## THE MAN WHO LOST THE SEA

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Say you're a kid, and one dark night you're running along the cold sand with this helicopter in your hand, saying very fast witch y-witchy-witchy. You pass the sick man and he wants you to shove off with that thing. Maybe he thinks you're too old to play wit-h toys. So you squat next to him in the sand and tell him it isn't a toy, it's a model. You tell him look hers, here's something most people don't know about helicopters. You take a blade of the rotor in your fingers and show him how it can move in the hub, up and down a little, back and forth a little, and twist a little, to change pitch. You start to tell hun how this flexibility does away with the gyroscopic effect, but he won't listen. He doesn't want to think about flying, about helicopters, or

About you, and he most especially does not want explanations about anything by anybody. Not now. Now, he wants to think about the sea. So you go away.

The sick man is buried in the cold sand with only his head and his left arm showing. He is dressed in a pressure suit and looks like a man from Mars. Built into his left sleeve is a combination time-piece and pressure gauge, the gauge with a luminous blue indicator which makes no sense, the clock hands luminous red. He can hear the pounding of surf and the soft swift pulse of his pumps. One time long ago when he was swimming he went too deep and stayed down too long and came up too fast, and when he came to it was like this: they said, "Don't move, boy. You've got the bends. Don't even try to move." He had tried anyway. It hurt. So now, this time, he lies in the sand without moving, without trying.

His head isn't working right. But he knows clearly that it isn't working right, which is a strange thing that happens to people in shock sometimes. Say you were that kid, you could say how it was, because once you woke up lying in the gym office in high school and asked what had happened. They explained how you tried something on the parallel bars and fell on your head. You understood exactly, though you couldn't remember falling. Then a minute later you asked again what had happened and they told you. You understood it. And a minute later. . .forty-one times they told you, and you understood. It was just that no matter how many times they pushed it into your head, it wouldn't stick there; but all the while you knew that your head would start working again in time. And in time it did.... Of course, if you were that kid, always explaining things to people and to yourself, you wouldn't want to bother the sick man with it now.~

Look what you've done already, making him send you away with that angry shrug of the mind (which, with the eyes, are the only things which will move just now). The motionless effort t~osts him a wave of nausea. He has felt seasick before but he has never been, seasick, and the formula for that is to keep, your eyes on the horizon and stay busy. Now! Then he'd better get busy-now; for there's one place especially not to be seasick in, and that's locked up in a pressure suit. Now!

So he busies himself as best he can, with the seascape, landscape, sky. He lies on high ground, his head propped on a vertical wall of black rock. There is another such outcrop before him, whip-topped with white sand and with smooth fiat sand. Beyond and down is valley, salt-flat, estuary; he cannot yet be sure. He is sure of the line of footprints, which begin behind him, pass to his left, disappear in the outcrop shadows, and reappear beyond to vanish at last into the shadows of the valley.

Stretched across the sky is old mourning-cloth, with starlight burning holes in it, and

between the holes the black is absolute-wintertime, mountaintop sky-black.

(Far off on the horizon within himself, he sees the swell and crest of approaching nausea; he counters with an undertow of weakness, which meets and rounds and settles the wave before it can break. Get busier. Now.)

Burst in on him, then, with the X-15 model. That'll get him. Hey, how about this for a gimmick? Get too high for the thin air to give you any control, you have these little jets in the wingtips, see? and on the sides of the empennage: bank, roll, yaw, whatever, with squirts of compressed air.

But the sick man curls his sick lip: oh, git, kid, git, will you?-that has nothing to do with the sea. So you git.

Out 'and out the sick man forces his view, etching all he sees with a meticulous intensity, as if it might be his charge, one day, to duplicate all this, To his left is only starlit sea, windless. In front of him across the valley, rounded hills with dim white epaulettes of light. To his right, the jutfing corner of the black wall against which his helmet rests. (He thinks the distant moundings of nausea becalmed, but he will not look yet.) ~So he scans the sky, black and bright, calling Sirius, calling Pleiades, Polaris, Ursa Minor, calling that . . . that . . . Why, it moves. Watch it: yes, it moves! It is a fleck of light, seeming to be wrinkled, fissured, rather like a chip of boiled cauliflower in the sky. (Of course, he knows better than to trust his own eyes just now.) But that movement

As a child he had stood on cold sand in a frosty Cape Cod

evening, watching Sputnik's steady spark rise out of the haze (madly, dawning a little north of west); and after that he had sleeplessly wound special coils for his receiver, risked his life restringing high antennas, all for the brief capture of an unreadable tweetle-eep-tweetle in his earphones from Vanguard, Explorer, Lunik, Discoverer, Mercury. He knew them all (well, some people collect match-covers, stamps) and he knew especially that unmistakable steady sliding in the sky.

This moving fleck was a satellite, and in a moment, motionless, uninstrumented but for his chronometer and his part-brain, he will know which one. (He is grateful beyond expression-without that sliding chip of light, there were only those footprints, those wandering footprints, to tell a man he was not alone in the world.)

Say you were a kid, eager and challengeable and more than a little bright, you might in a day or so work out a way to measui~e the period of a satellite with nothing but a timepiece and a brain; you might eventually see that the shadow in the rocks ahead had been there from the first only because of the light from the rising satellite. Now if you check the time exactly at the moment when the shadow on the sand is equal to the height of the outcrop, and time it again when the light is at the zenith and the shadow gone, you will multiply this number of minutes by 8-think why, now: horizon to zenith is one-fourth of the orbit, give or take a little, and halfway up the sky is half that quarter- and you will then know this satellite's period. You know all the periods-ninety minutes, two, two-and-a-half hours; with that and the appearance of this bird, you'll find out which one it is.

But if you were that kid, eager or resourceful or whatever, you wouldn't jabber about it to the sick man, for not only does he not want to be bothered with you, he's thought of all that long since and is even now watching the shadows for that triangular split second of measurement. Now! His eyes drop to the face of his chronometer: 0400, near as makes no

never mind.

He has minutes to wait now-ten?... thirty?... twentythree?-while this baby moon eats up its slice of shadowpie; and that's too bad, the waiting, for though the inner sea is calm there are currents below, shadows that shift and swim. Be busy. Be busy. He must not swim near that great invisible ameba, whatever happens: its first cold pseudopod is even now reaching for the vitals.

Being a knowledgeable young fellow, not quite a kid any more, wanting to help the sick man too, you want to tell him everything you know about that cold-in-the-gut, that reaching invisible surrounding implacable ameba. You know all about it-listen, you want to yell at him, don't let that touch of cold bother you. Just know what it is, that's all. Know what it is that is touching your gut. You want to tell him, listen:

Listen, this is how you met the monster and dissected it. Listen, you were skin-diving in the Grenadines, a hundred tropical shoal-water islands; you had a new blue snorkel mask, the kind with face-plate and breathing-tube all in one, and new blue ffippers on your feet, and a new blue spear-gun-all this new because you'd only begun, you see; you were a beginner, aghast with pleasure at your easy intrusion into this underwater otherworld. You'd been out in a boat, you were coming back, you'd just reached the mouth of the little bay, you'd taken the notion to swim the rest of the way. You'd said as much to the boys and slipped into the warm silky water. You brought your gun.

Not far to go at all, but then beginners find wet distances deceiving. For the first five minutes or so it was only delightful, the sun hot on your back and the water so warm it seemed not to have any temperature at all and you were flying. With your face under the water, your mask was not so much attached as part of you, your wide blue flippers trod away yards, yout gun rode all but weightless in your hand, the taut rubber sling making an occasional hum as your passage plucked it in the sunlit green. In your ears crooned the breathy monotone of the snorkel tube, and through the invisible disk of plate glass you saw wonders. The bay was shallow-ten, twelve feet or so-and sandy, with great growths of brain, bone-, and fire-coral, intricate waving sea-fans, and fish-such fish! Scarlet and green and

aching azure, gold and rose and slate-color studded with sparks of enamel-blue, pink and peach and silver. And that thing got into you, that... monster.

There were enemies in this otherworld: the sand-colored spotted sea-snake with his big ugly head and turned-down mouth, who would not retreat but lay watching the intruder pass; and the mottled moray with jaws like bolt-cutters; and somewhere around, certainly, the barracuda with his undershot face and teeth turned in-ward so that he must take away whatever he might strike. There were urchins-the plump white sea-egg with its thick fur of sharp quills and the black ones with the long slender spines that would break off in unwary flesh and fester there for weeks; and file-fish and stone-fish with their poisoned barbs and lethal meat; and the stingaree who could drive his spike through a leg bone. Yet these were not monsters, and could not matter to you, the invader churning along above them all. For you were above them in so .many ways-armed, rational, comforted by the close shore (ahead the beach, the rocks on each side) and by the presence of the boat not too far behind. Yet you were. . . attacked.

At first it was uneasiness, not pressing, but pervasive, a contact quite as intimate as that of the sea; you were sheathed in it. And also there was the touch-the cold in-ward contact. Aware of it at last, you laughed: for Pete's sake, what's there to be scared of?

The monster, the ameba.

You raised your head and looked back in air. The boat had edged in to the cliff at the right; someone was giving a last poke around for lobster. You waved at the boat; it was your gun you waved, and emerging from the water it gained its latent ounces so tha,t you sank a bit, and as if you had no snorkle on, you tipped your head back to get a breath. But tipping your head back plunged the end of the tube under water; the valve closed; you drew in a hard lungful of nothing at all. You dropped your face under; up came the tube; you got your air, and along with it a bullet of seawater which struck you somewhere inside the throat. You coughed it out and floundered, sobbing as you sucked in air, inflating your chest until it hurt, and the air you got seemed no good, no good at all, a worthless devitalized inert gas.

You clenched your teeth and headed for the beach, kicking strongly and knowing it was the right thing to do; and then below and to the right you saw a great bulk mounding up out of the sand floor of the sea. You knew it was only the reef, rocks and coral and weed, but the sight of it made you scream; you didn't care what you knew. You turned hard left to avoid it, fought by as if it would reach for you, and you couldn't get air, couldn't get air, for all the unobstructed hooting of your snorkel tube. You couldn't bear the mask, suddenly, not for another second, so you shoved it upward clear of your mouth and rolled over, floating on your back and opening your mouth to the sky and breathing with a quacking noise.

It was then and there that the monster well and truly engulfed you, mantling you round and about within itself- formless, borderless, the illimitible ameba. The beach, mere yards away, and the rocky arms of the bay, and the not-too-distant boat-these you could identify but no longer distinguish, for they were all one and the same thing, the thing called unreachable.

You fought that way for a time, on your back, dangling the gun under and behind you and straining to get enough warm sun-stained air into your chest. And in time some particles of sanity began to swirl in the roil of your mind, and to dissolve and tint it. The air pumping in and out of your square-grinned frightened mouth began to be meaningful at last, and the monster relaxed away from you.

You took stock, saw surf, beach, a leaning tree. You felt the new scend of your body as the rollers humped to become breakers. Only a dozen firm kicks brought you to where you could roll over and double up; your shin struck coral with a lovely agony and ~ou stood in foam and waded ashore. You gained the wet sand, hard sand, and ultimately with two more paces powered by bravado, you crossed high-water mark and lay in the dry sand, unable to move.

You lay in the sand, and before you were able to move or to think, you were able to feel a triumph-a triumph because you were alive and knew that much without thinking at all.

When you were able to think, your first thought was of the gun, and the first move you were able to make was to let go at last of the thing. You had nearly died because you had not let it go before; without it you would not have been burdened and you would not have panicked. You had (you began to understand) kept it because someone else would have had to retrieve it-easily enough-and you could not have stood the laughter. You had almost died because They might laugh at you.

This was the beginning of the dissection, analysis, study of the monster. It began then; it had never finished. Some of what you had learned from it was merely important; some of the rest-vital.

You had learned, for example, never to swim farther with a snorkel than you could swim

back without one. You learned never to burden yourself with the unnecessary in

an emergency: even a hand or a foot might be as expend- -able as a gun; pride was expendable, dignity was. You

learned never to dive alone, even if They laugh at you, even if you have to shoot a fish yourself and say afterward "we" shot it. Most of all, you learned that fear has many fingers, and one of them a simple one, made of too great a concentration of carbon dioxide in your blood, as from too rapid breathing in and out of the same tube-is not really fear at all but feels like fear, and can turn into panic and kill you.

Listen, you want to say, listen, there isn't anything wrong with such an experience or with all the study it leads to, because a man who can learn enough from it could become fit enough, cautious enough, foresighted, unafraid, modest, teachable enough to be chosen, to be qualified for- You lose the thought, or turn it away, because the sick man feels that cold touch deep inside, feels it right now, feels it beyond ignoring, above and beyond anything that you, with all your experience and certainty, could explain to him even if he would listen, which he won't. Make him, then; tell him the cold touch is some simple explainable thing like anoxia, like gladness even: some triumph that he will be able to appreciate when his head is working - right again.

Triumph? Here he's alive after . . . whatever it is, and that doesn't seem to be triumph enough, though it was in the Grenadines, and that other time, when he got the bends, saved his own life, saved two other lives. Now, somehow, it's not the same: there seems to be a reason why just being alive afterward isn't a triumph.

Why not triumph? Because not twelve, not twenty, not even thirty minutes is it taking the satellite to complete its eighth-of-an-orbit: fifty minutes are gone, and still there's a slice of shadow yonder. It is this, this which is placing the cold finger upon his heart, and he doesn't know why, he doesn't know why, he will not know why; he is afraid he shall when his head is working again.

Oh, where's the kid? Where is any way to busy the mind, apply it to something, anything else but the watchhand which outruns the moon? Here, kid: come over here-what you got there?

If you were the kid, then you'd forgive everything and hunker down with your new model, not a toy, not a helicopter or a rocket-plane, but the big one, the one that looks like an overgrown cartridge. It's so big, even as a model, that even an angry sick man wouldn't call it a toy. A giant cartridge, but watch: the lower four-fifths is Alpha-all muscle-over a million pounds thrust. (Snap it off, throw it away.) Half the rest is Beta-all brains-it puts you on your way. (Snap it off, throw it away.) And now look at the polished fraction which is left. Touch a control somewhere and see-see? it has wings-wide triangular wings. This is Gamma, the one with wings, and on its back is a small sausage; it is a moth with a sausage on its back. The sausage (click! it comes free) is Delta. Delta is the last, the smallest: Delta is the way home.

What will they think of next? Quite a toy. Quite a toy. Beat it, kid. The satellite is almost overhead, the sliver of shadow going-going-almost gone and . . . gone.

Check: 0459. Fifty-nine minutes? give or take a few. Times eight. . . 472 ... is, uh, 7 hours 52 minutes.

Seven hours fifty-two minutes? Why, there isn't a satellite round earth with a period like that. In all the solar system there's only

The cold finger turns fierce, implacable.

The east is paling and the sick man turns to it, wanting the light, the sun, an end to questions whose answers couldn't be looked upon. The sea stretches endlessly out to the growing light, and endlessly, somewhere out of sight, the~ surf roars. The paling east bleaches the sandy hilltops and throws the line of footprints into aching relief. That would be the buddy, the sick man knows, gone for help. He cannot-at the moment recall who the buddy is, but in time he will, and meanwhile the footprints make him less alone.

The sun's upper rim thrusts itself above the horizon with a flash of green, instantly gone. There is no dawn, just the green flash and then a clear white blast of unequivocal sunup. The sea could not be whiter, more still, if it were frozen and snow-blanketed. In the west, stars still blaze, and overhead the crinkled satellite is scarcely abashed by the growing light. A formless jumble in the valley below begins to resolve itself into a sort of tent-city, or installation of some kind, with tubelike and saillike buildings. This would have meaning for the sick man if his head were working right. Soon, it would. Will. (Oh...)

The sea, out on the horizon just under the rising sun, is behaving strangely, for in that place where properly be-longs a pool of unbearable brightness, there is instead a notch of brown. It is as if the white fire of the sun is drinking dry the sea-for look, look! the notch becomes a bow and the bow a crescent, racing ahead of the sunlight, white sea ahead of it and behind it a cocoa-dry stain spreading across and down toward where he watches.

Beside the finger of fear which lies on him, another finger places itself, and another, making ready for that clutch, that grip, that ultimate insane squeeze of panic. Yet beyond that again, past that squeeze when it comes, to be savored if the squeeze is only fear and not panic, lies triumph-triumph, and a glory. It is perhaps this which constitutes his whole battle: to fit himself, prepare himself to bear the utmost that fear could do, for if he can do that, there is a triumph on the other side. But . . . not yet. Please, not yet awhile,

Something flies (or flew, or will fly-he is a little confused on this point) toward him, fiom the far right where

- the stars still shine. It is not a bird and it is unlike any aircraft on earth, for the aerodynamics are wrong. Wings so wide and so fragile would be useless, would melt and tear away in any of earth's atmosphere but the outer fringes. He sees then (because he prefers to see it so) that it is the kid's model, or part of it, and for a toy, it does very well indeed.

It is the part called Gamma, and it glides in, balancing, parallels the sand and holds away, holds away slowing, then settles, all in slow motion, throwing up graceful sheet-fountains of fine sand from its skids. And it runs along the ground for an impossible distance, letting down its weight by the ounce and stingily the ounce, until look out until a skid look out fits itself into a bridged crevasse look out, look out! and still moving on, it settles down to the struts. Gamma then, tired, digs her wide left wingtip carefully into the racing sand, digs it in hard; and as the wing breaks off, Gamma slews, sidles, slides slowly, pointing her other triangular tentlike wing at the sky, and broadside crushes into the rocks at the valley's end.

As she rolls smashing over, there breaks from her broad back the sausage, the little Delta, which somersaults away to break its back upon the rocks, and through the broken

hull, spill smashed shards of graphite from the moderator of her power-pile. Look out! Look out! and at the same instant from the finally checked mass of Gamma there explodes a doll, which slides and tumbles into the sand, into the rocks and smashed hot graphite from the wreck of Delta.

The sick man numbly watches this toy destroy itself: what will they think of next?-and with a gelid horror prays at the doll lying in the raging rubble of the atomic pile:

don't stay there, man-get away! get away! that's hot, you know? But it seems like a night and a day and half another night before the doll staggers to its feelt and, clumsy in its

pressure-suit, runs away up the valleyside, climbs a sand-topped outcrop, slips, falls, lies under a slow cascade of cold ancient sand until, but for an arm and the helmet, it is buried.

The sun is high now, high enough to show the sea is not a sea, but brown plain with the frost burned off it, as now it burns away from the hills, diffusing in air and blurring the edges of the sun's disk, so that in a very few minutes there is no sun at all, but only a glare in the east. Then the valley below loses its shadows, and like an arrangement in a diorama, reveals the form and nature of the wreckage below: no tent-city this, no installation, but the true real ruin of Gamma and the eviscerated hulk of Delta. (Alpha was the muscle, Beta the brain; Gamma was a bird, but Delta, Delta was the way home.)

And from it stretches the line of footprints, to and by the sick man, above to the bluff, and gone with the sand-slide which had buried him there. Whose footprints?

He knows whose, whether or not he knows that he knows, or wants to or not. He knows what satellite has (give or take a bit) a period like that (want it exactly?-it's 7.66 hours). He knows what world has such a night, and such a frosty giare by day. He knows these things as he knows how spilled radioactives will pour the crash and mutter of - surf into a man's earphones.

Say you were that kid: say, instead, at last, that you are the sick man, for they are the same; surely then you can understand why of all things, even while shattered, shocked, sick with radiation calculated (leaving) radiation computed (arriving) and radiation past all bearing (lying in the wreckage of Delta) you would want to think of the sea. For no farmer who fingers the soil with love and knowledge, no poet who sings of it, artist, contractor, engineer, even child bursting into tears at the inexpressible beauty of a field of daffodils-none of these is as intimate with Earth as those who live on, live with, breathe and drift in its seas. So of these things you must think; with these you must dwell until you are less sick and more ready to face the truth.

The truth, then, is that the satellite fading here is Phobos, that those footprints are your own, that there is no sea here, that you have crashed and are killed and will in a moment be dead. The cold hand ready to squeeze and still your heart is not anoxia at even fear, it is death. Now, if there is something more important than this, now is the time for it to show itself.

The sick man looks at the line of his own footprints, which testify that he is alone, and at the wreckage below, which states that there is no way back, and at the white east and the mottled west and the paling flecklike satellite above. Surf sounds in his ears. He hears his pumps. He hears what is left of his breathing. The cold clamps down and folds him round past measuring, past all limit.

Then he speaks, cries out: then with joy he takes his triumph at the other side of death, as one takes a great fish, as one completes a skilled and mighty task, rebalances at the end of some great daring leap; and as he used to say "we shot a fish" he uses no "I":

"God," he cries, dying on Mars, 'God, we made it!"