

KENNETH BULMER has been rated by New Worlds magazine as "Great Britain's hardest working science-fiction writer." A native of London, he has produced many novels and short stories, as well as non-fiction articles on scientific subjects.

Bulmer states that he has been reading and writing science-fiction for longer than he cares to remember, starting both while still at school in the early 1920's. During the war he served with the Royal Corps of Signals and published and edited a Service magazine in Africa, Sicily and Italy. It was while basking in the Italian sunshine that he first heard of an atomic bomb having been detonated over Japan—and thought it was just another hoax of his comrades.

He is an active member of London "fan" circles, but also includes among his hobbies model ship construction, motor racing and the study of the Napoleonic legend.

WHEN THE HEAVENS FALL, MEN MUST FIGHTI

Keston Ochiltree's visit home had been short and disastrous. His newborn nephew had proved to be one of the Hopeless Ones and had only served to remind him of the present plight of mankind. Keston knew that the decision he was being called on to make might mean a new start for humanity or the end of their underwater civilization.

Each day found more Hopeless Ones being born: pitiful creatures with webbed hands and feet. More important, the inhuman Zammu were pressing their attack in a fierce struggle between species. Most important, the silver sky was lowering. The shimmering sky-level would soon shrink until they all burned in the gaseous beyond.

So Keston's decision might mean everything. Should he stay in the Emperor's shark-cavalry to fight the Zammu? Or should he join Professor Lansing in an illegal attempt to find what lay BEYOND THE SILVER SKY?

Turn this book over for second complete novel

by KENNETH BULMER

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THE WILD lands had encroached perilously around the homestead in the ten seasons since he had gone away from Ochiltree. The nearness of the sky shocked him. He started the turboflier again from where he had paused along the ridge and dived towards the house in a sweeping curve that crossed matted beds of weeds and slides of glutinous mud where there had been trim rows of tended juicy bivalves the day he waved goodbye.

His long hair swirled in the turbulence of his passage and the homecoming ache in him filled his throat with a longing both sweet and poignant. No man with wisdom in his skull stayed away too long. Too long: the very syllables echoed the deflated depression that had sprung so unexpectedly and disconsolately upon him. Everything changed, himself included, and before he could relax in the old familiar ways he would have to meet the family as a stranger.

Although the nearness of the sky depressed and alarmed him, so that he fingered his trident in the fighting man's instinctive search for reassurance from his weapons, there was in him none of the rife and mind-destroying fear of superstition that riddle the outer keeps. There was even a strange joy to be taken from the colors and the iridescence about him.

A figure rose from the balcony as he approached. It finned up toward him. So close to the shimmering sky her white clothing was tinted into a luminous blue and the jewels in her hair shot back sparkles of fire. Her lithe rounded body cleft the aquasphere with impatient, joyous ease. Amazement took him.

"Mirameel"

She curved in toward him and caught the guard rail of

the shell-shaped turboflier, clinging, gasping and laughing, holding her head high with hair streaming in the wake.

"Miramee! Little sister Miramee!"

She turned herself, eel-like, so that her laughing and excited face hovered inches from his own. Her eyes snatched vagrant gleams from the glistening sky.

"Little sister indeed! Why, you sere-skinned oldster, Kes-

ton!"

They laughed together, and the barrier of ten seasons col-

lapsed like weeds before the slicing blade.

Looking at her as the flier sank toward the garage, Keston, leaning against the main hall, saw the gaiety as a mask, a superficial excitement fleetingly generated because her big brother had returned home after so long. There was a shadow in her eyes and a pain in her face that might have set him wondering had he not been oppressively aware of the glittering sky, dancing so closely above their heads and reflecting menacing ripples from the coral walls of the house.

Dismounting from the turboflier he prudently left his wea-

pons aboard, remembering Aunt Ranee.

Miramee saw the action and the smile left her face. She shook her head. "Aunt Ranee is dead. Over five seasons ago, big brother. We no longer have need to argue peace or war."

He shook his head in turn so that his long hair coiled and floated in the aquasphere. The sky was so close that his hair showed a streaked yellow. But he left the weapons there, all the same.

Miramee caught his hand. Laughing again, she kicked off, pulling him towards the vaulted doorway where the bronze gates hung askew from hinges that had not been used for over a hundred seasons. He was not wearing his fins—they formed merely an unnecessary impediment aboard a turbo-flier—and so he calmly allowed her to tow him along.

Inside the courtyard everything was the same, and yet disturbingly different. He pivoted, idily finning with his

naked feet, making small balancing movements with his hands, looking as his eyes would and drinking in the old scene and the old memories.

"Come on!" Miramee was impatient. "Father knew you

were coming."

"He knows!"

"Of course. Since you have gone and the sky has crept closer we maintain a most efficient intelligence service. The Marhalls audioed that a turboflier—a fighting turboflier—had ghosted past their keep without stopping for the welcome that awaited within."

"I—I was thinking about the reason for my visit. I had no wish to argue with neighbors until I knew what was in the aquasphere."

She pouted her lips at him, wending across the courtyard to enter the main doorway. "You were always the cautious one, Keston."

He smiled, a fleeting, grim smile compounded of memories that would bring no joy to many men's mothers.

"I have had to be cautious, little sister. And cunning. And sometimes ruthless. But I am alive."

She shivered. "Has it been so bad?"

He rallied her, obscurely annoyed that this homecoming should be so colored with echoes of decay and disaster.

"Away with you! Where are father and mother?"

On the instant he felt his heart leap. Miramee had said nothing. Aunt Ranee was dead. Perhaps, too . . .?

Thankfully, Miramee pirouetted on one slender fin and pointed behind his back. A voice, a well-remembered, well-loved voice, said: "So you have come back, Keston."

She was caught up in his arms, pressed close to his brown and sinewy chest, long before his eyes had time to tell his brain of the wrinkles on her face, of the tiredness in her eyes and the thin, listless droop of her figure.

"Mother mine," he said, after a long time. "Yes, I have

come back." Then, because it would be best to deliver the wounding thrust quickly, so that there would be all the time at his disposal left for it to heal, he said, "But not for long. There is a thing I must do—"

"Don't say any more, Keston. Don't say anything. I know that men's lives are spent out in the deeps and that a woman must wait in the keep—and wait and wait." She put her arm around his waist and smiled up at him. Like Keston, she was not wearing fins, and he remembered the times he had been scolded for wandering about without strapping on his own.

"Now you can take me to your father. And kick straight with your legs and hold your head high so that your hair waves. Remember, you are a fighting man now. A fighting man . . ." Abruptly she turned her head down and Keston felt the spasmodic thrust of her chin against his chest.

Together, they flew past the empty shark pens, with the harness neatly hanging above, through the doorway and so came into the great hall of Ochiltree.

It was as he remembered it. Smaller, perhaps; but he was filled out from the turmoil of battle and bulked large. The groined roof was more thickly covered with growth, mute testimony to the creeping dissolution that choked this place and showed its strength in its power to undermine his mother's house-proud efficiency. The tattered banners still floated from their crosstrees, high against the walls. Each Ochiltree male placed his own banner there on the day he saw his twenty-first season. Keston's eyes swept instinctively to find his own. It was there, A flicker of reassurance warmed his heart.

"And do you gawp still, lost in self-love, lad?" The great voice boomed at him, washing currents of sound in the vaulted hall. Despite his tally of kills, despite his scars and the searing memories of desperate encounters against overwhelming odds, despite his own esteem of himself, despite all the

outward symbols of the fighting man shown in dress and impeccable weapons, despite all the flummery that made of Keston a sudden and dangerous fighting man—despite all this, he started. He snapped his back straighter automatically as his father spoke.

Only then, when he was floating with evenly finning feet and the occasional unconscious gesture of one hand to bring him balancing, when he was once again in command of himself, did he raise his head and stare directly at the great chair of the Ochiltrees, where his father sat, waiting.

He knew the slow, sure fire of purpose in himself should have prepared him for the abnormal sameness in his father. Where all about him had changed—Miramee a grown woman, his mother aging and worn down with care, his elder brother Kaley so indifferent to his return as not to be present, the whole homestead, Ochiltree itself, decaying and wasting away—in all this change his father, Kevin Ochiltree, was as he remembered him, to the same clothes the same lines in his stern and uncompromising face, the same jut of chin and twist of head that he saw in his own mirror.

"I was but remembering my youth, father."

"So you have returned. Well, the time is opportune."

Keston, obscurely and for no easily touchable reason, did not interrupt his father. He waited patiently until the big man, sitting in the carved chair of solid stone with the pelts flung in careless profusion upon it, had finished.

Then he said, "I cannot stay long. I came back to say goodbye."

His mother's hand was on his shoulder. Asserting himself as he had known he would have to do, with the strength of an Ochiltree set against an Ochiltree, he felt guilt. Kevin Ochiltree glared at him and Keston recognized and was torn by that glare. Here sat a man consumed with anger because he was growing old, with the sky pressing in on him nearer

and nearer with each passing season. And when he turned for comfort and help from his sons, they-sons. Kaley?

Keston said, "Where is Kaley?"

Miramee said impulsively, "Lissa is-"

His mother shushed her. "Kaley was married two seasons ago to Lissa, a girl from the Marhall keep. Kaley is with her now. Her time is due."

"And that is where you women belong," his father said in that chest-thrusting voice. "Keston and I have much to discuss."

"I think—" Keston paused. He had been about to say: "I think not, father." But he chopped it off. Not before the women.

When they were alone his father gestured inperiously. "Sit down, lad."

Keston sat. He sat on the footstool his father pushed out with one white leg. He repressed his involuntary shock at sight of that thin, gnarled and shrunken leg. His father's fins, resting on their hooks conveniently at his back, would swamp both feet with one fin. The crossed tridents on the wall at his father's back, the sharkskin shield with its memory evoking tang of shark oil, the ancient bronze sword and the modern, beryl-alloy blade—all would tax his father's strength merely to wield. No, his father remained true to Ochiltree and in the general decay could not, after all, remain aloof and unchanged.

"You look well, soon." There was a pause. Then: "Times are hard. You recall the Lawson Homestead? Harrap Lawson and his family?" He shook his head. "They are living with us, temporarily. They have discreetly kept out of sight whilst you return home. They are here and they are not the first."

Keston did not have to ask why the Lawson homestead was no longer tenable. Or, to be precise, of the two reasons why a keep or a homestead would be abandoned. But the

only one that fitted here was self-evident in that the Lawsons were still alive.

"How long?" he asked.

Kevin Ochiltree moved one hand at random on the carved arm of the great chair.

"I am no scientist like you, lad. I am a plain farmer, livestock man." His mind caught the errant thought. "You saw the pens?"

Keston nodded somberly. "I did. Nearly empty. And not a mount in the courtyard. And the weeds and the mud. Ochiltree must—" Again he paused; it was delicate work telling your own father that the family home was on the starvation danger level.

Kevin Ochiltree closed his eyes wearily. "How long? Marhall says three seasons at the minimum. Lawson, who saw the sky descend and engulf his home, says two. I do not know. All I know is that the sky is falling upon us and that when Ochiltree is swallowed up I shall not have the heart to leave. I shall sit here with my fins and my weapons strapped to me and wait for what may be, beyond the silver sky."

Softly, so that he barely stirred the aquasphere, Keston said, "And the Zammu?"

Softly as he had spoken, the name rang in the great hall. Kevin Ochikree's granite face set hard, stubbornly, like a grouper refusing to emerge from a hole with the trident piercing his body. He bunched up, hard and ugly.

"As well talk to me about them as about the Hopeless Ones." His shrunken legs stirred so that the aquasphere eddied. "The Zammu have not been seen in this quadrant. I hear only secondhand rumors of them. You have news?"

"A little. They raid. They kill. They steal. That is common knowledge."

His father rolled a contemptuous eye upon him. "And you have been away ten seasons! Studying, so you said, at the University of Golden Nablus. You are a watchshark with

the Emperor. An echelon-leader! The last audio told great stories of your prowess. And this is all you can tell your own father of the Zammu?"

"All the details I could tell you resolve into this one thing. Man is everywhere drawing in, retreating in face of the descending sky. And the Zammu, who came out of that sky within the stored archival recordings' time-span, press us, harry us, kill and steal and soon there will be but one keep and one man and when the Zammu have made an end to him—"

"Man will never have an ending!"

Kevin Ochiltree's voice was harsh and resonant. A flicker of gold from the pet's cage showed where his favorite rainbow-fins swirled in unaccustomed alarm. Long weeds trailing from the groined vaulting undulated beckoningly.

"And when the sky meets the ground?"

Keston had not meant to sound so fierce, so fatalistic, so crushed. His father sat back, scowling, rubbing one thin hand across his face. "When that day comes—"

"When it does," Keston said, amazed at this bludgeoning of his father, "you will long since have gone beyond the silver sky."

"Don't taunt me, boy. At least, we are men still. We at least have not fallen into the fatal flaw of the Hopeless Ones."

"The Zammu kill the Hopeless Ones, too, father."

"Good. They have ceased to be men. The Zammu never were men, though they ape our ways and our inventions and steal our secrets. Enough. I famish." He pressed the worn bell-push set in the arm of the chair. "Let us eat."

"A noble thought, father. I, too, famish after my journey."
"Remiss of me, lad. Should have offered hospitality before... Let us have more light, so that I may see what University and the Emperor have done to my son!"

Kevin Ochiltree had bellowed himself into a good humor; Keston knew that a man's mind cannot face the final disso-

lution and so shies away and seeks outlets in exuberance. He rallied at his father's mood. The outer keeps were no place for a fine academic discussion on Man's destiny upon Earth.

THE CLUSTERED light globes lit up among the festooned weeds of the ceiling. They shed their calm light outwards, bringing up colors, putting the natural red back in Keston's hair, throwing up the brilliance of jewel and precious metal in his father's cloak of ceremony, bringing out a glittering pseudo-brilliance from the tattered banners.

"At least the lights are-" Keston said, and stopped.

His father brushed the implication aside. "Whilst the aquasphere contains sixteen hydrogen atoms to every eight of oxygen and our thermonuclear reactors operate, Keston, lad, then we have light and power. Ho, there! Food!"

But it was not food that Miramee and his mother brought. They finned in through the doorway leading from the upper bedchambers. Behind them followed Kaley. Keston finned upright, to greet his brother as was seemly.

Kaley barely glanced at him. His dark, heavy face, so much like Keston's and yet, as though retaining all the brute force and vehemence that in Keston had been refined into liquid energy, was sullen and indrawn. Now he merely said, "So you return to eat our food and then depart. Well, I—" And then he went on, Keston forgotten completely. He floated up and flew protectively over his mother and the bundle she carried.

Kevin Ochiltree's old face lit up. His hands began to tremble. He inched forward on the seat, rising slightly, finning futilely with withered legs.

"Let me see!" his great voice boomed. "Let me see my grandson!"

Why, then, was Miramee hanging back? Why was Kaley scowling so, fingering the sword at his belt? Why was his mother sobbing so that her gown billowed about her?

The monstrous suspicion blossomed like an anemone into certainty in Keston's apalled mind.

Old Kevin Ochiltree was hanging weakly over his seat, peering dodderingly down towards his grandson. Miramee put one slender hand on her mother's arm and her mother gently, reluctantly, fearfully, withdrew the undulating shawl about the baby.

Keston rose and finned across, turned on his stomach and looked down.

The baby's pink and white face was screwed into a knot of digestion. The frayed mouth parted, seeking, the cheeks dimpled softly. The eyes of brilliant blue showed wide and unblinking, staring in wonder upon this strange and dramatic world.

And the hands.

Two tiny curled hands like the most delicate of coral weakly gripped and moved at the ends of rolled-fat chubby arms. Delicate, feathery hands. Hands with a tissue-thin membranous web linking finger to finger and finger to thumb.

Kevin Ochikree's cry was lost in the silence of the hall. His shaking hands wrenched the shawl away, bared the infant's feet.

A thin, membranous web, linking toe to toe

"No!" Kevin Ochiltree choked. "No! My grandson-a Hopeless One! It cannot be! It cannot be!"

"But it is, father." Keston looked down without compassion on that chubby, baby face. "My nephew is a Hopeless One. He has webbed hands and feet, You know the law."

Kaley turned to face Keston with an abrupt, tortured movement,

"He is my son! I know the law. And I also know he is my son! Lissa went through hell back there for this! For this, and you quote the law at me."

Quite unmoved, Keston said, "You know the law, Kaley." His hand groped down along his side, sliding toward the

familiar ridged grip of his sword. "Every Hopeless One must be killed, instantly, as soon after birth as possible. That is the law. Our father is incapable of the deed. You, as the father, should be spared the agony. I will force myself to do it, Kaley, in sorrow and—"

His hand, groping along the wide sharkskin belt, could not find his sword. Kaley, eyes wild, drew his own blade with a snicker that echoed eerily in this peaceful homestead hall. The women hung as though turned to lumps of coral,

"You shall not kill my child, Keston, for all the laws in the Empire. Fin back, Keston! You have no weapon, you

left them aboard your flier. Fin back, I say."

Keston retreated, the monstrous, blasphemous form of the Hopeless One there before him, destined to die at once. And he, weaponless, could do nothing. His brother would kill him. He knew that, coldly and logically.

He turned awkwardly with naked feet. In a long shallow

dive he flew towards the door.

Behind him in the great hall of the Ochiltrees he left consternation, heart-bursting grief, red, illogical rage—and the blasphemous form of a web-footed Hopeless One.

For some reason, all the way back to his turboflier, Keston kept thinking of that day in primary school when he'd been late because a mudslide had washed out the north field and his father kept him back to help clear up. He could only have been six or seven seasons old, then.

The class had been droning some scrap of rote, a routine task. The smell of cuttlefish ink and the confined ill—circulating aquasphere was as strong in his nostrils now as it had been every day at school. Flippering into the classroom he'd heard the young voices chanting:

"After the worms the jellyfish, then the Crustacea and the invertebrates, then the fish, then the breathless ones

and after the breathless ones, Man."

And into his young mind the chant had gone on: "And after Man, the Zammu."

He'd said this aloud into the silence after the hush of children's voices.

The teacher—a dim and fading memory now—had rounded on him, stirring plastics from the desk. "After Man, the rat people, the Hermaphrodilia, the octopoi, the whole great genus of the Corporate Entities, and then the Zammu. But, Keston Ochiltree, they are merely transients upon this globe. The rat people existed for a million seasons, and the octopoi for a hundred million. Where are they now? Yet Man is still here, still lord and master of the aquasphere."

"And the Zammu are still here, after-"
"After a mere fifty thousand seasons."

He'd rebelled at being proved a shallow thinker. He'd talked back, been cheeky. He'd then received sharp corporal punishment.

It was at that moment that he'd decided that he was go-

ing to enter the Emperor's watchsharks.

Well, much good it had done him. To be caught without a weapon—he'd be the laughing stock of the regiment if they heard. The only reason the octopoi people had at last died out had been the simple one that Man was not caught without a weapon at his side. The Zammu would go the same way; all intelligent life erupting freshly into the aquasphere was eventually conquered and banished by mankind.

Evolution taught that organisms evolved from simple multicellular forms into higher and higher forms until at last, a very long time later and only a very few forms, evolved into intelligent beings. But Man went on from time past the knowledge of his scientists through all the foreseeable time to come. That was the indisputable lesson of all history and archaeology. The aquasphere was Man's.

For however long the aquasphere remained.

Leaning into the flier to retrieve his weapons, Keston ex-

perienced a positive mental ache at the counterpoint to that grandiose thought. The silver sky was descending. The aquasphere was shrinking. There was one answer to that problem, an answer that only fear-crazed men would seek, and yet he had volunteered to be one of the band. And so he had come here to Ochiltree to say goodbye before the great adventure.

And he had come to find a newborn Hopeless One, one of those poor unfortunates who transgressed through no fault of their own the cardinal law:

Man is Man. Man must stay Man.

To keep the strain pure no mutations could be allowed even though common sense indicated that a man with webbed hands and feet, a scaly skin, a strong paddle-tail, would be more at home finning through the aquasphere. But the Law that had no recorded origin said no. Swim fins were so much a part of the dress of man that natural finned feet would become a hindrance, a scaly skin had its drawbacks, and Keston, like all his fellows, had a horror of tails. It was all a mystery, shrouded in the distant and still undiscovered origins of mankind upon his world.

And still Keston had not buckled on his scabbard and drawn his blade ready to return and slay the Hopeless One.

Kaley's son. His own nephew. He slid the sword up and down in the scabbard. Well, he'd seen the family again. He'd seen his mother and father and little Miramee—and Kaley. Why prolong the agony? Why go back now, to face a fight with his brother and his murder and the slaying of the baby? Why not let Kaley and the Ochiltrees work out their own salvation?

Near above his head the sky winked and sparkled, sending scuttering radiance in ghostly splashes of ever-moving light across the ground. He slid the sword hard back into its scabbard.

So the law was the law and a hard taskmaster into the

bargain. But of what real deep value was the law, in these wild days when the sky remorselessly descended, soon to engulf the entire world and blot out forever all sentient life? Of what value then the slaying of a tiny, helpless Hopeless One? Of what value then, in the final reconing, the adherence to the law and the murder of a tiny newborn baby; his own nephew?

Trapped in a whirlpool of indecision, he mounted the turboflier and eased the machine into the aquasphere, sending it spinning along toward Long Mile Reef. This was an infantile return to the days of his youth, an instinctive retraction of a matured personality confronted by problems hitherto outside its scope; Long Mile Reef had been his hiding place and think-cache for as long as he could remember. Now, returning to it with his emotions torn and trampled by all that he had experienced in the past moments, he could find little joy in the eagerly anticipated pilgrimage.

Everything was subtly altered by the awful nearness of the bedappled sky. Brain corals sprouted where before had been, to his uncertain memory, merely flat expanses of weed. But that, of course, could not be so. His memory was at fault. He was careful with the turboflier. He was still paying off on the installments, only about halfway through, and his pay as echelon-leader in the Emperor's watchsharks filled but meagerly the demands he made upon his purse. A repair bill from clumsily smashing his status-symbol into an outcrop of coral, on top of the regular payments, would see him finning moodily about barracks with an empty purse instead of joying in his comrades' company in the taverns lining Global Way outside the palace.

The dim and looming blue shadow of Long Mile Reef had vanished. In its place lay a massive weed-encrusted slope rising steeply to the sky. Again the sense of shock took him. Making all allowance for the difference in viewpoint from that of ten seasons ago he could yet still not fully

grasp the scale of the catastrophe encompassing the world.

The sky pressed full on Long Mile Reef. Up there, where as a child he had perched in his own cave snugly buried in the depths of the aquasphere, washed now the dimpled silver coins of the sky. He shivered. Then, because he was an Ochiltree, and because he was one of the Emperor's watchsharks, he lifted the turboflier and rose steeply, leaving a bubbling wake trailing beneath. Fronds trailed past. The colors brightened. Reflections glanced from the burnished handrail. His hair waving in the wake of his passage resumed its natural auburn tint. Resolved upon his purpose, he drove on upwards.

He could see for miles, it seemed. Down in the deeps, where normal men lived and where even the best of the modern artificial lights could penetrate a mere matter of yards, men's eyesight could pick up objects far beyond mere ordinary light range. The chemicals in his eyes reacted now, filtering down, shuttering off the glare. He started about, enchanted.

The first thing that struck him here, having driven through silent and deserted stretches, was the relative abundance of fish. Wild and untamed, they lurked in crevices, switched this way and that in thin shoals, their flanks catching the light and gleaming like a forest of blades. He wondered briefly what Kaley was doing, allowing all this potential stock to run wild. But one man could do only so much

A hammerhead bumbled along, turning its clumsy cross-shaped head this way and that. For an instant, as it passed, Keston saw the brand along its flank. The Flying O. An Ochiltree mount, then. He remembered his own first sharkling—Fury—and the brave bronze-studded harness, and his arrival so proudly at school. He was tempted to capture this maverick and take it back but remembered that his problems would not be solved by the bringing in of one stray.

Amid a brightening light and shards of bubbles rising

from some source below, he rose higher and higher toward the sky. He was perversely determined, having come this far, to reach his old cave. Already he felt sure that up the next weed-smoothed slope he would run across the little dell where the cave lay.

He had almost reached it, and already the choked exclamation of disappointment was rising in his throat, when

the sky split asunder.

He knew at once what it was.

A wild and ferocious rim-runner would have reacted with split-second violence, seeing only another threat to his herds. His father, now, would have drawn his gun and blasted without another thought. That was the way the men of the outer keeps stayed alive and in business.

A scientist, a studious man from the University, would have paused and begun to take mental notes, watching in absorbed fascination a phenomenon which, to him, was as rare as it was common to a herdsman on the rim of the aqua-

sphere.

Keston, born and bred a rim-runner and trained as a scientist's assistant and potential micropalaentologist, and by choice and for a living a member of the Emperor's watch-sharks, was torn between the two extremes.

His drawn gun was in his hand cocked and ready. Then he waited, coasting quietly along on the turboflier and watching the flitting shape of the breathless-winged-one as it chased fish. It was quite large, nearly as large as Keston himself. Its jaws—a beak, to give it its scientific name—were agape and collecting fish at a prodigious rate. Every now and then a webbed foot flicked down to turn the lithe body in a graceful curve. Strings of silvery bubbles followed its passage through the disturbed aquasphere.

These were wild fish, broken loose from the herds. Abruptly, Keston had no desire to kill the breathless-winged-one. Where it came from—ah, now, that was the question!

He had spent night after night at the University, arguing heatedly with his fellow students. Some said this, others that. Above the sky . . . What lay above the sky?

The breathless-winged-one cavorted past, turning a beady eye on him. Evidently it thought better of attacking the large and ponderous mass of turboflier and man. Veering off, it shot skywards once again. In a shattering of splintering shards, it vanished through the sky. Coins danced up there, throwing light in radiant speckles across Keston's upturned face.

Those of his comrades who argued that the breathlesswinged-ones were essentially the same as the great manta rays spoke arrant nonsense, according to others. Certainly, Keston could see little similarity between the manta's ponderous wings and the incredibly fragile structures, covered with clinging spines, that had been dissected from slain specimens of the visitors from beyond the sky. He shook his head. The incident had settled something for him.

Without a backward glance, without a look either for the cave or for Ochiltree, he turned the turboflier and set it full throttle back to the capital, back to the barracks of the Emperor's watchsharks.

WHETHER or not he believed the story about the first compressed-gas guns, had never bothered Keston; it was a good tall story. It went that men in those distant days used to fabricate a metal tube with a piston equipped with a spring-loaded catch. They filled the tube, sealed at one end, with gas produced with much laborious care from blended chemicals, and lowered it at the end of a cable into the great deeps. Mounting pressure steadily forced the piston up the cylinder, compressing the gas, until the spring-loaded catch clicked shut, bottling up the gas imprisoned within. All that was then necessary was the drawing up of the cylinder.

Now, of course, a good few million seasons or so later, men merely used their nuclear power sources to produce gas at pressures inconceivable to those early men. And yet, his own researches as a student working with Professor Lansing had taught him that men had existed on Earth for millions of seasons before that. The more you delved into the past, the more the time scales stretched, the longer the perspectives of time opened up, reeling in the mind an intoxicating vista of forgotten epochs.

Empires had risen and fallen, republics waxed and waned. Through them all men had gone steadily on, cultivating their farms, building their villages and cities, as each upheaval subsided sending out fresh waves of exploring ships to open up lands that had only yesterday teemed with the activity of their ancestors.

Old Professor Lansing, long hair bleached under the artificial lighting, had roundly castigated Keston the day he had told the old man that he was leaving University and entering the watchsharks.

"Those butchering maniaes!" Lansing had exclaimed, peer-

ing up with eyes more used to the delicate world in a microscope. "Well, young Keston, if you must. But think of what you are giving up! You have a great future. Micropalaentology and archaeology are in their infancy. We have great work to do, great work."

"Perhaps, when I have served my hitch, Professor . . ."

"Well, go then, go. Rattle your sword. Use the light-given power of science to fire off guns instead of seeking to unearth more knowledge of this world we live on. This world is all there is to us. It is all we have."

"And it is shrinking."

"Yes. Well, one day, one day . . . "

And so that day had dawned. Just like any other day. He'd risen on the watch alarm, dressed, donning his uniform with skilled and obedient hands, buckled on his weapons and reported at the guardroom. Echelon-leader Faro was there.

"Keston, old son. You're in for it. Report to no less a person than Guard Commander Nardun himself. In person." Faro had laughed, his teeth blue and gleaming in the dawn light. "I'm taking over your duty here. And may the Great Light have mercy on your soul!"

Guard Commander Nardun, middle-aged, burly, tough as the sharkskin shield hanging on the wall at his back, was curt.

"You are asked to volunteer for an expedition. Professor Lansing specifically requested you. Why, I cannot imagine."

"Yes, sir."

"I cannot tell you what it is. Just report to him. And if you let the watchsharks down I'll feed you to the stone-fish pen myself. Hear?"

"I hear, guard commander."

"Fin, then!"

Keston had finned.

So that had brought him here, fleeing from a decision he could not summon up the courage to take, fleeing from his

family after unsatisfactory goodbyes, fleeing from his own mother and father and brother and sister and the awful menace that descended upon them more narrowly season after season and could have but one end and one finale.

He sent the turboflier skimming over the ground, hurdling dangerously upflung rock formations, skirting the flanks of knolls, riding across crags that leered with sharp-fanged edges. The further he went with the dim and ghostly outlines of massive cliffs rising and falling across his horizon, the deeper he penetrated into the aquasphere. The dimpled sky receded, fading, shading from blue into green. The deep darkness opened out beneath him into which he could plunge bodily and feel at home. Damage to the flier suddenly seemed of small consequence beside the inscrutable menace of that silver sky.

Only once, as a headstrong and willful child, had he ever dared thrust his head through.

Nightmares had plagued him for days afterwards. The memory of heat, of scorching barrenness, of a condition for which he had no words to describe even now could bring him up in his hammock, shaking and shuddering. His eyes had felt as though struck by a sword dipped in nuclear acids. The bludgeoning impact of that experience had never left him.

The religious aspects did not fret him overmuch; the taboos about even thinking of celestial phenomena were still strong and fierce upon his people, especially in the rankly superstition-ridden outer keeps. But those bonds were slackening and men's minds were opening out to new ideas, new concepts and new adventures.

The stark terror of the experience stayed with him as an elemental example of punishment. And yet, standing in the familiar vaulted rooms at University, idly finning with curved hands, seeing Professor Lansing smiling at him and propos-

ing his fantastic expedition, Keston had said yes without hesitation.

Thinking of Ochiltree, of his family, of his new little nephew who was a Hopeless One, and of the crushing might of that descending sky, he felt a negative reassurance, as though he would be leaving nothing good and nothing worse could befall him.

All across fabled Nablus, the capital city of the Empire of Goldenzee, the colored watch fires flared. From tower to spire, cascading down arched and turreted wall, shooting unexpectedly from recessed embankment, lambent from pendant globes, shedding a refulgence over the crowds finning in the streets, and rising and falling from doorwindows set at all levels, the nuclear flames poured forth their radiance. Nablus was a wonder city of light and color, sparkling in the crystal aquasphere like some fabulous gem of mysterious antiquity.

To Keston, nursing his turboflier with curses and impatient fingers, the city boiled with life and noise and color and movement. The weed cluster that had been gulped by his motor and entangled in the turbofan had been partially cleared in a rushed emergency repair in the current-shelter of a coral outcrop, dead these million of seasons. Some weed had resisted his poking instruments, so that he had to creep back along Global Way, heading for the palace and the barracks like some miserable fish poacher on an outer homestead.

At last the very frenzy of the movement all about, the intense tone of the clamor, with fighting turbofliers scudding, crammed with armed men, the absence of women in their brightly colored trailing garments, the smoothly effortless sweep of a squadron of shark-mounted cavalry and the current-creating passage of batteries of heavy artillery drawn by harnessed and electrically controlled sharks—all this, at

last, aroused in him an awareness that all was not as well with fabled Nablus as when he had left it.

Were all returns then to be dogged by this brooding menace of imminent disaster?

A passing militiaman, brilliantly accoutered, swinging from his swordfish mount, seeing his uniform gave him a wave of his arm. His hair swirled widly. "We need every man, watchshark. We'll give them bloody bellies!"

Keston began to understand then.

And to Nablus. To the sprawling, many-leveled, mighty Nablus, capital of the whole Empire of Goldenzee, even here, the Zammu had no fear of penetrating.

A shiver touched his spine and he urged on the limping turboflier with an impatient hand on the throttle. He was feeling the pulse of the city now, smelling the familiar scents, becoming one with the breathing surge of the ten million inhabitants all about him. This was life as he had come to understand it, a life so far removed from all that he had known at Ochiltree that here his father would have been as a little child.

And that thought brought up an unpleasant memory so that he was scowling under his mop of waving hair as he reported in to the barracks guardroom.

As luck had it Echelon-leader Faro was on duty. His young, open, reckless face, already deeply scarred by a swordfish snout, lit up at sight of Keston.

"Keston, my wandering pilot fish! Back so soon? Bah, you always had a nose for trouble. No sooner do the Zammu threaten attack than you are here, arising in our midst." He peered more closely at Keston. "And why the ferocious scowl, lad?"

"I had no idea the Zammu were attacking, or even that they would ever dare."

"I agree," Faro rattled on in his reckless way. "That they

dream to attack Nablus, sacred city of Goldenzee! They will be destroyed this time, every last belly of them."

"Maybe." Keston was not thinking as he spoke.

Faro finned up, swirling his flippers before Keston's nose. "You dare to say that? You doubt—"

"No, no, Faro, not that." Keston was tired, irritable, anxious, if there was to be a fight, to get it started right away. "No, lad, you mistake me. I merely mean that I may not be on hand when the massacre begins."

"Ah!" Faro said, wisely. "Professor Lansing."

"Yes. And now, if you'll just do your duty and sign me in instead of flippering about like a sardine, I'll go to my quarters and change into fighting gear."

"Right. And when you have done that, report to Guard

Commander Nardun. And, my lad, finl"

Had Keston been other than he was he might have considered speaking to Nardun, of unburdening the load oppressing his spirit, and of seeking help and advice. He knew that he had broken the strict letter of the law. At the time he had justified that.

Justification had been easy with the silver-dappled sky pressing in on Long Mile Reef, overwhelming his private cave. The breathless-winged-one, spearing in from some remote and unthinkably mysterious region—region? was there a place beyond the silver sky?—had given added impetus to his feelings that a mere tiny Hopeless One could have no further significance in the scheme of things.

But now he was back in Nablus, back in the hub of the Empire with the bustle and throb of a great metropolis all about him, he was thinking once more as a civilized man.

Yet to speak to Guard Commander Nardun would be useless. The advice Keston would receive would be simple; Nardun might even consider it necessary to have him arrested and charged. His own shifting sense of proportion, of what was right and what was wrong, must go down in face

of that possibility, no matter how he sought to excuse it. When the Zammu were attacking sacred Nablus, when there was the silver descending sky to consider, the place for Keston was in the fighting ranks, not mouldering in some slime and weed-infested dungeon.

So that meant he had to live with his conscience.

One way of doing that was to throw himself into his work here, adhere with the blind devotion of a sharksman to his duty and shut out from his foolishly questing mind any other unwelcome intrusive thoughts. And at this very moment Guard Commander Nardun would have been alerted by Echelon-leader Faro's audio call from the guardroom. Probably Nardun was even now calling back, demanding of Faro why young Keston hadn't reported in yet, his dominating, domineering face staring out of the audio-visual screen set in the angle of the guardroom roof, hectoring Faro, giving him hell.

Keston finned rapidly to his room, leaving the damaged turboflier temporarily by the guardroom gate. He could pick it up later. His own room, bare, austere, sleeping hammock the main feature, seemed suddenly to welcome him with an anthropomorphic pleasure. He flung the uniform cabinet doors open and selected his second-best uniform.

He was wearing his fourth-best, his best was still strapped with his baggage aboard the turboflier. The third—hah! That was being repaired from the wreck ensuing from an enjoyable tavern brawl with the atomic artillery boys down along Global Way.

His fingers were sure and steady as he strapped on the wide skin underbelt, adjusted the shoulder harness and the rank badges which, in covering his operculum over his gill slits also performed the necessary function of modesty. A girl might show anything, within reason, but to no man save her husband would she reveal her operculum. Most women, Keston heard, fiercely resisted showing their naked gill slits

even to a husband of many seasons familiarity. This was just another of those unspoken-of mysteries stretching back into the womb of time.

A man breathed in through his mouth, the ambient fluid entered his lungs where oxygen was extracted and was then, recharged with carbon dioxide, passed out again to be ejected through the gill slits which also, in their fashion, carried on a minor oxygen-carbon dioxide exchange. This was a mere physiological function. But many a man had been stabbed to death for merely raising a girl's cloak over her operculum.

Oh, well, all this merely brought back bad memories of that other mystery-shrouded law that he had flouted, and drastically slowed down his time to Guard Commander Nardun, which was, all things considered, an extremely bad thing.

He drew up the three-cornered skin loincloth, working his thighs into a comfortable position, and strapped the wide bronze-studded belt across over the suspension belt beneath. He settled the harness leathers with their overlapping bronze scales over his shoulders and chest. Then his sword. After Kaley, never, never would he leave his weapons again.

Even though the sword was of use only against close-action fish, it was of some sacred significance and had before this saved his life. That time when the cudas had snapped his trident and his gas gun had been expended and they had driven at him from the blue dimness

It was all very well for the atomic artillery boys to laugh at a sharksman's sword; they weren't up at the sharp end where out of the blue veil sudden peril could strike quicker than an atomic shell could be thought of, let alone loaded and fired. A sword stopped an enemy, cold, stone dead, no matter how fast he came nor how near he managed to reach. Without a sword a sharskman of the Emperor's watchsharks not only felt naked, but was naked. Which reminded him of

his third-best uniform, and back again to Nardun. He blew into the aquasphere, chuckling. Already, back in the bustle of the big city, with walls and lights and traffic all about, with the threat of danger and perilous adventure beckoning, he was finding his good humor.

He slid on his most flexible fins and sped off to Nardun. Guard Commander Nardun kept him waiting. Calling back to Faro, indeed! How come Echelon leader Keston thought himself such a big fish that the guard commander would worry his head over him? It was a suitably chastened Keston who reported into the big room with the desks and wall charts and the aquasphere globes lining the ranked shelves. Each globe contained a sample of the liquid from all known areas of the world that had been reached and surveyed by explorers from the Empire of Goldenzee. There were a great many; their colors, salinity, plankton content and all other pertinent data neatly recorded below them on beryl plates.

-"Ah, Echelon-leader Keston. Come in, come in."

Keston entered and allowed himself to float down to the indicated bench. He waited.

"I am pleased that you cut your furlough short, Keston. I assume it was not because you heard that the Zammu were attacking Nablus itself; but I am not going to inquire into your reasons. Suffice it that you are here."

"Yes, sir."

"Good. You know the position. The sky can no longer be considered stable and we must plan therefore on a basis of a series of continuous attacks upon the Empire." The shadow of pain crossed Nardun's granite face. "That those attacks should begin in full strength upon Nablus itself is bad fortune; I see it in no other light."

"No, sir."

"Where the Zammu came from we do not yet know. They have plagued us for fifty thousand seasons, on and off. We thought once, back in the Republic of the Three Fins, that

we could bargain with them come to an agreement. But much has happened since then. Time has passed. The world has changed and there is a shrinking aquasphere to be shared between two intelligent races and far too many other animals."

"Man has always won before, sir."

"And he will again, against the Zammu."

There was no need to elaborate that thought. Even though the world might be dying, man would still go on fighting for his share of its goodness, right up to the last day when the aquasphere finally vanished and the sky touched the ground and that blinding light and heat and that scorching otherness that Keston so vividly remembered consumed them all.

"Now then, Keston. I know you are not just a plain fighting man. I know of your scientific work before you joined the Emperor's watchsharks—by the way, you might be interested to hear of Professor Dinar's latest work. I happened to be sitting next to him at the Lord Chancellor's dinner party the other night. A dedicated man, Professor Dinar. He has developed a system of mirrors which is extensible and which he hopes to extend through the sky to observe what might lie beyond. If anything does," he added, with a shiver.

"I am interested, sir. This is wonderful! Although I have heard the theory that a mixture of gases lies beyond the sky, and what they might be and their extent is so far beyond knowledge."

"A theory, surely? Well, then, my time is limited. I know of your proposed journey with Professor Lansing, of course. However, in this moment of dire peril to your city and Empire, I feel that you may wish to join the ranks of your comrades fighting shoulder to—oh, hell, Keston, you know what I mean. I can offer you a squadron, you know." The last was said indifferently, as though Nardun wished it to be made

clear that he was not offering this promotion in the way of a bribe.

"A squadron!" Keston's pulses quickened. After all, he was a sharksman, promotion in his corps was the road of his career. And to lead a squadron, to feel the undulating forms of a hundred tiger sharks at his back, each with its two riders clinging to their harness, guns and weapons ready, the gay banners flying—it was a heady picture. He'd have his own trumpeter, too.

It was what he had signed up for, what he had planned

that day back in primary school.

"May I have time to think, sir? I feel I could handle a

squadron, but . . .

"Still a scientist at heart, eh, Keston? Well, go see Professor Lansing. But I will add that the regiment can do with you. We are going to be desperately short of trained men."

"Yes, I know, sir. But-"

The screen set above the wide desk lit up as the audios struck in. "A call for you, sir, from General Zwohl. Urgent."

"Put the general on, please. You will excuse me, Keston?" Keston saluted and retired. As he finned through the door he glanced back, past his billowing regimental cape. General Zwohl was on the screen, thick-lipped, scowling, impatient. "We must put a screen across the bad lands to the north, Nardun. I'm sending two squadrons of your sharksmen and a detachment of artillery and what turbofliers I can scrape together. The damned Zammu are everywhere . . . "

Then Keston was in the corridor, under the calm lights, just hearing the tail end of General Zwohl's complaint.

"... in the ancient days they would have sent a fleet of battleships with atomic cannon to blast these damned Zammu. As it is we must make shift with shark-mounted cavalry and popguns."

Yes, that was it, Keston's thoughts rode the idea somberly. The whole world ran in cycles, up and down. And the Em-

pire of Goldenzee was on the slope of the trough, laboriously climbing the incline. A couple of thousand seasons ago there would have been no popguns, even, only bronze swords and bone crossbows against the impervious Zammu. But a few hundred seasons in the future and perhaps once again mighty fleets of manned battleships would roam the aquasphere, clearing the world of the Zammu, sweetening it and making it clean for the children of those who fought so desperately today.

Few hundred seasons in the future? By then, perhaps, the sky would have engulfed all of the ground and with it all of mankind.

HE FLIPPERED casually out into the courtyard and headed for the guardroom gate. His turboflier was not there.

"Commandeered," Faro told him. "They'd use the Im-

perial refuse carts if they were self-propelled."

Keston could not feel outraged. Sacred Nablus was hardpressed and the inhabitants must sacrifice right down to bone if the city was not to be overrun and hurled forever into the primeval ooze. "Well," he said. "I'll turn over payment of the installments to the government."

"You do that," Faro said, oddly serious. "They'll be glad

to pay."

He rose until he was level with the topmost tower where he hung inconspicuously. He could look about him now with the hypersensitive sight possessed by all men. In him the lassitude of his thoughts made any energetic movement, any decision, eminently postponable. He would fin idly over to see Professor Lansing. That squadron beckoned like the juicy meat in a lobster claw. The impending tragedy for all of mankind was inextricably bound up with his own fate and yet that race doom far overshadowed his own puny problems. Why worry, when whatever you did posterity just would not exist either to acclaim or condemn?

Much as he might be aware of mankind's gift for overcoming problems as was so clearly shown through all the past ages, he yet felt as one with those who would retire from the cuda-race and drift gently in a roseate cloud of their own imaginings.

Once, long ago in the golden age of the Commonwealth of the Five Oceans—no one knew now what the word ocean meant—they had found their idealistic mode of living unable to cope with their discovery and abandoned use of nuclear power. They had smashed up their world in the titanic blasts

of hydrogen bombs. When was that, now? A hundred—no, more like five hundred thousand seasons ago. Yet, here was mankind still, and again facing a definite threat that would end him forever.

Because this time there would be no welcoming world awaiting the creeping emergence of mankind again from his caves and hovels huddled against the coral reefs.

Movement far below attracted his attention and he let his gaze wander idly down the many levels. Far down there a marching column was finning steadily out and away, gradually inclining upwards, heading out and into the great deeps. He could make out the sleek forms of swordfish with their harnessed riders, the many flittering figures of infantryfinning in an eight-deep phalanx, their thirty-foot tridents all meticulously aslant forming a bristling hedge of beryl fangs. Poor devils! At best the steadfast beryllium wall against which the maddened onslaughts of the Zammu would break in a red welter of confusion and bloodied bellies.

And—he'd heard through the coral line that the infantry phalanxes were being equipped with plastic shields, tougher and more maneuverable than the old sharkskin targes that hung, exuding their odors of sharkskin oil, at every old man's back. The arsenals of the Empire, too, were hiving day and night producing gas guns and the unlimited store of bolts that fighting on this world-spread scale demanded.

Turning away, he looked across the steepling spires and towers of golden Nablus and wondered if all this color and life and gaiety would end with the marching fins of lines of fighting men and the thin dolorous howling of husbandless wives and fatherless children. That had happened so often before, back through the fleeting mists of time, odd corners only of which were raised by the painstaking toil of men like Professor Lansing. Reluctantly, he finned slowly down towards the University.

The age-old stones again extended a welcome to him as

his room in barracks had done. But this time the greeting was warmer, more profound, more personal. Here, he felt with a sudden wave of understanding, lay his true vocation in life.

"Surely," he'd said as a young man supping eagerly from the overflowing cup of wisdom held out to him by the willing hands and brains of the University, "surely a man can be more than just one simple thing in life? Surely," he had said, "a man might be a student, seeking to learn all he could of the wisdom of men and to grasp what might be of an understanding albeit dim and fragmentary of the wonder that was human life, and yet, at the same time, be in the fullest sense a sharksman ready and able to fight for his empire and his race against the darkness that threatened?"

So he had thought; and the dream had grown dim and tarnished during long hours of picketting and guarding and spasmodic fierce forays against the raiders from out of the deeps. He had grown calloused; a fighting man, living in his war harness, his sword hilt growing into a permanent part of his body like the weapon set in the jaw of a sword-fish. Then had come the summons from Professor Lansing to accompany him on the strangest expedition ever known in the history of mankind. And he had jumped at it, despite the primeval fears and childish experience. He had leaped at the chance.

And now the Zammu were everywhere attacking and his duty called him to rank himself by the side of his comrades when they met the oncoming shock of the alien wedge. Alien? Well, what was alien, if not a man or being who was not born within sight and sound of your own nuclear reactor?

Flying down towards the University and hovering for a reflective moment above those time-hallowed walls, he allowed his mind to roam back upon the men he had killed. Men who were aliens because they hailed from a different

quadrant of the habitable aquasphere. Men, yet enemies because they did not own allegiance to the Empire of Goldenzee. Now they were all men together, facing the truly alien threat of the Zammu.

And yet the Zammu had been spawned on this world, born like men under the same silver-dappled sky.

Truly, all of life was a puzzle. And perhaps one of the greatest, yet the smallest-seeming of all, was the problem of the Hopeless Ones; men who yet were not men. Men like his little nephew, born with a membraneous web linking fingers and toes, a true adaptation to life in the aquasphere. Yet they were not wanted, were abhorred, were condemned and therefore cut out from mankind's heredity with the swift and impersonal precision of the surgeon's scalpel.

With these vague and grandiose thoughts thronging his brain he finned into central corridor, heading for Professor Lansing's extensive laboratories, and came face to face with Soyle.

The lecturer backed up momentarily and then as he recognized the uniformed sharksman before him, his coarse face creased into a mocking smile.

"Assistant Keston! Or should that be sharksman Keston? Or what? Hev. Keston, or what?"

Keston was completely taken aback.

Certainly, he remembered lecturer Soyle as a loudmouth, a cuda-eyed vicious wart. Now the man was garbed fashionably and rufflingly in a oversmart militiaman's uniform, the rank patches over his operculum denoting the rank of Echelon-leader. He fingered his sword which was ostentatious and overelaborate, the hilt a congested mass of precious stones.

"Hullo, Soyle. I'm in a hurry. Let me by, please."

"In a hurry. Yes, that sums it up, Keston. In a hurry to get away from the fighting now that it has come. You were fresh enough to join the watchsharks when it was all a case

of ruffling it down Global Way. But now that there is business to hand, you slither off like an eel to join Lansing's fantastic circus."

"Out of my way, wart."

Soyle's sword flashed once as he drew it, twice as he lunged.

Keston was not taken by surprise. He was not a shaksman who was still alive after seasons of battle and sudden death to be taken by surprise by a jumped-up militiaman. His own plain, ridged hilt snugged sweetly into his palm. The first wild thrust was parried in a screech of blades. Then his point was inches from Soyle's throat and his left hand was bending the other's right hand backwards.

Soyle shrilled in pain as his hand bent against the bones. The sword dropped. It stirred silt as it struck the floor. The scintillating magnificence of the hilt dulled. Keston drew his left hand back and struck, edge-on, across Soyle's cheek. The red stained up like a chameleon-fish. Then he let the man drop, kicked him aside and finned up and over the sprawled figure.

He didn't even bother to look back. Soyle had been wearing no gun. Had he been Keston would probably have killed him then and there, in the sacred precincts of the University.

Red confusion and shame hammered in Keston's overstrained brain. Soyle accusing him of cowardice because he was contemplating joining Lansing's expedition. Didn't the fool comprehend the dangers involved? Or was he merely jealous that he had not been invited? Lansing was a wise old turtle. He'd known that a ready sword and a crack shot would be needed; not some half-cocked amateur militiaman too ready with his mouth and too slow with his blade.

There was no valid reason why a braggart's maggot-mind should upset him or make him ashamed. But to Keston there had been too much of his own smothered feelings in what

Soyle had said for his own comfort. If he went with Lansing on this madcap scheme, which, when it had been broached, had seemed of such high scientiffic purpose, he would be running away from the battle and the noise and tumult of the conflict. Keston had run away, quite recently. He had run out on a decision he could not make. And in that flight he had left behind a Hopeless One to live and blaspheme the law and he had left behind the shreds of his own self-respect.

So it was that he finned harshly through Lansing's open door, filled with ugly self-doubts and a smouldering desire to hurt someone—preferably himself—and the cold decision lying like a lump in his stomach to spurn the professor's offer and to rejoin his comrades and march against the Zammu.

Courtesy halted the thronging, angry thoughts in Keston's mind when he saw that Professor Dinar was with Professor Lansing. The two elderly men were so much alike they made a fit subject for a funny cartoon that might be published in one of Nablus' many plastic comic news sheets. Keston halted by the door, finning gently, politely taking care not to disturb the aquasphere and inconvenience the two scientists. Alike they may have appeared, but Keston was too astute an observer of human nature to imagine that they were alike in any other material respect. Human beings were like those splinters of light that danced down from the sky. They might seem to the casual observer to be exactly the same, but you never found two to match. Without embarrassment he listened to their conversation.

"... even if it should turn out to be a mixture of gases, as now seems relatively certain, the problems are still of the order with which we are familiar in laboratory work."

"My dear Lansing, I agree absolutely. The pressures and temperatures with which we juggle, the incredible advances, incredible even to a physics man like myself, of the past

few seasons lead me irresistibly to the conclusion that no matter what we may find will be overcome and all problems solved"

Dinar paused and delicately inhaled from his cut-glass perfume dispenser, a luxury that Keston could not afford and so rationalized into a vice. "I am reminded of the work of Doctor Somes some fifteen seasons ago. Nothing much came of it in the final fin—I believe he was chopped by the Zammu on a fresh scientific expedition beyond the safe areas."

"That is so," Lansing nodded. "I know the work to which you refer. He found caverns within certain mountain ranges where the sky unaccountably and arbitrarily appeared where no one expected it."

"Yes. The darkness was absolute and artificial lighting had to be used continuously. But his report, which did not receive a wide circulation, stressed the theory that above the sky lay an almost impossibly thin mixture of gases. When we liberate gases from the aquasphere with heat we cannot always trace their final conclusion . . ."

Lansing laughed. "You will bring up the hoary old one, my dear Dinar. What is in a bubble and where did it come from and where does it go?"

Both men chuckled. That problem had been a conundrum for many generations of men. Keston listened avidly. This talk was of the sort he sorely missed in the machinelike barracks of the watchsharks. He remained silent.

Despite his caution the languid currents reached the two scientists and they turned, smiles lighting up their faces.

"My dear Keston!" Lansing finned forward, hand outstretched. Keston grasped it, warming to the affection in the old man's glance and clasp.

"Professor Dinar, may I present to you Assistant Keston, a most able young man who chooses to waste his talents—as

you may observe from the barbaric uniform he wears." Lansing chuckled as though at a private joke.

Dinar laughed and shook hands. "It seems to me that many of us will be donning uniform and reverting to barbarism if the Zammu do not allow us to live in peace. Were I a younger man . . . Well, my fighting days are done." Lansing cocked his wise old head. "If you are serious in

Lansing cocked his wise old head. "If you are serious in your quest, my dear Dinar, that remark may strike you as exceedingly funny in a season's time."

"Oh?"

Lansing brushed that aside. "What happens, Keston, when a pressure valve jams on a flier motor and she descends to great depths!

Keston grimaced. "Implosion."

"Precisely. Now we are designing a turboflier that may have to operate in conditions entirely the reverse from those extant in the normal world. A hundred seasons or so ago to mention anything as existing beyond the silver sky would have brought frowns and immediate incarceration in a lunatic asylum. A hundred seasons before that, and before you'd framed your remark, you would have received eight inches of sword in your abdomen for blasphemy. The Great Light, it was said, would not be mocked."

"But we live in a more materialistic age now. Science is pushing back the frontiers of the known all the time."

"True. We now no longer credit the Great Light with a supernatural origin. No longer is the grand procession of days and nights thought to be the Great Fisherman crossing the sky with His catch of firefish which he needs for . . . But you know the teachings as well as I."

"Yes, but if you visit the outer keeps, where the rule of Goldenzee weakens and the sky may be close upon you, you'll find the same fanatical belief in the old teachings as any that obsessed men a hundred seasons ago."

"We still render token obedience to our childhood teach-

ing; religion must form part of any thinking man's mental makeup. These tremendous phenomena didn't just happen. There was a thinking brain and heart behind them." Professor Lansing glanced up quickly at Keston, a look at once profound and yet impish. "But, I venture to suggest, no one has ever dared to ask what exactly, in material terms, the Great Light is."

Keston felt hot and cold. Childhood memories of teaching at his mother's gently waving fins seized him with the vertigo of past time. Sacrilege, blasphemey-well, what right had he, a man who allowed a Hopeless One to go on living. to cavil at a little more blasphemy?

"Go on, professor," he said queitly.

"You were invited to join my expedition for the obvious reason that you had worked with me. We both know what we seek." Again that mischievous smile, "At least, I trust that you do?"

Keston nodded. While what he sought was not crystal clear to him he had enough of an idea, so he thought, not to need to contradict Lansing.

"Well then, imagine that armed with the standard Imperial infantry pattern sword you are in the ring facing a swordfish, a big and ugly swordfish. Who will win?"

Keston laughed. "A man will win every time."

"Again, true. But suppose it were I, or Professor Dinar, in the ring with our swords facing the swordfish. Who then do you suppose might win?"

"Well . . . " Keston hesitated.

Dinar said heavily: "The fish would win."
"Yes," Lansing said, "because we are no longer trained fighting men. Keston here is. That is the other reason why you have been invited. Not because you are a fighting man, but because you have been trained in aptitudes that we may need. It is easier to train a scientist, when caught young, to be a fighting man, especially when as a youth he was a

rim-runner, than it is to try to knock scientific ways of thought into the thick cranium of a fighter."

"So that's why you made no real effort to prevent me from

joining the sharksmen!"

Lansing chuckled and patted Keston on the shoulder.

"This trip has been planned for a long time. I have picked my men and women well."

"And I?" asked Dinar eagerly.

"There is room. The dangers are great. There is a strong possibility that we will not return."

"I'll go and pack right away."

"Wait, wait!" Lansing laughed. "Tell young Keston here of your latest experiments."

"You mean in the extensible optical system?" asked Kes-

ton.

"My, myl" Dinar marveled. "You keep up to date, young man."

"He fins sharply," said Lansing, with a sly smile.

"Well, the results are what matter. I managed to get my

apparatus through the sky and looked."

Dinar's manner changed. Like so many other scientists who discover earth-shaking truths in holes and corners, working like guppies in the obscurity of great buildings, he was profoundly moved by the importance of his own work, a little scared, and deeply humble in gratitude for his own part in the work. This particular experiment, Keston was well aware, would have brought imprisonment and an ugly death only a very short time ago.

Men were not allowed to peer past the veil of the sky and seek to confront the Great Light face to face. If Dinar had carried out the experiment too close to one of the outer keeps—the Marhall keep, for instance—inquiring riders might have felt it incumbent upon them to slip their tridents through his body and leave him to be eaten by crabs rather than risk the blasting revenge they were certain would fall from the

sky. "I chose night," Dinar said. "All I saw was an apparently limitless area of firefish, thousands upon thousands of them. They did not move. They just swam there, motionless, glittering, cold and seemingly infinitely remote and yet, strangely, close at hand. The scale had no meaning."

"And during the day?"

"One assistant was temporarily blinded by the Great Light. We did not dare resume our experiments for some time. Then I risked it. We had not so far been blasted for blasphemy."

"And?"

"I find it hard to describe. The optical system allowed only a hundred and eighty degree traverse, up and down and and around. Directly ahead lay mountains, as you might see any time in the aquasphere rising from the floor. The visibility was incredible. I had the impression that everything was very bright and very tiny. Just a limitless space, the mountains rising in the distance, and . . . *

"Well go on, Dinar." exploded Lansing.

"Above me, finning like mantas, were creatures. I took them to be the breathless-winged-ones, for like mantas their wings were extended and beating."

"So that there is a place above the skyl" exclaimed Kes-

ton.

"And our problem," added Lansing soberly, "is to know how to reach it."

A CARAVAN was entering the Amethyst Gate as Keston left the University buildings and finned a circuitous and moody route back to the barracks. The sight held him. Here was the spectacle of shark-mounted outriders with their flaring cloaks and handy weapons. Bunched spans of marlin towed plastic floats bundled high with bales and packages, one behind the other.

Here were inevitable snarls as the fish were coaxed through the expectant throng. He heard the jeers and catcalls, and watched the quick dart of city urchins ready to pilfer the slightest loose object.

Around him was the portly pomp and splendor of the fat merchants with their beringed hands and gorgeous costumes. Occasionally there was the thrilling glimpse of some strange fish never before seen in Nablus, or of exotic women veiled and bejeweled like a cluster of rainbow-fins.

The whole exciting, stirring, entirely wondrous pageant held him, had always held him from the time he had first experienced it as a young and raw rim-runner, and would always, he hoped, hold him for as long as he lived in sacred Nablus and the caravans pulled in from every corner of the world.

In the old days there would have almost certainly been, herded at the tail of the caravan with sharp-tined goads, a miserable, staggering collection of human beings, chained together, old and young, strong and weak, dragged from their homes and loved ones and sent to labor for as long as they lived. Thankfully, the suppression of the slave trade had been an accomplished act of mercy long before Keston had been born.

Keston moved his fins gently, keeping station a few spears'

lengths away from the caravan, ever mindful that the trigger-happy outriders would not think twice of pricking him aside with their tridents, Emperor's sharksman or no.

The smell of a caravan had power to send the blood drumming through Keston's veins. The mingled odors of distant places, unknown peoples half across the world, the spinetingling aromas from bales and bundles that might conceal the wealth of a city's ransom—these all thrilled him.

Once, Keston remembered, he had seen with his own eyes a gift from the Great Light, reverently tied by itself in place of honor to the broad back of a marlin. In appearance it was long and thin, cylindrical, with a few minor appendages branching off at each end like anemones. It was hard and yet could be cut with a knife. Puzzled, science, while still obsequiously regarding it as a gift from the Great Light, had to find a scientific name as well.

Numbers were found from time to time, always at the very limit of the sky, moving up and down, half in the aquasphere and half in that other place that was so much in Keston's thoughts. So science had found a name for these eerie phenomena and had called them logs.

But no man would dare to reach out to see them entirely. Invariably they would be dragged down and brought in triumph home. And, like many good things of this world, they were by Imperial decree peculiar to the Emperor and must be taken, at once, to the palace and there offered up with due rite and solemnity.

Keston flippered casually to avoid the lazily turning snout of a shark. The beast looked in poor condition and the rider's harness was patched and thin.

"What news, friend, of the world?"

The outrider lifted his trident with a gesture that spoke eloquently of a tired resignation. "The Zammu," he said.

"That we know. Where do you hail from, friend?"

"From far Strathcorbus have we come. I have no wish to

speak of it. Our leader is to see the Emperor at once. We tangled with a mad mob of Hopeless Ones who were cutting out a school of Breathless Ones."

By the way he said this, Keston knew he meant Breath-

less Ones and not merely breathless-ones.

Despite his bright and clear-thinking modernism, the imagined vision of the Breathless Ones brought a tingling shiver to Keston. He knew what Professor Lansing and Professor Dinar would say. And he knew, too, what he would answer. The Breathless Ones were a mere part of the world, another form of life living within the aquasphere. Yet, with that firm reasoning bolstering him, he felt the age-old thrill of wondering dread.

"Your leader will have difficulty in seeing the Emperor with the cares and duties upon his shoulders, friend."

The outrider touched his mount and veered away. "He'll see the Emperor, never fear. The Emperor is jealous of his rights over the Breathless Ones."

And that was true.

Keston in turn flippered off, making for the barracks.

Checking the duty rota he discovered, not without a twinge of displeasure, that he was guardroom officer this coming night. He collected his baggage from where it had been piled outside the guardroom doorwindow and finned off to his room. Then he joined his comrades in the mess and ate a prodigious meal. All the talk—tearing the unwritten taboos to shreds—was of the Zammu.

He had just finished and was sitting back to allow the orderly to remove the pile of empty oyster shells when the call sounded.

"Orderly officer! Report to Guard Commander Nardun." Faro looked up, mouth full of algae pie. "That's you, old son," he said indistinctly.

He at once protested, but Faro, swallowing, pointed out that this duty fell to Keston today and that he, Faro, had

jolly well been proving a pal and filling in. Keston had the grace to say thanks and rose, flippering off fast. A second interview with Nardun today might not go as well as the first.

General Zwohl's features were just fading from the screen

as Keston entered.

Nardun turned with a smile. "You, Keston? You are orderly officer?"

"Yes, sir."

"So be it. The position is this. Some fat merchant has brought in a tale of the Emperor's Breathless Ones being interfered with, rustled off, most likely, by a crazy bunch of Hopeless Ones. You are to take an echelon and deal. Here are the co-ordinates and pertinent data. Understood?"

"Understood, sir."

"Well, fin then! And, Keston, good luck."
Keston said, "Thank you, sir," and finned.
Only when Echelon-sergeant Ronel had roused out the

Only when Echelon-sergeant Ronel had roused out the men, saddled the tigersharks and seen the sharksmen harnessed up and steady on parade, did the amusing thought occur to Keston that Faro had been taking him for a ride. Crafty Faro, no doubt thinking of the many times he had taken Keston's place on guard, had confidently worked this one off on him. Keston, returning Ronel's impeccable salute, chuckled. Poor Farol He'd passed up the chance of an independent command, the exercise of unimpeded authority and the chance of action.

Keston led his echelon—he had naturally called out his own sharksmen—through the guardroom gateway and swung his hand into a fast fin forward. With the scrap of colored bunting atop the lance socketed in the bucket on the ensign's tigershark, the cavalcade finned hard up and away into the dim blue reaches of the aquasphere.

The co-ordinates were useful only so long as the ground was kept in view. After that he would have to rely on the sense possessed by all men, the ability to fix his position in the

aquasphere and know in which direction lay Nablus, when surrounded only by the impenetrable blue veil.

Echelon-sergeant Ronel was a good man, his tough barrel body in the bronze-scaled harness striped with the scars of past battles. He urged his tigershark up alongside Keston's in the lead. As the senior men on each shark they automatically took the right-hand flank, the left flanks each being guarded by a grizzled veteran of many campaigns.

"What's the flap, sir?"

Keston filled him in by pithy sentences. "Let's hope the men stay steady, sergeant. You know how the Breathless Ones are still regarded by some."

"Don't worry about that, sir. I'll have my trident ready for anyone who panics."

Soldiers were notoriously unimpressed by the stories of the superstitious and the credulous. But a Breathless One was a different kettle of fish. Except that they weren't fish at all. Like the breathless-winged-ones—and like men—they possessed lungs. But for some strange quirk of evolution, their lungs could serve no useful purpose. If restrained in the aquasphere too long, they died. Most odd. Like those logs of science, they drifted on the edge of the sky and no man sought to disturb them there.

Except, as now seemed the case, a crazed bunch of Hopeless Ones sought to drive them off.

"Getting close now, sir."

They had made good progress. All about the blue veil stretched, vast and comfortless to a man without a weapon, yet friendly and cloaking to this band of well-armed sharksmen.

"Close the men up, sargeant. No straggling."

"Sir."

The thing happened with trident-like rapidity.

The technician-sharksman had just looked up from his

audio search gear strapped to the back of his tiger, when a vast gray wall appeared out of the veil. The wall was ascending at a prodigious speed. Keston reacted with instinctive violence.

He shouted, flinging up a hand. "Form echelon!"

The sharks curved away in graceful arcs, even numbers to the left, odd numbers to the right. The aquasphere boiled in the thrash of many fins.

And then the greatest of all fins rushed past, making a noise like an unregulated turboflier. The gigantic fluke swished past Keston's head, the wash toppling him and his shark away so that the animal had to fight hard to regain station. Keston clung on and looked about, trying to see what had happened to his echelon of twenty-five tigersharks.

He was responsible for fifty men and he did not intend to

lose one of them.

Sergeant Ronel was shouting, high and shrill. Keston saw him firing his gun, saw the leaping bolts hurtling away into dimness. Lights flashed up as his men switched on their battlelamps. Confusion broke in a roaring wash of sound and movement.

The Hopeless Ones who by their very existence blasphemed the law had been caught completely by surprise. They had been herding the Breathless Ones along, always a slow business, and had made little progress from the point at which they had been seen and reported by the caravan.

In a smothering swirl of bubbles, Keston saw a man diving across his front. But the man was not a man. He did not wear flippers. Instead, his feet were webbed and clawed, and his body grew its own natural coat of scales. His mouth was wide and gaping and his eyes shone red in the battle-lamps' glow.

Even as the veteran riding at his side fired, Keston saw in that ferocious picture of the Hopeless One another picture superimposed: the picture of a tiny infant, uncurling

coral-like hands and feet, while his father and Kaley looked on

Then the bloody action milled all about. Sharksmen and Hopeless Ones clashed and fought and died. The aquasphere reddened across the lights. Drifting clumps of blood, like the ejected ink of cuttlefish, stained the scene. The tigersharks, despite their rigorous training, despite the electrical controls buried in their flat heads, despite all that men could do, reverted to their natural ferocity. Thus it always was and perhaps thus it would always be in battles fought under conditions of such primeval savagery.

The tigersharks went mad.

And through it all, bellowing along with their flukes thumping and their shrill, yattering cries, the immense bodies of the Breathless Ones drove remorselessly on. These were the ones, Keston saw, that held in their heads enough oil to grease a regiment's equipment for days on end, to give pleasure at the gourmet's table for more days, and to be devoured in the myriads of chemical uses that science every season discovered for the benefit of man.

They belonged to the Emperor as his personal perquisite, and the duty of Keston and his echelon of sharksmen was to preserve them for the good of the Emperor and the Empire of Coldenzee. Which, in the final fin, meant for the

good of all men living in the Empire.

"They're finning, sir!" Sergeant Ronel swept past, his tigershark streaming blood, the veteran on his left flank firing coolly and methodically though his shoulder stained the aquasphere about him. Keston saw the ensign crouching low, the echelon battle guidon lowered and driving cruelly into the belly of a screeching Hopeless One, who lashed it with a spined and finned tail.

It was a mad swirling fight.

Round and round circled the tigershark-mounted men. Rising and falling in the limpid aquasphere so hideously

stained, they outfought, thrashed and sent into tumbled ruin the savage bitterness of the Hopeless Ones. Men fought men who were not Men. And, as always, as always *must* be, Men won.

Keston's sword was a blade of gleaming fire, ruddy with blood in the battlelamps' light, striking with sure and steady purpose into the vitals of the Hopeless Ones. The sharksmen rallied together, turned and in one final charge routed completely the monstrosities who should never have been allowed to live.

After that it was a matter of administration.

There had been nothing of joy in the fighting. Keston had not experienced the welcome elation, the heightening of the pulses, the quickening of the blood, that could be found only in the thick of the fray and the bloodiest of the conflict. Trailing back with his echelon—minus four tigersharks and seven men—he was deflated, despondent, wondering why the joy of battle had deserted him and yet knowing only too well the answer and refusing to heed it.

Fighting the Hopeless Ones was a fit service for a man! From his mind's eye the picture of the red-gleaming-eyed monstrosity with its webbed hands and feet and its scaled skin would not be banished, nor would the superimposed image of his nephew, with the pathetic mouth seeking in puckering desire and those blasphemous hands and feet. He knew the law and he thought he understood the world into which he had been born. But now he could no longer understand himself.

"Keep the men formed up, Sergeant Ronel."

"Sir."

The Echelon-sergeant went about his work with the swaggering panache possessed by every member of the Emperor's watchsharks. But Keston saw with half an eye that he, too, was uneasy and fully aware of his leader's displeasure. Serrefiles were posted and the echelon finned on.

They passed the regular herdsmen, rather comically, to Keston's people, mounted on tarpon. The reasons for that were plain enough. The herdsmen waved, crouching among their sonic appartus festooned along their mounts. They were no doubt quite happy to go back to their peaceful pursuits with the fear of the Hopeless Ones removed. But Keston could not stop the black thoughts. How long did they expect to go on in the old ways, with Hopeless Ones, the Zammu? And the silver descending sky?

He set a cracking flippering speed back to barracks.

Guard Commander Nardun expressed approval at Keston's report. The tigersharks had been cleaned down and stabled, the men had furbished up their weapons and equipment and had been fed and sent off duty. Keston had snatched a mouthful and changed and reported in.

"That the Hopeless Ones venture so close is ample proof that our normal patrols have been drastically thinned," Nardun said, waving Keston to fin easy. "There is talk of an armistice—"

"An armistice! With them?" exclaimed Keston.

"Oh, I know it sounds unspeakable, blasphemous. But the Zammu press and harry us all indiscriminately." Nardun brisked up. "What have you decided, lad? The coral line has it that we march out soon. Faro is ready for that squadron if you feel, that is, if you decide, otherwise."

Into Keston's mind came Professor Lansing's wise old voice, speaking with the detached and yet fanatically dedicated voice of the scientist. "This trip has been planned for a long time."

And of himself: "So that there is a place beyond the silver sky!"

And Lansing: "And our problem is to know how to reach it."

He remembered with a shiver of savagery that brief and

bloody fight out there mixed up with the great Breathless Ones and of the joyless swinging of the sword that brought nothing but agony of spirit and discomfiture of mind.

He said firmly, "With your permission, sir. I feel it is my duty—to the Emperor as well as to science—to go with Pro-

fessor Lansing."

Nardun smiled, a little sadly, and held out his hand. "Good luck, lad, You're a very brave man."

So that was that.

He felt at once elated, sloughed of the worries that had plagued him. One fighting man more or less would make no difference to the Zammu. While his comrades fought to the bitter end, he would be away—somewhere, out there beyond the silver sky.

ON THE DAY that he was to see for the first time the gas ship and to make the acquaintance of the vehicle in which he was to spend possibly the rest of his life, his own regiment, the Emperor's watchsharks, moved out to the front. He went to see them off. Out of an ashamed decency, he discarded his bright uniform and donned simple civilian clothing, blending with the cheering multitudes as they finned excitedly along the various levels, watching the fighting men marching out.

Emotions tore at Keston but he was able to see quite clearly where his destiny lay. He watched the long array of undulating tigersharks, each with its two-man load strapped into their harness. Their gas guns were sheathed, bolt bandoliers filled, their swords scabbarded, their shields slung low and handily. Their tridents were aslant at the regulation fifty degrees slope. The banners heading up each squadron were the regulation number of shark-lengths in rear of the squadron leader and his trumpeter, whose great conch shell curved over his shoulder, streamlined into the current.

Among all that colorful, glittering and heart-catching panoply, one man more or less made no difference.

Faro was there with his reckless face and his scar, Squadron-leader Faro now, marching out at the head of the squadron that might have been Keston's.

He watched them go, hearing the shrill lilt of the trumpets, seeing the current-fluttered banners, critically observant of their alignment and bearing. Through it all he desperately wished that he could rush out from the onlookers, break ranks and fall in to march as a simple sharksman strapped to the coarse banded flank of a tiger.

He turned away, flippering awkwardly, colliding with

the stone supports to balconies and archways. Then he shook himself roughly. By the Great Light! What was he, anyway, a miserable little tiddler, squirming on the end of barbed emotions, or a mature man, a scientist before he was a sharksman? He finned on more strongly now, sure of his fate in life.

Bolstering his new-found resolution, he did not visit the taverns along Global Way as he had planned to recapture something of the golden past. Instead, he flew straight back to University and to the new laboratories where the gas ship had been building in secret for the past six seasons.

Professor Lansing met him finning awkwardly with his arms full of plastic sheets. Keston relieved him of the load.

"Ah, Keston, my lad. All gone?"

"Yes, professor. They're gone. And now?"

"Dinar is almost incoherent with impatience. I left him at the valves. The others will be joining us later. These plastics—I must have them with me, many of my calculations need reworking now that the damned Zammu have pressed in so close. After all, we are the first men in the history of the world to build, man and fly a gas ship."

"Has she flown then?"

"Hum, no. But she will, lad, she will."

"I am familiar with the theory by now," Keston said, falling in beside Lansing. "But just how you have applied it exercises my imagination."

Lansing laughed. "Here are the valves. This is the day. All you have to do to satisfy your imaginative conjectures is to allow me to open the sonic lock, usher Professor Dinar and yourself through, switch on the lights, and"

For a space thereafter both Dinar and Keston remained silent.

Surely, he had been familiar with the theory. A descent from the upper levels into the great deeps demanded the greatest care over valves and pressures, the skeleton ships

used allowing free access to all enclosed parts by the surrounding, crushing aquasphere. Yes, he understood that all right.

Conversely, although the concept was harder to grasp, a reduction of the pressure of the aquasphere demanded either a skeleton frame to allow for compensation or a very strong container to withstand the explosive, instead of implosive, force. The pressure at the interface should be the same as the upper level of the aquasphere. But who knew what lay above that? Keston had seen fish snared from the deeps, expanded and bloated with the speed of their ascent, and he had no wish to share that experience.

The container of the gas ship was strong. Fabricated from beryl alloy it bulked like the grandfather of all giant fish, like a Breathless One itself; immense, looming, crushingly overpowering. The frame was not complete; gaping eye sockets showed where observation ports were to be fitted. He guessed that was where Dinar would come in. Turboflier motors were fitted aft, with simple steering controls. Keston was not interested, for the moment, in those familiar objects. He directed his attention to the weird and outer contraptions along the belly of the ship.

Lansing sensed his thoughts. "The aquasphere, my dear Keston," he said with soft seriousness, "is capable of supporting a body as massive as the gas ship. I doubt that above or beyond the sky we will find anything to support us. We will be chained to the ground—that is, if there is ground there."

"I saw mountains-"

"Yes, Dinar. And where there are mountains there may very well be land from which they spring. At least, so it is on this side of the sky."

Keston's pulses quickened. These concepts were being bandied about with an almost reckless freedom. Two sides to the sky? And yet, why not? Superstition, fear, religion,

had kept men's eyes and brains fixed below. Surely there was nothing sacriligeous in supposing that once through the sky another *place* might be found? Lansing and Dinar had no compunctions.

"To punch clean through the sky . . ." And then he banished the wonder of that thought and concentrated on its accomplishment.

"We are calling the gas ship the *Turtle*," Lansing told them. "Just exactly when the last turtle swam in the aquasphere is a matter of heated argument. Certainly from the levels at which their shells and fossils have been excavated it must have been several millions of seasons."

"But the ground levels have been subject to titanic convulsions," Dinar broke in, ready to battle on the old and familiar ground of the correct time sequence to be assigned the myriad life forms of past ages, preserved through the seasons as fossils. "Latousec says from the specimens he recovered on Shan Reef that the last turtle swam at least five hundred million seasons ago."

"Who can grasp that sort of time scale? Anyway, it does not matter." The old professor spoke brusquely and, to Keston's alert ears, with a hint of evasiveness; Lansing didn't believe in that last particular statement. He went on rapidly, turning to gesture. "At least, Keston, you can see at a glance why we have called the ship the *Turtle*."

"Yes." Keston ran his eye over the protuberances appended to the keel of the ship. Now, once the clue had been given him, he could deduce their function.

Then he found himself embarrassed. "What was that fantastic theory evolved by Latousec? Something about the turtle always going to reproduce—"

Lansing nodded wisely. "I see you have not lost your finning ability, my dear Keston. Yes, there was more to the choice of name than the mere fact that turtles possessed four legs. Latousec suggested, from an ichnological study car-

ried out under extreme difficulty, what you were about to comment upon. From fossil imprints held and preserved in compressed rocks that had been mud when the prints were formed, he suggested the theory that the turtles had the power of breaking through the sky."

"Little publicity was given to that report, like so many others of the time," cut in Dinar. "Latousec was nearly

chopped by the mob after his first and only lecture."

"Yes." Lansing laughed quietly. "I swung a mean sword in those days. Lorim and I covered Latousec's back when we broke from the hall." He sighed. "I think what most upset the mob was Latousec's quite casual reference to his work out along the rim of the sky, where the aquasphere drifts thin. Ignorant people have always been mortally terrified of those distant regions."

Dinar grimaced. "And with reason. Even all my so-called scientific absorption does not prevent an itchy feeling down my back when the aquasphere is pinched out between earth and sky. You feel trapped, short of breath."

"Ah, well," said Lansing. "Lorim, with whom I worked for a goodly time, was chopped in his turn by the damned Zammu, a few seasons later. Life goes on, life goes on."

"And you have remembered their work and carried it on all along," said Keston, realizing afresh the many facets to the dedicated scientist in Lansing.

"Yes, well," brisked Lansing. "There you have a gas ship equipped with not four but sixteen legs, like a super turtle. Perhaps we shall see if legs can break us free of the sky and carry us where we need to go." He paused, then added, "I mean by that, of course, carry us through the sky."

Both Dinar and Keston were staring at Lansing. The slip of the tongue had been so pat, so effortless, that it opened up vistas of dizzying surmise. Had Lansing other, hitherto undreamed of information.

No further information to support this disturbing theory came to Keston's notice in the hectic days following his introduction to the first gas ship in the world. He met the other three adventurers who were as keen and full of bounce as Dinar. Of them all, only Keston was filled with doubts. And these, as befitted his resolution when he had seen his regiment march away to the front, he suppressed as well as he could. The task, with the increasingly bad news, was not easy. The Zammu were everywhere and in strength that hitherto had appeared impposible.

Professor Lansing seized the opportunity to have an audience of the Emperor when that august personage spent a fleeting day in his capital city between traveling from front to front. Keston warmed to the thought that in the midst of the battle, the Emperor could spend precious time on matters of pure science. Lansing returned with high-priority chits for requisitioning of materials needed for the *Turtle* and the expedition. Nothing was to be allowed to delay them.

Within the hull of the gas ship and cunningly bedded down against possible shocks had been built a compact yet versatile laboratory. Enough experiments could be carried out there to determine beyond possible doubt just where the gas ship might be once she had burst up beyond the sky.

Alongside the laboratory and the isotope-powered motors, which drove the sixteen legs in a pulsating rhythm very comical to watch as they pounded back and forth in the limpid aquasphere, there lay the algae tanks. These guaranteed a continuous supply of oxygen, and of the raw material with which many of the staples to which they were accustomed could be manufactured. And Allaree, as it turned out, besides being a competent biochemist, was a charmingly efficient cook.

Apart from that, and the quick supposition that she would make an excellent mother for some man's children, Keston had little time to spare in gallantries. She was tall and little

and with hair that flamed to gold when the lights showed its natural color. Her figure, usually cloaked in the traditional female trailing garment, had caused him to blink. Then he banished that sort of frivolousness althogether.

Had he been merely a ruffling sharksman along Global Way he would have pursued her with a single-minded determination until he had won her, seizing brief pleasure in shadow of the dooms threatening sacred Nablus. But as a scientist working day and night on a project so vast that he still trembled a little at the thought, he treated her as just another scientist.

He was man enough, in these days of dire danger for all mankind, to deny his inherent manhood in this one thing.

Anyway, there wasn't time.

Shena, the other girl, a quiet-eyed, calm and highly trained philologist, together with Hallam, the engineer, completed the crew. Hallam and Shena were quite beautifully aware of each other and yet ridden by the same compulsions that kept Keston from his instincts. For them it was worse. They had an understanding dating from before the *Turtle* expedition and now fate had caught them up and there was no time to be married.

All the crew doubled and tripled up on tasks, performing crew functions that normally—if there was anything about the *Turtle* that could be called normal—would have been undertaken by a fair-sized crew.

Days of equipping the Turtle dragged. Yet they dragged only one after another; each one was crammed with frenzied activity. Provisions, arms, maps, scientific equipment, recorders, a whole welter of paraphernalia was thrust within the stout hull and found some sort of resting place. The gas suits were tested out and checked and racked. The ship took on the look of an overloaded stall in the Open Aquasphere Market, stinking to high sky behind the turboflier berths.

On the day they took her for a trial flight, Keston had difficulty in refraining from shouting: "Let's go now! Let's cut this shilly-shallying and start now. At once!"

He had a good idea that the others felt the same. All except Professor Lansing. He fussed like a broody shark over

her young.

"Heat," he mumbled to himself one day. "We must have

adequate refrigeration." So that was attended to.

"Light," he said. "We must assume that the Great Light which so nearly blinded your assistant, Dinar, would also do the same to us if we gave the chance. Filters." So that was attended to.

"Lubrication," he grumbled. "If there is no aquasphere but only a thin and ghostly mist of gases, we must provide proper lubrication for the ship's legs." So that was attended to.

And all these attentions took time.

Throughout the fabled city of Nablus the hospitals were filling. Wounded men, finning wearily back from the front, arrived in a steadily mounting stream that threatened to tax the resources of the entire medical and surgical faculty of the city's health services. Keston although bone-weary managed to scrape time to visit men of his own regiment lying with pseudo cheerfulness in their ranked ward hammocks. He listened with a grim, set face to their stories, tried to smooth out the worry-lines and give the men hope.

Significantly, no prisoners reached the city.

Keston was realist enough to know that prisoners were being taken. But he knew, too, as a fighting man that all their information could be sucked from them long before they need be transported back here. No one cared to contemplate the terrifying prospect of a prison pen of Zammu within the sacred city's precincts.

All across the wide-flung metropolis the watch fires burned. Deep-buried beneath the city's heart the nuclear power re-

actors worked at full stretch, providing power and heat, recharging gas guns, priming atomic shells, giving a purpose and a direction to the myriad activities in the levels above.

Unobtrusively the daily news plastics began to publish a certain figure. Under the heading 'fathoms' the figure expressed the height from the tallest tower of Nablus to the edge of the silver sky. With a slow and remorseless contraction the figure shrank and with its shrinking concentrated the awful weight of fear lurking in every man's mind.

Of what price the Zammu, that figure seemed to ask, when

on an accelerating curve I descend to zero?

Yet despite the twin pressures bearing down on the people of Nablus there was no orgy, no abandonment to saturnalia, lust, drunkenness, licence, no slipping of the casually believed in yet tenaciously held moral code that had built the Empire of Goldenzee from the ruins of the silted-over Frangian Empire of two thousand seasons ago. Men were Men. They would stay Men despite the Zammu, despite the Hopeless Ones born to them through the evil power of unwanted mutations and—a flickering hope—despite the shrinking of the silver sky.

"You might as well," Professor Lansing said with impatient scornfulness, "try to persuade me that the breathlesswinged-ones are still what they were once believed."

Hallam, the engineer, a young, earnest scientist who regarded Professor Dinar as some sort of elder being, looked uncomfortable. They were sitting and finning in the control room of the *Turtle*, checking through their various positions.

"The two propositions aren't on the same level," he said quietly. "We are far enough advanced to understand that the breathless-winged-ones are not the spirits of the dead, breaking back through the silver sky to punish and terrorize we humans left alive in the world."

"Yet that was a firm belief for thousands of seasons."

"Speaking personally," put in Dinar, lolling with a flick of the fins above the forward observation ports, "I support young Hallam. The case of the Hopeless Ones bears a resemblance to the discredited beliefs of our ancestors."

"But it does not." Lansing was stubborn. "You have proved that ancient superstitions are unfounded nonsense. But you have not proved that the law is in the same category. I say, and I shall continue to say, that we should have no truck with the Hopeless Ones." He snorted in disgust. "That they live and breed out on the far ranges at all is a disgrace to us! Weakling parents who couldn't bring themselves to kill their blasphemous offspring as the law demands should be severely chastized."

"If you can find them." Allaree sat placidly, watching the

interplay of emotions.

"Out there beyond the frontiers," spluttered Lansing, "thousands, probably millions, of nightmare creatures which sprang from the loins of men! It is nothing short of monstrous. Scaly-hided horrors, web-footed half-men—"

"And crowding in past the frontiers," said Keston, remem-

bering.

"Why," demanded Lansing, "if they're allowed to proliferate unchecked do you know what will happen?"

"Yes," Keston rose and flew towards the exit. "They indicate that Man will revert to a fish . . . " And he finned out.

As he went he heard Lansing say triumphantly: "So I say we should not seek them as allies. They may kill and be killed by the Zammu. Let them, We fight them both."

But allies, allies of almost any sort, would be desperately welcome now in the Empire of doomed Goldenzee.

The fathom figure in the daily press was shrinking to a numbing quality of horror. The Zammu, or the contracting sky?

The brightly glittering metal chips of money that once had meant so much were now as a broken handful of coral. But

under the Emperor's beneficial administrators no one went hungry, no one went cold down into the deeps. The few pitifully unhuman profiteers were put down, all sources of supply were controlled for the common weal. Yes, Keston decided with savage mockery, the sacred Empire of Goldenzee was all smooth and ship-shape and neatly on parade for its final dissolution.

The tearing desire in him to visit once again the old homestead and to prowl the familiar reefs and fields of Ochiltree was a live ache demanding all his willpower to control. Only the numbed realization that Ochiltree could never again be as he remembered it held him chained fast to sacred Nablus. The dread touched him with chill fingers; Ochiltree might already have been swallowed up by the sacred, dappled, mocking sky.

But no. His father and mother, Kaley and his wife, little Miramee—they would be here, then, facing with all the other dispossessed the final act of the drama.

He stared up, past the highest levels, stared into radianceshot blueness where fish flitted and men finned about their business and shuddered to think how soon from sacred Nablus itself he would be able to discern the pearly-gray, silver-veined, laughing, tumbled, hateful sky.

VII

"IGNORE everything, Hallam, and bear straight on. We must put the outlying pickets behind us before nightfall."

Professor Lansing, acknowledged captain of the expedition, gave his orders in a firm voice. They all knew and understood the reason for haste. In a wild dawn with the aquasphere reaching down with fingers of pounding power even to the upper levels of fabled Nablus, the *Turtle* started out with her crew well aware that they must quickly clear the fighting lines of the men from the Empire of doomed Goldenzee.

Once beyond that beryl hedge they would be penetrating perilously into the untamed aquasphere, piercing through the areas claimed by the Hopeless Ones, by the Zammu, and by all the fearsome hordes of savage fish escaped from domesticity ages since. Keston had protested. "Why not," he had said, head for the buckling edge of the sky where it lies within the power and jurisdiction of Goldenzee?"

But in face of his and the others' protests, Lansing had held stubbornly to his own orders, and now the *Turtle* drove on through the blue dimness heading for an adventure that even the beryl-nerved Keston did not dwell upon for too long.

He sat up alongside Hallam for a time close to the gas gun turret set in the deck of the ship. At any moment of danger, that was his post. As of now, with the ship cleaving the aquasphere and with the turbo motors running sweetly, he had time to look through the observation ports. There was nothing to see. The *Turtle* bore on and still Keston sat there, not moving his feet from which the swim fins had been removed, wondering if he would ever again see golden Nablus and the ancient homestead of Ochiltree.

The Zammu operated a type of audio search gear similar to the rig installed in the Turtle; Keston could only hope

that the gas ship could slip through unobserved.

Behind him he could visualize the far-flung lights of fabled Nablus slipping away, dimming and guttering, sliding into the encompassing blueness, becoming as one with the lambent enveloping mist. He did not bother to look back. In him skulked a deflation, a feeling of lassitude and anticlimax. In face of a whole race, a whole world seeing before them utter extinction, what could these four men and two women aboard their fantastic craft hope to achieve? Of what importance, after all, was it to pierce through the mystery of the shining silver sky?

Allaree roused him after a time and they ate in the inner, windowless cabin. The *Turtle* soared on. At regular intervals they passed parties of fighting men, coming and going and presently the activity was stepped up so that soon they were threading their way through masses of infantry. Back at his gun station, Keston saw with a wry smile that the infantry were all floating supinely in the manner of infantry the world over awaiting orders where to fin next.

A few fighting turbofliers and larger cruisers and a handful of artillery passed. Keston took a professional interest in all the activity outside the hull of the ship. Even so, he could not throw off the cloak of ineffective onlooker that suited him so ill.

Some time elapsed before he realized that they were not going to pass any more fighting men of Goldenzee.

They were out on their own.

At once, perversely, his instincts of conflict aroused and he clambered back up the narrow turret and swung the gas guns experimentally.

They felt good under his hands.

Designed to operate in the theoretical absence of the aquasphere—a topsy-turvey concept, if you liked!—they could

yet function drastically in the normal world and Keston felt a sadistic desire for Zammu to rise up, belly white and glistening, before his sights. The heavy metal bolts would rip through that alien flesh and blood like a reaper harvesting weed.

Gradually, he realized that the day was drawing to a close. The light fell with lessening power through the misty levels; the blue veil subtly changed, shifting through the end of the spectrum, dropping into deeper and deeper indigo, shadowing into positive blackness unrelieved by a single mote of light. Lansing did not switch on the ship's internal or external lights. They drove on, a blundering metal monster, one with the blackness.

Over the next meal, crouched with the others in the inner cabin, windowless, where a dim illumination showed him their hands and the gleam from eye and teeth, Keston could not refrain from saying: "How can the scientific way of life be reconciled with the sword? I am torn; wrenched apart.

"I want more than anything else to accompany you on this trip. I am here, willingly going. And yet, again more than anything else, I want to be with my regiment, weapons in hand, fighting the Zammu. Can you explain it, Professor? Can you give me some guide, some idea why it is that two opposites struggle so fiercely in a simple man's breast?"

Lansing was not disturbed by this uncharacteristic outburst. He must, Keston realized dully, have been clinically observing his assistant and following the shifts and turns in his emotions. Now the professor spoke.

"The answer is not simple, my dear Keston. I, too, once upon a time, swaggered my fins with a sword at my side. But then I began to see that the sword is useful only when it is serving some noble purpose. In my instance that purpose was the dedication to science. It may be that we will have to fight before we reach our goal. We may have to kill. Yet if that goal is reached and our scientific enterprises are

crowned with success, then the sword will have justified its purpose."

"But you're just putting forward the theory that the end justifies the means," objected Allaree, her mouth full of processed algae pie. "I thought that had been discredited."

"I think what is troubling Keston more," said Dinar precisely, "is the apparent contradiction in terms. On the one hand we have a growing civilization with nuclear power, atomically charged weapons, turbofliers, a mounting interest in and understanding of many branches of science, a humanitarian system of social services. And yet we still wear swords, still carry tridents and shields, and still ride tiger sharks and swordfish as beasts of burden."

"That's easily understood," Lansing said casually, brushing the argument aside. "We're steadily rebuilding a smashed empire. You don't just turn easily from a shark mount to a turboflier. Civilization is a painful process. It takes time, and the time scales become jumbled."

"So all right," said Keston, regretting his outburst and clearly and resignedly aware that they hadn't followed what was biting him at all. "If we get through to the rim, then we can start worrying. I take first watch, I believe?" He rose, finning instinctively to avoid half-seen obstructions in the crowded cabin. "I'll just go up and relieve Hallam at the controls."

As he flew out he felt that the others would be discussing him. Strangely, that did not disturb him. Allaree, alone, had seemed to understand what was troubling him.

He told himself that this uneasiness, this lurking fear, had nothing to do with the enterprise upon which they were engaged. Breaking through the sky . . . No, he trusted that he was not afflicted with supernatural fears. But, still . . . He would be glad when it was done.

Up in the control room after he had relieved Hallam, he sat, conning the ship forward and watching through the

ports. Once he saw a distant string of lights, fitful through the misty levels of the aquasphere, rising and falling and spelling out in dread and terror one word: Zammu,

They passed into the encompassing blackness and he felt himself consciously relax. Back there, watching those faroff lights he had been stricken with the mad and sadistic impulse to switch on the Turtles light, to welcome the fight and to battle, come what may.

What were the things in life that mattered to a fighting man? To wage a good fight, to joy in the battle and to leave

a shining and untarnished reputation

When he had completed his watch and slept for the remaining period of night when the Great Light, too, slept, and arose to find a blue-dim dawn seeping through the portholes, he felt more alert, more fit, more swaggeringly uncaring of what might be. He took great care over his toilet. He strapped on his weapons as though preparing for a full-dress parade before the exalted person of the Emperor himself. He regretted that in the turmoil of the present days the Emperor had had no time to meet the members of the expedition at the last and wish them good luck as he had promised to do. The Emperor was away on one of the fronts, deep in consultation with his generals while the mass of Zammu onslaughts never weakened.

Presently they all clustered in the control cabin. Steadily, the levels outside lightened, brightening with the return of the Great Light. Would they, this day, see the Great Light in awesome majesty, naked, stripped, revealed in all its

mighty power to their puny human senses?

There was a silence between them. The ground rose steadily, forcing the *Turtle* to fly higher and higher, and soon, frighteningly soon, they could see the dimpled sky up there, dancing and glittering, flashing a thousand reflections upon the firm, packed sand beneath. Here was where any normal man would turn back. Here began that uneasy area of the

world where the sky and the ground together sandwiched so small an amount of aquasphere that only the smallest of indifferent fish chose to swim and chance what horrific results might accrue to such foolhardiness. And now, four men and two women were venturing where before only brainless fish had swum.

The legs of the Turtle struck the ground.

Lansing roused himself. "Let in the power, Hallam," he ordered. His voice was not as firm as it had been. Hallam obeyed.

The vibration and feeling of motion changed. Now they were rocked and rolled as the sixteen legs outside bent and straightened, seeking firm grips upon the sand, carrying them unhesitatingly onward. The motion was upsetting. Shena and Allaree paled and even Keston felt a nausea plunging in his stomach.

"Do not be alarmed," Lansing said. He sounded alarmed himself. "We carried out ground tests before, you remember. This queasy feeling is only gas sickness. It will wear off."

Keston remembered the old legends. Of how the aquasphere moved, all in a solid body, unaccountable, first this way and then that. Of how, if you ventured too close to the buckled edge of the sky the whole aquasphere would drain away behind you. Impossible, fantastic, fear-ridden myths, and yet stories that gripped him now in the strangeness of the moment.

He mentioned it in a shaky voice. Hallam laughed, once, too shrilly. The girls were silent, but their hands clasped in mutual search for reassurance.

Dinar said: "The old legends. Hahl That the bulk of the aquasphere could so move up and down is preposterous nonsense!"

Lansing did not say anything.

Ahead lay a shelving sandy ground, trending steadily up-

wards at a gentle incline that, suddenly and anticlimactically, maintained the *Turtle's* rounded back some few spearlengths from the silver sky. The legs outside clanked on, their noise a droning, regular rhythm oddly comforting.

Periods of time passed. Lansing consulted his private plastics. The tremble in his arms was marked now. Dinar kept a watchful eye on the engines and Hallam sat with the controls gripped in hands that had the need of something to cling to and steady their tremble. Slowly, eerily, the sky crept down.

Presently Keston felt he could endure this no more. He finned upright and wormed his way into the gas gun turret.

Up here, through the vision slit toughly protected by transparent plastic produced at fantastic temperatures in the empire's mammoth nuclear factories, he watched with heavily twitching eye. He was afraid. So he was afraid. He wasn't the only one.

Now he could see only by ducking his head down and peering upward at an acute angle. The dancing silver light was blinding. Incredibly, here, at the edge of the world, myriads of brilliant fish were sporting. A few weeds trailed away in the turbulence of their passage.

He sat back, his eyes smarting.

When he once more applied his eye to the vision slit he could not at first understand what it was that he was seeing.

Across the plastic sprawled a succession of spear points, silver, constantly moving, upright wedges of some transparent material that held all the fear-loaded emphasis of beckoning fingers. He started back with an involuntary exclamation.

As he watched, awe-struck, the wavering line of dancing points slid down the plastic. Bright blueness below, a brilliance such as he had never experienced before above. With trembling fingers he pulled the filters designed by Professor

Lansing into position over the plastic. At once he felt a profound shock of dismay, of disappointment, of despair.

He was staring at the same sandy floor that the *Turtle* had been legging it over before. The sand lay smooth and undisturbed before him and all the fish had gone. He raised his vision. Ahead lay a long vista of sand and rocks, then a rocky rim, small and distant with a few tumbled weeds growing from its summit.

So they hadn't broken through the sky after all! They had in some miraculous fashion merely carried on traveling and were now simply crawling along the floor, bathed still in the omnipresent aquasphere. A twist of dimensional wizardry, a flashback in time, a subtle and not to be understood distortion of the known world had perhaps brought them back in a full circle so that they were now moving clumsily back to their starting point. He choked down the bitterness and slid from the turret, rejoined the others in the control room.

Their faces, their features, the stark disbelief written large there staggered him. Did he, then, look like that? Lansing said in a choked voice, "Comrades, we have left the sky behind us."

Keston said, "But that is impossible. The Great Light has rejected us, turned us back—" Then he followed the gaze of the others, and turned, and looked back through the rear ports.

A picture he could not understand; a scene for which he had no words

Brightness. Infinite distance. A sensation of smallness. A vertigo, seizing him, making his eyes dizzy and his brain spin. A smooth, shimmering veil spread out over all the ground, split by vagrant shafts of light, green and blue and silver and gold. Blueness above, unthinkable, remote, tremendous blueness. And in that blueness were gigantic monsters of white, formless, groping, piled as though by the maniacal hand of a madman playing with current-cast sand.

He swallowed. He had no words. He had no brain to weigh, to assess, to measure. He had only eyes, to see and marvel and fail to comprehend.

Lansing rustled his plastics. His face held now the fanatical glow of a man whose wildest dreams have come true. He was elevated, possessed, driven by a force that had given him no rest; that was now demanding still further efforts.

"We will leg it up to that rocky crest," he said, his voice shaking; but shaking now with elation and wild surmise. "We will then stop and look about, What we may see . . . "

The Turtle crept over the sand. Now Keston felt that the motion was more rapid, freer, as though some clinging weight had been removed. In this brilliant place above the sky perhaps everything was insubstantial, ghostlike, not bound by the normal earthly values obtaining in the familiar aquasphere that must now lie beneath them?

Lansing gave the order and the Turtle stopped. They

peered over the ridge.

A cry of utter amazement, of sheer disbelief, burst from Keston.

Directly ahead lay a mass of weeds, huge weeds, thick stemmed and growing directly upwards, sprouting into tufty heads that held still and silent and without motion. He felt he was going crazy, adrift now in the impossible place.

"They are," he said, choking a little over it. "They must

be the source of the Emperor's logs."

"Probably," Lansing said, his attempt at matter-of-fact scientific poise shattered by the tremble in voice and hands.

"Note that there are no currents here," said Dinar. "What you would expect in a thin mist of gases." He glanced at Hallam. "We'd better check the packing. If the aquasphere inside starts to leak out—as it must do—then we will be in trouble."

"Aren't we now?" said Shena unexpectedly.

"No, my dear, we are not," said Lansing. He was recover-

ing rapidly now after the experience. "Now, all of you, please gather around me." He spread his plastics. "Here you see a map. It was drawn up by Doctor Lorim—"

"Who was chopped by the Zammu after Latousec's lec-

ture?"

"The same. Although it was not directly afterwards. He wanted to prove Latousec right. He found strange facts on his travels and passed on much information to me. We worked together, you know. On his last expedition I came into possession of his notes.

"So before he died he had passed on to me details of his latest discoveries. Briefly, he discovered the ages-dead ruins of a city, close to the buckled edge of the sky. In all the confusion of warfare and empire building and Zammu fighting that has gone on, this information was only too easy to keep secret. The Emperor knows, of course."

Keston nodded. "That would explain how you acquired

those priorities."

"Yes. Well, Lorim's city should have been passed over by us in our passage—"

"But we didn't."

"Precisely. That city has been engulfed by the sky."

Keston looked uneasily through the viewport. The shadows of objects, he saw, lay thick and hard and unmoving. No one so far had broached the single topic that, it now seemed, had still the power of frightening them. No one had yet suggested coupling in the viewports that would allow them to see directly above.

"This city, like so many that we uncover in our archaeological diggings all over the ground known to Man, was not one but many cities, each built upon the ruins of its predecessor. Lorim dug through twenty strata and found many hitherto unknown artifacts, devices that have been lost to us and some which are laboriously being rediscovered."

Still no one wanted to look upwards.

"When he had reached back in time so far that all figures lose their meaning, he had still not reached a city that had been built when the last turtle roamed the aquasphere. Their fossil remains lay in even lower horizons. But he persevered. On the thirtieth level he—" Lansing paused. He finned a refreshing current across his face.

Well, were they going to take a look upward?

"Lorim, you must remember, carried out this work according to a strict archaeological regimen. He rushed nothing. So it was that at the thirty-first level he realized that he could not carry on at his regular rate and achieve success before he would be forced to return to Nablus for supplies. The aquasphere deals harshly with artifacts left exposed. The protecting silt and mud covering the vanished cities preserves them for all time for our inspection—"

And, fumed Keston, are we to sit here for all time listening to this ancient tale of dead cities, when outside lay—lay what?

"What is the relevance of this?" asked Dinar.

"Simply, for now, that the city partially excavated by Doctor Lorim lies ahead of us. My measurements—if my maps are correct—show that we have broken through the sky where when Lorim was here the aquasphere stretched . . . "

So there it was. Now they had to think. Keston finned up and reached for the control catches on the upward view ports. He turned to the others. Lansing swallowed and nod-ded.

Keston opened the ports.

A bar of brilliant golden light struck down, shaped like the port, struck like a sword, splashed fire in all their faces. Instinctively, hands flew up to cover eyes.

When at last Keston peered out he saw the strange and clear blueness extending and—he staggered back, dropping to the deck of the ship, Daggers of fire clawed at his eyes.

Chips of flame flashed in his retinas. He was blinded, in agony, shaking all over and more frightened than he had ever before known in his life. He groped desperately for comfort and reassurance in the cabin of the ship.

"Evidently my assistant did not learn from yours, my dear Dinar." Lansing swung the filters into position. Some long time after that Keston again looked out. The blueness was dimmed to a deep violet and in that violet field swam a monstrous, single inflamed eye. He stared for a very long time.

No one could explain what a single ball of flame was doing suspended in mid-nothing, and no one, for the moment, tried.

But Keston felt a weird elation in him. He had seen the Great Light!

For that, without the shadow of a doubt, was what that single lambent eye of light must be.

VIII

In THEIR confident struggle to rebuild a shattered civilization from the ruins of the Empire of Frangia, the people of the Empire of Goldenzee had adapted and turned to their own ends a gnosis that incorporated belief in life after death—as witness the fantastic idea that the breathless-wingedones were the spirits of the departed and uneasy dead—a reverence for the older beliefs and an understanding that beyond the silver sky lay the Great Light, whom or which no one would see this side of final dissolution.

Now Keston was seeing the Great Light at first hand, face to face. No wonder his blindness had been so painful, no wonder he felt like a shrimp clicking along in the shadow of a barracuda.

"And is this all," Professor Dinar was asking vehemently, "that we have dared for? To burst through the sky to seek a lost and forgotten city?"

Professor Lansing was not perturbed. "That, and other things, my dear professor. Already our laboratory has turned out enough riddles to last our colleges many seasons. No, I feel it much wiser not to tell you just yet what this city means to us until we have found it and reach down again to the thirty-first level."

And with that they had to be content.

The *Turtle* rumbled on over the strange ground. Nothing moved outside. Weeds remained upright, shivering only occasionally, the ground maintained a perfectly firm appearance, completely lacking the shifting streaks of color and liquid reflection so typical of the normal world. Every now and then one of the mysterious white monsters high above would sail between them and the Great Light. Keston felt a touch of blasphemy then.

Looking out he was continuouosly struck by the impossibly infinite depths of vision. Allaree had worked with Lansing on meticulous dissections of breathless-winged-ones and had reported the structure of the eyes. Different from those of a man, the retinas were far more flat. Keston knew that Allaree believed human being's eyes ill adapted for this place. Everything was incredibly tiny—he had at first thought that his eyes had shrunk when he had observed the distance and the curvature of the Turtle's hull. Out there in a gas suit, he felt, he would be reaching immense distances for the most near and trivial objects.

He remembered standing perched on the topmost tower of far-away Nablus—breaking the law into the bargain—and thinking how far he could see. Now that experience receded.

It had the remembered effect of being in the center of a confining globe of light, with details more distant than about thirty fins vague and formless and undefined. Now he would not care to hazard a guess as to the number of fins' distance he could see. In that abnormal vision the ruins took a long time to reach. They were scattered about the plain before the *Turtle*, gray, sharp, unthinkably ancient and—and pathetic.

"That is where Lorim pitched camp," Lansing said, excitement making him hop from port to port. No one wore fins inside the ship; had they done so Lansing would have bludgeoned someone in his enthusiastic violence.

"The last time men were here this was part of the normal world," Lansing whispered, half to himself.

The Turtle crawled like a monstrous crab up to the depression in the sand. Shattered walls of metal reared everywhere. At irregular intervals widely-opened excavations gaped, dark and blackly inviting. Even through the filters light bounced in cruel fangs from the metal, showed it to be scarred and corroded.

The strangest item to Keston was the lack of smothering

weed. A few wisps of green tufted here and there over the crumbled masonry; back in the normal world any ancient object would be smothered in weeds and shellfish and all the myriad life forms battening on decay.

And Keston chuckled, suddenly, freely. Allaree smiled at him, her mouth tremulous.

"I was just thinking of one of the sharksmen who went to sleep on duty outside the palace's rear gateway and woke up to find his fighting harness smothered with limpets."

Well, he felt better, at that.

"Ah, hm," Lansing said, and paused. Keston smiled. "Me."

Allaree raised one hand in an involuntary gesture.

Lansing smiled in return and patted Keston on the shoulder.

So they both donned gas suits, checked that their own portable supply of aquasphere was functioning smoothly within the suits, and entered the lock. Hallam checked, calling out reassuringly. The inner valves closed. The aquasphere was pumped back into the ship. What lay around him now, Keston had no desire to dwell on.

The outer valves opened and he stepped awkwardly through, wanting always to lean forward and fly out. Like the *Turtle*, he would have to use his legs not only to support himself in an upright position, but as a means of moving along actually fixed to the ground. He felt undignified. Legs weren't made for that!

He saw Lansing stagger and collapse and then he, too, was falling. He pushed out both hands. The ground came up with unbelievable force and rapidity. Everything was tiny and far away and bright.

Like an ungainly crab he crawled along on hands and feet, his rear high above his head, panting so that the confined aquasphere circulated through his lungs and gill-slits at an

accelerated rate. Stumblingly, head cricked to see where he was going, he crawled after the professor.

The two men were actually crawling along on the ground in this place beyond the silver sky. Momentarily, Keston expected the sky to fall back onto him: it would have been reassuring, at that. He tried to stand up as he would have done back at Ochiltree; each time he felt himself falling.

How like life, he thought crossly. Strip away superstition, strip away your own fears and venture out onto a great and glorious expedition, with the magical aid of science pry past the barrier set by nature, and what did you end up with?

Two red-faced men crawling along on their hands and knees

With the aid of the mechanical cutters and grabs and shovels swinging from derricks on the exterior of the Turtle they dug their way in the succeeding days down into the buried cities. Every now and then someone went outside in a gas suit to superintend some finicky operation, but this frolicsome exercise was kept to a minimum. Keston had at once protested his teacher's barbaric attack upon the site. Lansing had simply said: "There is no time left, Keston. No time! The Zammu are destroying fabulous Goldenzee while you prate about the proper archaeological digging system. We must find what Lorim talked about in his last delerium."

"What do you seek, professor?"

"When the shovels strike a substance through which they cannot cut, I will tell you more." Lansing was looking tired. "I scarcely credit the theory myself. I must be sure that what Lorim said-what I have until now fervently believed -is indeed true. The whole expendition is meaningless otherwise. Yet the nearer we come to testing that truth the more undecided and disbelieving I grow."
Allaree, smiling, said, "That's just human nature, pro-

fessor."

Hallam glanced across the control cabin. His face was set. "The cutters are whining off a surface they cannot pierce," he said.

It was the catalyst.

By the time the others had assisted in scraping away the peculiar ground and uncovered a sloping wedge of the object, Lansing had rested and regained his usual urbanity.

Up here, wherever here was, the ground had no cohesion; it slipped through mechanical fingers and fell straight and unpluming, oddly disturbing. Scraping away the hard-packed earth, they marveled at its brittleness. There was an absence here, a lack of something with which they had been so familiar throughout their lives that they could put no name to it.

They clustered at the viewports.

From the angles of the curve, Hallam and Dinar calculated that the dome formed a perfect hemisphere. The material of which it was composed defied their means of analysis. Dinar was not sure, even, that it was a solid material and talked to himself of semisolid states and lines of force and magnetic cages. The others left Dinar and Hallam to work on the dome and contented themselves with looking at it. It shone, dull-gray, sheening still through the millions of seasons it had lain here, covering—covering what? Lansing sat down, finning limply, elated and yet calm and scientifically triumphant.

He said: "Lorim, then, spoke the truth. He spoke of this featureless dome of metal, or of whatever material it turns out to be. Lorim could not decide, either. But he did not have the advantage of having with him Goldenzee's foremost physicist."

Dinar grunted.

Keston wondered whether or not the compliment was a trifle late. Dinar, he felt, would have preferred to have been told the problem before setting off so that he could have

brought any special equipment he anticipated would be needed. He might, too, have begun to form theories. But that was always dangerous. Maybe shrewd old Lansing knew best, after all.

As though fully understanding these thoughts, Lansing said with a little smile: "I could not tell you before, my dear Dinar, for a number of reasons. But the chief one, I think you will readily see, was that I simply could not be sure that this great dome existed. It could so easily have been a phantasm, conjured up in Lorim's mind, excited as it was by the potentialities this discovery led him—and us—to consider."

"Nothing can be certain up here," Dinar said, not taking his eyes from the dome. "Except uncertainty."

Hallam's expressive face was alight. "The potentialities you mention . . ."

"Must by now be obvious to you all."

Dinar swung round sending currents swirling.

"It is my considered opinion that this dome is more than mere metal. We know it to be unthinkably old. I doubt that untreated metal would have remained intact over time spans of this order and so I assume that an energy source exists which creates a field of force within, or about, the material to provide a continuous support. We have played with such things in the nuclear labs."

"One item there, my dear Dinar." Lansing's face shadowed. "When Lorim reached the dome and removed, as we have done, the overlying silt and rubble, he said that he stumbled across a crack, a fissure, in the surface. And into that crack the aquasphere poured with titanic force."

"A rupture of the field!" said Dinar, dismayed.

But Keston had finned beyond that. "The aquasphere that for millions of seasons had lain above the dome poured into it when the crack was uncovered. That means—"

"You all understand what that means?" asked Lansing somberly.

The concept, once grasped, was astoundingly simple.

"Yes, but-" someone said.

"That means-"

"The aquasphere poured in and down-"

Today the aquasphere is shrinking upon our world," said Dinar didactically. "There is extant the idea that this may have happened in previous ages. The sky is falling upon the world we know, and yet here we are upon another part of this globe. Might not there be a movement about the world, with the aquasphere not necessarily anchored to one portion of it?"

"The old legends that the aquasphere breathed-"

Lansing moved a hand. "Lorim said that the force was so great that their spoil was moved back and redeposited in the crack, taking two men with it, and sealing off the fissure. They were lucky not to be swept away, camp and all. Disheartened at the end of the digging, he came home—and was caught by the Zammu. Only his notes survive." "And so we are here," said Keston in a whisper. "Again

"And so we are here," said Keston in a whisper. "Again we uncover this age-old secret." He stared around at the others. "But what lies beneath?"

No answer to that question was to be found that day. The Great Light became veiled. Movement stirred noticeably in the strange tall, stiff weeds. A massive darkness spread over the world. Into that darkness, hurled like flung harpoons and blazing with elemental wrath, shafts and lances of fire scorched across their retinas. Noise bellowed down from some unknown sphere. Even though sound traveled here at only a quarter of its normal speed they were bewildered by the crashing crescendoes of sheer volume.

A few scattering drops pitted the ground with round dark splotches. No one ventured to guess what they might be.

As soon as the Great Light reappeared—to Keston's heart-felt relief—the strange dark dots vanished.

Brushing all these eerie scientific manifestations aside, Lansing pushed on with excavation of the dome. Their stay above the sky was limited; the great deeps and the battling city of Nablus called.

Daily, as the work progressed, Dinar grew more and more irritable. The trouble was that his work did not progress and he felt himself responsible and lacking in some vital fashion in the eyes of his comrades. Clumsily, Keston tried to reassure him and had his head bitten off in response.

During the short nights they often tried to work out what those far-off—or quite near?—firefish were. They did move, in a great wheeling arc all across the—well, Keston had to face it—across the sky. If they had broken through the sky into this place, then what was above here must be this place's sky. No other great radiance lit the night sky apart from those myriads of tiny chips of light all during their stay; nothing else shared this uncanny region's sky with the Great Light by day and the swarming firefish by night.

They found the crack reported by Lorim. They scraped and shoveled away congested earth and rocks and uncovered the pitiful remains of the two men swept away. Burial presented a problem; how could you bury a man if there was no aquasphere in which to set him tenderly adrift? These two men had already reached past the silver sky. In the end they piled a huge mass of boulders and rocks above them and committed their spirits to the Great Light just as that weird luminosity sank below the distant hills.

Staring down into the fissure and allowing his mind to roam ahead of his body, Keston was besieged by his familiar twin-devils in emotions. He wanted to retire hurriedly, not to go down into those black depths, and hide away from the fear he clearly sensed rising from the pit like ink from

a cuttlefish. And yet, at the same time, he was eager, anxious, recklessly wanting to descend and to pry back the millions of seasons, to open up a window onto past ages. There was only one course open to him and that he knew well enough. And so he threw off any thoughts he had about not going down.

That was what they had come here for, wasn't it? To go into whatever lay beneath the dome and rend away the secret of is construction.

"We must get in," Dinar said emphatically. "If we are to create our own domes then every portion of the technology used must be fully understood. It goes without saying that the thinking involved here is in advance of our own."

"Does that mean, though," asked Allaree, "that we may not ever be able to understand how the dome was made?"

Hallam answered, as usual backing up his chief. "Oh, no, Allaree. But it does mean that we will have to copy everything exactly. Until we fully understand how to make a dome, we are like children following the instructions of their teachers and creating objects for which they are fully responsible. But, one day, we will understand just what we are doing."

Lansing moved about with his demeanor of hard purpose showing starkly through the façade of the kindly, bumbling old professor. He contained himself with difficulty against the delays and the frustrations.

"We have come here on the chance that Lorim's reports were accurate. They were. Now it is all up to us. Nablus, Goldenzee, our whole way of life, rest squarely on our shoulders." His face was animated. "I look forward to the day when the first dome goes up over Nablus! Then we will extend outwards and at each fresh advance the Zammu will be pressed back and back until all the aquasphere once again rightly belongs to mankind!"

It was a grandiose, a wonderful and vet so common sense a vision that Keston felt that it must succeed, come what

might.

Dinar and Hallam worked out between them the best method of approach. By descending the fissure and advancing in a straight line they calculated that they should reach the exact centre of the hemisphere. Dinar was confident that there, at that spot, they would find the energy source that maintained the dome through the millenia.

The two girls were quite prepared to stay with the Turtle. Nothing had been seen that gave any alarm-alarm, that is, on the purely physical level. A few breathlesswinged-ones sailed past overhead from time to time, but the gas ship's guns could take care of them if the need arose.

Crawling in his gas suit towards the lip of the fissure, Keston wondered why he'd strapped on his sword. The dangers they were facing were not likely to be those a man could cut into with a keen edge or thrust with a point that would settle the question finally. Only when he was waiting to go down was the answer given him.

He was going into unknown dangers, facing hidden terrors, fighting a battle that his comrades of the Emperor's watchsharks would never know. He needed the reassurance of their intangible presence, the comradeship with them in the hour of strife. And the sword was a sacred symbol, a symbol of the best in life, striving through turmoil to the peace that might lie beyond.

Chapter IX

AT LAST Keston stood on the rim, balancing precariously with grasping hand-manipulators, staring down into remote and shivery blackness.

He was not looking forward with the same zeal to this descent as he had to the ascent above the sky. They had risen to pierce beyond the silver sky; it seemed foolish and topsy-turvy now to be venturing down into the depths again. There was something cold, illogically primitive, about this voluntary descent into solid earth and rock.

And yet it wasn't solid, was it? Lorim had reported that the aquasphere had flowed strongly until choked off. Keston adjusted his helmet light, glanced across at Lansing and then began the precipitous descent.

Again and again he wished that he was descending this cliff of rubble in the aquashphere. Then he would have dived freely, joying in the experience. Now he had to slip and slide a few fins' length, grasp a projecting boulder, let himself go on again, fetch up against a sheet of metal, curved, extruding from the debris. Then the cautious heart-stopping descent could begin again to bring fresh dangers. He lost all count of time. Lansing followed closely with Hallam assisting Dinar a few spear-lengths in the rear.

Shaking with reaction, Keston at last reached a broad and sand-strewn area which their light failed to reveal in its entirety. They all looked about.

In the strange absence of the aquasphere their lamps threw bewildering lances of light in which silvery motes gyrated like frenzied reef fish. All about stretched eerie shadows, looming and half-seen masses of debris and wrecked machinery, the hint of the work of titans. At their backs, soaring away the slope of rubble down which they had so painfully crawled, the scale was enormous.

They began to crawl across the ground which was littered and craggy and which puffed up in billowing spurts of the all-prevading crumbly detritus. The fever of exploration gripped Keston and he marveled that said scientists could still experience the pure and unalloyed thrill of reaching past the frontiers of the known even when their whole world was threatened. Without the shining prize of the dome-technology to be unearthed, he knew they would still experience that urge for discovery; it owed nothing to any consideration of reward. The four men fell into a frenzy of discovery and a high elation of adventure. Time passed.

This had been a city. That, at the least, they could determine. That it had been like no city understood or even envisaged by Keston did not enter the matter for he knew that in some distant and forgotten time long since choked with the weeds of decay and ruin, men and women and children had flown through these streets, had lived in these houses, had made love, lived and died.

Even their rough, preliminary estimates of a date astounded and awed them. So long ago, so long ago. . . .

Then Lansing shattered those comforting illusions.

They touched helmets, relishing this alive human contact in that city of the past, there beneath the broken columns of a titanic arch, and Lansing's voice vibrated in Keston's helmet.

"This city is one unknown to men! Men have never lived here. Look at the architecture. Look at the way the place has been designed, run your eyes along the street façades—where are the balconied doorwindows allowing ingress conveniently at every level? Where are the turboflier landing stages. Those flat roofs there appear strangely different."

"You must expect a difference," objected Dinar. "This city is old." But the eerie acceptance of the truth of Lansing's statement rang hollowly in his voice.

"I see what you mean," Keston said slowly, "These people

lived on a monolevel. They could not fly freely through the aquasphere as we do and so they built their city differently. Those levels there with many little floors one above another. You could crawl up those if you were chained to the ground by gravity as we are now—" He stopped, horrified by what he had said: As we are now!

"Yes." Lansing was wearily triumphant, as though having finned a long, hard race. "The people who lived here could not have been men. Lorim said the aquasphere flowed in. So that means they were living here above the sky before the aquasphere, if our speculations are correct, moved across and brought with it the normal world."

"But how did they breathe?" demanded Dinar, the physics man.

"Think of the breathless-winged-ones-"

"But they fly."

"These people, long since dead and gone, must have breathed too, and not flown."

"Amazing!" said Hallam. He looked about uneasily.

"Dead and gone," breathed Keston. "Their bones mouldering in the eternal ooze." Then: "But there would be no ooze."

"Precisely." Professor Lansing's voice trembled. "I would dearly love to uncover fossils. Their physiology must have been widely variant from ours. We can barely move about here, crawling and scrabbling like undignified crabs. What system of locomotion did they possess? If they had legs they must have been immensely thick and strong and dumpy. What were their faces like—if they had faces? Weird, bizarre, different. And yet still a mere product of this Earth." He would have gone on but the monstrous idea had occurred to Keston and he could not keep it down. He voiced it now, conscious of its enormity.

"We have often speculated where the other races of intelligent beings have come from," he said diffidently and yet with angry purpose underlining his words. "The oc-

topoids we know evolved in far-distant reaches of our own aquasphere-covered land. But what of the rat-people? The Hermaphrodilia? The genus of the corporate entities? Maybe they originated here? Maybe, even, the Zammu—"

The idea shook them all.

"It's almost unbelievable," whispered Lansing. "But our concepts are being overturned continuously since we broke through the silver sky. Maybe this was a city of the Zammu. Maybe they did evolve so they could live in our normal world."

"It might account for their deviltry," growled Dinar.

"The time scales don't match, though," observed Lansing. "This city is older, far older than fifty thousand seasons, when we first have records of the Zammu."

Keston felt the bilious fear in him. Chostly essences reached out with groping fingers to pluck at his nerves. He laughed, a short, savage, self-conscious burst of sound.

"Whilst I am still a thinking man and can wield a sword I will not fear a thousand-million season's old ghost. Come on. The centre should be along here."

And he broke contact and led the shambling advance through the crumbling gloom-infested city.

How long it took they could never be sure; but they found the decaying heart of the city and stood, propped against shattered archways, marveling and amazed, filled with awe. The dome testified that the entities who had built here had built well, and whoever or whatever they had been, they seemed now to congregate about the four men, huddled together in converse, and huddled, too, against the unknown. Dinar and Hallam threw off that opressive feeling of being overlooked and set about the task. They found the energy source located in a plain, simple and intact building set at the junction of eight streets.

More than that they did not find out. They could not enter the building.

It stood, enigmatic, screne, undisturbed by the passage

of time and the long procession of the ages.

"This must be the place," Dinar said. His voice rang hollow with disillusion in their helmets. "Everything points to that building holding the key to the domes."

"And to our future protection against the Zammu," said

Keston.

"And," Lansing said mildly—so mildly that Keston broke contact for a moment so as to look closely at the old professor. His face was quite blank, quite unmarked, quite unlike himself. He went on: "If a building can stand, impregnable, for a thousand-million seasons, there must be a reason. There seems to be no way in and perhaps that is just what the builders intended. We have no tools to break in. The energy upholding the dome must come from a source we can only guess at. From deep in the Earth, perhaps; hardly from fusion power in the lack of an aquasphere. Perhaps—I offer this as a suggestion—perhaps this building and the dome are in some way energized by the Great Light itself."

No one could find the strength to argue that now.

Lansing looked around on them, then he regained contact and said with sorrow shading his voice: "Gentlemen, we have failed."

After that, for a space, they raged and ramped at the building. To have come all this way, to have ventured so much—and to be beaten in the end! Keston beat upon the phlegmatic walls with his sword. Then the blessed sanity of the everyday rescued him and he desisted because he was taking the edge off his weapon.

"We may have the chance to return. I very much doubt it. But we may." Lansing brisked around, herding them. "We must return now. This is not the first defeat we have suffered in the cause of science."

Keston accepted that. It was facile and, in the present

situation, ludicrous, but a man had to cling to something when everything he had planned on had fallen apart. They were not in this thing, not so deeply committed, purely in abstract cause of science. Fabulous Nablus and the Empire of Goldenzee weighed in the balance against their failure.

Defeated, dejected, they crawled back the way they had

A flicker ahead in the ruins arrested Keston's attention, and he stopped crawling the better to lift his head and look. Half a dozen strange gray creatures were going swiftly across the street. He had no words to describe them. They had no fins and no scales and they did not fly. Beneath their bodies was a blur.

Lansing said: "I have examined fossils of the rat-people. They had large spatulate tails and webbed hands and feet. Those creatures had long worm-like tails. But in all else, in all else..."

"Let us follow them." Dinar scrabbled away, followed at once by Hallam. Lansing looked over at Keston, smiled half-heartedly, and began to crawl after Hallam. His expression said quite clearly: "Having failed, we might as well see what this will lead to."

Keston had not liked the look of those strange creatures. He remembered his thoughts when the breathless-winged-one had broken through on Long Mile Reef and smiled a little as he saw how truly he had predicted the reaction of a scientist.

But he followed the others. This might turn out to be why he had been taken along.

In a tumbling slither of fallen masonry and twisted beams, squeezing beneath prostrate girders, slipping and sliding down mounds of unidentifiable debris, he followed. He reached an octogonal chamber, roofless, decaying, smothered with the strange gritty material in which their movements left streaky smears. He threw his light ahead.

At once his sword was out of his scabbard, the mechanical grips giving him an odd sensation as they grasped the familiar ridged hilt.

His legs thrust hard in an automatic reflex that would in aquasphere have sent him gliding forward in an attacking dive. He skittered forward wildly.

Dinar was down, a creature—a rat-person?—worrying him with jaws that, for all their smallness, were yet a potent danger. Lansing was fending off the combined attacks of three others and Hallam was kicking desperately at more as he lay on his back, flailing with arms and legs. The situation was not pretty and cast a grave reflection on the sagacity of the men. That men could be killed by animals of this stamp was insane.

Then, again, were they animals? Suppose the breathlessones were in very truth the departed of Earth. Were their spirits reborn in different flesh and blood? Keston gripped his sword and fought away the demons that clawed at his mind.

He put in a thrust that skewered a rat-person and he swung the sword high and hard so that the pierced body hurtled bloodily away, keening, to disappear. Those little fangs might puncture a weak spot of a gas suit; one of his friends might suddely be bereft of aquasphere and what manner of death he would die was past comprehension. Keston's sword flashed again and Lansing was able to scrabble up and keep his helmet away from flashing fangs.

Their helmet lights criss-crossed in confusing brilliance.

A rat-person scuttled away from Hallam, turned on Keston. Bringing the sword around in a slicing sideways stroke was an extraordinary experience; there was nothing to clog and slow his sword arm down. The two halves of the rat-person toppled away.

From then on the fight was relatively enjoyable. He found that he could bring the sword around so fast that a side-

ways blow from the edge could cleave a rat-person down the backbone. They had backbones all right; Keston saw the shattered vertebrae gleaming whitely in the lamp's blaze.

They had blood, too. . . .

He stopped using the old reliable point and hacked his way across the octogonal room. In moments it was all over. Thankfully, they checked up to find no one's suit punctured. But it had been a near thing.

And then Keston threw his light upon the walls.

Lansing forgot the rapid dissection of the body beneath his grips, a body a good three fins' length from nose to rump and with a whiplike tail another two fins' length after that. He, together with the others, stared at the walls and what their lamps revealed.

Recognition that this long dead decaying building had been a hospital was slow in coming. The mouldering, defaced yet still achingly modern pictures adorning the walls brought instant acceptance once they had been understood. The four lozenges of light splayed over the murals, picking out color, detail, story.

"An allegory," Keston said, unheeding that the others could not hear him. It was all there. They made their halting way around the circuit of the room scarcely crediting that what they saw could ever have existed, and marveling at every fresh and sudden spark of life from the past, revealed in a twist of limb, the expression of a face or the grace of a mother cradling her baby.

They touched helmets.

There in some forgotten cavern deep beneath the crust of the world, buried by tons of earth and rock, four men clad in their incongruous gas suits sought comfort and reassurance from one another in the time-shattered rubble of the ages-old city.

"So they were men."

Professor Lansing spoke, but it could have been any one of the four.

"Men."

"Men with arms and legs, with heads and eyes and noses and faces. Men who must have thought much as we do. Men who lived here millions on millions of seasons ago; who did not posses gill-slits and who did not live in the aquasphere of the normal world."

"Yet they were like us!"

"So very like us."

No matter who speke, no matter who voiced the same thoughts thronging all their brains.

"Perhaps, as we speculated about the Zammu, these longgone men evolved-"

"Perhaps they are not gone long."

"Perhaps they were faced with the self-same problem that faces us. Perhaps their sky was falling upon them. And so they sought sanctuary in the normal world, in the aquasphere."

"Yet this would have been their normal world."

"And the sky still exists. . ."

"So they evolved. Some great catastrophe forced them to the mass migration. They adapted, through directed surgical control and irradiation bathing of the genes and chromosomes. Perhaps there was a great migration from this awful, lonely place above the sky into the safety and saneness of the aquasphere."

"Perhaps," Keston finished for them all. "Perhaps they are us."

Each man dwelt a little with his thoughts.

Then Dinar said abruptly: "A few days ago I would have found this conversation, this idea, impossible. But in face of a changing world a man must change too, or die. We believe these people changed in order to live." He lifted the oxygen meter attached to his respiratory tanks. "Our

supply is dwindling. The suits' aquaspheres will be foul by the time we have flown—that is, crawled—out of here."

"Yes. Yes, we must leave," Lansing said with regret.

"Oxygen . . ." said Keston.

"Yes." Dinar turned his control, conserving the gas. "Ironic that in the thin mists about us now oxygen is there, denied to us, locked away—" He stopped talking. All four men swung again to look at the murals. Depicted there were men and women and children, alike in all respects to themselves, except that they possessed no gill-slits.

"The breathless-ones?"

"If they were men then they breathed. They couldn't fly if there was no aquasphere and the pictures show them always upright, not crawling. Perhaps, then, they had another system not only of getting about but of taking oxygen. The great Breathless Ones die in the aquasphere. We may . . ." And Dinar's voice was lost as he began to hump himself out of the octagonal room.

The others followed. Each in his own shell of isolation, each scrabbling on hands and knees. In the pictures men had

gone upright, lightly, fleetly, on their legs.

All the way back through that terrible climb the thoughts battered in Keston's mind. He felt bemused. If the whole world was changing and growing hostile to men, then men would have to change to face that challenge, in bending to the violence of nature he would outwit her and continue a life that to him, if to no other, was of use and value and beauty.

Oxygen?

The aquasphere, or a thin drift of gases?

But men had lived here! They had been men, indisputably.

Men lived in the normal world enclosed safely in the comfort and protection of the ambient aquasphere. Keston recalled what Professor Lansing, in an idle moment, had dubbed this thin drift of atomized gases. So split, so tenuous

was it, he had declared, ironically, that it could be called the atmosphere.

Strange concept.

They battled their way up the cleft, leaving the dead and silent city far below, emerged at last into the radiance of the Great Light and the comforting bulk of the *Turtle*.

Maybe they had also found the reason why the ancient law proscribed so severely the Hopeless Ones? Webbed hands and feet, a scaly body or a fish's tail would be of little use out here beyond the limits of the sky. A curious twisting concept grew in him, spiraling backwards through past time, that perhaps the law had been framed in the long ago in expectation of just such a journey?

Just such a return journey?

Then, if men crawled up seeking a new world, dragged themselves from the aquasphere into this new and frightening atmosphere, who knew what wonders would be theirs for the finding? He looked first at Allaree as he came in through the lock. With the great ideas burgeoning in him he opened up a vision of what was to come, a clear sight that humanity could still defeat the Zammu by beating the descending silvery sky; there would still be a life to lead and a future to plan.

His fears that in his heredity lay the seeds of the Hopeless Ones, generated in such panic when he had first looked down upon that pitiful web-footed nephew, were brushed aside now in the new wonder that was vouchsafed him. Allaree responded to the smile in his eyes and deep in her eyes the answer to the unspoken question was plain for all to see.

"We must take back samples of the atmosphere," he told her. "So that you and other scientists may work on the great metamorphosis. One generation, two, who knows?"

"We will do it, Keston," Allaree said. "For the sake of

the children yet to come, who must never be Hopeless Ones."

And then what might still be the greatest wonder of all stole upon him, so that he smiled with great tenderness upon Allaree.

For if men prevailed and adapted and left the long seasons of development in the aquasphere behind them and ventured out again upon what had once been theirs—why, then Keston might himself, one day, again see the familiar fields and buildings and live out a life of peace in the old homestead of Ochiltree.

Here's a quick checklist of recent releases of

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D-457	VULCAN'S	HAMMER	by	Philip	ĸ.	Dick
	and THE SI	CYNAPPERS	Ьy	John	Bru	nner

- D-461 THE TIME TRADERS by Andre Norton
- D-465 THE MARTIAN MISSILE by David Grinnell and THE ATLANTIC ABOMINATION by John Brunner
- D-468 SENTINELS OF SPACE by Eric Frank Russell
- D-471 SANCTUARY IN THE SKY by John Brunner and THE SECRET MARTIANS by Jack Sharkey
- D-473 THE GREATEST ADVENTURE by John Taine
- D-479 TO THE TOMBAUGH STATION by Wilson Tucker and EARTHMAN, GO HOMEI by Poul Anderson
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