the payment of an insurance premium against piracy—an amount so large that it could only cover an important shipment.

The receiver in his helmet crackled vigorously, but the voice that should have followed his acknowledgment did not immediately speak. Then he could make out a screamed, "Look out, Sam! I can't hold—" and Ben's warning was choked into stillness. The crackling stopped. The line was dead.

Something must have happened to the *Kwasind*—perhaps the anchors were dying out. Sam hastily made his way through the jumble of twisted stanchions and stumbled over buckled floor plates. In his alarm, it seemed ages before he could gain the crack by which he had entered and look aloft to see what was wrong. When he saw, he sprinted for the surfboat and shook his waiting men into alertness.

Overhead, still hanging from the six gleaming anchors, the *Kwasind* was all too evidently getting ready for action. Her under jet bushings were glowing white, and even as the startled men on the ground stared, straw-colored fire gushed down at them. They scrambled frantically for the shelter of a nearby ledge and cowered there while the incandescent rocket exhaust smote the place they just had been. They saw their surfboat burst into flames. The *Estella Verde* heaved upward, hogging noticeably as the cargo segment rose, pulled by the strong hawser. Huge fragments of intertwined wreckage, the last clinging fragments of the ruptured bow and stern, fell away as the amidship section was dragged

skyward. The *Kwasind* was under way—was running off with their prize, abandoning them!

Sam Truman's phone again crackled, alive once more.

"This will do as well as Iapetus," said an exultant voice. It was that of Varms. "Dig a mine where you are." The connection clicked.

"The dirty louse," said one of the men.

They stood silently watching the Mars-bound tug and its tow, now a ruddy streak against a handful of dwindling stars. Sam set his face in grim chagrin as he realized what had happened. He had been a sucker. He saw now what he should have known all along. He could have hauled off before, if he had only thought of adding the lift of his anchors to the force of the rockets. His mistake had been in thinking of them only as anchors, when in reality they were assistant tugs, pulling always. Varms must have doped it out, overpowered Ben, and gone. Sam groaned inwardly at this crowning humiliation. It was bad enough to be marooned on a bleak, rocky Trojan, but he had to face the fact that it was by his own acts—his providing the anchors, his securing the towline, his unpardonable tardiness in returning aboard-that had made it possible for Varms to decamp with the salvaged ship.

By that time he was aware that the two silent men beside him were awaiting orders. Something had to be done now. It was Sam who must give the word. It was a gloomy prospect. They had no boat and there was small promise that in the remaining wreckage of the Estrella anything of use to them could be found. In the cursory examination he had made of the planetoid as they had approached it, Sam recalled he saw no signs of life. Rather there was an abundance of evidence that the storm had killed whatever life had been there. But at least the weather was beginning to moderate. The zeta fire was very weak and in many places it was entirely absent. The improvement was due in part to the revolution of the body on which they stood—they were more in its lee now but even a "low" passes after a time.

"Let's see what they left us," said Sam, leading the way to the scattered and tumbled remnants of the *Estrella Verde*.

They found lean pickings. As for the bow, after its second crash it was an impenetrable jungle of junk. In the stern, intact and unmoved by the departure of the *Kwasind*, they came upon rows and rows of fuel drums. Those were in the after keelson, the reserve bunker. The macabre dolls scattered about told the story plainly enough. Men had been getting up their ultimate supply of fuel when the ship struck and doomed them all. But the fuel that remained was of no value to the marooned tug men. They had no boat nor had any of the *Estrella's* survived. What foodstuffs they could identify had been squeezed to such incredibly compact pellets as to be unfit for any use.

But while the men were prowling through the broken stores, Sam kept his eye peeled for the telltale box of lead. Radium, he guessed, was what the concealed treasure was, and hidden, probably, in the keelson as a further precaution against piracy. Or at least it was one of the radioactives. In any case they were likely to put it as far as possible from the place where men lived and worked, and away from the fields of the huge electric machine.

At last he found it, and called to his companions. They watched in quiet awe while he ripped open its cover and exposed its contents. In neat tiers lay dozens of small white metallic bricks. Uranium 235! The most compact and economical source of atomic power—enough of it to disrupt the Earth itself. The value they had given out over the Omnivox had not been an error; it had been an understatement. Here was wealth beyond their wildest dreams.

It was all theirs, too, for the law on salvage classed what was left behind by a chartered salvager as junk. Whoever found such leavings took title. When Varms left as he did, he renounced for the IPS and himself, as well as the original owners, whatever claim for ownership they might have possessed.

It was one of the men who laughed first, but in a moment they all were rocking with merriment. The irony of the situation was too acute to miss. Tumbled carelessly on the ground by their knees was this vast fortune, while all about was the stark, wild darkness of the storm-devastated Trojans, in which the moment the last scant provisions in their pockets were gone, they would die. What Sam laughed at was his picturing of the manager's greedy face, and that of the snaky Varms, when they went to settle with the owners and found that they had carefully towed in the dregs and left the cream behind. He sobered as he recognized they would promptly send an expedition for it.

He thought of concealing it, but he knew that was no good. The stuff was radioactive and instruments could find it. Tossing it into the depths of the adjacent canyon was as useless for the same reason. Yet they could not hope to carry it with them, both on account of its weight and of its emanations. Their means of locomotion was strictly limited now. They had only the hand rockets of their suits.

VII.

An exploratory cutting down of their suit compensators showed them the surges were far apart now, and light. It would soon be calm. They lashed themselves together, pooling their rockets.

They soared easily over the scraggly ranges and looked down into great yawning crevasses, but seldom did they see a ledge wide enough for a goat to stand upon. They went on, hoping against hope, exploring the polar regions of the body —the areas that had not fallen under their observation while aloft in the tug. Finally one cried: "Light-ho!"

There was a light, nearly ahead, which neither of the others had noticed, due to their inspection of the ridges and caverns beneath. It was a tiny light, such as might be expected in a dwelling. It was in the midst of a vague gray shape. As they headed more directly toward it and decreased their altitude they could make out the outlines of a small ship's hull. Some tiny craft, a yacht, probably, was down there and the light marked its entry port.

Cutting their bonds the moment they grounded before the lock, Sam rapped sharply on the ship's hull. The outer lock face slid aside and the three tug men stepped within. As the inner door let them into the ship, they faced a powerfully built, red-faced man of about sixty. He took one look at the IPS monogram on Sam Truman's helmet visor and bellowed:

"No! I don't want salvage. Get out of here and take your pack of bloodsuckers with you!"

It was a disconcerting reception for the three castaways, but Sam stood his ground and began an explanation. After his first few sentences their host dropped some of his ready belligerence, and as he began to get the drift of the story he invited them into the cabin and made them comfortable. Sam related the main events leading up to their marooning, not elaborating his feud with Varms, except to give an account of the quarrel over the casting off of the ill-fated *Berenice*. Nor did he see fit to reveal the cache of uranium they had left behind. "Ah, that's different," said the old man, at last. "Well, you're welcome here until my tender comes, though God knows when that will be. But I'd stay here until hell froze over before I'd deal with Inter-Planetary. My name's Ethridge —Jovian Mining Syndicate, if you ever heard of that—and this is my yacht *Norma*.

"We snugged in here early in the blow, and outside of being practically out of fuel, we're all right. Our radio's crushed, so we can't communicate, but I've got all my life ahead of me—sooner or later a lighthouse tender'll come snooping around, if my sons haven't looked me up before. When you first popped in here, I thought you wanted to give me a tow, then bleed and blackmail me for the rest of my life on account of it. No, sirree. Charlie Ethridge doesn't play the game that way. I'll wait, if I have to, all—"

"I have plenty of fuel, Mr. Ethridge. It's in drums. Lend me a boat and I can fuel you right where you lie. It's a tricky landing up there for a ship."

"What's the catch?" demanded Ethridge, suspicious again. His distrust of men in the IPS uniform was long-standing and deep-seated. "That's IPS's wreck, isn't it? I won't be billed by them, I tell you."

Sam explained the legal status of the wreckage and all that was in it. Sizing Ethridge up as a man of power and wealth who nursed a personal grudge against the equally powerful salvage company, he decided on the instant to tell him frankly about the uranium. His offer was to fuel the *Norma*, in return for the transportation of himself and shipmates to the nearest port, with their personal possessions—the treasure.

"Certainly, my boy. An eminently fair proposition. Get about it at once, and take such men of my crew as you may need to help."

Herapolis Skyport was coming up on the horizon of Mars. Ethridge's sailing master was handling the landing. The old man offered his guests a final drink with the toast, "Here's to the confusion of our enemies."

"By the way," he asked, as an afterthought, "when that tug of yours was hanging in the sky up there over us, what was that mess of fireworks over her? Looked like a corona of stars from where we lay."

Sam explained the sky anchors.

"Hm-m-m," commented Ethridge. "Never heard of such a thing. Why couldn't I use those getting my ore scows up from the surface of Jupiter? We have the devil's own time now, what with the gravity and all. When you get through your rat killing down there, come back and talk to me. I think you have something there."

Upon stepping out onto the landing field, Sam was astonished to see that the ship in the next cradle was the *Berenice*, her bow tubes still smoking from her recent landing. Her passengers were pouring out of the lock, grateful to step on solid ground again. Sam paused and asked a few questions. He learned that the lift he had given them had been sufficient for them to get the vessel under control again. By the time she was cut off she was near enough the edge of the "low" to fight her way out of it. It had been a hard battle, but when the gale had subsided they retained enough momentum to drift into Mars and land, but with only a quarter of a barrel of fuel to spare. Captain Tribble, they told him, was indignant at the *Kwasind's* inexplicable reversal of action and had gone to the Dome of Justice to make a formal complaint of it.

Sam hurried on to the IPS yards. Inside them he found everything seething with excitement. The manager was waddling up and down, happily rubbing his hands together in avaricious anticipation. There was much lucre about to fall into his coffers. Two hours before, the *Kwasind* had appeared in an orbit outside Deimos and asked for other tugs to relieve her of her ungainly tow. The flotilla were expected to land momentarily.

Sam was astonished at the unaccountable delay in the *Kwasind's* arrival, for she must have left the storm-swept Trojan a full week before the *Norma*. He was not to know until later the reason for it, but it was his sky-hooks that had done the trick. From the moment of their planting they had been attempting to escape the asteroid and that naturally, radially. But while at the time of their setting the direction of their pull was Marsward, in the interval to Varms' hasty departure the planetoid had made a quarter revolution or more about its axis, with the consequence that when the anchors were free to run away, they pulled violently in an altered direction. They proved to be far stronger than the

rockets, and although Varms blasted angrily with every imaginable combination of rocket angles, by the time they burned out he was millions of miles on the far side of the Trojans, very much muddled as to his bearings. No one had told him about the anchors, so he had no understanding of why the sturdy tug persisted along its unique cycloidal trajectory.

Ben Tiggleman could have cut the threads that held them, but all that time Ben Tiggleman was lying face down in a locker, bound hand and foot.

A black prison van was parked by the side of the *Kwasind's* landing cradle and a couple of stern-faced Martian hounds of the law were there, one of them suggestively jingling a set of irons. Mutiny aboard, the incoming tug had signaled—mutiny and desertion. One of the desperate ringleaders had been overcome and confined, her message read, and the vessel was shorthanded; but her brave and resourceful captain was bringing her in, regardless of such trying difficulties.

The *Kwasind* was just landing. As the crowd eased back to escape her skirts of flame, Captain Tribble arrived with a black-robed functionary of the court. In company with them was Mr. Ethridge, looking pleased as the cat that licked the cream. They spoke rapidly and earnestly with the puzzled gendarmes, displaying papers with dangling seals. The two officers finally understood and nodded. The entry port of the

Kwasind slid open and out stepped Varms, dragging his bound engineer behind him.

"Here's your man—the others deserted," he said imperiously to the cops, and pushed the goggle-eyed Ben Tiggleman forward.

"Thanks," said the senior of the two officers, laconically. But he ignored the trussed-up Ben and shoved past him. With a quick snap he fastened the bracelets on Varms instead. "We know all about you, old-timer. This way!"

They shoved him, struggling and protesting, into the wagon. A door slammed, a lock clicked, and the Black Maria rolled away.

[The end of A Question of Salvage by Malcolm Jameson]