Attitude

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Astounding

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Dr. Little wokeup abruptly, with a distinct sensation of having just stepped over a precipice. His eyes flew open and were greeted by the sight of a copper-colored metal ceiling a few feet above; it took him several seconds to realize that it was keeping its distance, and that he was not falling either toward or away from it. When he did, a grimace of disgust flickered across his face; he had lived and slept through enough days and nights in interstellar space to be accustomed to weightlessness. He had no business waking up like a cadet on his first flight, grasping for the nearest support—he had no business waking up at all, in these surroundings! He shook his head; his mind seemed to be working on slow time, and his pulse, as he suddenly realized as the pounding in his temples forced itself on his awareness, must be well over a hundred.

This was not his room. The metal of the walls was different, the light was different—an orange glow streaming from slender tubes running along the junction of wall and ceiling. He turned his head to take in the rest of the place, and an agonizing barrage of pins and needles shot the length of his body. An attempt to move his arms and legs met with the same result; but he managed to bend his neck enough to discover that he was enveloped to the shoulders in a sacklike affair bearing all the earmarks of a regulation sleeping bag. The number stenciled on the canvas was not his own, however.

In a few minutes he found himself able to turn his head freely and proceeded to take advantage of the fact by examining his surroundings. He found himself in a small chamber, walled completely with the coppery alloy. It was six-sided, like the cells in a beehive; the only opening was a circular hatchway in what Little considered the ceiling—though, in a second-order flight, it might as well have been a floor or wall. There was no furniture of any description. The walls were smooth, lacking even the rings normally present to accommodate the anchoring snaps of a sleeping bag. There was light shining through the grille which covered the hatchway, but from where he was Little could make out no details through the bars.

He began to wriggle his toes and fingers, ignoring as best he could the resulting sensations; and in a few minutes he found himself able to move with little effort. He lay still a few minutes longer, and then unsnapped the top fasteners of the bag. The grille interested him, and he was becoming more and more puzzled as to his whereabouts. He had no recollection of any unusual events; he had been checking over the medical stores, he was sure, but he couldn't recall retiring to his room afterward. What had put him to sleep? And where had he awakened?

He grasped the top of the bag and peeled it off, being careful to keep hold of it. He started to roll it up and paused in astonishment. A cloud of dust, fine as smoke, was oozing from the fibers of the cloth with each motion, and hanging about the bag like an atmosphere. He sniffed at it cautiously and started coughing; the stuff was dry, and tickled his throat unpleasantly. There could be only one explanation; the bag had been drifting in open space for a length of time sufficient to evaporate every trace of moisture from its fibers. He unrolled it again and looked at the stenciled number—GOA-III-NA12-422. The first three groups confirmed his original belief that the bag had belonged to theGomeisa; the last was a personal number indicating the identity of the former owner, but Little could not remember whose number it was. The fact that it had been exposed to the void was not reassuring.

Dismissing that phase of the problem for the moment, the doctor rolled the bag into a tight bundle. He was drifting weightless midway between ceiling and floor, almost in the center of the room; the hatchway was in one of the six corners of the ceiling. Little hurled the bundle in the opposite direction. It struck the far corner and rebounded without much energy; air friction brought it to a halt a few feet from the wall. The doctor drifted more slowly in the direction of the grating. His throw had been accurate enough to send him within reach of it; he caught hold of one of the bars and drew himself as close as possible.

Any lingering doubt that might have remained in his still befuddled brain as to whether or not he were still on board theGomeisa was driven away as he caught his first glimpse through the grille. It opened—or would have opened had it been unlocked—onto a corridor which extended in two directions as far as the doctor's limited view could reach. The hallway was about thirty feet square, but there its orthodox characteristics terminated. It had been built with a sublime disregard for any possible preferred "up" or "down" direction. Hatches opened into all four sides; those opposite Little's station were circular, like his own, while those in the "side" walls were rectangular. From a point beside each opening, a solidly braced metal ladder extended to the center of the corridor, where it joined a heavy central pillar plentifully supplied with grips for climbing. Everything was made of the copperlike material, and the only light came from the orange-glow tubes set in the corners of the corridor.

Dr. Little maintained his position for several minutes, looking and listening; but no sound reached his ears, and he could perceive nothing through the gratings which covered the other hatchways. He also gave a few moments' attention to the lock on his own grating, which evidently was operated from either side; but it was designed to be opened by a complicated key, and the doctor had no instruments for examining its interior. With a sigh he hooked one arm about a bar of the grating and relaxed, trying to reason out the chain of events which had led up to these peculiar circumstances.

TheGomeisa had been a heavy cruiser, quite capable of putting up a stiff defense to any conceivable attack. Certainly no assault could have been so sudden and complete that the enemy would be in a position to use hand weapons on the crew before an alarm was raised—the idea was absurd; and fixed mount projectors of any type would have left more of a mark on the doctor than he could find at this moment. Furthermore, the ship had been, at the last time of which Little had clear recollection, crossing the relatively empty gulf between the Galaxy proper and the Greater Magellanic Cloud—a most unpropitious place for a surprise attack. The star density in that region is of the order of one per eight thousand cubic parsecs, leaving a practically clear field for detector operations. No, an attack did not seem possible; and yet Little had been deprived of consciousness without warning, had been removed from theGomeisa in that state; and had awakened within a sleeping bag which showed too plainly the fact that part, at least, of the cruiser had been open to space for some time.

Was he in a base on some planet of one of those few stars of the "desert," or in some ship of unheard-of design? His weightlessness disposed of the first idea before it was formulated; and the doctor glanced at his belt. Through the glass window in its case, he could see the filament of his personal equalizer glowing faintly; he was in a ship, in second-order flight, and the little device had automatically taken on the task of

balancing the drive forces which would, without it, act unequally on each element in his body. As a further check, he felt in his pocket and drew out two coins, one of copper and one of silver. He held them nearly together some distance from his body, released them carefully so as not to give them velocities of their own, and withdrew his hand. Deprived of the equalizer field, they began to drift slowly in a direction parallel to the corridor, the copper bit moving at a barely perceptible crawl, the silver rapidly gaining. The corridor, then, was parallel to the ship's line of flight; and the coins had fallen forward, since the silver was more susceptible to the driving field action.

Little pushed off from the ceiling and retrieved the coins, restoring them to his otherwise empty pocket. He had not been carrying instruments or weapons, and had no means of telling whether or not he had been searched while unconscious. Nothing was missing, but he had possessed nothing worth taking. The fact that he was locked in might be taken to indicate that he was a prisoner, and prisoners are customarily relieved of any possessions which might prove helpful in an escape. Only beings who had had contact with humanity would logically be expected to identify which of the numerous gadgets carried by the average man are weapons; but the design of this craft bore no resemblance to that of any race with which Little was acquainted. He still possessed his wrist watch and mechanical pencil, so the doctor found himself unable to decide even the nature of his captors, far less their intentions.

Possibly he would find out something when—and if—he was fed. He realized suddenly that he was both hungry and thirsty. He had been unconscious long enough for his watch to run down.

Little's pulse had dropped to somewhere near normal, he noticed, as he drifted beside the hatch. He wondered again what had knocked him out without leaving any mark or causing some sensation; then gave up this line of speculation in favor of the more immediate one advocated by his empty stomach. He fell asleep again before he reached any solution. He dreamed that someone had moved Rigel to the other side of the Galaxy, and the navigator couldn't find his way home. Very silly, he thought, and went on dreaming it.

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A gonglike note,as penetrating as though his own skull had been used as the bell, woke him the second time. He was alert at once, and instantly perceived the green, translucent sphere suspended a few feet away. For a moment he thought it might be one of his captors; then his nose told him differently. It was ordinary lime juice, as carried by practically every Earth cruiser. A moment's search served to locate, beside the hatchway, the fine nozzle through which the liquid had been impelled. The doctor had no drinking tube, but he had long since mastered the trick of using his tongue in such circumstances without allowing any other part of his face to touch the liquid. It was a standard joke to confront recruits, on their first free flight, with the same problem. If nose or cheek touched the sphere, surface tension did the rest.

Little returned to the door and took up what he intended to be a permanent station there. He was waiting partly for some sign of human beings, partly for evidence of his captors, and, more and more as time wore on, for some trace of solid food, He waited in vain for all three. At intervals, a pint or so of lime juice came through the jet and formed a globe in the air beside it; nothing else. Little had always liked the stuff, but his opinion was slowly changing as more and more of it was forced on him. It was all there was to drink, and the air seemed to be rather dry; at any rate, he got frightfully thirsty at what seemed unusually short intervals.

He wound his watch and discovered that the "feedings" came at intervals of a little over four hours. He had plenty of chance to make observations, and nothing else to observe; it was not long before he was able to predict within a few seconds the arrival of another drink, Later, he wished he hadn't figured it out; the last five or ten minutes of each wait were characterized by an almost agonizing thirst, none the less painful for being purely mental. Sometimes he slept, but he was always awake at the zero minute.

With nothing to occupy his mind but fruitless speculation, it is not surprising that he lost all track of the number of feedings. He knew only that he had slept a large number of times, had become deathly sick of lime juice, and was beginning to suffer severely from the lack of other food, when a faint suggestion of weight manifested itself. He looked at his equalizer the instant he noticed the situation and found it dark. The ship had cut its second-order converters, and was applying a very slight first-order acceleration in its original line of flight—the barely perceptible weight was directed toward what Little had found to be the stern. Its direction changed by a few degrees on several occasions, but was restored each time in a few seconds. The intensity remained constant, as nearly as Little could tell, for several hours.

Then it increased, smoothly but swiftly, to a value only slightly below that of Earthly gravity. The alterations in direction became more frequent, but never sudden or violent enough to throw Little off his feet—he was now standing on the rear wall, which had become the floor. Evidently the ship's pilot, organic or mechanical, well deserved the name. For nearly half an hour by the watch, conditions remained thus; then the drive was eased through an arc of ninety degrees, the wall containing the hatchway once more became the ceiling, and within a few minutes the faintest of tremors was perceptible through the immense hull and the direction of gravity became constant. If this indicated a landing, Little mentally took off his hat to the entity at the controls,

The doctor found himself badly placed for observation. The hatch was about four feet above the highest point he could reach, and even jumping was not quite sufficient to give him a hold on the bars. He estimated that he had nearly all of his normal hundred and ninety pounds Earth weight, and lack of proper food for the last several days had markedly impaired his physical powers. It was worse than tantalizing; for suddenly, for the first time since he had regained consciousness in this strange spot, he heard sounds from outside. They were distorted by echoes, sounding and reverberating along the corridor outside, and evidently originated at a considerable distance, but they were definitely and unmistakably the voices of human beings.

For minutes the doctor waited. The voices came no nearer, but on the other hand they did not go any farther away. He called out, but apparently the group was too large and making too much noise of its own to hear him. The chatter went on. No words were distinguishable, but there was a prevailing overtone of excitement that not even the metallic echoes of the great hull could cover. Little listened, and kept his eyes fixed on the hatchway.

He heard nothing approach, but suddenly there was a faint click as the lock opened. The grille swung sharply inward until it was perpendicular to the wall in which it was set; then the side bars of its frame telescoped outward until they clicked against the floor. The crossbars separated simultaneously, still maintaining equal distances from each other, and a moment after the hatch had opened a metal ladder extended from it to the floor of the room. It took close examination to see the telescopic joints just below each rung. The metal tubing must be paper-thin, Little thought, to permit such construction.

The doctor set foot on the ladder without hesitation. Presumably, his captors were above, and wanted him to leave the room in which he was imprisoned. In this wish he concurred heartily; he was too hungry to object effectively, anyway. He made his way up the ladder to the corridor, forcing his shoulders through the narrow opening. The human voices were still audible, but they faded into the background of his attention as he examined the beings grouped around the hatch.

There were five of them. They bore some resemblance to the nonhumans of Tan Ceti's first planet, having evidently evolved from a radially symmetric, starfishlike form to a somewhat more specialized type with differentiated locomotive and prehensile appendages. They were five-limbed and headless, with a spread of about eight feet. The bodies were nearly spherical; and if the arms had been only a little thicker at the base it would have been impossible to tell where body left off and arm began. The tube feet of the Terrestrial starfish were represented by a cluster of pencil-thick tendrils near the tip of each arm and leg—the distinction between these evidently lying in the fact that three of the appendages were slightly thicker and much blunter at the tips than the two which served as arms. The tendrils on the "legs" were shorter and stubbier, as well. The bodies, and the appendages nearly to their tips, were covered with a mat of spines, each several inches in length, lying for the most part nearly flat against the skin. These either grew naturally, or had been combed away from the central mouth and the five double-pupiled eyes situated between the limb junctions.

The beings wore metal mesh belts twined into the spines on their legs, and these supported cases for what were probably tools and weapons. Their "hands" were empty; evidently they did not fear an attempted escape or attack on the doctor's part. They made no sound except for the dry rustle of their spiny armor as they moved. In silence they closed in around Little, while one waved his flexible arms toward one end of the passageway. A gentle shove from behind, as the doctor faced in the indicated direction, transmitted the necessary command, and the group marched toward the bow. Two of the silent things stalked in front, two brought up the rear; and at the first opportunity, the other swarmed up one of the radial ladders and continued his journey directly over Little's head, swinging along by the handholds on the central beam.

As they advanced, the voices from ahead grew slowly louder. Occasional words were now distinguishable. The speakers, however, were much farther away than the sound of their voices suggested, since the metal-walled corridor carried the sounds well if not faithfully. Nearly three hundred yards from Little's cell, a vertical shaft of the same dimensions as the corridor interrupted the latter. The voices were coming from below. Without hesitation, the escort swung over the lip of the shaft and started down the ladder which took up its full width; Little followed. On the way, he got some idea of the size of the ship he was in. Looking up, he saw the mouths of two other corridors entering the shaft above the one he had traversed; at the level of the second, another hallway joined it from the side. Evidently he was not near the center line of the craft; there were at least two, and possibly three, tiers of longitudinal corridors. He had already seen along one of those corridors; the ship must be over fifteen hundred feet in length. Four vessels the size of theGomeisa could have used the immense hull for a hangar, and left plenty of elbow room for the servicing crews.

Below him, the shaft debouched into a chamber whose walls were not visible from Little's position. His eyes, however, which had become exceedingly tired of the endless orange radiance which formed the ship's only illumination, were gladdened at the sight of what was unquestionably daylight leaking up from the room. As he descended, two of the walls became visible—the shaft opened near one corner—and in one of them he finally saw an air lock, with both valves open. He went hastily down the remaining few feet and stopped as he touched the floor. His gaze took in on the instant the twenty-yard-square chamber, which seemed to occupy a slight outcrop of the hull, and stopped at the corner farthest from the air lock. Penned in that corner by a line of the starfish were thirty-eight beings; and Little needed no second glance to identify the crew of theGomeisa.They recognized him simultaneously; the chatter stopped, to be replaced by a moment's silence and then a shout of "Doc!" from nearly two score throats. Little stared, then strode forward and through the line of guards, which opened for him, A moment later he was undergoing a process of handshaking and backslapping that made him wonder. He didn't think he had been that popular.

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Young Captain Albeewas the first to speak coherently.

"It's good to see you again, sir. Everyone but you was accounted for, and we'd begun to think they must have filed you away in formaldehyde for future reference. Where were you?"

"You mean I was the only one favored with solitary confinement?" asked Little. "I woke up in a cell upstairs, about two thirds of the way back, with less company than Jonah. I could see several other sets of bars from my stateroom door, but there was nothing behind any of them. I haven't seen or heard any living creature but myself since then. I can't even remember leaving, or being removed from, theGomeisa. Does anyone know what happened?"

"How is it that you don't?" asked Albee. "We were attacked; we had a fight, of a sort. Did you sleep through it? That doesn't seem possible."

"I did, apparently. Give me the story."

"There's not much to give. I was about to go off watch when the detectors picked up a lump that seemed highly magnetic, and something over eighty million tons mass. We hove to, and came alongside it while Tine took a couple of pictures of the Galaxy and the Cloud so that we could find it again. I sent out four men to take samples, and the instant the outer door was opened these things"—he jerked his head toward the silent guards—"froze it that way with a jet of water on the hinge and jamb. They were too close to use the heavy projectors, and we still had no idea there was a ship inside the meteoric stuff. They were in space-suits, and got into the lock before we could do anything. By the time we had our armor on they had burned down the inner lock door and were all through the ship. The hand-to-hand fighting was shameful; I thought I knew all the football tricks going, and I'd taught most of them to the boys, but they had every last one of us pinned down before things could get under way. I never saw anything like it.

"I still can't understand what knocked you out. They used no weapons—that annoyed me—and if you didn't put a suit on yourself I don't see how you lived when they opened up your room. The air was gone before they started going over the ship."

"I think I get it," said Little slowly. "Geletane. Four cylinders of it. Did you broadcast a general landing warning when you cut the second-order to examine that phony Bonanza? You didn't, of course, since we weren't in a gravity field of any strength. And the 'meteor' was magnetic, which made no difference to our beryllium hull, but made plenty to the steel geletane cylinders, one of which I had undamped for a pressure test and had left in the tester. I went on about my business, and the field yanked the cylinder out of the tester and against the wall. It didn't make enough noise to attract my attention, because I was in the next room. With the door open. And the valve cracked just a trifle—just enough. I didn't need a suit when these starfish opened my room; I must have been as stiff as a frame member. I had all the symptoms of recovery from suspended animation when I woke up, too, but I never thought of interpreting them that way. The next ship I'm in, see if I don't get them to rig up an automatic alarm to tell what the second-order fields are doing—"

"You might also put your geletane cylinders back in the clamps when, and if, this happy state of affairs eventuates," remarked Goldthwaite, the gloomy technical sergeant. "May I ask what happens now,

captain?"

"I'm afraid it isn't up to me, Goldy," returned Albee. "But I don't suppose they plan to keep us in this corner indefinitely."

Probably they didn't, but Albee was beginning to doubt his own statement before anything else happened. The sun had risen so that it was no longer shining directly into the port, and the great chamber had grown darker as the shadow of the vast interstellar flier crept down and away from its outer wall, when a new party came through the air lock from outside. Two of the pentapods came first, and came to a halt on either side of the inner door; after them crept painfully the long, many-legged, gorgeously furred body of a Vegan. Its antennae were laid along its back, blending with the black and yellow stripes; the tiny, heavily lidded eyes opened wide in the effort to see in what, to the native of the blue star, was nearly total darkness. The line of guards penning in the Earthmen opened and formed a double-walled lane between humans and Vegan.

Albee stepped forward, and at the same moment the interior lights of the chamber flashed on. The Vegan relaxed for a moment as itseyes readjusted themselves; then its antennae snapped erect and began to sway slowly in the simple patterns of the sign language of its race.

"I assume that some of you, at least, understand me," it said. "Our captors, having learned a little of my language in the months I have spent here, hope to save themselves trouble by using me as an interpreter. Do you wish to acknowledge acquaintance with my speech, or do you think it better to act as though our races had never encountered each other? I was not captured near my home planet, so you might get away with such an act."

Most of the Earthmen had some knowledge of Vegan speech—the two systems are near neighbors, and enjoy lively commercial relations—and all looked to Albee for a decision. He wasted little time in thought; it was evident that they would be better off in communication with their captors than otherwise.

"We might as well talk," he answered, forming the signs as well as he could with his arms. "We should like to find out all you can tell us about these creatures, and it is unlikely that we would be given the chance to communicate secretly with you. Do you know where we are, and can you tell us anything about this planet and its people?"

"I know very little," was the answer. "I believe this world is somewhere in the Cloud, because the only time one of us was ever outside the fort at night he could see the Galaxy. Neither I nor my companions can tell you anything about the planet's own characteristics, for we have been kept inside the base which these creatures have established here ever since our capture. We move too slowly in this gravity to escape from them, and, anyway, the sun has not sufficient ultraviolet light to keep us alive. Our captors, we are sure, are not natives of the planet; they seldom venture outside the walls themselves, and always return before nightfall. Furthermore, they live on provisions brought by their interstellar ships, rather than native food.

"They have not told us the reason for our capture. They allow us to prepare everything we need for existence and comfort, but every time we try to divert supplies to the production of weapons, they seem to know it. They let us nearly finish, and then take it away from us. They never get angry at our attempts, either. We don't understand them."

"If they are so careful of your well being, why do they try to drive us crazy on a steady diet of lime juice?" interrupted Little.

"I could not say; but I will ask, if you wish," returned the Vegan. He swung his fusiform body laboriously around until he was facing one of the creatures who had accompanied him to the ship, and began semaphoring the question. The men watched silently; those who had not understood the preceding conversation were given the gist of it in brief whispers by their fellows. Little had not had a chance to ask if the others had been fed as he had been; their silent but intense interest in the answer to his question indicated that they had. The chronic slowness of Vegan communication rendered them all the more impatient to know the reason, as the black and yellow creature solemnly waved at the motionless pentapod.

There was a brief pause before the latter began to answer. When it did, the Earthman understood why an interpreter was necessary, even though both sides knew the same language. The arms of the creature were flexible enough in front-to-rear motion, as are human fingers; but their relatively great width hampered them in side-to-side waves, and put them at a severe disadvantage in using the Vegan language. The Vegan himself must have had difficulty in comprehending; the Earthman could not make out a single gesture.

Finally the interpreter turned back to the human listeners and reported the result of his questioning:

"The green liquid is all that our captors found in the canteens of your space armor. Since there was a large supply of it on your ship, they assumed it was the principal constituent of your diet. They have, however, salvaged practically all of the contents of your vessel, and you will be allowed shortly to obtain your foodstuffs, cooking equipment, and personal belongings, with the natural exception of weapons. I might add, from my own experience, that their unfamiliarity with your weapons will not help you much if you attempt to smuggle any from the stores. We never could get away with it."

"What surprises me," remarked Albee in English, "is that we are allowed at the supplies at all. These creatures must be extremely confident in their own abilities to take a chance."

"From what you told me of the hand-to-hand fighting, such confidence may be justified," remarked Little with a grin. "Didn't you say that they more or less wiped up the floor with the boys?"

"True," admitted the captain, "but there's no need to rub it in. Why are they so stuck up about it?"

"Stuck up? I was getting a strong impression that, as a race, they must be unusually modest." Albee stared at the doctor, but could not get him to amplify the remark. The Vegan interrupted further conversation, attracting their attention with a flourish of its long antennae.

"I am told that your supplies have been unloaded through another port, and are lying on the ground outside the fort. You are to accompany me and the guards to the pile, and take all the food you wish—you may make several trips, if necessary, to get it all to your quarters in the fort."

"Where is this fort, in relation to the ship?" asked Albee. "What sort of land is around it?"

"The ship is lying parallel to the near wall of the fort, about two hundred yards from it. This air lock is near the nose of the ship, and almost opposite the main valves of the fort. In front of the ship the ground is level for about a quarter of a mile, then dips down into what seems to be a heavily forested river valley. I don't know what lies beyond, in that direction; this sunlight is too dim for me to make out the details of objects more than a mile or two distant. I do get the impression of hills or mountains—you will be able to see for yourselves, outside. Your eyes are adapted to this light.

"In the other direction, toward the stern, the level plain extends as far as I can see, without any cover.

Anyway, you'd be between the ship and the fort for the first five hundred yards, if you went that way, and could easily be cornered. I warn you again that these creatures will outguess you, but—good luck. I've told you all I know."

"I guess we might as well go along and get our stuff, then," remarked Albee to his crew. "Don't do anything rash without orders, We'll wait until we see how the supplies are arranged. Maybe we'll have to move some apparatus to get at the food."

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The black bodiesof the guards had ringed them, almost statuesque in their motionlessness, during the conversation. As the Vegan concluded his speech, he had turned toward the lock; Albee had spoken as the men began to follow. The air of the planet was evidently similar to that of Earth, Vega Five, and the home planet of the pentapods, since both valves of the air lock were open. It had the fresh-air smell which the filtered atmosphere of a spaceship always seems to lack, and the men almost unconsciously squared their shoulders and expanded their chests as they passed down the ramp in the wake of the heavily moving Vegan. The scene before them caught all eyes; the interpreter's description had been correct, but inadequate.

The hull of the interstellar cruiser curved high above their heads. The lock chamber occupied a relatively tiny gondola that projected far enough, from its location well to one side of the keel, to touch the ground. The outside of the vessel gleamed with a brilliant silvery luster, in contrast to the coppery glow of the interior. The fort, directly in front of them, was an imposing structure of stone composition half a mile in length and two hundred feet high on the side facing them. The walls were smoothly polished, and completely lacking in windows.

To the left, beyond the nose of the craft, the level meadow continued for several hundred yards, and then dipped abruptly downward. As the Vegan had intimated, the background was filled by a range of rugged-looking mountains, the nearest several miles away. The sun was now nearly overhead, thereby robbing the landscape of the shadows that would have given the Earthman a better idea of its relief. Albee wasted little time looking for what he wouldn't be able to see; he strode on toward the great gate of the fort. In front of the portals were several large heaps of articles, and even at this distance some of them could be recognized as pieces of equipment from the unfortunateGomeisa. The guards closed around the group of human beings and proceeded at the pace set by the captain, leaving the Vegan prisoner to follow at his own speed.

It was evident that a thorough job of looting had been done on the Terrestrial warship. Food and medical supplies, bunks, kitchen equipment, blankets and miscellaneous items of field apparatus were included in the half dozen heaps laid out beneath the glistening black walls. Mixed in with the rest were hand tools and weapons, and Albee, in spite of the Vegan's warning, began promptly to make plans. At his orders, each of the men dragged a shoulder pack out of one of the piles and began filling it with containers of food and drink. The pile of lime-juice bottles was pointedly ignored until Albee, glancing at it, noticed that one case of bottles was not green in color. He went over for a closer look, then extracted one of the plastic containers, opened it and sniffed. His voice, as he turned to the watching men, was just a little louder than usual:

"Would anyone know where they found this stuff?" His eyes wandered over the faces of the crew. It

was Sergeant Goldthwaite who finally answered, hesitantly.

"Theymight have looked between the bulkheads at the cap end of the storage room, cap'n. It was pretty cool there, and seemed like a good place—"

"Not too easy to visit often, in flight," remarked the captain quizzically.

"I never visited it, sir—you can see it hasn't been touched. But you said we would probably touch at Ardome, and I was thinking it might be possible to get rid of it there."

"It probably would. But they have good customs inspectors, and war vessels aren't immune to search. I shudder to think of what would have happened to our reputation if we had made Ardome. Consider yourself responsible for this stuff."

The sergeant gulped. The case of liquor weighed eighty pounds, and could not possibly be crammed into a shoulder pack. He realized gloomily that the captain had inflicted about the only possible punishment, under the circumstances. He put five of the bottles into his pack and began a series of experiments to find out which way his arms went most easily around the case. A small group of pentapods regarded the struggle with interest, their spines waving slowly like a field of wheat in a breeze.

Albee watched, too, for a moment; then he went on, without altering the tone of his words:

"Most of you should have a decent supply of food by now. This planet probably has good water, since the vegetation and clouds appear normal. We should be able to live here without the aid of our generous captors, but we may have some difficulty in avoiding their well-meant ministrations. The Vegan said his people had never been able to fool these pincushions into letting them make or steal a weapon. Remembering that, use every caution in carrying out the orders I am about to give.

"When I have stopped talking, each of you count thirty, slowly, meanwhile working your way toward the handiest tool or weapon in the neighborhood. When you reach thirty, dive for the object of your choice and do your best to get to that forest. You have all, except the doctor, had some experience of the rough-and-tumble tactics of these creatures; the problem, I should say, is to get past them without a fight and into the open. I think we can outrun, on the level, any invertebrate alive. If someone is caught, don't stay to help him; right now, I want to get at least a small crew away from here, where we can work out at our leisure rescue plans for the unlucky ones. Don't all try to get guns; we'll find cutting tools just as useful in the woods. You may start counting."

Without haste, Albee counted over the contents of his pack, swung it to his shoulders. The guards, spines twitching slowly, watched. Reiser, the senior navigator, was helping one of Goldthwaite's engineers drag the ship's electric stove from a pile which chanced also to contain several ion pistols. Little picked up and tested briefly a hand flash, conscious of the fact that guards were watching him closely. The action had some purpose; the flash was almost exactly similar to the pistols. He tightened the straps of his own pack—and someone reached the count of thirty. Albee had chosen that number to give the men time enough to prepare, but not enough to get very far out of pace in the counting.

Almost as one, the human beings turned and sprinted for the bow of the warship. Almost simultaneously, the guards went into action, each singling out a man and going to work. Little, who had not experienced the tactics of the creatures, managed to avoid them for perhaps five yards; then one of them twined its tendrils about his wrist and literally climbed up onto his back. A moment later, the doctor was face down on the grass, arms and legs held motionless in the grip of the clumsy-looking, stubby limbs. The spines of his captor were not stiff enough to penetrate clothing or skin, but their pressure on the back of his neck

was unpleasant. He managed to turn his head sufficiently to see what was going on.

Four men, who had been at the pile nearest the forest, had moved fast enough to avoid contact with their guards. They were now running rapidly toward the declivity; none of the creatures was in pursuit. Albee and a dozen others were practically clear, but one of these was pulled down as Little watched. One man found himself in a relatively clear space and made a dash. Guards closed in from either side, but realized apparently that they were not fast enough to corner the fellow. They turned back to other prey, and the runner was allowed to escape.

Goldthwaite had been in a bad position, with almost the whole group to fight through on his way to the woods. Apparently he never thought of disobeying orders, and going the other way, he dropped the case he had been trying to lift, seized a bottle from it with each hand and headed into the melee. Curiously enough, he was the only one using weapons; the guards, festooned with implements snapped to their leg belts, fought with their bare "hands," and the men all ignored their guns and knives in the effort to run. Most of the pentapods at the sergeant's end of the group were engaged, and he got nearly halfway through the group before he was forced to use his clubs.

Then a guard saw him and closed in. Goldthwaite was handicapped by the creature's lack of a head, but he swung anyway. The blow landed between the two upper limbs, just above one eye. It didn't seem to bother the pentapod, whose flexible legs absorbed most of the shock, and the tough plastic of the bottle remained unbroken; but the stopper, urged by interior pressure and probably not closed tightly enough—it may have been the bottle investigated by the captain—blew out, soaking the sergeant's sleeve and jacket with liquor. This particular fluid had some of the characteristics of Earthly champagne, and had been considerably shaken up.

Another of its qualities was odor. This, like the taste of Roquefort, required a period of conditioning before one could become fond of it; and this may have been the reason that the guard fell back for a moment as the liquid foamed out. It is more likely, however, that he was merely startled to find an object his people had decided was harmless suddenly exhibit the characteristics of a projectile weapon. Whatever the reason, he hesitated a split second before pressing the attack; and in that moment the sergeant was past.

Ahead of him, three or four more guards—all who remained unoccupied—converged to meet him. Without waiting for them to charge, Goldthwaite swung the other bottle a few times and hurled it into their midst. He was a man quick to profit by experience. Unfortunately, so were the guards. They saw the liquid which had soaked into the sergeant's clothes, and needed no further assurance that it was harmless. They paid no attention to the flying bottle until it landed.

This flask was stoppered more tightly and did not blow out. The pentapods, who had either seen the behavior of the first bottle or had been told of it, decided that the latest arrival was a different sort of weapon and prudently changed course, avoiding the spot where it lay, and the sergeant, with no such scruples, passed over it like a racehorse. It was several seconds before the guards overcame their nervousness over this new form of delayed-action bomb, and before they could circle around it. Goldthwaite was well out of reach across the plateau. By that time the action was over.

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Albee had gottenaway with about a dozen men. One of these had escaped through the co-operation of the Vegan, who, unable to run himself, had tripped up with an antenna the only guard in position to catch the man. Some twenty-five human beings lay about on the field, each held down by a single pentapod. Two swarms of the creatures were coming rapidly toward them, one from the ship and one from the fort. These formed a ring about the area, and Little found himself once more free to get to his feet. He did so, the others gathering round him.

All guns had disappeared, it seemed. One of the men had tried to use his when he had been intercepted, but his opponent had relieved him of the weapon before any damage had been done. Evidently the information had been broadcast, for all the other ion pistols had been confiscated, though the very similar flash tubes had not been touched. Injuries were confined to bruises.

Little was beginning to get ideas about his captors—he had, indeed, begun to get them some time since, as his cryptic remark to Albee had indicated. Every action they performed gave evidence of most peculiar motivation and thought processes, evidence which was slowly sifting its way through Little's mind. He continued to let it sift as the men, still ringed by pentapods, began to march toward the fort.

The great outer gate opened into a chamber large enough to hold the entire group with room to spare. It was about fifteen feet high, metal walled, and possessed but two doors—the outer valve and another, smaller, in the opposite wall, giving access to the interior of the structure. As though the room were an air lock, the inner portal was not opened until the outer had shut. Then the group passed into a brilliantly lit corridor, stretching on ahead of them far into the bowels of the fort. Hallways branched from this at intervals of a few yards, some brightly lighted like the main passage, others in nearly total darkness. They had gone only a short distance when the men were stopped by their escort in front of a small doorway in the left-hand wall.

One of the guards activated a small control in the wall beside the door, causing the latter to slide open. The small chamber disclosed was evidently an elevator car, into which five of the pentapods beckoned an equal number of the men. The door slid to behind them, and several minutes of uneasy silence ensued. Little asked the Vegan if it knew where they were being taken.

"Our quarters are in a superstructure on the roof," gestured the creature. "They may put you there, or on the roof itself. You can live in the open under this sunlight; we need supplementary lighting, both visual and ultraviolet. They have told me nothing. I do not even know whether we will be allowed to communicate any further—though I hope so. My companions and I have long wanted to have someone besides ourselves to talk to."

"I suspect we shall be allowed as much contact as we wish—they may even quarter us in adjoining rooms," remarked Little hesitantly. The Vegan eyed him closely for a moment.

"Ah, you have found a way into their minds, Earthman?" it asked. "I congratulate you. We have never been able to understand their motivation or actions in the slightest degree. It may, of course, be that they think more after your fashion than ours—but that seems unlikely, when your minds and ours are sufficiently alike to agree even on matters of philosophy.

"I am not at all sure I have penetrated their minds," answered Little. "I am still observing, but what I see has so far strengthened the impression I obtained almost at the first. If anything constructive results from my ideas, I will tell, but otherwise I should prefer to wait until I am much more certain of my conclusions."

The return of the elevator interrupted the laborious exchange of ideas. It had been gone many minutes, but the Vegan sign language is much slower than verbal speech, and the two allies had had time for only a

few sentences. They watched silently as five more men and their guards entered the car and disappeared. There was little talk in the ensuing wait; most of the beings present were too fully occupied in thinking. One or two of the men exchanged low-voiced comments, but the majority kept their ideas to themselves. The Vegan, of course, was voiceless, and the guards stood about patiently, silent as ever, rock-still except for the slow, almost unceasing, wave of the black, blunt spines. They did not seem even to breathe.

The silence continued while the elevator returned and departed twice more. Its only interruption consisted of occasional faint metallic sounds of indeterminable origin, echoing and reechoing along the corridors of the vast pile. To Little, they were interesting for the evidence they provided of activity through the place, and therefore of the presence of a very considerable garrison. Nothing was seen to substantiate this surmise, however, although it was possible to view objects at a considerable distance along the well-lighted passage.

The elevator returned for the last time. Little, the few remaining men, and the Vegan entered, accompanied this time by only two of the pentapods, and the upward journey began. The car was lifted by an extremely quiet—or extremely distant—motor; the continuous silence of the place, indeed, was beginning to jar on human nerves. The elevator rose smoothly; there was no sense of motion during the five or six minutes of the journey. Little wondered whether the creatures had some ulterior motive, or were simply economizing on power—if the fort were only two hundred feet high, an elevator journey from ground to roof should take seconds, not minutes. He never discovered the answer.

The car door slid open to reveal another corridor, narrower than the one below. To the right it came to an end twenty yards away where a large circular window allowed the sunlight to enter. Little decided that they must be above the level of the outer wall, since no openings had been visible in it. The wall at this level must be set back some distance, so as to be invisible from a point on the ground near the building.

The party was herded in the opposite direction toward several doors which opened from the hallway. Through a number of these, light even brighter than the daylight was streaming; from others there emerged only the sound of human voices. The party paused at one of the brightly lighted doorways, and the Vegan turned to Little.

"These are our quarters," telegraphed the creature. "They have permitted us to set up everything we needed for comfort. I would invite you to enter, but you should first find some means of protecting your skin against the ultraviolet radiators we have arranged. Dark goggles, such as Earthmen usually wear on Vega Five, would also be advisable. I shall tell my friends about you; we will converse again whenever possible. If my ears do not deceive me, your people are quartered along this same corridor, so we can meet freely—as you guessed we might. Farewell." The bulky form turned away and hitched itself through the blue-lit entrance.

The creature's auditory organs had not lied; the human crew was found occupying a dozen of the less strongly illuminated rooms along the corridor. Magill, who as quartermaster was senior officer present, had taken charge and had already begun to organize the group when Little and his companions arrived. One chamber had already been set aside as a storeroom and kitchen, and the food was already being placed therein. When the quartermaster caught sight of Little, he wasted no time in greetings.

"Doctor, I seem to recall that the Vegan said we could make several trips for supplies, if necessary. I wish you'd take a dozen men, try to make these creatures understand what you want, and bring up the rest of the food. Also, Denham wants that stove—he promises a regular meal half an hour after you get it here. Can do?" Little nodded; and the officer told off a dozen men to go with him. The group retraced their steps to the elevator.

Several of the pentapods were loitering at this end of the corridor. They made no objection as the doctor investigated the control beside the elevator door, and finally manipulated it; but two of them entered the car with Little and half of his crew, and accompanied them to the ground level. Little obtained one more bit of information as they started down: the elevator controls were like those of an Earthly automatic car, simply a row of buttons. He indicated the lowest, and made a motion as though to push it, meanwhile looking at one of the guards. This creature came over beside him, and with one of its tendrils touched a stud less than a third of the way down the panel. Little smiled. Evidently the fort was more underground than above, and must be a far larger structure than he had thought. It was nice to know.

They waited at the lower level, while one of the men took the car back for the others; then, accompanied by several more of the guards, they went outside. None of the men could discover how the doors of the entrance chamber were manipulated; none of the creatures accompanying them appeared to touch a control of any sort. The piles of supplies and equipment were still in front of the gate; nothing had been touched. Squads of the pentapods were hurrying this way and that around the great ship; some were visible, clinging to nets suspended far overhead against the hull, evidently repairing, cleaning, or inspecting.

A long line of the creatures was passing continually back and forth between one of the ports of the vessel and a small gate, which the men had not previously noticed, in the wall of the fort. They were bearing large crates, which might have contained anything, and various articles of machinery. Little watched them for a moment, then turned his attention to their own supplies.

The men loaded up and returned to the elevator, into which the food was piled. One man started up with the load and the others went back to the piles. This time Little turned his attention to the stove, which the cook had demanded. It had already been worked out of its pile and was awaiting transportation. The doctor first inspected it carefully, however.

It was an extremely versatile piece of equipment. It contained a tiny iron converter of its own, but was also designed to draw power from any normal standard, if desired. Being navy equipment, it also had to be able to work without electric power, if circumstances required precautions against detection; and a tube connection at the back permitted the attachment of a hydrogen or butane tank—there was even a clamp for the tank.

Little saw a rack of three gas tanks standing by a nearby pile, and was smitten with an idea. He detached one of them and fastened it into the stove clamp, which, fortunately, it fitted. Four men picked up the stove and carried it inside. The other tanks were removed from the rack and carried after it. They contained, it is needless to say, neither hydrogen nor butane. Little hoped that none of the watching guards had been present at the actual looting of theGomeisa, and knew where those tanks came from. He had tried to act normally while he had fitted the cylinder and given orders to bring the others.

The elevator had not yet returned when they reached its door. The men set their burden down. To Little's surprise, none of the guards had accompanied them—they had deduced, from the weight and clumsiness of the device the men were carrying, that watching them would be superfluous until the machine was set up. Or, at least, so reasoned the doctor. He took advantage of the opportunity to tell the men to be very careful of the cylinders they were carrying. They asked no questions, though each man had a fairly good idea of the reason for the order. They already knew that the atomic converter of the stove was in working order, and that heating gas was, therefore, superfluous.

When the elevator finally arrived, Little ordered the man who had brought it to help the others bring the rest of the food from outside. There was still a good deal of it, and it might as well be brought in, though a

large supply had already accumulated in the storeroom. He finished his orders with:

"You're free to try any smuggling you want, but be careful. They already know what an ion gun looks like, and we have been told that they're very good at guessing. We don't know, of course, what articles besides weapons they don't want us to have; so be careful in taking anything you think they might object to. I'm going to take this load up." He slid the door to and pressed the top button.

The same group of guards were waiting at the top. They watched with interest as several men helped the doctor carry the stove to the room which was to serve as the kitchen. There was not too much space left, for food supplies filled all the corners. Little smiled as he saw them—it seemed as though Magill were anticipating a long stay. He was probably justified.

Denham, the cook, grinned as he saw the stove. He had cleared a narrow space for it and fussily superintended the placing. He looked at the gas tank attached to it, but before he could express any surprise, Little spoke. He kept his voice and expression normal, for several pentapods had followed the stove into the room.

"Act as if the tank were just part of the stove, Den," he said, "but use the iron burner. I assure you that the gas won't heat anything."

Denham kept his face expressionless and said, "O.K., Doc. Good work." As though nothing unusual were occurring, he began digging supplies from the surrounding heaps, preparing the promised dinner. The doctor sought out Magill, who had just completed the task of assigning men to the rooms.

"Have you found out how this place is ventilated?" asked Little, as soon as he could get the quartermaster's attention.

"Hello, Doc. Food in? Yes, we located the ventilators. Ceiling and floor grilles. Too small to admit a pair of human shoulders, even if we got the bars out."

"I didn't mean that, exactly. Do you know if the same system handles the rest of the building? And whether those grilles keep blowing if we open the window in a room?"

"We can find out the answer to the second, anyway. Come along."

The two entered one of the rooms, which had been set aside as a sleeping room for three men. All the chambers on this side of the corridor had transparent ports opening onto the roof; after some juggling, Magill got one open. Little, standing beneath the ceiling inlet, was gratified to feel the breeze die away. He nodded slowly.

"I think we should form the habit of keeping the windows open," he remarked. "Of course, not being too pointed about it. It may get a trifle cool at night, but we can stand that. By the way, I forgot to have the men bring up those sleeping bags; I'll tell them the next time the elevator comes up. Do you think our faithful shadows"—Little nodded toward the two pentapods standing in the doorway—"would object if we went out on the roof? They let us open the window, and we could go out that way, in a pinch. There must be some more regular exit."

"No harm in trying," replied Magill. He led the way into the corridor, the two watchers moving aside for them, and after a moment's hesitation turned left, away from the elevator. The guards fell in behind. The room they had been in was the last of those occupied by the Earthmen, and several lightless doorways were passed before the end of the passage was reached. They found it similar in arrangement to the other

end, containing a large, transparent panel through which was visible a broad expanse of roof.

Magill, who had opened the window in the room, began to examine the edges of the panel. It proved openable, the control being so high above the floor as to be almost out of reach. The pentapods could, without much effort, reach objects eight feet in the air. The quartermaster, with a little fumbling, finally released the catch and pushed the panel open.

The guards made no objection as the men went out on the roof, merely following a few yards behind. This end of the hall opened to the southeast—calling the sunrise point east—away from the ship. From a position a few yards outside the panel, it was evident that the prison quarters occupied a relatively small, rectangular pimple near the north corner of the half-mile-square roof. The men turned left again and passed along the side of the protuberance. Some of the crew saw them through the windows, which Magill beckoned them to open. Denham had already opened his, and cooking odors were beginning to pour forth.

Crossing the few yards to the five-foot parapet at the edge of the roof, the men found a series of steps which raised them sufficiently to lean over the two-foot-thick wall. They were facing the forest to which Albee and the others who had escaped had made their dash. From this height they could see down the declivity at its edge, and perceive that a heavy growth of underbrush was present, which would probably seriously impede travel. No sign of the refugees caught the eye.

The bow of the ship protruded from behind the near corner of the structure. Little and Magill moved to this wall and looked down. The line of pentapods was still carrying supplies to the vast ship, whose hull towered well above the level of the two watchers. It hid everything that lay to the northwest. After a few minutes' gaze the officers turned back to the quarters. They were now at the "elevator" end of the superstructure, and found themselves facing the panel which had not yet been opened. Two of the men were visible, watching them from within; and Magill, walking over to the entrance, pointed out the catch which permitted it to open. No outside control was visible.

"The men have come with the rest of the food, sir," said one as soon as the panel opened, "and Denham says that dinner is nearly ready."

"We'll be in shortly," said the quartermaster. "You may tell the men they are free to come out and explore, if they wish."

"I would still like to know if the ventilator intake is on this roof," remarked Little as they walked on. "It must be somewhere, and the wall we saw was perfectly smooth. There doesn't seem to be anything out in the middle of this place, so if it's anywhere, it must be hiding in the shadow of the parapet. Can you see any irregularities near the edges?"

"No," said Magill after straining his eyes in every direction, "I can't. But we're half a mile from two of the walls, and might easily miss such a thing at a much shorter distance. If it's here, one of the men will find it sooner or later. Why do you worry about it, if you want us to use outdoor air directly?"

"I thought it might be a useful item of knowledge," replied Little. "I succeeded in smuggling up my three remaining cylinders of geletane, disguised as part of the stove. I don't suppose there's enough to put the whole garrison out—but still, it would be nice to know their ventilating system."

"Good job, doctor. After we eat we'll find out what else, if anything, the boys succeeded in bringing up, and more or less take inventory. Then perhaps we can arrange some plan for getting out of here. I wish we knew what has become of theGomeisa; I don't suppose we could manage the controls on that ship

outside." Magill made this remark with such perfect seriousness that Little was forced to grin.

"You may be a little optimistic, Keys. Remember the Vegans, who are far from stupid creatures, have been here for some time and have failed to get to first base to date."

"They are handicapped physically, Doc. They can't live for long outside without supplementary ultraviolet sources, and they have to plan with that in mind. Furthermore, this gravity is nearly twice that of Vega Five, and they can't move at any rate better than a crawl."

Little was forced to admit the justice of this argument, but remained, in Magill's opinion, pessimistic. He had developed a healthy respect for their captors, along with a slight comprehension of their motives. The trouble was, the Vegan's description of the way the pentapods seemed to guess the purpose of a device before it was completed did not tie in very well with his theory concerning those motives. More thought was indicated. He indulged in it while Magill steered him back to the prison and dinner.

The meal was good. There was no reason why it shouldn't be, of course, since the cook had all the usual supplies and equipment; but Little was slightly surprised to find himself enjoying dinner while in durance vile as much as if he were on his own ship. It didn't seem natural. They ate in the hallway, squatted in a circle in front of the kitchen door. The Vegans, whose quarters were directly opposite, watched from their doorways. They also commented from time to time, but were very seldom answered, since both hands are required to speak Vegan. They would probably have felt slighted if one of them—not the one who had acted as interpreter—had not understood some English. He got about two words in every five, and succeeded in keeping his race in the conversation.

The meal concluded, the meeting of the ways and means committee, which consisted of all human beings and Vegans in the neighborhood, was immediately called to order. The presence of nonmembers, though resented, was perforce permitted, and discussion began under the watchful eyes of eight or ten pentapods. Little, rather than Magill, presided.

"The first thing we need to know," he said, "is everything possible about our five-sided friends. The Vegans have been with them longer, and probably know more than we; but owing to the relative slowness of their speech, we will save their contribution until last. You who understand English may translate the substance of our discussion to your fellows if you wish, but we will hold a second meeting afterward and go over everything in your own language. First, then, will anyone who succeeded in smuggling any weapons or probable-contraband tools up here please report? Keep your hands in your pockets and your eyes on me while you do so; there is a high order of probability that our friends are very good at interpreting gestures—even human gestures."

A man directly across the circle from Little raised a hand. The doctor nodded to him.

"When we were loading food, before we made that break, I dropped my testing kit into my pack first of all. I didn't try to cover it up and I concentrated on boxed articles of food afterward to make it look natural." The speaker was one of Goldthwaite's assistants, a tall fellow with the insignia of a technician's mate. Little knew him fairly well. He had been born on Earth but showed plainly a background of several generations on the colony-planet Regulus Six—big bones, dark skin, quick reactions. "Good work, Dennis. What is in the kit?"

"Pliers, volt-ammeter, about sixty feet of assorted sizes of silver wire, two-thousand-line grating, midget atomic wire-welder, six plano-convex lenses of various focal lengths, support rod and two mirrors to go with them, and a small stroboscope."

"Item, one portable laboratory," remarked Little. "Congratulations. Leo, I suppose you have outdone your brother?"

Leo Dennis, the twin brother of the first speaker, shook his head. "Just an old-fashioned manual razor. I'll start accepting offers tomorrow." Little smiled and fingered his chin.

"You're too late, unless someone brought scissors to start with. Safety razors weren't built to cope with a ten-day growth, more or less. Never mind, we may find a use for it—it's a cutting tool, anyway. Next?"

There was a pause, with everybody looking expectantly at his neighbor. Evidently the total had been reached. Little spoke again. "Did anybody try to smuggle something and fail?"

"I tried to salvage Goldy's liquor, and had it taken from me," answered another man. "I guess they're firmly convinced it's lethal. I wish them luck in analyzing the stuff—we never could."

"How far did you get before they took it from you?"

"They let me pick up the bottles that were lying around, and put them in the case; half a dozen of them watched me while I did that. But when I started to carry the case toward the gate—of course, that was some job, as Goldy found out—they all walked up and just took it away. They didn't get violent or anything like that."

"Then it wasn't really a case of detected smuggling; you made no effort to mask your real intentions. Is that right?"

"Yes, sir. I don't quite see how anyone could hide either that case or the bottles; I was just sort of hoping against hope."

Little nodded and called for more contributions. A gunner responded.

"I found a couple of cases of grenades and stuck several into my pockets. The next thing I knew, one of the starfish was holding my arms, and another taking them out again. He handled them as though he knew what they were."

"I suppose you checked the safeties before you pocketed the bombs?"

"Of course, sir,"

Little nodded wearily. "Of course. And that was enough for our admittedly astute friends. I admit it's usually a very good idea to obey regulations, but there are exceptions to every rule. I think the present circumstances constitute an exception to most of them. Any others?"

Apparently no one else had seen anything he coveted sufficiently to attempt to sneak out of the piles. The doctor didn't care particularly; he believed he had enough data from that source, and an idea was rapidly growing. Unfortunately, the primary principle of that idea required him to learn even more, though not about his captors. Possibly the Vegans could supply the information, but Little was not prepared to bet on it.

Magill closed the discussion by mentioning the anesthetic which Little had made available, and requesting an early communication of all ideas. The men withdrew into smaller groups, talking in low tones among themselves, and gradually drifted through the doors to their rooms, or out onto the roof. Magill followed

to take a small group down again for the sleeping bags.

Little remained with the Vegans. He had a good deal to ask them, and material which could be covered in an hour of verbal conversation would probably take three or four hours of arm-waving. He sat just outside the fan of intense light from one of the doorways, and the creatures formed a semicircle just inside—the door was wide enough for the four of them, since it had been constructed to admit the pentapods. The doctor opened the conversation.

"How long have you been here?" was his first question. It was answered by the individual who had acted as interpreter.

"Since our arrival there have passed about two hundred of the days of this planet. We are not sure just how long they are, but we believe they are about thirty of your hours. We have no idea of the length of time that elapsed between our capture and our arrival at this place, however. We were driving a small private ship on a sightseeing trip to a world which had recently been reported near the galactic center by one of our official exploring vessels, and were near its reported position when we were taken. They simply engulfed us—moved up and dragged our ship into a cargo lock with magnets. We were on their ship a long time before they put us off here and left again, and we were not allowed to obtain any of our belongings except food and ultraviolet lamps until we arrived; so we don't know how long the trip lasted. One of us"—the Vegan indicated the individual—"got up courage enough to venture onto the roof one night and saw what he thinks was the Galaxy; so we believe this world lies in the Cloud. You will be able to tell better for yourselves—you can stand the dark longer than we, and your eyes are better at locating faint details."

"You may be right. We were heading toward the Cloud when we were taken," answered Little. "How freely have you been permitted to move about this fort?"

"We may go almost anywhere above ground level," was the answer. "Some of these watchers"—a supple antenna gestured toward the ever-present guards—"are always with us, and they prevent us from taking the elevators any lower. Then there are a few rooms on the upper levels which are always sealed, and two or three which are open but whose thresholds we are not permitted to cross."

"How do they prevent your entering?"

"They simply get in front of us, and push us back if we persist. They have never used violence on us. They never need to; we are in no position to dispute their wishes. There is no comparison between them and us physically, and we are very much out of our natural environment."

"Have you been able to deduce the nature or purpose of the rooms from which you are barred?"

"We assume that they are control rooms, communication offices, or chart rooms. One of them contains several devices which look like ordinary television screens. Whether they are for long-range use or are merely part of a local system, of course we cannot tell." Little pondered for several moments before speaking again.

"You mentioned constructing several devices to aid in escape, only to have them taken away from you just before they were completed. Could you give me more details on just what happened? What were you doing, and at what stage were you interrupted? How did you expect to get away from the planet?"

"We did not expect to get away. We just wanted to make them go, so we could take over the fort. When we disconnected their tube lights to put in our own, he"—indicating the creature beside

him—"managed to retain a sample of the tube. On its walls were absorbed layers of several gases, but neon was the chief component. We had smuggled in the neutrino converters and stabilizers from our ship"—and Keys said these fellows were helpless, thought Little—"and it occurred to us that we might set up a neon-oxygen reaction which would flood the place with ultraviolet. We had already noticed that they could not stand it any better than you. The half life of the process would have been of the order of twelve hours, which should have driven them out for a period of time ample for our purpose. A neutrino jet of very moderate power, correctly tuned, could easily have catalyzed such a reaction in every light tube in the place. We had built the projector, disguising it as another ultraviolet lamp, and were connecting the converter when about fifty of the guards dived in, took the whole thing away, and ran out before the lamps we already had going could hurt them."

Little heroically forbore to ask the creatures why they had not smuggled in their ship while they were about it and flown away. The Vegans wouldn't have appreciated the humor.

"I believe I understand the purpose of the actions of these creatures," he said. "But some of their characteristics still puzzle me. Their teamwork is perfect, better than that of well-trained human fighters, but if my idea is correct their technical knowledge is inferior to ours. I have already mentioned to my captain their apparent lack of conceit—that is also based on my guess as to their motives in capturing us. One thing, however, I do not understand at all. How do they communicate? I have always been reluctant to fall back on the 'explanation' of telepathy; there are reasons which make me doubt that it can ever be a satisfactory substitute for a language."

The Vegans looked at him for a moment, astonishment reflected in the tenseness of their antennae.

"You do not see how they talk?" signaled one at length. "That is the first and only thing we have been able to appreciate in their entire makeup."

Little leaned forward. "Explain, please," he waved tensely. "That may be the most important thing any of us has yet ascertained."

The Vegans explained at length. Great length. The recital was stretched out by Little's frequent questions, and once or twice delayed by his imperfect comprehension of the Vegan language. The sun was low in the west when the conversation ended, but the doctor had at last what he believed to be a complete mental picture of the habits, thoughts, and nature of the pentapods, and he had more than the glimmerings of a plan which might set the human and Vegan prisoners free once more. He hoped.

He left his nonhuman allies, and sought out Magill. He found him at the western corner of the roof, examining the landscape visible beyond the tail of the spaceship. A couple of pentapods were on hand, as usual. Leo Dennis was making himself useful, sketching the western skyline on a pad he carried, with the apparent intention of marking the sunset point. Magill had evidently decided that an assistant navigator should be able to get his own location on a planet's surface as well as in space. Dennis was slightly handicapped by a total lack of instruments, but was doing his best. Little approached the quartermaster.

"Has anything new turned up, Keys?"

The officer shook his head without turning. "The men are all over the roof, to see if there are any ventilator intakes or anything else. One of them pointed out that the lack of superstructure suggested that the roof might be used as a landing place for atmosphere craft, and found some blast marks to back up the idea. No one else has made any worth-while reports. If there are any aircraft, though, I'd like to know where they stow them."

"It might help, though I hope we won't be driven to using them. I suppose the boys have their eyes open for large, probably level-set trapdoors in the roof. But what I wanted to find out was: with whom am I sharing a room?"

"Don't recall, offhand," replied Magill. "It doesn't matter greatly. If there is anyone in particular you want—or don't want—to be with, you're at liberty to trade with someone. I told the boys that."

"Thanks. I want to spend some time with the Dennis boys, without making it too obvious. I suppose they're already together. By the way, seeing I'm still a medical officer, has anyone reported sick? The air is just a shade on the thin side, and we've been breathing it long enough for effects to show, if there are going to be any."

Magill shook his head negatively, and Little strolled over to Leo, who had completed his sketch and was trying to mark the position of the sun at five-minute intervals. He was wearing one of the few watches possessed by the party. He was perfectly willing to have his erstwhile roommate replaced by the doctor, especially when Little promised work to be done. He agreed to speak to his brother and to Cauley, who had originally been assigned to their room.

"Tell Arthur to bring his pack, with the kit he sneaked along," added the doctor. "We will probably have use for it." Leo nodded, grinning, and resumed his attempts to fix the position of an object, much too bright to view directly, which had an angular breadth on the order of half a degree. He didn't appear discouraged yet.

Little wandered off across the roof, occasionally meeting and speaking to one of the men. Morale seemed to be good, he noted with relief. He had always considered that to be part of the business of a medical officer, since it was, after all, directly reflected in the health of the men.

A motion in the direction of the setting sun caught his eye. He turned to face it and saw a narrow, dazzling crescent low in the western sky, a crescent that rose and grew broader as he watched. The planet had a satellite, like Mars, so close that its period of revolution was less than one of its own days. Little wondered if a body so close to the planet might not prove useful. He filed the thought away for future reference.

The sun set as he watched, and he realized he had been right about the thinness of the air. Darkness shut down almost at once. The moon sprang into brilliance—brilliance that was deceptive, for details on the landscape were almost impossible to make out. Stars, scattered at random over the sky, began to appear; and as the last traces of daylight faded away, there became visible, at first hazily and then clear and definite, the ghostly shape of the Galaxy. Its sprawling spiral arms stretched across a quarter of the sky, the bulk of the system inclined some thirty degrees from the edge-on position—just enough to show off the tracing of the great lanes of dust that divided the arms.

The men began to drift toward the orange glow that shone through the entrance panels and windows of the "penthouse." They were greeted by the whistle of Denham, who had just completed preparation of another meal. It was eaten as the first had been, in the corridor with a silent audience of guards. The men had grown used to the creatures, and were no longer bothered by their presence. The conversation was desultory, except when Arthur Dennis offered to take the place of Denham's helper for the evening. It was the most plausible excuse for entering the kitchen-storeroom, where the packs had been stowed. No one commented, though everybody guessed the reason.

Windows and doors of all rooms were left open, the first because of Little's advice, the second because the pentapods had removed all means of closing the entrances—privacy was impossible, which did not in

the least surprise Little. At the conclusion of the meal, he accompanied Leo Dennis to the latter's room, which was near the end of the corridor farthest from the elevator, and waited for the arrival of Arthur. A little investigation solved the secret of turning out the room's tube lights, which darkened the place somewhat, but the light from the corridor was sufficient to move around by.

Arthur entered after about fifteen minutes, carrying three packs under his arms. Two of these he tossed to his brother and the doctor, remarking, "Pillows in one suite, anyway!" The other he retained. The three men rolled up the packs and placed them under the canvas at the heads of their sleeping bags, conscious meanwhile of the never-ending scrutiny from the door; then they leaned back against the wall and relaxed.

The twins had tobacco, and all three smoked as they talked. A remark of Leo's, which opened the conversation, eased Little's mind of one problem which had been bothering him.

"Before we do or say anything else, Doc," said the navigator, "please think carefully before you tell us anything. I suppose you found out a good deal from the Vegans, and I wouldn't be surprised to know you have a campaign all mapped out; but I don't want to know more than necessary. I have developed, from what the Vegans said and from what I've seen myself, a very healthy respect for the intuition, or guessing powers, or whatever it is, of our silent watchers. It makes me uncomfortable. And the less I know the more natural I can let myself act. All right?"

"All right; that was my own idea, too," answered the doctor. "I will tell you no more than necessary. In the first place I should, like Magill, like to know our location on this planet and the planet's location in space. That, unquestionably, is your job, Leo. Then I want to get the information to the handiest Union base or ship. That's all. I don't believe we could break out of here, though probably Keys will try. I pin my hope on our broadcasting a message from inside and letting people already outside do the rest."

The brothers nodded. "That's clear enough," said Leo, "and I can probably locate us fairly well if...Art, did you say you had a grating in that kit of yours?"

"Yes," was the answer. "Do you need it?"

"Uncertain, but probably. I'll have to identify the local navigation beacon somehow, and its spectrum will be the most outstanding hallmark. Why don't Doc and I go outside now and do some star-gazing, while you curl up in your sleeping bag and see if the shadows don't follow us? If they do, you can rummage in the kit without being seen, and come out in a few minutes with the grating and a couple of the lenses you mentioned. If they don't, we'll do what we can with the naked eye and come back. Sound?"

"Solid. Be seeing you."

Arthur extinguished the stub of his cigarette, loosened his belt and shirt, and began removing his boots, while Leo and Little rose and went out into the hallway. Pentapods, scattered along the corridor, eyed them as they emerged, but made no move to intercept them. The door opening outside had been left ajar by the Earthmen in their policy of avoiding the use of the building's ventilation system, and the guards were evidently following a policy of noninterference with regard to everything but weapons. The panel was still partly open.

Little pushed it wide, and the two human beings went out onto the roof. To their surprise they were not followed; but both realized that there might already be guards on the roof. They moved out of the path of the light from the door and approached the nearest wall.

The mountains to the northeast were silhouetted against the almost equally dark sky; the forest at their feet was indistinguishable. No glow or spark of light suggested the presence, anywhere in the scene, of the men who had escaped nine hours before, though Little and Dennis strained their eyes looking. Not even a reflection from the river the doctor believed must be present broke the dark expanse.

The sky offered more material for comment. The Galaxy was lower in the west and the moon higher. Dennis, looking at the latter, did some rapid mental arithmetic. It had risen about an hour and a half ago, and would probably reach the zenith in a little more than another hour. Its sidereal period, then, must be about eight hours, and its distance, if this world had the same size and mass as Earth, a little over eight thousand miles from the surface. It was now nearly at "first quarter," but its dark side was faintly visible, presumably illuminated by the reflected light of the planet. Somewhat less than four hours after sunset, the satellite should enter the planet's shadow and be eclipsed for about forty minutes, unless its orbit were more highly inclined to that of the planet than appeared to be the case.

Little was looking at the stars, spread over the sky in unfamiliar constellations. "Which of these is the local navigation beacon, and how do you identify it?" he asked. "And why do you pick out one star to call a beacon?"

"It would be possible to obtain our position from any three stars whose location is on the charts," answered Dennis, "but it is much easier, as a rule, to use certain individuals, because tables have been computed for use with them, and they are easier to identify. I don't have the tables with me, of course, but the beacon for this neighborhood and the Galaxy, together, would give me a fairly good idea. We use the brightest available stars for beacons, naturally—Rigel and Deneb in the Solar sector, for example. For navigation in the Larger Cloud we use a slightly different system, which employs two super-giant stars back in the Galaxy and the one local beacon which covers the whole Cloud—S Doradus. It shouldn't be hard to find, even without instruments, since it's a first-magnitude star at a thousand parsecs; but we always like to check the spectrum, if possible. Most beacon stars, of course, are O, B, or A supergiants, but there are usually detectable individual differences which can be picked out by a good instrument. We haven't a good instrument, but fortunately S Doradus has a very distinctive spectrum."

Little nodded. "I can see that much. Don't tell me how you reduce the observations to get your position; it would certainly go beyond my mathematical limit, and I don't like to be shown up."

"It's not difficult—elementary spherical trig. If you know what a direction cosine is, you're all right. Matter of fact, that's how positions are indicated—three direction cosines from a given beacon, plus distance. I don't know how we'll get the distance—I can estimate brightness to a tenth of a magnitude, but that may answer to a small percentage of an awful distance. We usually can triangulate, but not in the Cloud."

"I'll take your word for it," replied the doctor. "Can you see anything that might be your beacon?"

"There's a fairly bright specimen sitting just above the north horizon, that seems to have a tinge of yellow; and there's another right overhead. If Art ever gets here with the lenses and grating I'll test them. I suppose he can't make it, since the dumb chums didn't follow us out here and give him a chance to burrow into the kit."

"He may find a way to do it anyway," remarked the doctor.

"It would be just like him to try, and lose the kit," was the pessimistic answer.

Even Little was growing discouraged by the time Arthur finally arrived. They had been out nearly an

hour, Little amusing himself by strolling along the walls to see whether anything were visible below, and Leo observing the satellite as it approached the zenith. He had already come to the conclusion, from the fact that the sun had set practically "straight down," that they were near the equator of the planet. It now seemed that the moon was in the equatorial plane, since it was rising to a point directly overhead. It was well past first quarter now, but the unlighted crescent was still visible. Leo had just noticed this fact when Arthur's voice interrupted his pondering.

"I assumed you wanted the lenses for a telescope of sorts, and chose accordingly," said the technician. "It took me a long time to work the kit out of the pack and into the sleeping bag because the guards were looking in every two or three minutes. I don't know what will happen when they find me gone."

"I do, you chump," answered Leo. "Two or three of them will drift out here after us, and some more will seize the chance to investigate the pack whose position you changed so often."

"Think so?" asked Arthur. "Here are the lenses and grating. I brought the rod and lens clamps, too, but I'm afraid you'll have to get along without a tube." His brother accepted the assortment and fell to work. The doctor looked on silently. Arthur had brought a light also, and held it on the step which served as a workbench.

Leo, after a moment's thought, discarded one lens and used the other—the one of longer focal length. He clamped this at one end of the rod, with the plane side toward the center. The grating was smaller than the lens, and he clamped it against the plane face of the latter with the excess glass blocked off with paper. Another sheet of paper—a leaf torn from his sketch pad—was clamped to the rod at the focal distance of the lens, completing the crude spectroscope.

He set the instrument on the wall, propping it so that it was pointed toward the northern horizon and one of the stars he had mentioned. He leaned over it, to cut off the moonlight. The other two also leaned forward to see the results.

A little streak of color, narrow as a pencil line, was just visible on the paper screen. Leo brought his eyes as close as he could, striving to perceive the tiny dark gaps that should have existed; but the resolution of the instrument was not sufficient. After a moment's pause, he returned to the original idea, removing the paper and clamping the other lens in normal eyepiece position. This proved successful. He could make out enough to identify both the stars he had counted on as unquestionably sun-type G stars, probably no more than a few parsecs distant, and definitely not the giant he sought.

The navigator began to wear a worried expression. There were several thousand stars visible to the naked eye, and only a few of them were obviously not the object of his search. After a few minutes, however, he began a methodical examination of all the brighter yellow and white stars, one after another. Arthur and the doctor saw that interruption would not be helpful, so they withdrew a few yards and conversed in low tones.

"What will you do if Leo does get our position?" asked the technician. "I suppose you have some idea."

"The idea I have depends almost entirely on you," answered Little. "I have been told that a second-order transmitter is less complicated than an ordinary radio. Could you build one?"

Dennis frowned and hesitated. "If I had all the materials and no interruptions, yes. Here and now, I don't know if the necessary equipment is available, and I'm reasonably sure we wouldn't be allowed to do it, anyway."

"You said there were two atomic tools in your kit, a heater and a stroboscope," said Little. "Would their parts be enough?" Once again Dennis paused to think.

"The welder wouldn't—it's just a converter and a tungsten element. The stroboscope converts with a direct electron current and a variable oscillator and—I believe it could be done. But it wouldn't handle much power, and the range would be nothing to speak of."

"That doesn't matter, as I see it. All I want to know is that you can build a vision transmitter with the material on hand—"

"Wait a minute!" interrupted Arthur. "I didn't say a vision unit. What do you need that for? All I was counting on was voice transmission. That won't be very difficult."

Little shook his head. "Vision or nothing. I don't want to tell you why, for the reason Leo gave. But please, if you don't want me to have to redesign the whole plan, find a way to construct a vision transmitter. And I hate to be too exacting, but I'd like it done before that ship leaves again. I don't know how long they usually stay here, but I notice they're stocking up."

"Sure," groaned Dennis. "Right away. Doc, if it were anyone else I'd know he was crazy, but with you it's only a strong suspicion. I'll try—but Lord knows where I can come by an icon tube."

Little grinned invisibly in the darkness. "The Vegans said they smuggled up a complete neutrino assembly. It was taken away from them later, but it gives you an idea of what can be done."

"They didn't give you an idea of their technique, I suppose? I'm not too proud to learn."

"I didn't ask them. There were guards around. Good luck!"

Little went back to Leo, who was resting his arms. Not a single O-class spectrum had yet been picked up by the instrument.

"If I were sure it were there, I wouldn't mind so much," he said, wiping his forehead. "But it's just as likely to be in the daylight half of the sky. I'd rather not have to wait here half of whatever time it takes this world to amble around its sun, just to get a rough idea of where I am."

Little nodded sympathetically—after all, he was the one who wanted their location. "Does the moonlight interfere any?" he asked.

"It did, until I made a rough tube out of paper. It's a little hard to hold together. But speaking of the moon, Doc, have you noticed anything strange about it?"

"I wouldn't," answered Little. "Is something wrong? It looks natural to me.

"It doesn't to me. It did right after sunset, when it was a narrow crescent. We could see the rest of it then, but reflection from this planet could have accounted for that. But it doesn't now! The darn thing's nearly full, and you can still see the strip that the sun doesn't reach. This world can't possibly reflect enough light for that. What's lighting it up?"

"I'm afraid it's no use to ask me," said the doctor. "I can guarantee it's not radioactivity, because that much radioactive matter so close would have prevented the existence of life on this world. It would have been burned sterile; we'd probably be dead now ourselves. I don't know any astronomy, but I can tell

you all you want to know about gamma-ray burns."

"That occurred to me, too," agreed Leo. "It seems that there must be something, at present invisible to us, shining on that satellite. I think in a few minutes we'll be able to get an idea of where it's shining from, too."

"How?" asked Little and Arthur with one voice.

"The moon should pass into this planet's shadow very shortly," answered Leo. "A lunar eclipse. The satellite must have one every revolution—almost four times a day, I should say. The sun's light will be cut off, except for the fraction scattered by the atmosphere of this world, and we should be able to tell from the shape of the part illuminated by this mystery source, the direction of the source. We'll wait." The other two nodded. Even Little, who was no astronomer, understood the mechanism of an eclipse. The three settled themselves on the broad steps inside the wall.

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They had notlong to wait. It was about three and a quarter hours after sunset, and the first outlying tentacles of the looming Galaxy were just dipping below the western horizon, when Leo marked the first darkening of the eastern limb of the nearly full moon. It was not like the protracted lunar eclipse of Earth; the satellite was moving far more swiftly, and took less than a minute to travel its own diameter. There was a feeble, preliminary reddening as it plunged into the region illuminated only by air-scattered light; then this was gone, as the little body passed on into the umbra of the planet's shadow.

It should have disappeared. No possible reflection from the planet it circled could have given it a touch of illumination, for it looked down only on the night side of the world. Yet part of it was still to be seen—a ghostly, dim-lit crescent, a little less than half full, its convex side facingeast. There was no possible question of the nature of the light source. Leo estimated the distance of the moon above the eastern horizon, and the angular breadth of illuminated surface; there was only a small difference.

"It will rise before long," he said. "I'm staying to see. You fellows can go back to sleep if you wish; we've been out over two hours and we'll need some sleep."

"We'll stay," said Little. "This gets interesting. Do you think there's another, very bright moon? Large enough, perhaps, to be habitable?"

Leo shook his head. "I don't believe any possible moon could do that," he said. Arthur nodded in silent agreement, and for many minutes the three sat without speaking as the dimly lit crescent dipped lower toward the eastern horizon. Leo had judged roughly that the eclipse should last about forty minutes.

It had not ended when Arthur pointed silently to the east. A spur of the mountain range whose principal peaks lay to the northeast had become a little clearer, silhouetted against a suddenly brighter patch of sky. The brilliance grew and spread, paling the stars in that quarter of the heavens as though dawn were breaking; and quite suddenly the source rode clear of the concealing hill and presented itself to view. The undulations of the landscape were abruptly visible, standing out against the long shadows cast by the light of the newcomer, which hung, far brighter than the moon at its best, just above the peaks.

The men looked on in awe. They had seen the mad splendor of the spiraling gas streams hurled forth from binaries like Beta Lyrae; they had driven through the hearts of globular clusters, with giant suns by the myriad on every hand; but somehow the lonely, majestic grandeur of this object was more impressive. A star—too distant to show a perceptible disk—too bright to be gazed at directly, putting to shame the surrounding celestial objects. Even the moon, sliding out of the shadow in an apologetic fashion, no longer seemed bright.

Arthur Dennis was the first to speak. "It gets you, doesn't it? I suppose it's a companion to the sun, or else—"

"Orelse" said Leo flatly, snatching the spectroscope. The great star was white, with just a suspicion of topaz in its glow, and Leo was prone to jump to conclusions. One glance through the instrument, sweeping it slightly from left to right, was enough. He grinned, removed the eye lens, and replaced the paper screen of the original arrangement, and three heads bent once more to look at the streak of color.

It wasn't a streak this time. A single bright point centered itself directly behind the objective lens, and to either side of this there extended a broken series of dashes—the intense emission bands, bordered on the violet side by relatively sharp dark lines, which characterize what the early astronomers called a "P Cygni" star. The continuous background spectrum was too faint to show; the grating was so coarse that several orders of the spectrum fell on the paper at once.

"And that's your beacon!" remarked Little after a few moments of silence. "Well, it certainly earns the name."

"You can get our location now?" asked Arthur. I should think you wouldn't need to say much but 'Near S Doradus,' from the looks of that thing."

"Wrong, blast it," answered Leo. "When I said I could judge brightness to a tenth of a magnitude, I was thinking of decent stars with visual mags between zero and plus six. For this thing, I don't know whether it's minus five or minus fifteen—whether the blasted thing is three quarters of a parsec or eighty parsecs away. I'll get the direction, though, and maybe I'll find a way to measure the brightness. I'll look after that, you people worry about what to do with it if I get it. Good night."

The dismissal was rather pointed, and Leo turned his full attention to the pad on which he was computing, so Little and Arthur silently retired. So did all but one of the guards who had been watching, invisible in the shadow of the superstructure.

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Dr. Littleopened his eyes with a start and realized it was full daylight. It had been the first sleep under normal gravity in several weeks, and his body had made the most of it. The other two sleeping bags were empty, but the Dennis brothers were both present. They were by the window, removing a piece of canvas that had apparently been draped across it. Little sat up.

"What are you fellows up to now?" he asked. "Leo, don't you ever sleep?"

"Sure, when necessary. You have been sleeping for twelve hours, Doc. Did we wake you up?"

"Twelve hours! No, it was probably my conscience. What's the idea of window curtains? We haven't even a door, so it can't be privacy."

"We were screening out the sunlight Leo didn't want," answered Arthur. "He was trying to get the sun's spectrum, and just wanted a narrow beam through the grating."

"Did you get it?"

"Sure." It was Leo speaking again. "And we found a use for the razor. The edges of the blades are good for making a slit for the beam. This fellow, of course, didn't have anything in that wonderful testing kit that would do. By the way, Art, have you still got the kit, or did our friends take it last night?"

"Someone poked around in it," Arthur answered, "but they left it here. Maybe they thought there was nothing in it that we could put to use."

"I think they would have left it, anyway," remarked the doctor, grinning at the expressions of unbelief on the two faces.

Leo walked over to his brother's sleeping bag and took the kit box from the pack. "You know best, Doc. In that case, I'm going to have a look, and find out if there's anything useful that Art forgot to mention—Art, you dope!"

"What's wrong now?" asked the technician, without moving.

"The welder and the stroboscope you spoke of—they're gone! And you said the guards must have decided the stuff was harmless. What do we do now?"

"The welder and stroboscope are in my pockets, and have been since last night. You thought of the stuff's being taken, didn't you? And did youever think of anything without my beating you to it? You worry about your own department; I can take care of mine, I hope." The last phrase was stimulated by an amused glance from the doctor.

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They strolled outinto the mixed crowd of humans and pentapods in the corridor, and Arthur went over to the kitchen. He appeared to have taken on permanently the job of cook's helper. Little located the quartermaster, and began discussing the day's possibilities. They seemed to be few. Most of the crew were specialists of one sort or another, experts in the fields of knowledge and activity necessary to fly and fight an interstellar cruiser; but one and all were hampered by lack of materials and tools. The only way to get these appeared to be theft, at which the crew of theGomeisa were not specialists. The only advice Little could give was that the men should do their best to smuggle in materials, to the exclusion of other occupations, and anyone who had a workable idea should let the others know what he needed to work it. Not very helpful, since everybody already had that idea. It looked as though time would pass rather boringly.

It did. The men wandered more or less freely about the roof and the corridors of the building below, and

occasionally went out to the supply piles for material they wanted. To Magill's surprise, but not to Little's, they were allowed to take even pieces of scientific apparatus without interference.

"I don't get it," said the quartermaster when a man reported bringing in a portable atomic melting furnace. "Anyone could see that that was a dangerous tool in the hands of a prisoner. Why do they let us get away with it?"

"To me," answered Little, "that is the least puzzling factor. The treatment we are getting shows that there can be only one reason for our capture—to learn from us. Naturally, we must be allowed access to tools and scientific equipment. Then they watch our efforts to escape, and help themselves to the results of our labor. What is so puzzling about that?"

Magill was silent for several minutes. "Put that way," he said at last, "it's obvious. I don't know why I didn't think of it before. That, I suppose, is why you said they weren't a conceited race—they go to such lengths to take the knowledge of others. But what happens if they're a little slow in taking a weapon away from us?"

"Apparently they are prepared to take that risk. They have succeeded so far with the Vegans, and they have all our standard weapons, you'll note. That ability of theirs to guess the purpose of our actions is our chief bugbear. It's unusual; most of the time it's almost impossible for two races meeting for the first time to understand even each other's standard gestures, let alone natural, unstereotyped face and body motions. But do your best with that in mind."

Little did not say that, with the aid of the information given by the Vegans, he had been able to deduce the reason for the almost telepathic guessing ability of the pentapods; and he did not mention the plan that he and the Dennis brothers were trying to put into operation. If Magill went ahead with ideas of his own, it would probably occupy much of the attention of their guards. Not that Little wanted itall occupied.

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The reports ofthe men who had wandered through the building agreed with the statements of the Vegans—most places were permitted, below ground was not, some rooms were locked, and some were open but the men had been kept out. One room, on the top floor almost directly below the prison quarters, appeared to be a communications office—which was a natural situation, if the roof had originally been used as a landing platform. The purpose of most of the others was not clear. Little did some wandering himself, and personally checked most of the information.

That evening the Vegans ate with the men; their own supplies had given out long before, of course, and they had been living on food supplied by the pentapods. It was evidently harmless, but far from enjoyable, according to the Vegans. Arthur Dennis served the food to them at their doorway, and brought the mess kits back to the kitchen after the meal. The guards usually withdrew some distance while the men were eating; the odors evidently did not appeal to them. Consequently, there was none of the creatures in the kitchen when Arthur brought back the kit. His self-assigned position as cook's helper was becoming constantly more useful, he reflected.

Days in prison tend to be rather boring. Nights are better because one can sleep and forget the boredom for a while; but from this night on Arthur Dennis knew he would sleep very little, though he planned to

trade his sleeping bag for one several sizes larger and retire completely into it. He decided to develop the habit of keeping his face partly covered by the canvas flap, and have his companions emulate him to make the action seem more natural. He was jubilant when the others came to the room.

"I have an icon tube, Doc," he said from the depths of the sleeping bag. "That's what worried me most. I can build the second-order converter from the stuff I already had, and I can probably dig up enough from the other boys to make the tube connections. It's lucky they let us keep the hand lights. I don't know how I'd put this stuff together in the dark."

"How did you get the tube?" asked Little. "I didn't see you go downstairs all day, and I don't think many of the men knew about the guards' having let a good deal of apparatus by without trouble, so they wouldn't have done it for you."

Arthur grinned in the darkness. "Since I didn't have the Vegan technique we mentioned, I bet one of the Vegans fifty Union credits it couldn't be done—thus implying my doubt of his story of smuggling up a neutrino unit. He slipped it into his mess kit this evening after the meal, and I got it in the kitchen. He was a little touchy about my rudeness, but I apologized this evening and he's cooled off. I pay the bet if and when we reach a Union planet and can get some money." The technician ceased speaking, and the flap fell again across the opening of the bag.

Silence fell throughout the room, broken by the even breathing of two people and the occasional almost inaudible footfalls of the guard outside. Once or twice a shadow fell across the doorway as one of the creatures looked in, but it defeated its own purpose by blocking the light, and saw nothing. Dennis was careful, anyway, and allowed no motion to show through the padded canvas of the sleeping bag.

He was not interrupted that night, and worked for two or three hours before placing the partly completed unit in his kit and going to sleep.

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The next morningit occurred to Little that the Vegans might have some idea of the probable length of stay of the ship. After the morning meal he squatted in front of the doorway of their quarters and questioned the creatures.

"They usually remain about ten days," was the answer. "But it is impossible to tell for sure. This is the first time prisoners have been brought since we came. We didn't notice how long they stayed on our arrival—we were too worried about other things."

"How long do they remain away, usually?"

"There is no 'usually' about it, the duration is absolutely unpredictable as far as we can see. Sometimes the ship is gone for only a day, sometimes for several weeks. It is evidently not a patrol cruiser with a regular beat."

Little thanked the creature and left, to ponder the effect of the new facts on his plans. He returned almost at once, to ask another question:

"Does the garrison of the fort appear to expect the ship at any time before its actual arrival?"

"Not obviously, if at all," was the answer.

Little nodded, satisfied. He sought out the Dennis brothers. Leo was in their sleeping room, trying to manufacture a photometer from the lenses of a pair of dark goggles an atomic engineer had found in his pocket. The doctor located Arthur and brought him back to the room, and asked if either one knew anything about geletane.

"Not much," answered Leo. "I gathered that it was more than an ordinary anesthetic when I heard you had lived through an exposure to space while under its influence."

"Right," nodded Little. "It produces, to put it crudely, suspended animation. It is adsorbed, apparently, on all the cell surfaces in the body, foreign bacteria included, and seals them from chemical influence. One would expect that to produce death, since the destruction of the gas film could not start the vital processes again; but the patient always revives. I could put my finger on ten different theses in the New York Medical Library, each suggesting a different mechanism and none completely satisfactory. The film, when it breaks, seems to do so everywhere at once, and there is an abnormal amount of carbon dioxide in the blood immediately thereafter; but the whole process is not thoroughly understood.

"It seems, however, that the cell walls themselves tend to cause the breakdown of the film; and if a person exposed to the gas is exercising violently, that action is increased to a point where he isnot affected at all. If he holds his breath, and otherwise suspends body activity, it gets him almost instantly. The gas, as you can see, has an all-or-none nature. I wanted you to understand this, because it is possible we may have to use the gas in the near future. Think it over." The brothers kept their faces nearly expressionless, but it was perceptible that they thought the matter over with some pleasure. Arthur, slightly the more imaginative of the two, immediately assumed that the gassing was to take place when the communicator was finished, so that they would have a chance to use it.

With this pleasant prospect in mind, Arthur worked even longer that night. The converter was completed, and he began to construct a support for the tube and its connections before he was forced to sleep. Again, his work apparently went undetected by the ever-prowling guards. His hopes showed so clearly on his face the next morning that his brother kicked him firmly and ungently in the shins as a reminder of the unbelievable expression-comprehension of the pentapods.

He reported to Little that the device would probably be completed that night. The doctor nodded and said:

"Good work, Art. We probably had another week before the ship left, but this is better than I expected. As soon as Leo gets his photometer done and finds our distance from S Doradus, things should start to pop; and that should be fairly soon." In this statement Little was half right; things started happening quite soon, but they did not wait for the navigator's mate to complete his tasks.

The doctor found Leo seated on one of the steps which lined the outer wall. He was examining closely an object, consisting chiefly of several small fragments of darkened glass, which proved to be his photometer; and like his brother, he was obviously in good humor.

"All done, Doc," he said on sighting Little. "I can measure tonight—calibrate this thing on stars I can estimate, and then do the beacon. It's lucky I already know its absolute magnitude. What do you think are the chances of that gadget of Art's reaching a Union receiver?"

Little smiled without speaking, and shrugged his shoulders. His opinion was that the question was unimportant, but it would not do to say so. He might be misunderstood. He fully believed that they would be caught the moment they attempted to start broadcasting. Without committing himself, he admonished Leo not to lose the photometer, and went in search of Magill.

To that officer he spoke earnestly for several minutes, making several requests which were granted only after persuasion. One of them had to do with the disposal of kitchen waste, and for once the doctor's interest was not in sanitation.

The rest of the day passed in as boring a fashion as had the two preceding.

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Evening found thethree conspirators in their room, planning the night's activities. Arthur, of course, would remain to "sleep." They found difficulty in deciding whether Little should remain with him, or accompany Leo on his astronomical expedition. If he went without an obvious purpose, the guards might wonder why he was the only curious sightseer and why Arthur didn't go, too; if he remained, they might wonder why he behaved differently from the previous occasion, and investigate the sleepers. Even the insight Little had gained into their thought processes could throw no light on this question.

Finally, he accompanied Leo, carrying the latter's pencil and pad to provide himself with an excuse. As on the previous occasion, none of the guards followed them through the door. They took up their former station by the wall and seated themselves on the steps until S Doradus should rise. The moon was only a little past first quarter, and the beacon would not rise tonight until some two hours after the eclipse, so they had a wait of nearly four hours. They had chosen to come out early, to avoid falling asleep and missing their chance.

For the first time since their arrival on the planet, there were clouds in the sky. These provided matter for conversation and anxiety for nearly three hours, as they completely covered the heavens on two occasions; but by the time the waning moon was sinking low in the east they had disappeared. The remaining time before observation could be started was passed in silence.

As the glow on the eastern horizon warned of the mighty star's advent, Leo went to work. Each of the fragments of glass he had obtained from the engineer's goggles was tested in turn, a star viewed through the darkened glass being compared with another seen directly. Little noted the results on the pad, though there was little need. The lenses had originally been very evenly darkened, and as nearly as Leo could estimate, a single thickness of the glass cut about three and five-tenths magnitudes from the brightness of an object.

When the beacon rose, his only task was to find the number of layers necessary to reduce its apparent brightness to that of a star lying in the range where his own judgment was good. The method obviously gave room for error, which increased with each additional thickness used, but it was better than guessing; and anyway, as Leo remarked, since S Doradus is an irregular variable, the best instruments in Civilization would still have left them with a probable error of over half a magnitude.

He measured and computed. "Art was almost right, at that," he remarked finally. " 'Near S Doradus' would almost be enough. I get an apparent magnitude of minus fourteen, which means a distance of just

under one parsec." He took a fresh sheet of paper from the pad and wrote rapidly. "Here," he said, handing it to Little, "is the complete specification of our position, to two decimal places—I can't guess closer. It also includes the type of this planet and sun in standard terms, and a rough idea of our latitude on the planet. If you broadcast that and anyone hears you, they'll find us."

"And he can go right ahead and broadcast it, as soon as the rubbernecks are out of the way," broke in a new voice. "The gadget's done. I haven't tested it, naturally, but it can't help working. Say the word, Doc."

*****

Little shook hishead. "Not tonight. We must arrange some way to keep the broadcast from being too obvious. Come on to bed and we'll talk as we go. It would be too bad to slip up now."

They arose and walked slowly toward the lighted doorway.

"It seems to me that we only need to gas the guards in the immediate neighborhood, and lock ourselves into the quarters with them outside. There are no outside catches on the main doors, and I could seal the elevator panel with the welder—I didn't use it for the broadcaster, and it should stand the overload long enough."

They passed into the corridor. "That might work," mused the doctor. "There is only the one elevator, and no other entrances to the roof, from below, anyway. But we'd want as many hours as we could get, and I should think they could burn out the elevator door in a few minutes."

They entered the room in which they slept. "That could be prevented by simply leaving that door open when the elevator was up and going into action at that time," contributed Leo as they pulled off their boots. "Then they couldn't get at either the elevator or its door."

"How about the other men?" asked Little. "It will be difficult to tell them all about the geletane, and how to avoid its effects. What will—"

"Stop worrying about it," interrupted Arthur. He had lain down with the pack for a pillow, moved it to a more comfortable spot, noticed the ease with which it moved and, with a horrible suspicion in his mind, looked into the kit box inside. "The communicator is gone."

Possibly the guards in the corridor and on the roof were laughing, if their unhuman cerebral processes had ever evolved an emotion akin to humor. Certainly, they were pleased with themselves.

"You loon," growled Leo. "Why did you have to celebrate finishing the thing by tearing outside to tell us? It would have been simpler just to step outside our door and hand it to a guard."

The night had not passed too peacefully, in spite of Little's advice to save recriminations until morning. Relations between the twins were slightly strained. The sunlight coming through the window revealed only too clearly on Leo's face that expression of smug, "I wouldn't do such a thing" superiority that tends to drive repentant sinners to homicide.

"The meeting will please come to order," interrupted the doctor. "Leo, lay off Arthur. If it will make you any happier, Art, I'll tell you that if neither of you boys had spilled the beans in a day or two, I should have done so myself—carefully, of course. It was better for it to happen naturally. Now sit around, and wear a disgusted expression for the benefit of the guards if you like, and listen. This will take some time.

"In the first place, I suppose you've realized by now that we were captured simply for observation purposes; the pentapods hoped to learn about our weapons and science from our efforts to escape. They have, we must admit, been rather successful. Our activities have probably been evident to them from the first, but they waited until the communicator was completed before taking it, naturally. That habit of theirs struck me when the Vegans first described the way in which their plans were never interfered with until nearly mature.

"There was also the question of the surprising ease with which they were able to divine our feelings and intentions. It took me longer to discover the reason for that; but information supplied by the Vegans again provided the key.

"Their language is not verbal. None of us has yet heard them utter a vocal sound. We couldn't understand how they communicated, but to the Vegans it was so evident as to be unworthy of comment—their captors' language was of the same type as their own, visual rather than audible, a sign language in which the thousands of mobile spines with which their bodies are covered replaced the two antennae of a Vegan. It was so complex that the Vegans couldn't begin to learn it, but the method was obvious to them.

"That, to me, gave a nearly complete picture not only of their language, but of their thought; not only of the way they exchanged ideas, but of the very nature of those ideas.

"You have heard, no doubt, that thoughts may be considered as unuttered words. Of course, we do think in visual images, too, butlogical reasoning, in human minds at least, takes the form of an unuttered conversation with oneself. Think through the proof of a theorem in grade-school geometry, if you don't believe it. With creatures like the Vegans, an analogous process takes place; they think in terms of the visible symbols of their language. The language, as you know, is slow—takes much longer to get ideas across. Also, it takes longer for a Vegan to comprehend something, though they certainly can't be called stupid.

"The same thing should happen, and does happen, with our captors. They think and talk immeasurably faster than we do; and their thoughts are not in arbitrary word or picture symbols, but in attitudes. Watching them, I have come to the conclusion that they don't have a language as we understand it at all; the motions and patterns of the spines, which convey thought from one to another, are as unconscious and natural as expressions on our faces. The difference being that their 'faces' cover most of their bodies, and have a far greater capacity for expression. The result is that they have as easy a time learning to interpret expressions and bodily attitudes of other creatures, as we would have learning a simple verbal tongue. What the psychologists call attitude—or expression, to us—is the key to their whole mental activity. Until we understood that, we had no chance of using their own methods to defeat them, or even of understanding the methods.

"When Albee and the others made that break, you noticed that the pentapods wasted no time in pursuing a man who was even slightly out of reach; they were able to reason with extreme rapidity even in a situation like that, and realized that they couldn't catch him. A man would have tried, at least.

"Like everything else, this high-speed communication has its disadvantages. These creatures could never have invented the telephone, any more than the Vegans could; and they'd have had the same difficulty

with gadgets such as the telegraph. I don't know anything about their written language, but it must be ideographic and contain, unless I underestimate their capacity for bringing order out of chaos, a perfectly appalling number of symbols. Who could make up a dot-and-dash code for that? The Orientals of Earth had the same trouble. That would interfere with the 'evolution' of communication devices.

"Their long-distance communication, therefore, must be purely visual transmission. We have seen the television screens in their office downstairs—ten feet square, enough to picture any of the creatures full length. I'm sure that they can't broadcast their vision for two reasons: the Vegans say the ship always returns unexpectedly, and preparations are never made a few hours in advance of its arrival—as they would be if they could broadcast news of their approach. Also, there is no sign anywhere on this building of a beam-type second-order projector, or even the loop of a general field broadcaster such as Art was making. The images are transmitted by wire, and only inside this building. That was the reason, Art, that I insisted on your making a visual transmitter. They would have no desire to copy a telephone unit. They have it now; they'll have a full-size visual before that ship leaves; and their communications room is right below here, and should contain emergency accumulators in case the regular power goes.

"When the ship leaves, we wait a day. Then we collect the kitchen refuse, which Denham is accumulating, and pile it into the elevator to take outside—Leo, get that happy expression off your face—making the load big enough so that none of the guards can ride with us, though they don't usually these days anyway. Just before we go, the stove will break down, and Denham will come kicking about it. Arthur will go back, tinker with the stove, remove the geletane tank now clamped to it and replace it with another, and toss the 'used' tank in with the rest of the waste. The elevator will descend one floor, and we will emerge with the tank open. We willrun toward the office, which is just down the hall, in order to avert the effects of the geletane by activity; we will hold handkerchiefs over our faces to let the guards know we have gas, and hold their breaths. Two of us will enter the communication office, while the third will remain outside to destroy the door control. He can spend the rest of his time welding the door shut, until that welder gives out.

"The guards and operators inside should be under the influence of the gas by then, and will be thrown out before the welding starts. The two of us who are inside will keep exercising until the ventilators clear the air in the room; then we can use the vision transmitter to our heart's content, until the starfish can bring up heavy tools and burn through the door. There are a dozen Union bases within five hundred parsecs, even I know; and five minutes should be ample to contact one of them and give our situation.

"Art, did you really think I hoped to get anywhere with that pint-sized thing you built? The pentapods have us here so that we can build equipment for them; I decided that turn about was fair play. I only hope those infernally quick minds of theirs don't grasp the fact that two can play at one game. In case they should, I think we had better start working with Magill on whatever plan he has evolved; that will keep us occupied, reduce the chance of our betraying our secret, and may prove a valuable second string to the bow if our plan falls through. Let's have breakfast."

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Little had spokenlightly of "working in" with Magill on whatever plan of escape that worthy might have evolved; at breakfast he discovered that no less than four lines of attack were being developed simultaneously. The quartermaster was hoping that one of them would go undiscovered long enough to reach a climax. He had not divided the men into separate groups for each job; the idea was to confuse

the guards by having everybody work on all the plans at once. Confusion had certainly resulted, though none of the pentapods showed the symptoms. Little, first making sure that his own private plan would not be affected by any of the others, plunged joyfully into the conflicting tasks of (1) finding and using one or more of the aircraft which Magill was positive were stored beneath the roof; (2) getting an armed party of human beings into the interstellar flier of the pentapods; (3) carrying out the original Vegan plan of flooding the building with ultraviolet light without at the same time forcing out the men; and (4) locating an arsenal of the pentapods and simply clearing a section of the building by brute force. Magill intended to use whichever of these plans first attained practicability.

Four days were spent in this fashion. Work at least prevented them from being as boring as the preceding three, though little or no progress was made. On the morning of the fifth day, however, just after the morning meal, an event occurred which opened a fifth line of procedure, and almost caused Magill to abandon the others.

One of the men had gone out onto the roof; and the others were attracted by his cry. Little, following the others to the edge of the roof, looked over; and was rewarded with a clear view of nothing at all. The line of pentapods which had been loading supplies into the vast cruiser was not to be seen, and the vessel's ports were closed. The men watched silently and expectantly, reasonably sure of what was to happen.

Perhaps ten minutes passed without a word being spoken; then, without sound or ceremony, the tremendous cylinder of metal drifted lightly upward. The men followed it for a short distance with their eyes; they might have watched longer, if their attention had not been distracted by an object revealed by the cruiser's departure.

Just beyond the depression in the soil left by the great ship there appeared a second, much smaller, silvery metal torpedo; and a howl of surprise burst from almost every human throat on the rooftop. It was theGomeisa, her ports open, apparently unharmed, and—apparently deserted.

For several seconds after that involuntary expression of astonishment there was dead silence; then Magill spoke.

"This puts a new light on the situation. Don't do anything rash until we decide just how this affects our position; our plans will certainly need modification. I'll be in the market for ideas all morning; we'll have a general discussion meeting after dinner," He turned away from the edge and walked back toward the doorway.

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Denham had longsince been coached in his part; he played it without a hitch. The load of refuse and the tank of geletane were tossed into the elevator; the three men followed. No guards entered; since the departure of their ship they had concentrated on guarding the lower doors rather than preventing the prisoners from wandering about the fort. Little slid the door of the cage closed and touched the button next to the top, and Arthur took the welder from his pocket.

Slow as it was, the car took but a few seconds to reach the next level. It stopped; Little looked at his companions and slid open the door, at the same instant opening the valve of his gas tank. The three dashed into the corridor and toward the office, handkerchiefs pressed over their mouths and noses.

Two pentapods stood at the open door of the communication room. They swept instantly toward the approaching men, but must have conversed with others inside the room even in that time, for three more emerged after them.

Fast as the men were running, the gas diffused ahead of them; and the rearmost guards, who were moving more slowly than the others, were paradoxically the first to go down under the invisible attack. The others heard them fall, deduced the cause, presumably held their breath—and dropped as though shot. The men hurtled into the room, Little still leading, and found it empty. Evidently the communication officers had joined the guards and, confident of their ability to overcome three human beings, had not even sounded an alarm,

Leo Dennis leaped toward a mass of equipment that was all too plainly of recent installation; Little reversed his motion, snatched the welder from Arthur's hand, and darted back through the door.

"I'll look after this end," he said, "and saturate the air in the corridor while I'm at it. I'm more used to gas and can probably avoid its effects longer than you, Art." He slid the metal portal shut with a clang, tossed the still-open gas cylinder across the hall, and set to work with the welder. He jumped up and down, kicking, dancing, and waving his free arm as he worked; but the hand holding the torch remained steady.

Reluctantly, the metal of door and frame fused and flowed under the heat. The tiny lever that had actuated the opening mechanism dripped away. Slowly a glowing line of red marked the edge of the door and extended around it, a line that did not cease its slow growth as a dozen guards raced around a corner and collapsed as one the moment they paused to take in the situation. One, at least, must have been far enough behind to signal to others; seconds later, another group, clad in transparent, baggy air suits, sped into sight. At almost the same instant the little torch expired.

Little straightened, dropping the instrument, and saw the approaching guards. He turned to run toward the elevator, and saw another group rapidly approaching from that direction. Knowing the futility of the attempt, he tried to dodge past them; one swerved, reached, and an instant later he was pinned motionless as he had been once before in the first break for freedom. But he was still in the region of geletane-impregnated air.

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Dr. Littleopened his eyes with that peculiar feeling of having done the same thing before. This time memory returned almost instantly; he struggled to his feet, helped by the men clustered around him. He was on the roof of the fort, where a stiff breeze had cleared the last of the gas from his lungs and cell walls. No guards were in evidence.

"How did it go?" he asked, seeing the grinning features of the Dennis brothers beside him. "Did you get through?"

"We did. It took them nearly an hour to get heavy tools and cut in—after all we had control of their local 'telephone' central. They must have called their own ship back at once; it came in ten minutes ago, and they're rushing stuff aboard. I think they're going to abandon this place before help arrives for us. The Ardomese I talked to promised a squadron in fifteen hours.

"I wish that starfish ship had been farther away—we might have been able to take some prisoners of our own. But I'm afraid they'll have time to clear out."

"You're not annoyed, are you?" asked Little. "After all, they didn't hurt you fellows when they found you in the communication room. I think they're rather good sports, myself. After all, they've been risking all along the chance that we might do just what we did; they haven't hurt anyone; and theGomeisa is not seriously damaged."

"Nevertheless, they committed an act of war against the Union," cut in Magill, "and they have stolen a lot of valuable information. TheGomeisacarried stuff that could make them dangerous enemies."

"They have had plenty of time to duplicate that armament, and unquestionably have done so," returned Little, "but they seem to have no intention of staying and using it on our ships. I think their curiosity was purely academic; perhaps this was all a game to them. In any case, I can't make myself feel anger toward them. I'm curious, myself, and personally I rather like the creatures. You can make yourself do the same, Keys; the whole thing is only a question of attitude." The doctor traded knowing winks with the Dennis brothers.