In V-formation over ten thousand miles of space the fleet drifted like silver ghosts behind the flagship Tetracil(-*-). Much, at least, was saved, Geoff Walney thought as he watched the tiny flecks of light on the screen.

“ We have reached the calculated position, sir,” the navigator’s communicator said.

Geoff was silent, reminding himself that the Tetracil was no longer his to command while Flight Marshal Rosyth was aboard — which might well be indefinitely. At his back Rosyth was issuing crisp instructions. Geoff knew the ship was slowing to relative motionless, and that the ships of the fleet would settle into a saucer-shaped orbit round them. Three light years away a bright nova marked the back- drop of stars. Alpha Cleopa, once centre of the Seventh Galactic Empire.

“ Too bad when a people have no planet, Captain Walney,” Rosyth said quietly.

Geoff turned from the screen upon which the vessels were beginning to gain cartwheel formation. “ An outpost must expect difficulty.”

Rosyth’s thick brows lifted towards his iron grey hair. “ We have more than difficulty. We have danger. A people with no planet is like a sailor with no shore.”

His brows came down and his face grew immobile as chiselled rock. Geoff admired his coolness while opposed by such disaster. The simile was apt. A sailor with no shore could not live: nor could the fleet with its thousands of men, women and children. There was a limit to food and to human endurance. Man needed space to move, fresh air to breathe, a sun in sky above his head — all the primitive essentials that had been the automatic right of his ancestors.

“You believe Alpha Cleopa was destroyed, as a habitable system, sir ?” Geoff asked.

“ I am sure of it.” Rosyth watched the screen over the shoulders of two seated subordinates. “ Conditions were not those from which a nova would arise normally. That was checked before we settled the system’s planet. If we are now adrift with no shore it is because that shore has been made impossible for us.”

Geoff nodded, mind going back over the last weeks. The planet of Alpha Cleopa had resembled an Earth of which he had heard but never seen, thousands of light years away across the vastness between the stars. Into the peace had come sudden danger.

The evacuation of the planet had been hasty and in some ways incomplete. The Flight Marshal's ship, immobile for repair, had been just one of the things left behind, and was by now undoubtedly a cinder with the rest. The Seventh Empire was now an empire in name only — a people, a drifting mass of ships. Until then, each empire had been a stepping- stone towards more expansion. Planets had been consolidated for a decade, a generation, then mankind had pressed on again and again. Easy success had brought expectation of endless expansion.

An hour later he went to his cabin, tiny and amidships. The Tetracil had settled into her position in the centre of the disk of vessels, each rotating to obtain a centrifugal substitute for gravity. He shaved, scanning himself critically. The Flight Marshal was intolerant of laxity. He would pass, he thought, brushing his sandy hair. Rosyth had snapped, " Untidiness suggests personal inefficiency, Captain ! Inefficiency may cause disaster!" No one invited such criticism twice.

He opened the door almost under a knuckle raised to knock. The young woman saluted, and he recognised her as from the astrogation section. At near twenty-four she had quickly expressive features and a height and build he personally liked. He paused, wiry hand on the door.

" You wanted me ?"

She nodded so that her dark, curly hair bobbed. He saw she carried a large folder, sought in his memory for her name, and found it.

" Very well." He let her pass and closed the door. " You realise I'm not commander here, Miss Austin."

Unity Austin smiled and he thought it conveyed much, particularly that junior astrogation personnel did not risk possible criticism by an officer sharp tongued as Rosyth.

" You can at least give your opinion, sir." The smile had gone. She opened the folder. " When leaving Cleopa we had automatic cameras gathering information for eventual study. Many other ships did also. It was a first close experience of a nova, and all knowledge eventually proves useful — "

She hesitated and he wondered to what she was leading. Certainly the astrogation section should have studied Alpha Cleopa during those fateful days. He nodded, sitting on the corner of the tiny desk.

Her eyes fell to the open folder. " No one bothered with these shots until a few hours ago. We've been too busy integrating courses."

He looked at the prints she shuffled out across the blue steel. Alpha Cleopa, normal, with swelling solar protuberances, and flashing into a dreadful, brilliant nova. From amid the sequences she was selecting some. He took one, studied it, and the breath hissed from between his lips.

Her gaze flicked up. “ You see it ?”

“ I see it.” The steel was cold under his free hand. Dim, yet unmistakable on the graph-lined paper was a long, thin needle, glinting on its trajectory into the fierce, burning mists surrounding the star that had been their sun. Equally astonishing was the object’s size, judging from the cross lines.

Her finger came upon the print. “ And that ?”

Lost in the distance at the limit of the camera’s reach was something dark and vaguely like a bell. Too remote for detail, its symmetry showed it to be no mere cloud of intergalactic gas thrown into relief by some trick of reflected light. Geoffrey would have staked his rank on it being no natural phenomenon.

She put other prints in his hands. The dark object drifted away into remote obscurity. The projectile, if projectile it was, sank into Alpha Cleopa’s gleaming surface. The eruption into a nova was distinctly pear-shaped in its early stage, with maximum increase in radiation coincident with the point of entry of the glinting object.

“ Someone — something, blew up our sun to clear us out !” Geoff felt the shock unpleasant.

“ You could put it that way, Captain.”

“ And you’d like me to tell our commander ?”

She inclined her head, placing the most telling pictures in one pocket of the file. “ Now we’re all in safe orbit the others will be catching up on routine work. There’ll be other pictures. Some may be better.” She left him. He thought of the years during which their base on the system’s only planet had been consolidated. It would appear that during that time there had been — other preparations. And of a singularly effective nature.

Rosyth’s thick brows rose at first sight of the prints, and rested low over his light blue eyes when he had considered them all. He moved jerkily round the control room, and halted with thumbs in his breeches belt.

“ They are undoubtedly artifacts, Captain !”

“ I thought you’d agree.”

“ Which means man has at last met another intelligent race.” Without doubt, Geoff thought. Highly intelligent, and also highly dangerous and determined, at first showing.

Rosyth relaxed from his characteristic stance. “ I’ll want to see this girl who spotted it. Other ships may have better pictures. I’ll need those too, and any information deduced.”

Geoff nodded. “ I understand from Miss Austin that astrogation may gain a little data from spectra tests.”

Dimensions of the objects might also be calculated once the ship’s computer had enough to work on. Those stages of the investigation would be in other hands, but he hesitated. Rosyth’s gaze came keenly on his face.

“ There is something else, Captain Walney ?”

“ Yes, sir. Permission to leave the ship.”

“ Temporarily ? Of course.” The Flight Marshal’s eyes were quizzical. “ I gather it’s not — official business.”

“ No, sir, but being we’re not on flight schedule — ”

“ Quite.” The word was both permission and dismissal. “ Keep in contact so that you can be recalled.”

Geoff saluted, withdrawing. In a way Rosyth’s presence was fortunate, he thought as he prepared to leave. It freed him from continuous duty.

The ferry tug slid into motion on murmuring jets. The Tetracil drifted away, huge, man-made and self-contained world. Or was she, Geoff wondered. Limitations seemed to spring into existence on every hand once such a thought arose. Each ship, with all her personnel, might live a mere decade, at the most, without touchdown. Compared with the millennia of the evolution and civilisation of man, how short was that period. A mere procrastination of the end, or foretaste of defeat.

Alpha Cleopa was a bright orb dominating the heavens. At three light years she should have appeared as nothing but a significant star. Near, Geoff was conscious that the multitude of ships of the fleet lay around him, dark but integrated by a matrix of radar. The knowledge brought comfort, dispelling some of the helpless feeling of personal insignificance.

He wondered if all these ships would have to return to the sixth empire outpost, receding through second-order space like whipped dogs. If so, it would be man's first retreat. Worse, it would invite speculation and advance on the part of the beings who had made the Alpha Cleopa system untenable. It was like a retreat move in a giant game of chess. Geoff started forward to catch his first glimpse of the Greenbatt. A retreat move. Barry Bell's keen grey eyes would have met his over the board. " Retreat wastes time, Geoff. The loss is twofold — that of the advance and the withdrawal. During that time an opponent can develop and consolidate — "

Geoff hoped that Barry would be free to see him.

A dim glimmer of reflected starlight dawned ahead, just visible through the ferry's nacelle. Geoff reported to the Tetracil's operator and drifted at falling speed towards the Greenbatt' s lock, the ferry's forward tubes mirrored in her steel. He looked again at the stars around. Never before had man considered withdrawing from any of his stepping stones in space.

Barry toyed with a silver knight that had accompanied him through three galaxies and a hundred light years of space. " So you're still interested in Hyperants," he said.

" I've never ceased to be interested !" Geoff watched his friend's lean features, the play of feeling in his eyes, and the slight twitch of tension at his lips. " If there is such a thing !"

" There could be — in theory. And theory most generally leads to practice." Sensitive fingers replaced the silver knight. " Your interest isn't idle curiosity any more."

" No."

Barry Bell smiled, looking less than his thirty-five years. " So I guessed. Captain's don't leave their ships for nothing. And when permission of absence has to be asked from a man strict as Rosyth one can be sure the motive is strong."

" You guess right, as usual," Geoff admitted. " You know Alpha Cleopa probably didn't grow too hot for us by chance ?"

" I guessed it. The probability of an apparently stable sun going that way during a man's lifetime is astronomically small, judging by data of habitable systems."

" As small, perhaps, as the existence of a Hyperant ?" . .

Bell spread his hands expressively. " That type of comparison can't be made. On the average, a nova arises in a certain fractional percentage of cases. A Hyperant, on the

other hand, is a probable end result of a series. Looked at that way, you'll see the building of a space fleet was on the cards from the moment one of our ancestors found he could walk on his hind legs and carry a stone."

Geoff uncrossed his legs. Somewhere in the distance a bell had rung. " With no planet here we must go back to base six," he said flatly. " We dare not risk going on. The step from base six to a mythical base eight is too large. Rosyth would never permit it, and I agree."

The bell rang again, and footsteps sounded outside. Barry rose quickly and opened the door. A junior officer stood there, looking in.

" Captain Walney from the Tetracil here ?"

" You're seeing him."

" Then there's a message he must report back at once." The man saluted.

Geoff gave an exclamation of annoyance. " Why ?"

" The message didn't say, sir."

" Rosyth paging you before your chair is cold," Barry said as the man went. A low, unmelodious hooting began and his brows shot up. " Emergency! You'd better hurry."

Geoff took the ferry craft back rapidly. The only general alarm he could imagine was immediate standing-by of all personnel at flight stations. As no likely system existed near, that probably meant another period of recession through second-order space, or at least out of the continuum in which they had remained to watch developments in the condition of remote Alpha Cleopa.

Rosyth's apology was brief, his welcome to the point. " Long distance radar has located a ship not of our fleet, Captain. We're waiting developments . "

The large screen showed a remote fleck that burned steadily against the glowing and fading at identification frequency of the other vessels.

Geoffrey noted its bearing was perhaps forty degrees off that of Alpha Cleopa. The interval on the screen of the distance-checking equipment showed it had ceased to approach. Thus it hung while the hours passed. Rosyth went off duty, and returned. A message came from astrogation, listing the calculated dimensions of the objects on the prints. Each was roughly fourfold the size of the Tetracil , largest ship of the fleet. Geoff felt increased unease at the knowledge.

When he went off duty after replacing Rosyth, the situation was unchanged. The cabin door next his was ajar. Wondering if something was amiss, he looked in. It was empty, tumbled bunk telling of an occupant not long gone. He began to draw shut the door, but hesitated, hand on the catch. Upon the steel locker fitting the wall near the bunk stood a globe in a triangular frame, unlike anything he had ever seen before.

He frowned, stepping in, curious yet with a sense of trespass. The globe was large as a clenched fist, silvery in colour, and its surrounding triangles of cherry red. The whole seemed devoid of useful purpose.

Steps came in the narrow corridor and he returned to the door. He recognised the newcomer as a junior officer from the propulsion section, fresh to the ship when she left Cleopa's planet so urgently, and presumably working duty hours which never coincided with his own. Perhaps twenty-five, he looked a mere youth. His slimness was almost extreme, his hair a light gold that might have been albino white.

" Nothing wrong, Lieutenant ?"

Lieutenant Pakes shook his head. " No, sir." His gaze shot past Geoffrey, then returned. " Just slipped down to medical."

" Nothing serious ?"

" No, sir." The other edged past him, halting with his back to the bunk. " Been having trouble sleeping, sir."

Geoffrey nodded, withdrawing. Pakes was not the only one who found present circumstances disturbing. He thought again of the globe in its odd frame, and put his head round the door.

" Tell me—"

He halted. The object had gone. The locker top was clear, its door closed.

" Yes, sir ?"

Geoffrey felt beaten. " Report to go off duty if you need."

" Yes, sir."

Outside, Geoffrey frowned, entering his cabin. If Pakes wanted to conceal the globe, why not ? Yet there had been no sound of the door. No time, in fact, for it to be opened and closed. After listening to the silence of the waiting ship for long moments, he sat on the bunk. His own nerves were on edge, Geoffrey decided. If Barry carted

chessmen about the galaxies why shouldn't Pakes have his own particular charm, oddity or memento ?

With the light dimmed Geoffrey settled down to sleep. His mind ran on Barry's words. Barry appeared to suggest a Hyperant would arise as inevitably as had a designer of space ships.

He awoke after an hour with a strange feeling of increased mental sensitivity. On the borderline of complete awareness a traffic of information was in some unknown manner taking place, filtering between other minds and observed by himself. One mind was that of a man; the other, something different from man. His eyes flicked open and his breathing momentarily halted.

A silvery globe enclosed in a red triangle stood on his locker, scant inches from his face. He snatched back his head and twisted on to his back, elbows digging into the bunk to rise. The oddity from Pakes's room ! He screwed shut his eyes, assuring himself he no longer slept. There had been no sound of entry; moreover, his door was fastened on the inside, as always. He swung his feet to the floor and opened his eyes. The object was gone.

He looked on the floor foolishly, searching though he knew he would not find. The globe was not in his cabin. Gone, too, was the awareness of mind contacting with mind.

He dressed quickly. The object had previously been in Pakes's cabin, and the logical move was to seek it there. Yet his assumption that it belonged to the thin lieutenant was now open to doubt, he realised. Pakes might be as ignorant of it as himself.

The cabin had no occupant, nor was there sign of the oddity once occupying his locker. Its top was covered with open books. One, inverted to keep the page, was titled Whole Mind of Man. Its author's name conveyed nothing to Geoffrey and he read the first page at the opened spot. " Matter and mind are relative. Matter cannot be proved to exist without the simultaneous existence of mind to apprehend it. If proof of the existence of matter depends on the existence of mind, then such proof exists, or does not exist, according to whether mind exists to apprehend it. In turn, it can thus only be deduced that matter exists, or does not exist, in accordance with the presence of mind to apprehend it, or the absence of mind to observe its existence. That matter still exists when no mind is present to observe it cannot be deduced."

Geoffrey returned the book. It was more in Barry's line, he thought. The others appeared to be much the same in subject, and he contemplated searching for Pakes. The search might not be easy — the Tetracil was large, and a junior officer who could not sleep might legitimately wander down any of her hundred corridors and galleries.

Deciding rest impossible, he sought the control room. Rosyth was in a bitter humour, obviously irritated by the shadow sitting watch upon him. He scowled at the screen.

“ It’s been a one-sided affair, Captain Walney !” He jerked a finger at the motionless blip. “ Their preparations show they’ve been aware of our presence in the system for years. Our awareness of their presence is a matter of hours only.”

He grunted, the annoyance at being caught off guard twitching his lips. Geoffrey saw well over twelve hours had passed since his recall from the Greenbatt.

“ We might try a continuum shift, sir.”

“ I’m thinking of just that. It means we shall not be able to observe further development of the nova, which astrogation wants. We’re three light years out from her, remember.”

He paced a few jerky steps, thumbs in belt, his light blue eyes flicking round the control room, but seldom long off the screen. He halted with equal abruptness.

“ I’ve a feeling we don’t know it all, Captain ! If we had suspected the presence of an alien race we should have tried to observe them, then contact them. If we felt uneasy, doubtful, the contact might be secret.”

Geoff nodded, following. “ You mean they may have secret contact with us — a spy — ”

He realised the matter was growing more complex. It had begun as a mere hasty retreat from unendurable natural conditions, but fast increased to something much more. Rosyth might well be uneasy: there was cause in plenty. Geoffrey wondered if Pakes had a role in the affair, with his reticent manner and interest in odd sciences.

Rosyth studied the screen and the clock. He looked fully his years, and conscious of his responsibility.

“ Order general preparation for a space shift,” he said heavily.

Geoffrey watched Rosyth’s officers and admitted they were as competent as his own. The quick beep-beep of the warning sounded through the ship, followed by check and counter-check from astrogation and radio. As each man gave his all clear tension grew, and Geoffrey felt the usual sickening lurch, a tearing of space and time itself, as the fleet shifted. The siren ceased its note, the strained features of the men relaxed, and all eyes returned to the screen. The fleet was un- changed, its identification echoes winking. The brightness of Alpha Cleopa was gone, would remain unseen for years, because the nova was light years away in the continuum they now occupied with her. But the hovering alien blip was still there, its position unchanged.

“ Damnation take us !” Rosyth said.

Geoff studied the watching shadow, and some primitive fear of the unknown momentarily awoke age-old reflexes in his nerves. An alien ship that could simultaneously occupy different space-continuui ? Or an immediate and simultaneous movement out of one space order to another, to keep observation on the fleet ? The former seemed impossible, the latter extremely improbable. Unless there was a source of contact !

He spun on a heel. “ I want to find a junior officer named Pakes !”

The steel panel slid smoothly across at his back and he paused momentarily. If Pakes was the point of contact, he would have known a space shift was imminent, and might have conveyed the information. If so, the lieutenant had some explaining to do !

Within the hour Geoffrey felt a remarkable conviction growing. Pakes was not on the Tetracil. Impossible, yet being proved as the minutes passed. Medical had not seen him again, nor was he in any of the sections where a junior officer might normally reach or illegitimately penetrate. Some parts of the ship could only be reached by connecting doors always fastened or under guard. He had not passed. A general call for him over the ship’s communication system failed, as did a quick but systematic search of the crew’s cabins. Little by little Geoffrey was forced to admit that Pakes could not be found because of the fact he was not aboard.

He halted the search, dismissed those who had helped, and briefly reported to Rosyth. Rosyth sounded irascible. “ Has the ferry been out or the main port opened since you saw him ?”

“ No, sir.”

“ Then obviously he must be on the ship !”

Geoffrey felt the truth less simple. “ He cannot be found,” he pointed out guardedly.

“ Then search again !” The tone suggested the whole affair was a mere unimportant irritation. “ You don’t need me to keep track of your men, do you, Captain ?”

Geoff let it pass. “ I will have you informed if he is found, sir.”

He flicked off the corridor communicator, frowning, and encountered clear eyes that looked mildly amused. The amusement seemed directed against him, but he felt no annoyance, but rather admiration for the direct gaze, smooth features and dark curly hair.

“ The Flight Marshal is an excellent commander, even if a trifle crisp,” he said wryly.

“ So I heard.”

He wondered what brought Unity Austin out towards the lock. Astrogation occupied a sector for’ad, where observation was best and interference from the ship’s drive least.

“ I’m crossing to the Greenbatt.” She seemed to guess his thought. “ They have some photocopies we want. They’ve radioed them, but we lose detail that way. We have permission.”

Geoff’s mind flicked over possibilities. This was a chance to see Barry Bell again — perhaps to continue from where the general alert had interrupted them. He felt he wanted Barry now, preferably on the Tetracil.

He pressed the communicator button again. “ Captain Walney to Marshal Rosyth.”

A moment’s delay, then the clipped word: “ Yes ?”

“ I wish to cross to the Greenbatt, sir.”

“ Go if you consider the situation justifies it, Captain.”

Good, Geoffrey thought. Rosyth was crisp, but gave his sub- ordinates the advantage of trusting to their own judgement, knowing that freedom would not be abused.

Alpha Cleopa now appeared merely as a near star amid other stars, three light years distant, and thus seen as she had been those three years earlier. Geoff thought of the planet that was to have been the foundation of the Seventh Galactic Empire, and of the building, planning, cropping and tillage. Its virtual destruction had caused great material loss, but more bitter still was defeated expectation. Broken hope lay amid the ruined, smoking wilderness.

“ What we need is a planet within fair distance,” Unity said, gaze turned up through the ferry nacelle.

“ There’s no sun of suitable type in this sector of space.”

“ I know. Seems the Sixth Empire will have wanderers returning with a tale of defeat.”

The ferry murmured on its course, an insignificant mote between slightly larger motes. For thousands of generations man’s eyes had turned heavenwards, seeing worlds beyond worlds. For hundreds of generations his mind had looked forward to empires

beyond empires. Spread and grow, build and settle. Then on again. Always on. Geoffrey breathed deeply. That was the essence of man. Always onward, always new shores to reach, new knowledge to gain. Each galaxy had been a stepping stone in his never-ending fording of the stars — until now.

The autopilot silenced the jets, and a gentle thrust began as their speed fell. Ahead loomed the Greenbatt, a dark mass obscuring the remote pin-pricks of light.

“ No Sol-type star, thus no planet, thus no empire,” Geoffrey said as they drifted into contact with the ship’s lock. “ An inevitable series.”

She left him and he found that Barry Bell was probably in his own cabin. A ship-bound life could be boring for a man in Bell’s position, he thought. No duties required attention, filling the hours. Laboratory, equipment, the very subjects on which a biochemist worked, all had been abandoned to the pyre reaching from Cleopa.

Bell was on his knees amid the greatest heap of books and papers Geoffrey had seen. His grey eyes showed surprise as they rose to the door. He wiped back the straggling hair from his brow and sat on his heels amid the debris.

“ What brings you, Geoff ?”

“ Our astro section wanted something. I took the opportunity.” Bell commenced placing books in piles. “ An opportunity is one thing — the reason that prompts a person to take it, another.”

Geoffrey sat on the corner of the bunk. “ As you say. The reason? The disappearance of a lieutenant. The appearance and disappearance of something I can’t name.”

“ As awkward as that ?” The other dumped books in his locker. “ Disappearances seem catching.” He gestured. “ Books I have in plenty — but not the one I’m looking for — ”

Geoffrey felt a tiny creeping motion somewhere in his skull. He licked his lips and found them dry. “ Not a book you’re looking for— ?”

“ No,” Bell stated. “ The Whole Mind of Man. Something of a rarity, though that’s not why I want it now.”

The unease became stronger, almost a recoil of the mind from a belief it found untenable. Geoffrey felt his nerves twitch, and watched Barry stack away more books, momentarily stunned into silence.

“ W-When did you have it last ?” The words came with difficulty. Bell rose. “Not so long ago. Shortly after you left last time.” Geoffrey repeated the words. After he had

left. Since then, no ferry craft had been to the Tetracil. Yet the book had been in Pakes's cabin !

He saw that time flew, that explanations would be long. "Nothing ties you here, Barry ?"

" No." The grey eyes settled on him.

" Then I'd like you back on the Tetracil !" He knew there would be no argument, no preamble. Bell did not waste time or words.

" You think there's a good reason why I should come ?"

" I do !"

" When does the ferry go ?" Bell was already putting oddments in a noose-mouthed holdall.

" Now. We've orders not to wait."

Barry led the way down the corridor, the bag over a shoulder. Geoffrey decided Unity Austin might already be waiting, and risked censure if the ferry was slow returning. The corridor ended at a right-angle passage, and some instinct prompted him to pause and look back.

At the other end of the corridor stood a thin, bird-boned man of perhaps twenty-five, watching them, hair white under the corner illuminant. Geoffrey's limbs froze.

" Pakes ! "

If the other heard he made no sign. Instead, he stepped back quickly to the corner and was lost to view. Geoffrey flung himself into motion. His steps rang the fifteen paces of the corridor, and he gained the corner. Pakes was not in sight, but there were two open doors. The first led into a storeroom with no other exit, devoid of hiding place. As he ran through the second he almost collided with two men approaching in fitters' uniform. He stopped.

" Seen a man with light hair come this way ?"

" No, sir." The first looked at him curiously. " No one came this way."

The second shook his head. " We just come down the gallery. Nobody passed us."

They stared at him and Geoffrey retreated through the door. The gallery beyond was

long, and had no other corridors joining it. By no feat of speed could Pakes have escaped that way.

As he returned to the lock he wondered if he had been mistaken. The glimpse had been so brief. Yet Pakes was of a singular and distinctive leanness, and the albino white of his hair surely rare. All told, it could have been no other.

Unity Austin had two large, thick folders under one arm. “ I’ve been waiting.

There was curiosity in her voice. Noticing it, Geoffrey decided explanations that in reality clarified nothing had better wait.

“ Sorry.”

The ferry left the dim outline ship behind and Geoffrey stared unseeingly through the plastic dome. Here indeed was something that as yet defied explanation. He only spoke once.

“ If a Hyperant existed, what limitations would he have ?”

Barry looked at him quickly. “ Limitations ? None, I think.”

The tiny craft began to slow for contact. So far, one man had shown himself not bound by the limitations of ordinary matter, as imposed on humanity in general — Pakes. What one could accomplish, so could others, Geoffrey thought. The problem was knowing how. He wondered what Barry would do if they found that the hypothetical had indeed become fact. It would be a telling discovery, and its application as important as anything in history.

Contact with the ship came and he rose from his seat. He felt that the next few hours might prove a great deal.

After reporting to Rosyth, Geoffrey went to his cabin. Pakes was something of a mystery, but apparently did not wish to draw attention to his own activities. His rapid escape from observation on the Greenbatt proved that. Therefore Pakes might try to keep up the impression that all was normal. Geoffrey decided as he walked quickly along the corridor. If so, Pakes would appear aboard the Tetracil by the time his duty period should begin.

Rosyth had had little to say, but had separated one ship from the fleet, detailing her to search. “ We need a planet, Captain Walney,” he had said. “ The Myridon is the ship I think most suitable.”

Geoffrey remembered her, and her skipper, Captain Abelard. The Myridon was

relatively small, but the pride of Abelard, who would venture anywhere man and steel could go. Personally, he doubted if Abelard would find any sanctuary for the fleet. There was no Sol-type sun, and hence no possibility of an inhabitable planet.

He entered his cabin silently and closed the door. Moving without sound, he put an ear to the wall adjoining Pakes's room. Except for a low background murmur of engines, conducted by the chilly metal, all was quiet. He wondered if Pakes were there, or whether sound would betray him if he were.

After a few minutes he went out, taking the opportunity of listening at the door. All was still silent, and it was locked. He sought out the ship's warrant officer, checked Pakes's duty periods, and returned to his cabin. If Pakes was not back within the hour he would be officially absent, and liable to discipline.

Back in his cabin, he considered arranging some means of observing what took place in the adjoining room. It might prove worth while, he thought. There was a ventilation louvre near the ceiling, and it would be duplicated in Pakes's cabin. All were common to an extensive duct system, but a little work during the other's absence might make overhearing or observation possible that way.

Conscious of passing time, he waited. For Pakes it was soon — or never. Almost on the thought came the sound of the door opening. Instantly Geoffrey was at his own door, and emerging nonchalantly.

Pakes had just left his cabin. He appeared even thinner than usual, pale cheeked and ill. If he saw the adjoining door open he made no sign. An exclamation came involuntarily from Geoffrey's lips. Behind Pakes came four men, all from the cabin. One, lean and tall, he recognised as a senior ship's engineer. The others he did not know. They did not look at him, but the last closed the door and all followed Pakes along the corridor.

Geoff watched them go, forming a mental record of every movement. Their faces had been but fleetingly glimpsed, but he would know any of them again, his mental image remaining unfading as a photograph. He did not follow, deciding that if the five thought themselves observed their activities would increase in secrecy.

Little investigation proved necessary to find their names. The lean engineer he had recognised. The other three were from Rosyth's abandoned ship. Walcheri, a short, stout stores officer, and two crew men, Erroll and Berno. He thanked the warrant officer, wondering what the four and Pakes had in common. ,

Rosyth had left his second officer on stand-by duty, and looked bleak as he emerged from the control room. Geoffrey saluted.

“ You’ve had no report from Captain Abelard, sir ?”

“ Nothing favourable. He points out the danger of going too far, so that we should lose contact with our sixth base. I personally doubt if the Myridon will find a useful system. Astro have studied our perimeter of the heavens pretty thoroughly. If we all return to base 6 that will be defeat — but if we lost contact with them, that would be disaster.”

True enough, Geoffrey thought. With suns beyond suns, and galaxies beyond galaxies, it was possible to go so far that all old terms of reference became unintelligible. If a continuum shift took a man too far he had no bearing upon which to home. To go so far that there was no return was virtual suicide.

Barry was setting his possessions into some kind of order. Geoffrey wished a spare cabin could have been found nearer his own. His back to the closed door, he told of the four he had seen. Barry Bell looked pensive; the expression in his grey eyes was curious.

“ Audley, Walcheri, Berno and Erroll,” he murmured.

Geoff caught the tone. “ You know them ?”

“ Know of them, rather,” Barry said. “ They are names I’ve encountered before — among a list of others.”

He searched quickly through the almost empty bag, took out a folder, and removed from it a single sheet bearing names written in his own hand. His finger ran down the list, halting momentarily at each of the four. Geoffrey’s gaze flicked back to the top of the sheet. There was a single word. Astonished, he repeated it.

“ Pagans ! ”

Bell smiled slightly, putting the sheet away. “ My personal evaluation ! Not very flattering, but rather apt. If you’re as keen on old history as I am, you’ll see the connection. It takes us right back to the first expansion of man from Earth. There were those who weren’t in agreement. They said that if man expanded he might touch something bigger than himself, which could be the first step towards the end of our race. Keep on Earth so as to keep Earth for man. That was their slogan. Millions supported them, some in ignorance, many in fright. The first stages of that first expansion took a generation. It was slow — from Mars out, then to Alpha Centauri when the space shift was devised. Time enough in plenty for feelings to grow, and a sect arose which called itself the Humanists, and said mankind was safest in his own little backwater.” He sat on the edge of his bunk. “ The sect was declared illegal. When the first expansion was accomplished and no terrible alien race came swooping back to Earth on our tails the scare died. There were insurrections, usually before each step out towards the stars.”

Geoffrey thought of the monstrous solar bomb hurtling into Alpha Cleopa at fantastic speed. He wondered if the safety inherent in no expansion was at last demonstrated — too late. His high-cheeked face grew thin.

“ And the Pagans, as you call them ?”

Bell pushed shut his locker door with a foot. “ The last of the old sect. Probably most of them don’t know it even existed. But they have the same ideas. They think that if we expand indefinitely we’ll meet something more clever than ourselves.”

“ And haven’t we ?” Geoffrey jerked.

“ Perhaps. Perhaps not. Surprise counts for a lot.” Barry Bell rose, stretching. “ They’re all underground now. I doubt if there are a hundred all told in the fleet, civilians included.”

A hundred determined men might accomplish much, Geoffrey thought. Especially when circumstances abruptly seemed to prove them right ! He saw his friend’s taut brown cheeks twitch. Bell appeared to be following other possibilities.

“ I’m wondering if Pakes is the first hyperant, Geoff,” he said.

Geoffrey’s mind flashed back to recent happenings, and the plan which had been formulating itself. “ I can have him confined on a charge of leave without absence.”

“ It can be faked ?”

“ Easily, with Rosyth’s permission.”

Ten minutes later they were striding towards the stern sector where Pakes was on duty, the ship’s chief N.C.O. at their heels. Pakes stood on a catwalk with a companion, looking down upon fuel-storage tanks in the gallery below. He started visibly at their arrival, pulled himself together with obvious difficulty, and saluted.

Geoffrey thought he looked ill. His lips twitched and his cheeks were pale, features telling rather of mental conflict than physical sickness. Geoffrey let his gaze bore into him without mercy.

“ You are to accompany us, Lieutenant.” He let the words sink in. “ Absence without leave remains a severe matter.”

Disbelief, consternation, crossed the thin face. “ I — I have not been absent, sir — ”

Geoffrey calculated the hour at which he could have sworn he had seen the other on the Greenbatt. “ You were absent at 1700 hours.”

The consternation became dismay. “ I was not listed for duty at that time, sir.”

“ But was required for it, nevertheless,” Geoffrey lied. “ You were wanted for special duty, but could not be found.”

At his gesture the N.C.O. stepped smartly forward. Pakes seemed about to argue or resist, but subsided into silence. Geoffrey’s lips opened from a thin, compressed line.

“You are under arrest and will be confined pending investigation, Lieutenant !”

Pakes’s face had resumed its wooden immobility. Once again it was clear he would give nothing away, His lips barely parted.

“ Yes, sir.”

“ Absence during a critical time such as the present is grave.”

“ Yes, sir.”

“ Marshal Rosyth himself takes a severe view of your action." Geoffrey tried to make the pressure mount, looking for some sign of emotion that might reveal Pakes’s thoughts. There was none. Pakes’s lips moved as if a dummy spoke.

“ Yes, sir.”

Geoffrey knew he was beaten — for the moment. “ Take him away, sergeant !”

The N.C.O.’s iron fingers closed round Pakes’s thin arm. Barry Bell moved from the corridor wall, momentarily facing the Lieutenant.

“ Witch hunts last, Pakes.”

Geoffrey saw that the thrust had struck where his own efforts had failed. The mask was gone momentarily, leaving naked, unconcealed terror. Then it returned, wooden, with expressionless eyes. With the sergeant-major at his side, Pakes marched from sight. Geoffrey expelled his breath. That brief moment had proved there was more in it than a mere supposed breach of discipline !

“ I guarantee Pakes knows as much about the Pagans as any man !” Bell stated as they left the catwalk. “ If ever I saw fright it was then.”

“ We’ll leave him a little while — to think !” Geoffrey hoped that introspection would soften resistance. If not, Pakes must be encouraged to talk, even if the encouragement were a trifle rough. Time to think, in solitude in a steel cell, should help.

As they reached the first junction the beep-beep of the warning system echoed along the passages. Geoffrey broke into a quick trot. A general alarm meant he should be in the control room.

Rosyth was already there, gaze bent on the screen in complete concentration. Only by a slight movement of a hand did he acknowledge Geoffrey’s presence, directing his attention at the radarscope view.

The dark mass of the alien ship hung in the same position, but rhythmic movements in the outline showed some activity had commenced. As seen by the radar, the movement was incomprehensible, a mere swelling and retraction of one flank of the perimeter of the distant ship. Almost a pulsation, it came and went without change of tempo.

“ Make anything of it, Captain ?” Rosyth did not look away.

Geoffrey watched the rise and fall of the bell-shaped outline. It could be a distortion of the radar reflections by some local equipment in the alien hull. “ Difficult to see, sir. Can we have more magnification ?”

The operator shook his head with a quick jerk. “ It’s at maximum, Captain.”

The pulsation continued, half lost beyond the sparking of intergalactic static. Shimmering waves of silvery haze crossed the screen, the remote ship wavering as if seen through heat.

“ The outer ships have triangulated bearings,” Rosyth stated, voice clipped. “ The figures give our enemy a likely distance of about thirty thousand miles.”

Beyond the limit at which the radarscope could give exact information, Geoffrey thought. The captain of the waiting ship — if captain it had — might almost have been aware of the limitation of their equipment.

“ I think something is — being separated, sir !” the operator murmured uneasily.

The pulsation looked greater. At times the protuberance was almost disconnected from the ship. Beyond the haze the flickering outline clarified momentarily, and Geoffrey saw a long, needle-shaped body detaching itself from its parent outline. In a flash it recalled the photographs taken by astrogation. The shock of recognition ran through him like a physical current.

“ A missile !”

Rosyth had seen it too, and was already talking quickly into the inter-ship radio.

“ All vessels prepare for continuum shift. If emergency arises and communications are broken, act under your own initiative. If dispersed, wait in Alpha Cleopa nova continuum if possible, for radio contact.”

Geoffrey wished the fleet were armed for war. But the ships were not. Mankind had not wanted to expand by conquest, but by occupying unwanted living space. He doubted if any weapons they might have possessed would have halted, turned or destroyed the projectile, if it resembled that which had swept into Alpha Cleopa. It was now distinctly separate, and approaching with astonishing velocity.

A communicator near the door shrilled, and Geoffrey jerked down its switch. “ Captain Walney, control room !”

“ This is Bell. Pakes has gone !”

“ Gone !” Astonishment momentarily thrust their greater danger from Geoffrey’s mind. “ He was to be locked in a cell — ”

“ And was !” Barry Bell rapped. “ There’s no way out, and the door was still locked !”

“ Thanks !”

Geoffrey jerked up the switch. Rosyth would not welcome interruptions of this nature at the present. His eyes flashed to the screen. The projectile was now distinctly visible, needle-shaped, moving straight as an arrow towards the heart of the fleet. Remembering Cleopa, he doubted if their dispersal was sufficient to save even half the fleet. Radar was now giving direct distance readings with monotonous regularity. Twenty-thousand miles, fifteen . . .

“ All ships prepare for space shift !” Rosyth snapped.

With a sickening feeling Geoffrey remembered that the previous space shift had left the alien ship hovering unchanged. It could happen again —

The sickening lurch almost simultaneous with Rosyth’s order; the quiver of steel and flesh, as if dragged through some warp of time and space . . . Alpha Cleopa blazed as a nova. A score of ships, slow to act, vanished from the general screen, then returned. “ Ten thousand miles,” the radar man stated.

Rosyth swore into the silence following the hiss of expelled breath. The bell-shaped

shadow still sat on the edge of visibility. The needle shone, growing.

“ Seven thousand.”

Rosyth’s voice came, sharp as ringing steel. “ All ships maximum acceleration radially!”

Within seconds thrust shook the Tetracil and the flecks on the screen began to spread with infinite slowness. Looking from them to the screen upon which the missile loomed, Geoffrey knew it was too late. Mere seconds remained. Minutes would have saved them. But Rosyth, relying on a space shift, had left it too late.

“ Three thousand,” radar said.

He wondered at what point the missile would detonate. The ship’s first-order drive had scarcely put them up to half-G acceleration, and the others would fare as badly. A hundred miles or so either way would probably make little difference to a weapon able to disrupt a solar body . . .

“ Two thousand.” There was a crack in radar’s voice.

Then a mass like a clenched fist loomed from nowhere. Dark, featureless, mere matter, distant beyond the perimeter of ships, it obscured the radarscope view and the pinpricks of distant stars. Geoffrey gaped, shock twanging his nerves. Large as a minor planet, formless, irregular world that was no world made by nature, the mass hung in the missile’s path. For the space of an inheld breath the dark body hung, then brilliant fire was born behind it, lancing out in a holocaust of blue flame that hurt the eyes, flowed over a thousand miles radius, and faded. The dark body ceased to exist. Gone, too, was the needle, consumed to its last atom by some wholesale fission at which he could not guess.

He wiped his brow and found his hand damp. The radarman was shaking visibly. Systematically, in a voice that barely trembled, Rosyth began checking his ships’ positions.

Geoffrey left the control room, walking stiffly, his face set like white marble. Did he live to be a thousand the abrupt appearance of that dark mass, so like a clenched fist, would remain vividly in memory. Only as in a dream did he hear Rosyth’s voice checking off his unharmed vessels, and instructions for one to contact Abelard in the Myridon, informing him of the fleet’s space shift.

Barry was waiting outside the cell. Door open, it obviously had no other possible means of egress. The door itself was unmarked, equipped with an external fastening.

“ It was still locked,” Bell said.

Geoffrey examined the smooth, uninterrupted steel. From inside there was no catch or lock to pick. He straightened. “ Someone could have opened it — ?”

“ One of the four ?” Barry Bell shook his head. “ There was a guard, and the N.C.O. had the key.”

So again they must search for the elusive Pakes, Geoffrey thought. They left the cell and he looked sideways at his friend.

“ You know what happened just now ?”

“ I didn’t see it, but heard enough to explain — if explanation it is.” Barry put his hands in the pockets of his loose jacket, walking with his head bowed. “ You realise there’s only one solution ?”

Geoffrey had expected it. “ Pakes is a — hyperant.”

Barry’s silence he interrupted as agreement. He recalled the scores of times they had discussed the subject, slowly penetrating more deeply into the theory. Even with all implications realised, the practical demonstration of that theory had been shattering. He remem- bered the time he had asked what limitations a hyperant would have, and Barry had replied, “ None !”

He halted at the corridor end. “ Pakes has given himself away. Concealment is over — ”

“ Because self-preservation is the stronger instinct,” Barry Bell interjected. “ That missile posed the biggest problem Pakes has encountered. Let it do its work, or act himself, knowing he could then pretend no more ? He chose the latter.”

Geoffrey thought of the phrases he had read in the Whole Mind of Man. Pakes’s knowledge clearly extended beyond that of Barry, being limited to no mere theory.

He turned the junction corner and halted. Pitifully thin, a mere dummy deprived of rigidity, Pakes was collapsed almost at his feet. His eyes were closed, his face white, and he was half propped against the steel wall, as if he had tried to rise and failed.

Geoffrey knelt quickly. The pulse still beat, weak and quick. He turned the crumpled form to a sitting position.

“ Get someone from medical, Barry !”

Barry disappeared, and almost within moments footsteps rang along the corridor in return. Pakes hadn't been strong enough to take it, Geoffrey thought as he watched the brief examination. The medico rose from one knee.

" General collapse, so far as I can see, Captain," he said. " He's a bed case."

Geoffrey noted curiosity in the voice. " See to it, will you."

" At once." A pause, then: " I understood he had been confined for absence, and was going to see him. His nerves have been in poor state."

The man's eyes put a clear question. Geoffrey nodded almost imperceptibly. " He had been absent, but we released him, seeing his offence was an error, not insubordination."

He could not be sure whether the lie had passed. A second man appeared with a light stretcher and Pakes was borne away. Geoffrey watched him go, wondering what knowledge was hidden by the bloodless, silent lips. Certainly something as startlingly new to civilised humanity as the first leaping crackle of fire had been to remote ancestors.

They followed and waited outside the hospital ward. The delay grew and Barry Bell moved uneasily.

" Suppose we look through Pakes's things, then come back ?"

" A good plan."

The time for conventional respect for a fellow's privacy was gone, Geoffrey thought as they hurried back towards the cabin near his own. It was untidy, but the disorder was rather that of extreme activity and pressure, not the mere muddle of laziness. The bunk was unmade, papers stacked at its foot. With a murmur of triumph Barry lifted them, withdrawing a book with a distinctive cover Geoffrey recognised. Barry flipped through the pages, halting. Whole passages had been marked. Elsewhere, occasional lines had been underscored. Bell put a finger on the open page.

" For the observer, knowledge that a thing exists means that the state where it may have influence on him is reached," he read. " The object that has become subject of his observation has not changed, but its effective relationship to himself has. Not knowing of its existence, his conduct is such as would arise if it did not exist. Knowing of its existence, his conduct is changed to accommodate this knowledge. The change to the observer may be great; yet no change has arisen in the object — "

" Heavy going," Geoffrey said.

Barry nodded. “ Look.”

In the margin Pakes had scribbled: “ First step, important to remember.”

The passage was undeniable in its truth, Geoffrey thought. A man could picnic in tranquillity on an unexploded land-mine — until he knew the mine was there ! For the man, knowledge that the mine existed equalled a coming into existence of the mine under his feet. A person could not react to circumstances if he did not know they existed.

“ Listen to this, he underlined it,” Barry said. “ The foregoing chapters suggest the effective presence of a thing depends upon knowledge of that presence. Without knowledge, effect is absent. Knowledge thus creates.” .

Geoffrey stared at the crumpled page. Pakes had drawn two thick lines under those last words. Knowledge thus creates. He sucked his lower lip, pondering. Apparently disassociated facts were beginning to integrate in his mind, and the pattern they made was of such intricate complexity that his brain crept, shivering as with a physical movement inside his skull. Barry Bell closed the Whole Mind of Man with a snap, and Geoffrey saw that his fingers shook visibly. The grey eyes held an odd expression; the cheeks twitched momentarily.

“ Pakes has been into this pretty deep,” Bell said.

Geoffrey’s gaze was on the closed book. “ You’ve found your hyperant — and had proof theory can find expression in practice — ”

“ It always can, when based on fact.” Bell looked from the cabin door, as if for the first time realising others might be listening. “Newton, Franklin and Edison didn’t invent electricity. They showed it existed and could be applied. Pakes is their equivalent in this, and sets my own dabbling on a level with the efforts of a chinaman rubbing amber.” “ Let’s go back to the ward.” Geoffrey moved to the door. The great, fist-shaped mass of inert matter against which the alien missile had hammered itself to destruction hinted at the complete over-whelming power of mind. But between theory and practice lay knowledge of practical technique — information Pakes alone had.

“ Intermediate steps unknown to us may have helped Pakes,” Bell said as they approached the ward.

Geoffrey wondered silently what they might have been.

Pakes lay motionless except for a ceaseless flutter of his lips, barely visible, so slight was it. Geoffrey stood at the bunk-side watching him, then raised his eyes to the

medico, who shook his head.

“ He’s in a bad way.”

“ There’s no actual physical injury ?”

“ None, Captain. But profound collapse and shock. He has suffered a nervous or mental impact — ”

The words invited comment but Geoffrey made none. “ He’ll be unconscious for some time ?”

“ A long time.” The doctor’s eyes sank momentarily to the thin face. “ A very long time — possibly days — possibly — ”

The words trailed off again, startling Geoffrey by their soberness. “ You think he may — die ?”

“ It is possible.”

Barry’s hand came upon his arm, and Geoffrey knew what the grip meant. If Pakes died, with all his knowledge . . . ? What if the cavemen who had discovered fire had perished, taking his knowledge with him ?

“ You’ll do everything possible ?” he urged.

“ Of course, Captain.”

Pakes’s cold lips fluttered again. Bending, Geoffrey thought he caught a phrase: “ I tried — ” The set expression on the thin face could have been mental agony, reproach. On impulse Geoffrey put his lips almost at Pakes’s ear. “ You succeeded ! ”

No movement, no other word. Rising, Geoffrey found the medico’s gaze on him. He left the bedside.

“ I want an N.C.O. on duty here until he recovers — or until — ” He left the words unsaid. “ I want an exact record of all he says, if he speaks. No, better have a tape machine to take it down. There may be things a stenographer might miss or not understand.”

“ That will be in order, Captain Walney.”

Geoffrey halted smartly at the door. “ If there is any change in his condition I wish to know at once.”

No more could be done, he decided as he left. Within minutes anything Pakes said would be going on record, and could be studied. They could only wait, and hope he would recover.

Alone, he returned to the control room. The alien ship still hung on the limit of radar visibility, but seemed to be moving slowly upon a tangent to the hub of earth ships. A waiting silence had descended on the officers.

“ I’ve had a ship through and contact the Myridon,” Rosyth said crisply. “ Abelard’s reports are the same — no sol-type sun, hence no possible planet.”

“ And what of them ?” Geoffrey indicated the shadow on the screen.

“ I don’t feel they’ll try anything further for now. The last — failure was complete.”

Rosyth’s tone said certain explanations were lacking. A deserted lump of rock did not materialise from nowhere without reason, or so conveniently halt a missile by chance.

“ As you say sir, it was.” Geoffrey felt the legitimacy of Rosyth’s curiosity must be acknowledged. “ I hope Mr. Bell and myself may have something useful to say on that eventually.”

A quick flash from light blue eyes told him Rosyth would not press the question yet. Intermediate steps by subordinates were not the Flight Marshal’s concern. Geoffrey felt glad to leave it thus.

He looked in on the sick ward, and found a tape recorder set up by Pakes’s bed, wired to a suspended microphone and already running. The patient’s condition appeared unchanged, though Geoffrey wondered if his breathing were not a trifle more irregular.

In many ways Rosyth’s presence was fortunate, he thought. It gave a freedom which no ship’s captain could otherwise have had ! He checked that watch would be kept on Pakes, then turned his feet towards corridors they rarely trod.

A tiny lift in a cylindrical shaft carried him up through the ship, halting at the limit of its travel for’ad. He stepped into a passage where the murmur of the vessel’s power equipment scarcely penetrated, and went through into the nose, where astrogation officers sat at their equipment. Under the transparent dome he had a feeling of being infinitely small, yet it was a relief to see outside the confines of close steel walls. Stars marked the sky in un-named groupings, wheeling slowly as the hub of ships rotated to simulate gravity. The many ships, dotted in unchanging formation, could not be seen. Instead was apparent isolation beneath majestic constellations earlier men had never

seen. Alpha Cleopa in her nova glory dominated the heavens, visible again without time lag since the return continuum shift.

He moved quietly round the astrogation room. Precision instruments were still adding to the data covering Cleopa and the surrounding galaxies, plotting, measuring and co-ordinating. A further door opened and a girl of medium height, with dark, curly hair, came through. Geoffrey felt satisfaction, doubly strong when he saw pleasure cross the mobile features.

“ Captain Walney !”

“ Yes — but not present on duty, Miss Austin.”

“ Nor for idle curiosity ?” she asked quickly.

He smiled slightly. “ No. I’d like another look at the ship and missile photographs— to begin with.”

She motioned to a vertical projection unit fitted in a corner. “ We’ve a composite movie of the best shots.”

He watched while she ran the machine, muscles unconsciously tensing as the climax came. Ship and missile were huge; the eruption of Cleopa inspiring of awe and astonishment. He halted the girl at the moment when the silvery needle was most clear.

“ It resembles the second one,” she murmured.

Geoffrey felt his brow rise under his sandy forelock. Unity Austin missed little ! “ It does. Anyone taking observations when the second blew up ?”

“ The automatic machines were on.”

She left the projector. From her tone Geoff knew she would have liked to express a different opinion, or contradict him direct. The missile had not blown up: it had struck some enormous body in its path.

He was still studying the motion pictures, running the projector back, when she returned. “ There’s not much data on the second missile, sir.”

He thought the title of deference singularly unsuitable on her lips. But correction of such points would have to wait, he decided. Rosyth was a veritable fiend for discipline. There were other considerations, too . . .

“ Yes ?”

She put a sheet in his hand. “ It’s velocity was computed by triangulation from ships on the perimeter. So was the radiation shock wave.”

He studied the figures. They were highly impressive, even by interplanetary travel standards. The missile had had such velocity that no major weapon could have been prepared in time. As bad as looking for a plate to catch a bullet when someone shot at you, he thought. The energy released was equally astonishing. A note said it apparently represented the complete fission of the whole missile, including hull and propulsion equipment. He chewed a lip. If so, then the weapon had been the most completely efficient he had yet encountered.

“ I understand there was something else, sir.”

He looked at her quickly. Her eyes did not hold the expression a junior should have for Captain, but he felt no annoyance at the fact. “Yes, Miss Austin ?”

“A movement of the gravity meters shortly before the detonation. We thought it a fault in the equipment, but other ships have since reported the same effect. It was as if — as if — ” She sought words.

“ As if a large body had suddenly appeared, then been destroyed. Its attraction was shown by the equipment for seconds only.”

“ Very likely,” he said.

He knew that here again was not the time for explanations. Anything he might say would be only half intelligible, because so far only half sense to himself. When he began thinking, trying to put it into such phrases as he might employ with Rosyth, his brain began to wriggle and squirm, refusing to be forced into the task.

He saw a question fluttering on her lips, manifest in her direct gaze, and felt thankfulness when the ship’s general communication unit on the wall awoke.

“ Captain Walney — ”

He crossed in two quick steps. “ In astrogation and speaking.”

“ Good, I’d been looking for you !” Barry Bell’s voice. “ I’d like you down at once.”

“ Why ?”’ Geoffrey felt uneasy at the tone of urgency.

“ Someone’s stolen Pakes’s tape.”

The reproducer became silent. A shock ran through Geoffrey. Barry knew nothing further need be said, and did not err. Pakes's tape ! The tape from the recording machine at his bunk-side . . . ! Geoffrey was at the exit door even as the full meaning of the loss swept into his mind.

Barry swore. A hard glint in his eyes boded violent catastrophe for someone unknown. His finger accused the tape-machine again.

" Gone !" he said. " Gone damn it."

Geoffrey moved round the bunk. Both winding spindles were empty, new and used tape and both spools gone wholesale. The officer left to watch sat on the next empty bunk, still nursing his head.

" You saw no one ?" Geoffrey snapped.

" No, sir, as I said." The man looked up, tenderly touching the lump. " The blow was from behind."

" Had Pakes talked ?"

" Yes, sir. Quite a lot. In delirium, I think."

" Do you remember what he said ?"

The man moved uncomfortably. "Very little, sir. It — it didn't appear to make sense. And I knew it was going on the tape."

Geoffrey crushed the desire to make a victim of someone. The man was right. It was going on the tape — and would not seem to make sense ! Selective reasoning like the Whole Mind of Man did not make easy listening, and Pakes had gone beyond that.

He became aware that Pakes himself was breathing unevenly, and that a blue tint lay on his cold lips. When they left the ward his condition had not improved. The medico met Geoffrey's eyes as he went out, and shook his head very slowly.

" What now ?" Barry asked.

Geoffrey chose the way towards his cabin. " I don't like the look of Pakes, poor chap. He's been ill for months — he's no constitution."

He wondered where on the Tetracil the spools were now concealed, and by whom. A detailed search of a ship so large would take weeks, with no guarantee of success.

During those weeks forces other than those of law and order could be preparing for action.

An hour later a messenger tapped on his door. Geoffrey opened it and recognised a man from the medical section, and his face showed the news he brought was no pleasure.

“ Lieutenant Pakes has died, sir.”

Geoffrey felt regret at the loss of a fellow, and dismay at the implication of that loss. “ Did he speak again ?”

“ No, sir. The coma that followed his delirium never lifted.”

“ I see.” Silent and thoughtful, he watched the man go. The tape was now vital, last possible means of discovering what the thin lieutenant had known.

He recalled the four who had left Pakes’s cabin, whose faces he remembered, and whose names he had discovered. Audley, the lean senior engineer, Walcheri, the plump stores officer, and the two crewmen, Berno and Enroll. It seemed likely they would have watched Pakes, seen developments, and surprised the unsuspecting N.C.O. The moment for them to be taken unawares in their turn had come, he resolved.

He went to the stores section of the ship, huge because of the vast demands made upon it. Food, medical supplies, instruments, spares and replacements of every kind filled a whole level in the vessel, secured in systematic blocks with narrow alleys between. Walcheri stood in a tiny office cubicle whose three walls were occupied by racks of reference files. He saluted, but Geoffrey did not wholly like the expression in his dark, rather near-set eyes.

“ I wish to see files M, N and O,” he said.

Walcheri slid folders from their places and turned down a flap to serve as table. Geoffrey wondered if he would guess that two files were merely to allay suspicion. M was the file he needed — Machines : tape-, for the playing of.

The other placed the folders on the table. “ You wish to check some particular store issue, sir ?”

His voice indicated only a natural curiosity and proper desire to help. Geoff shook his head.

“ No, merely assure you’re up to date. Marshal Rosyth may be along.”

He felt the lie and explanation most convincing if left at that and leisurely studied the records. Some items of equipment were extremely valuable; others were important; many were irreplaceable. Everything had to be signed for, and checked off, if brought back. That fact had prompted his idea. No person on the ship would have a tape machine unless it had come from the store.

The N file was on top, and he spent many minutes looking through it. Walcheri stood with one elbow on the extended flap, flanked and backed by files so that he could move but little, and Geoffrey felt the dark eyes following every page. At last he closed the N file and took up that marked M.

“ Fault can scarcely be found with your records.”

“ Thank you, sir.”

Geoffrey let the pages flip rapidly through his fingers. Macaroni. Machines. He could not be sure if Walcheri’s breathing had hastened. There were series of sub-listings, with stores position numbers. Tachometer. Machines, tampion, for the removal of. Machines, tape, for the playing of. The leaf passed over with the rest and he read two names, entered in Walcheri’s neat hand. One was from the medical ward. The other was S. Audley. He went on with unvarying speed, resolutely to Muzzle, canis,for the gagging of, and gave the last file equal attention. He closed it with a snap.

“ I don’t think Marshal Rosyth would have any fault to find.”

Walcheri returned the folders. “ You want others, sir ?”

“ I don’t think so.”

Geoffrey walked round some of the piled stores, viewing them with apparent interest, and sought the door. In opening it he allowed himself to look back. Walcheri had folded away the table and stood before his cubicle, watching him go. The door closed, Geoffrey hastened. It would prove interesting to find why S. Audley, senior engineer, had suddenly required a tape machine, he told himself.

The engineer was off duty and not required to return for some hours. His cabin seemed the best place to try. Nowhere else could Audley find privacy.

The door was closed. From beyond it came a weak, irregular flutter of speech. Geoffrey took his ear from the cold steel and looked both ways. The passage was empty; he tapped, waited, and tapped again, knowing what he would find.

Audley, tall and with thin lips, started visibly, saluted, and stood so as to block the

door.

“ You wish me on duty, Captain ?”

His voice had a hard ring. Here was no second Pakes, Geoffrey thought. Instead of replying he moved forward, so that Audley could only prevent his entry by actual physical opposition. Almost brushing shoulders, both stood in the room. Behind Audley a tape machine stood on the locker, spools halted but indicator alive. Geoffrey closed the door at his own back.

“ A tape has been missed, Mr. Audley. May I hear yours ?” Furious eyes locked with his own, and Geoffrey knew he had found Pakes’s recording. The engineer did not move.

“ My own choice in — entertainment is my affair, Captain.”

“ Undoubtedly.” Geoffrey reached out a long arm, put an extended finger on the start button, and the spools moved into action. For a bare second Pakes’s voice filled the room, then Audley struck down the stop button.

“ An unusual recording,” Geoffrey said, reaching back behind him for the door. “ A little less confidence might have saved you — ” The door moved violently against his hand. Arms locked round him from behind and something extremely hard pressed into his back. A third hand stifled his shout. A blanket whisked from the bunk over his head. Geoffrey swore within himself. A little less confidence !

When the blanket was removed four pairs of eyes bent watchfully upon him and four sidearms were trained on his heart. The four unmoving barrels indicated Walcheri had utilised his position as stores officer; the eyes above them said their owners would take big risks for big stakes.

“ If you shout you’re a dead man,” Audley stated.

Berno nodded. “ You’ll know these guns make no noise.”

“ If one of us misses, the others won’t.” Erroll seemed to find comfort in the words, though his cheeks were pale.

Geoffrey let a sneer cross his face, watching every move behind seeming nonchalance. “ You’ll never get away with this !”

“ That’s as maybe !” Walcheri was breathing heavily, sign of the haste with which he had summoned the two crewmen, Geoffrey guessed.

Audley closed the tape machine and withdrew the power plug. He rested it on the bunk. “ Up in stores there’s less chance of interruption, Captain,” he said heavily. “ We’re going that way — -just an engineer and two crewmen returning with you and the stores officer, understand ? Two will be in front of you and two behind. If we have to shoot it will include anyone you try to warn. We’re too far in to turn back now— let that be your warning.”

Geoffrey shrugged, but knew truth lay behind the words. If he escaped the Tetracil would be too small for the four. Having gone so far, they could only maintain their safety by keeping him prisoner.

They left the cabin and strode down the corridor. Little enough chance they even meet anyone, he thought. It was an hour when those off duty mostly slept.

The lift would barely accommodate them. It halted at the stores section and Geoffrey wondered what vacant room Walcheri would use as prison.

“ I shall soon be missed,” he pointed out.

“ Not so soon as to worry us.”

Audley’s tone showed he had checked duty periods. They rounded a corner and Geoffrey felt a shock. Unity Austin was coming quickly towards them, a roll of data from astro under one arm. He remembered the warning; knew he could not risk her life. Knew, too, that he might at least bank on the size of the Tetracil, which might assure the four did not know her.

She looked surprised to see him, and hesitated. “ You weren’t going up to astrogation, Captain ?”

“ No, Miss Bell.”

He hoped he had not misjudged her quickness of mind, or would believe he had actually forgotten her name. If not, his words might make sense . . .

They passed on and he did not look back. He could only hope she had heard and understood. Walcheri opened the last door of all, one of unusual thickness and hermetically sealed. All inside, he closed it with a dull thud.

“ I don’t need to tell you the purpose of this chamber, Captain.”

For the first time Geoffrey felt a deeper fear under his unease. The four had chosen unexpectedly — but admirably. The ship’s disposal chamber, sometimes used also for the direct loading in of supplies, was almost soundproof, because of its airtight door.

The opposite wall was curved, with a second door that opened into space. Remote controls in the passage operated it. That alone was a subtle threat.

Audley plugged in the tape machine. “ We wish to know exactly what it was Pakes did.”

“ How should I know!” Geoffrey snapped, a tiny, new excitement growing.

“ We suspect you may ! Pakes was secretive, but told us enough to suspect what he was about.” Audley depressed the start button. “ We haven’t made anything of this, yet, but with your help — ”

He let the words drift into silence meaningly. Geoffrey felt triumph. He had feared their knowledge equalled Pakes’s yet it was obviously less than his own !

The lieutenant’s thin voice came into the room. Pakes had been very near consciousness, at times, Geoffrey decided. He had desperately wanted to tell he had meant no harm, but had tried to save — to save — Pakes stumbled on the words again and again. To save the fleet, Geoffrey thought. Pakes had collapsed without knowing of his own success. Underlying almost every broken phrase was a deep sense of personal guilt. Much had to be guessed. Pakes had studied the old anti-expansionist sect. A hobby had become an obsession. He had drifted into company with men of like opinion — Berno and Erroll first. Spacemen needed something to occupy them in leisure hours, Geoffrey thought. Bell had his chess. With Pakes it had first been the old cult of non-expansion, backed up by all its fear of eventual disaster.

The recording went on and on, often silent, often repeating itself. It was Pakes’s mumbled, final excuse. The four moved uneasily often, watching, but Geoffrey almost forgot their presence. Pakes had first been in Barry Bell’s cabin when on ground duty, months before.

The machine had been on a full hour when Audley pressed the stop button with irritation. “ Mean anything, Captain ?”

Geoffrey longed to hear the remainder of the tape. All was slowly fitting, like some infinitely complex jigsaw puzzle. “ It may.” Indifference was in his voice.

“ It better had !” Erroll spoke for the first time since entering the chamber. His lips were drawn back, revealing his teeth. “ Pakes had found something big ! We want to know what that was. If not — ” He snapped his fingers. “ You’ve seen a man after sudden exposure to space, Captain ?”

“ I can’t tell you what I don’t know.” Geoffrey’s voice was ice.

Erroll's lips opened, his eyes flashed, then his gaze snapped to the door. In one pace he was to it, swinging it wide. His free hand closed upon a slender arm. The girl screamed, but it was cut off by a hand. A weapon bored in Geoff's back warningly. She was dragged in and the door shut with a thud. Released, she sought Geoffrey's gaze.

" I — I couldn't find Barry Bell."

Geoffrey's spirits sank. She had understood, but failed. It was the nearest thing to complete disaster possible.

The four faces held no compassion. Erroll remained by the door, listening. Audley stood by the machine, his back to the curved wall. The silence was so complete that the ship might have been absent of life, Geoffrey thought. The chamber was a virtual air-lock, inner walls and door thick enough to withstand the piled up force of the ship's inner atmosphere. He had seen supplies ferried across from other ships and shunted in, but never expected such a use as this.

Audley started the recorder again. " We're more than half through. When it's finished well leave the pair of you a bit to think it over . . . If that's no help, well — I believe Walcheri is expecting he may be wanted to try the outer door remote control."

" Routine requires it," Walcheri stated.

Geoffrey felt contempt, yet admitted that their violent tactics had weight. The four did not outwit an opponent, or circumvent his opposition, but flattened him as with a road-roller so that resistance ceased.

The lieutenant's voice drifted again from the machine, picking up the thread woven half of delirium and half of sanity. " I didn't think they meant harm. They said the globe was easiest, that they wanted to help us — "

Geoffrey's attention became complete. The globe in the red triangle . . . !

Pakes's voice droned on, once again less connected, less the product of sanity and consciousness. But the words fitted, and from their integration sprang a picture. Pakes had unlocked the power of mind, giving it domination over matter. With rare insight he had understood the deepest implications of the Whole Mind of Man, forming them into one whole, and going on from that point. Geoffrey felt extreme admiration for the thin lieutenant's clarity of vision. Gone were limitations of time and space. Gone the finite nature of matter. Pakes's voice ended almost inaudibly: "A hyperant can make or destroy matter, atom beyond atom, universe beyond universe . . ."

Silence filled the chamber, broken by Walcheri's expelled breath. " That's the lot ! Make anything of it, Captain ?"

Make anything of it ! Geoffrey thought. It was a key, a revelation. Wooden-faced, he did not let his excitement show.

“ It’s difficult — disconnected and incomplete — ”

The four faces grew hard. Audley jerked the plug free and went to the door. “ We’ll give you thirty minutes.”

They filed out and the door thudded shut. Geoffrey guessed their purpose. First to return the machine, to avoid suspicion if someone else began investigating. Then to fake up some convenient alibi, again for their own safety, and to avoid trouble when Rosyth found his captain removed without trace.

His companion’s gaze turned from the closed door to him. “ What did he mean ?”

He pitied the girl. “ This chamber opens into space, for loading. If the outer lock were opened with us here that would be unfortunate, but no one’s fault.”

Her lips quivered. “ You mean we — we have thirty minutes ?”

“ So it seems, and I don’t doubt they mean it.”

Geoffrey dwelt upon the lieutenant’s words. Deep in Pakes’s mind had been awareness of the great significance of his knowledge, forcing its way up through the cloudy layers above. Self-reproach had added the final stimulus: there had been contact of sorts between Pakes and the aliens, and they had provided the final touch to the growing pattern. A blending of time, space, molecules and mind, Geoffrey thought. Immanuel Kant had laid the foundation stone many centuries before, but all his work had been a mere introduction to the thought contained in the Whole Mind of Man. Pakes, again, had taken an equal step beyond . . .

A hand came on his arm. “ W-what can we do ?”

He scarcely heard. Pakes, first hyperant, had succeeded. A blending of space and the stuff of mind itself. Gone were all physical barriers; gone, too, the limitations formerly imposed on man by the physical world. To know was to understand, and to understand fully was to be . . . time was not, nor space, nor the limitations of distance or the barriers of matter. The totality of all phenomena existed in the mind. It all fitted. The groundwork with Barry Bell, the years of discussion over the chequered board, the mumbled phrases from the tape … all were a wonderful completeness, now. After millennia mankind need no longer be denied his freedom, heritage as illimitable as mind itself.

Geoffrey took the girl's arm and they walked through the steel wall of the chamber. The others were gone, but Walcheri cowered in terror, lips twitching and face nerveless.

Flight Marshal Rosyth's light blue eyes held defeat. Some of the military erectness had gone from his back and shoulders and his face was that of a man who had tried his best and failed.

" You are not mistaken, Captain Abelard ?"

" No, sir." The inter-ship radio carried the full note of certainty. " There is no sol-type sun within reaching distance."

" Very well, Captain."

Rosyth turned about, thick brows so low that his eyes were hidden. Geoffrey pitied him, iron marshal defeated when success was most wanted. Equipment in the Myridon had scanned every neighbouring system. There was no planet ready to receive the foot of man.

" This means back to 6th base," Rosyth said. " There will be no 7th Empire."

Geoffrey entered the control room from where he had paused at the door. The feeling of new awareness and power had not left him.

" Will you wait before taking the fleet back . . . ? "

" Wait, Captain ?" Rosyth's gaze was penetrating. " Delay risks another attack — perhaps something we cannot escape."

Geoffrey glanced at the radarscope. The alien shadow had apparently drifted round forty-five degrees. Knowing its great distance, that movement represented a first-order space velocity no earth ship had ever reached.

" I know, sir. Yet I ask it."

The Marshal's eyes were unmoving. " You believe your request justified ?"

" I do."

" Then I will give you twenty-four hours."

The eyes posed a question, but Geoffrey knew he could not explain, now. Only once again could he hope that Rosyth would accept his request without asking for reasons.

He saluted.

“ Thank you, sir — I hope your trust will be justified !”

He left the control room in silence, aware that every eye followed him. Walcheri and the others could wait, trapped, helpless mice. Alone, sole hyperant, he must grasp for his fellows mankind’s heritage. Later, others could be shown — Barry Bell first . . .

The void between fleet and alien ship was nothing, his traversing of it without duration. The vessel was of astonishing dimensions and in a curved path at extreme velocity. He trod corridors lit by a pale blue light, universally diffused with no apparent source. Piezo-electric crystals large as a man floated from doorways ahead, each vibrating with inner awareness. Not of cell, bone and muscle, but sentient, they communed in a rapport of interlocking waveforms, questioning his presence. His sense of their inner awareness grew, and a silvery globe enclosed in a red triangle floated down the corridor, halting before him. Thought funnelled through it, asking if he was the life-form with whom they had first gained contact. He walked on. The crystals parted and drifted behind, glittering upon their many facets.

Life that had originated under extremes of temperature and pressure, he thought. Life, too, that was wholly dissimilar to man; probably considering him a strange creature unworthy of space in the cosmos. The globe drifted after him, echoing in resonance with the aliens’ thoughts. Thus had they contacted Pakes, swearing their amicability while they learnt what the race he represented planned, and what they might do.

Thinking of the needle that had pierced Alpha Cleopa, and the missile speeding from the bell-shaped vessel, a twisted smile of disbelief remained on Geoffrey’s face.

He walked through many corridors and chambers, seeing strange products of sciences unknown to men. As he went he felt the slow change of humour in the brainwaves from the globe. The beings surrounding him were realising that here was no second Pakes, to be deluded or made traitor with nebulous promises. At last the thought was open hostility, predicting his death if he would not halt. A barrier came out of the walls ahead, cutting off the corridors beyond. Behind him, a strange machine with a glowing apex came from a door. He sensed the hate of the piezo-electric crystals. He and all his kind were alien, to be destroyed. Every living, moving form was a potential enemy, to be killed. Never had he imagined such complete, all- enfolding hate as surrounded him as the crystals drifted aside to let the glowing machine approach.

Better that they all be ended, he thought. He drifted timelessly between worlds, shredding their vessel to its last atom. Its molecules drifted into space, dispersing in a cloud of intergalactic dust. Their hate ceased, gone as a flame in a vacuum.

Space was all around him, sensed like a flowing river. The ships of the fleet glinted

like fish in a dark sea, tranquil as before the appearance of the missile and hammer-fist of matter created by Pakes's mind. In his imagination Geoffrey stood in the void, and out beyond the ships, a hundred million miles away a sun glowed into golden life. Around her swung planets in their orbits, green and awaiting the ships of men.

Again he stood in the Tetracil, listening to the murmur of her power plant, and to the sudden movements in her. Rosyth's voice cut from the passage intercom.

" Will Captain Walney report."

" Reporting, Flight Marshal," he said.

" Good ! The alien ship has vanished. And astrogation says they've spotted a sol-type sun — "

Geoffrey smiled, walking towards the control room. Sunshine would be streaming into the astro observation nacelle. There would have to be long explanations. He wondered if Barry would find it equally easy. Possibly not, lacking the urgent drive of self-preservation. Walcheri, planning evil, had done good.

As he walked his mind drifted on the future. Suns and worlds for man, planet beyond planet, world beyond world, universe beyond universe. All were man's for the asking.

" What limitations would a hyperant have ?" he had asked.

Barry Bell had smiled at his silver knight. " None."

Geoffrey felt akin to an ancestor of millennia before, who had striven, wondered — and suddenly found fire his, and all men's, for ever. First they would colonise the planets of the sun that had glowed into golden life at his thought.