

TOM SWIFT AND HIS DEEP-SEA HYDRODOME

VICTOR APPLETON II

No. 11 in the Tom Swift Jr. series.

(1958)

From the inside cover:

From the moment Tom Swift finds himself tossed about helplessly in an undersea geyser to the time he faces possible death at the hands of his enemies, the young scientist lights to overcome many obstacles in putting his two latest amazing inventions to use.

When Torn discovers that helium on the ocean bottom had caused the geyser, he plunges into the task of building an underwater city of derricks and pipe lines to capture the gas. His astounding new water-repelling machine and phenomenal hydro-dome make the gigantic operation possible.

While at work at the undersea mountain site, Torn and his pal Bud Barclay uncover what seems to be pirate treasure, but find in the leaden chests a cache of death-dealing destruction. Time and again the young scientist's plans are nearly wrecked. A sinister, hooded figure attacks him in his laboratory, and a mysterious submarine nearly costs him his life.

How Tom outwits his ruthless enemies and saves his country from grave danger makes a nerve-tingling story, packed with swift, tense action and high-voltage suspense.

THE NEW TOM SWIFT JR. ADVENTURES

TOM SWIFT AND HIS DEEP-SEA HYDRODOME

BY VICTOR APPLETON II

The Tom Swift Jr. series:

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- 2 Tom Swift and his Jetmarine (1954)
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CHAPTER I

AN EXCITING DISCOVERY

“Swing that searchlight around, will you, Dad? I see something unusual!”

Tom Swift's blue eyes lighted up with excitement as he steered the Sea Hound, his latest model of the diving seacopter, through the inky depths of the Atlantic Ocean.

“Port or starboard?” asked Mr. Swift.

“Starboard, just a few degrees,” Tom replied.

The lanky, blond-haired inventor was cruising with his distinguished scientist father about a hundred feet above the ocean floor near an undersea mountain. They were in the realm of eternal night, far below the depths at which the sun's rays penetrate.

Mr. Swift gasped in surprise as he swiveled the powerful searchlight. In its glare a myriad of huge bubbles could be seen billowing upward in a steady stream from the ocean bottom.

"Great Scott! This is unbelievable!" the scientist exclaimed.

"I've never seen anything like it!" Tom agreed, as he stared in fascination.

On an earlier cruise in his first seacopter, the Ocean Arrow, Tom Swift Jr. had discovered an underwater city of gold on the same mountain range. Now he and his father were making a return trip to explore the strange sunken civilization, and conduct underwater tests there.

"Dad," Tom said, after making some quick calculations, "those bubbles might be helium gas!"

"You mean because of the tremendous speed with which they're rising?" remarked Mr. Swift, who was as excited as his son.

"Yes," Tom replied. "Other bubbles we've seen so far have been just lazily drifting up."

"You have a point there," his father admitted. Knowing that helium, because of its low density, is very buoyant, both Swifts realized that this would account for the bubbles' fast-streaming action.

The elder inventor's keen eyes glinted as he added, "Son, if your hunch is right, this could be a discovery of top scientific importance!"

Eighteen-year-old Tom nodded tensely. "I know. At present our country can get helium only from certain natural gas wells in Texas and Kansas, and those sources don't produce a great deal. If scientists had an unlimited supply from under the ocean--"

Father and son looked intently at each other as Mr. Swift laid a hand on Tom's shoulder.

"Don't get your hopes up too soon," he cautioned. "The gas is still deep in the ocean. And we don't even know that it is helium."

Tom grinned. "Right. It could be hydrogen, or argon or neon or other gases. But," he declared, "I intend to find that out right now!"

Mr. Swift frowned. "How?"

"I'll go out in a Fat Man suit, collect a sample, and test it!"

Pulling a lever on the control panel, Tom cut the directional jets. The sleek craft slowed to a halt, as its whirring central rotor held the sea-copter suspended motionless in the ocean depths.

Powered by atomic reactors, the Sea Hound was one of Tom's most thrilling inventions. Like the Ocean Arrow, it could be used as a helicopter or as a submarine. The unique craft was equipped with tractor treads which could be extended like a plane's landing gear for crawling along the ocean floor.

“Take over, will you, Dad?” Tom asked eagerly.

Mr. Swift stepped to the controls and glanced at the dials and gauges. “You’ll need a float balloon in case you want to send up a marker,” he suggested over his shoulder.

“Good idea. I’ll take one.”

Tom unlocked a stowage compartment and took out one of the “balloons,” which actually was a hollow metal sphere containing compressed air. Using a short length of nylon cable, he attached the sphere to a laboratory vacuum flask in which he would collect the gas sample.

“Now to climb into a Fat Man suit,” the young inventor murmured.

The Sea Hound carried two of these escape suits just inside the ship’s air lock, located at the rear side of the forward compartment. Shaped like huge dinosaur eggs, each Fat Man suit had a heavy quartz-glass view plate, pantograph arms and legs operated by inner controls, and a seat for the operator. Months ago, Tom had invented the Fat Man devices to help him track down a gang of undersea pirates in his jetmarine.

“Watch your step in the ooze out there,” Mr. Swift warned as Tom squirmed into one of the suits through the open view plate and sat down.

“Roger!”

Clamping the view plate shut, Tom switched on his air supply. Then he picked up the balloon and flask with one of the mechanical arms and stepped into the pressure chamber.

His father shoved the control wheel forward and the seacopter descended gently to the bottom. A moment later the hatch in the ship’s hull opened and Tom stepped out.

Waddling cautiously through the muck, he made his way forward into the glare of the searchlight. Guided by its beam, he headed toward the source of the bubbles.

The ocean floor was completely barren of vegetation at this depth. Occasional flashes of eerie light from strange-looking fish and other sea creatures were the only signs of life.

The bubbles seemed to issue from the ledge on which he stood. The ooze seethed like a giant stewpot.

Tom tested each step with the Fat Man’s pantograph legs, at the same time probing the sea floor with his own built-in searchlight. Finally he came within reach of the bubbling area.

Maneuvering the mechanical arms, he upended the vacuum flask just as a bubble was forming and caught some of the gas neatly inside.

“So far, so good,” the young scientist muttered. “Only hope it is helium.” After the self-sealing bottle had capped itself, he started back toward the Sea Hound.

Suddenly the Fat Man began to wobble. It teetered perilously on its mechanical legs for a moment, then righted itself as the gyro brain brought the egg-shaped monster back into balance.

“Hey, what goes on here?” Tom wondered, feeling a slight twinge of alarm.

The next instant a violent lurch almost threw him out of his seat. Quickly Tom pressed his face against the quartz-glass window to see what was happening. To his horror, the ocean bottom was shuddering in a violent upheaval!

“Good night! I’d better get out of here fast!” Tom muttered to himself.

He gunned the air jet to propel the device forward. But an upsurge of bubbles caught the Fat Man, rocking it from side to side.

Frantically Tom worked the controls, trying to keep the escape suit upright. Then came another jolt as the whole sea floor seemed to explode.

An immense geyser of water and mud erupted with the force of a dynamite blast. It struck the Fat Man and the seacopter, and hurled them upward.

Tom barely had time to glimpse the Sea Hound’s searchlight beam sweeping in a crazy arc, when he was thrown from the operator’s seat. His head crashed against the inner wall of the steel egg. With a moan of pain, the young inventor blacked out. When Tom regained consciousness, he found himself in total darkness. Only the glow of the instrument dials relieved the black gloom of the ocean depths.

The water around him was quiet now. Tom theorized that the geyser had been caused by the sudden release of a tremendous quantity of gas held under pressure inside the mountain.

Whether he had been unconscious for a few seconds or several minutes, Tom did not know.

“Where was Dad blown to?” he asked himself worriedly. “And how is he?”

Tom pressed the Fat Man’s light switch, then flipped it back and forth in desperation. There was no response.

“Oh, no!” Tom groaned. His searchlight was out of commission!

Outside the quartz-glass window, there was no sign of the Sea Hound’s beam. A wave of fear surged through Tom.

“Steady, boy!” he told himself. “Getting panicky won’t help.”

From the weight indicated on the pantograph controls, Tom could tell that the vacuum flask had been wrenched from his grasp by the undersea geyser. His valuable sample was gone, too. But there was no time to worry about that.

Working the controls cautiously, Tom maneuvered the Fat Man through a complete 360-degree turn. There was not a glimmer of light from the Sea Hound.

“Maybe I can make contact by sonarphone,” he thought.

Switching on his two-way set, Tom spoke hopefully into the mike. “Dad, can you read me? . . . Fat Man calling the Sea Hound!”

Again and again he repeated the call. Getting no response, he finally gave up and turned off the

transmitter.

“Now what?” Tom wondered fearfully.

He pondered the situation for a moment. Without help from the mother ship, his own plight was serious and his father’s might be worse. In any case, Tom decided, there was no point in lingering on the ocean bottom.

“Well, here goes,” he determined.

Opening a valve, he blew his ballast tanks and prepared to surface. An elevator feeling in the pit of his stomach told him the Fat Man was zooming upward through the murky depths.

Slowly the blackness outside his view pane lightened into gray. Then the water took on greenish tinges, which finally deepened into a rich blue-green. Fishes of all description darted past. Seconds later he broke through the surface.

“Oh, boy, that old sunshine looks good!” Tom exulted.

Peering around, he gave a cry of joy. Less than a hundred yards away, the Sea Hound was wallowing in the waves. The float balloon, with the vacuum flask attached, was also in sight.

After retrieving the gas sample, Tom steered the Fat Man toward the seacopter. A chill of foreboding came over him when he failed to glimpse his father inside the cabin window.

Tom rapped on the ship’s hatch. After a pause, he knocked again. There was no response from inside!

CHAPTER II

SECRET MISSION

THIS time, there was no avoiding the fearful thoughts that hammered in Tom’s mind. Something must have happened to his father when the Sea Hound was hurled upward by the undersea geyser. Was he lying helpless and seriously injured inside the seacopter?

Frantically Tom tried the hatch to no avail. The opening mechanism was jammed! And he had no tools with which to force an entrance.

What to do now? Bobbing about in his Fat Man suit, Tom was alone at sea, hundreds of miles from the nearest point of land. And he was not in a sea lane for ships.

“It looks as if the radio is my only hope,” Tom decided grimly. He switched to the special frequency used by employees of Swift Enterprises. This was the sprawling experimental station in Shopton, the Swifts’ home town, where Tom and his father developed their numerous inventions.

“Tom Swift Jr. calling Enterprises! Can you read me? . . . Come in, please! . . . Tom Jr. calling Swift Enterprises!”

Suddenly his heart gave a leap of joy as a reply came faintly over the earphones. “Enterprises to Tom. What goes, skipper?” It was the voice of George Billing, communications chief at Enterprises.

“We’re in trouble, George-stranded at seal” Tom said urgently. “Send help pronto, including Doc Simpson!”

He gave their position and Billing started to reply. But after two or three words, the signal faded out.

Again and again Tom tried to re-establish contact but without success. At last he gave up in despair. Had Billing heard the position?

For the time being, there was nothing for Tom to do but wait and hope. As the minutes dragged by, the young inventor thought ruefully of the many times when he had come face to face with death, not only at sea, but in the frozen wastes of the Antarctic and the bleakness of outer space. In his latest adventure, with his ultrasonic cycloplane, he had outwitted a fiendish scientist seeking long-lost riches in the New Guinea jungle.

Now, under the blazing sun of the open Atlantic, the Fat Man was becoming uncomfortably hot. Even the asbestos insulation and air-changing equipment could not prevent the temperature from rising inside the egg-shaped escape suit.

To offset this, Tom submerged several times to cool off. Each time he reappeared, the stranded inventor looked hopefully for help. But all he saw were flying fishes which leaped into view every now and then. Several times a deadly-looking shark fin went streaking past, and once he sighted a school of playful porpoise.

It was midafternoon when a faint roar from the sky drew his attention. Off to the northwest, a silver speck was winging into view.

“The Sky Queen!” Tom thought hopefully. “Thank goodness!”

A few minutes later the sleek, swept-wing air giant stood overhead. Atomic-powered and completely equipped for scientific research anywhere in the world, this three-decker Flying Lab was Tom’s first major invention. Jet lifters enabled it to land or take off vertically.

“Fat Man to Sky Queen! Boy, are you a welcome sight!” Tom said into his mike.

“Be right with you, skipper!” came the reply.

Using the lifters, the huge plane lowered to a hovering halt just above the water a short distance from the Sea Hound. Swiftly Tom propelled the Fat Man alongside and clambered aboard through the open hatch. Anxious faces greeted him as he crawled out of the escape suit.

“Are you all right, pal?” asked Bud Barclay. The same age as Tom, the husky, dark-haired boy was his closest chum.

“Never mind me,” Tom replied. “We must see about Dad!”

“Where is he? What happened?” demanded Hank Sterling, the Swifts’ square-jawed chief patternmaking engineer and trouble shooter.

Quickly Tom described their undersea disaster and how his father had failed to respond when he knocked on the Sea Hound’s air lock.

Hank said promptly, “Pull up alongside, Slim, and I’ll open it!”

Slim Davis, a company test pilot who had flown the Sky Queen from Shopton, hurried back to the controls. With a slight kick on the main jets, he maneuvered the big plane close to the seacopter.

Then Arv Hanson, a hulking six-foot, engineer-craftsman who turned out the small, sleek models of all Tom’s inventions, got to work. He threw a mooring line over to a cleat on the seacopter’s hull to grapple the two craft close together.

Working with a powerful cutting torch, Hank and Bud soon forced open the door of the Sea Hound’s air lock. Tom, with Doc Simpson, Swift Enterprises’ physician, led the way into the sea-copter. The crewmen scrambled aboard behind them.

In the rear of the forward cabin, they found Mr. Swift laying in a crumpled heap on the deck.

“Dad!” cried Tom in a stricken voice, as he rushed to his father’s side.

Doc Simpson followed. “Your dad must have been jolted off his feet and knocked out,” he said, examining an ugly bruise on the scientist’s forehead. “Help me carry him to a bunk.”

The young medic worked over Mr. Swift for several minutes but failed to restore him to consciousness.

“What do you think the trouble is?” Tom asked anxiously.

“I’m afraid that he may have a concussion,” Doc replied gravely. “I’m hoping I’m wrong, but we’d better get him to a hospital as quickly as possible.”

Tom took over the controls for the return flight, and soon the huge, atomic-powered Sky Queen was streaking in a northwesterly course across the ocean at twice the speed of sound. Meanwhile, Hank Sterling and Slim Davis had remained aboard the seacopter to pilot it home. In little more than an hour, Tom’s Flying Lab was nearing an island off the United States coast.

“We’ll land at Fearing to save time,” the young inventor told Doc Simpson.

Moments later, they came in sight of the tiny stretch of sand dunes and scrubgrass lying not far off the Atlantic coast. This was Fearing Island, the Swifts’ rocket base, closely guarded by drone planes and radar.

Tom radioed for clearance, and an ambulance was waiting when they landed. Mr. Swift was carried off the plane on a stretcher and rushed to the island infirmary. Here, with Tom, Bud, and Doc at his side, he finally regained consciousness.

“W-what happened?” he asked weakly.

“Take it easy, Dad,” Tom soothed him. “Everything’s okay and we’re back on Fearing.”

X rays had revealed a slight concussion and bone bruises. Doc Simpson said that it would be necessary for Mr. Swift to remain in the hospital for two to three days.

"I'm afraid this fouls up our trip to the city of gold, son," the scientist said with a wry smile.

"Never mind that, Dad," Tom replied. "The important thing is that you'll soon be all right, and we may have found an important new source of helium!"

"You've tested the sample?" asked Mr. Swift eagerly.

"Yes, and the Swift spectrograph proves that it is definitely helium."

"Fine, fine," his father said. He drummed his fingers on the white bedspread, then added, "Tom, we'd better notify the government of this at once. It's too important to keep to ourselves."

"I certainly agree, Dad," Tom replied earnestly. "Whom should I contact?"

"Bronson at the Bureau of Mines. He's in charge of all helium production."

"I'll call him right away," Tom promised.

In a jeep Tom hurried to the base headquarters building and put through a long-distance call to Washington. When he reported the undersea discovery, the government official was very enthusiastic.

"If we can find a way to tap this source of helium, it would really expedite our space-flight program!" Bronson declared.

"The space-flight program?" Tom puckered his brow. "What's the connection, sir?"

"Can't go into it over the phone, but I'll send two men up to your rocket base first thing in the morning."

"We'll be waiting for them," Tom replied.

Early the next morning an Air Force jet streaked down on the Fearing airfield. Two passengers disembarked—one a rugged, balding man of about fifty with a tanned, weather-beaten face. The other, in his late twenties, was dark-haired and wiry.

The older man, Dr. Arthur Clisby, was a well-known Bureau chemist. "And this is my associate, Bob Anchor," Dr. Clisby said, introducing his companion.

"Glad to know you," said Tom, shaking hands. "And this is Bud Barclay. Would you like to have a look at that helium sample right away?"

Bob Anchor grinned. "More than you realize!"

With Bud at the wheel of a jeep, the group sped off to the main laboratory building. Here the two chemists eagerly assisted Tom in repeating his analysis with the spectroscope. When they finished, the visitors' faces were tense with excitement.

"Incredible!" gasped Dr. Clisby. "This is almost one hundred percent pure helium!"

Bob Anchor ripped off his rubber apron and said jubilantly, "If we could organize production on a large scale, it would revolutionize half a dozen fields of research!"

"Yes," Dr. Clisby said. "Cargo-carrying balloons would be much cheaper than the present planes and they could make use of the jet air stream."

"Also," Tom remarked, "Mr. Bronson mentioned the space-flight program. Is the government planning to use helium balloons?"

Dr. Clisby nodded, pausing to light a huge meerschaum pipe. "Right! On some of the future rocket and satellite launchings, helium balloons will be used as a booster stage. In other words, the launching platform will be raised to the outer limits of the atmosphere by means of these balloons."

"That will save fuel," Tom agreed, "but it will take immense quantities of helium if the method is used for all rocket experiments."

"That's just it!" put in Bob Anchor. "We need a new source of helium in a hurry and this undersea bed could be the answer!"

Bud, who was looking on, grinned at Tom. "How soon do we take off, skipper?"

The young inventor smiled. "We could leave almost immediately, if these gentlemen agree."

"You mean to make a preliminary survey?" Dr. Clisby asked.

Tom shook his head. "I'd start drilling operations, using my atomic earth blaster."

"Great!" said Dr. Clisby and Bob Anchor nodded. Both men were familiar with Tom's earth blaster, which he had invented to tap a new source of iron at the South Pole. "However," the senior chemist went on, "what about capping the flow if the drilling proves successful?"

"I've thought of that," Tom replied. "My gadget must be strong enough to stand up against a geyser. Last night I had a special well-capping device rigged up in the base machine shop. Here's the principle."

Pulling out a pencil, he made a quick sketch of his arrangement. Both government chemists gave admiring approval.

"Should work perfectly!" said Dr. Clisby. "Well, I'm in favor of leaving as soon as possible to find out the extent and depth of these wells. Of course the expedition must be kept secret until the United States has staked an official claim."

"So far, no one outside Swift Enterprises and the Bureau of Mines knows about the discovery," Tom assured him. "And we'll keep it that way!"

Within half an hour, the Fearing rocket base was bustling with activity. A crew of mechanics swarmed over the Sea Hound to repair the hatch damaged by the undersea geyser. Every part of the craft, which could wing its way through the air as easily as it could navigate to great depths under water, was tested. After the check was complete, supplies and equipment were loaded aboard, including Tom's well-capping device and an extra Fat Man suit.

Meanwhile, an atomic earth blaster was flown in from Shopton. Shaped like a gleaming torpedo, it was radio-controlled and had a launching rig capable of withstanding great pressure. Its nose tip was designed to smelt the hardest rock.

By noon this, too, had been loaded aboard and the seacopter was ready for take-off. Tom lunched with his father at the infirmary. Then, assured that Mr. Swift's progress, though slow, was satisfactory, Tom sped to the airfield by jeep. Bud Barclay, Dr. Clisby, and Bob Anchor were waiting for him.

"All set, skipper?" Bud greeted him eagerly.

Tom grinned back. "We're on our way!"

All four climbed aboard and Tom took his place at the controls. As he gunned the throttle, the rotors whirred into life and the sleek craft rose skyward.

In a few seconds both ocean and distant coastline were far below. Then Tom cut in the forward jets and the Sea Hound streaked off toward the South Atlantic.

Bob Anchor, who had served a post-college hitch in the Air Force, was impressed. "Tom, if your new helium strike pans out half as well as this baby, it'll be a rip-snorter!" he exclaimed.

"Wait'll you see this hound dive!" Bud told him with a chuckle.

Reaching the site of the helium bubbles, Tom brought the seacopter down on the water and reversed blade pitch. Then he shoved the control wheel forward and the Sea Hound plummeted downward into the ocean depths.

Dr. Clisby marveled at the strange, phosphorescent fishes that darted past the cabin window. "Fantastic scene!" he exclaimed.

Soon the seacopter settled onto the ocean floor at the site of the helium. Climbing into Fat Man suits, Tom, Dr. Clisby, and Bob Anchor went out to explore the bubbling area while Bud manned the controls.

After selecting a spot for drilling, they unloaded the launching platform through the ship's air lock and fastened it into the rock below the ooze with spread anchors. Next, the earth blaster was maneuvered into place and quickly set up.

Then, the men worked on the capping device. To keep it in place, they shot rocket anchors into the bedrock. The nozzle, which would be open at first, was protected from the sea water. It would close gradually, until the device sealed itself.

"All set now. Stand back!" Tom warned his two companions by sonarphone. "I only hope we don't start another geyser!"

When the men signaled back an okay, Tom switched on the power. As the blaster bored into the sea floor, the three scientists turned off the searchlights in their Fat Man suits. In the yellow glare of the seacopter's giant beam they watched the flow of gas from the end of the blaster.

Suddenly the Sea Hound's light blinked off and on, as if in a warning signal. Surprised, Tom asked over his mike, "What's wrong, Bud?"

He stopped short as the searchlight went off again-and stayed off. Instantly Tom sensed danger. He turned off the blaster, which by now had completely disappeared under the sea floor. Then Tom told his companions to keep their lights out.

Everyone waited tensely.

CHAPTER III

UNDERSEA ROVER

A FEW seconds later Tom's sonarphone detected sounds that made him stiffen with apprehension. An underwater craft was coming rapidly toward them from the south!

Tom was puzzled. He was sure no one from Enterprises would be coming from that direction, and he had never heard of any submarine besides the seacopter that could dive to this depth.

Of one thing he was sure: He did not want to be seen at the secret project! Over his mike he told his companions:

"Lie down! Camouflage yourselves! Don't move!"

Obediently the two grotesque-looking Fat Men followed Tom's example as he worked the controls of his suit so that it stretched out into a mass on the ocean bottom.

As they waited in worried silence, the strange submarine came on steadily and passed within a few hundred yards of the three prospectors. In a moment its searchlight disappeared from view and the throb of its engines dwindled off in the distance.

Tom now turned on his light and slowly worked the pantograph arms and legs to bring his Fat Man upright again. The other two were soon standing up also. To Tom's amazement, the Sea Hound was gone!

"Where did it go?" he puzzled.

Over the sonarphone Dr. Clisby asked urgently, "What about that sub? Whose was it?"

"Can't even guess," Tom replied.

As he spoke, another light flashed on and drew closer. Tom's heart leaped with relief as he recognized the outlines of the Sea Hound!

"Everyone okay?" Bud inquired.

"I think so," Tom told him. "How about you, Bob?"

The young chemist responded that he was all right but thoroughly mystified by the unknown submarine.

“Aren’t we all!” Bud chuckled. “That’s why I ducked out of sight. Tom, do you think it was someone who got wind of our operations and was trying to find you?”

“Could be,” Tom admitted in a worried voice. “As far as I could make out, the sub had no marks of identification. However, we went into hiding ourselves when you ducked out of sight, and I think our helium secret is safe. So let’s get on with the drilling.”

“Roger!”

“First we’ll put the capping device in place,” Tom said.

The men labored with their mechanical arms to lower the tube-shaped device into the hole already cut by the blaster. The power was turned on and the capper ground itself into the rock. Tom adjusted the main valve to an open position so as not to restrict the flow of vaporized rock from the well.

Once again Tom switched on the power, and the blaster resumed its downward boring into the sea floor. Several minutes later a hissing roar, deep and muffled, could be heard over the sonar-phones.

“We’ve struck gas, I think!” Tom cried out to his companions.

Reversing the controls deftly, he brought the blaster zooming up backward out of the shaft. There was a pinging noise, like a cork being pulled from a bottle, as the blaster cleared the surface of the sea floor. Then a terrific geyser of helium gas shot upward!

“You’ve done it, skipper! Nice going!” Bud cheered from the Sea Hound.

Tom turned the controls that closed the well, stopping the flow of gas from the undersea mountain.

“Tom, this is wonderful! We have that new supply of helium right in our grasp!”

“Fine so far,” Tom agreed with a smile. “But we must still-“

His words were cut short by a strangled cry over the sonarphone. “Help! S-something’s gone wrong with my air supply!” It was Bob Anchor’s voice. “I can’t b-b-breathe!”

The call died away in a choking gasp!

“Quick! We must get him back to the ship!” Tom urged Dr. Clisby.

In agonized suspense, the two waddled through the water as fast as they could to their friend’s side. Through the view pane, they could see Bob’s eyes bulging, his face turning reddish purple!

“We must hurry!” Tom urged.

He and Dr. Clisby grasped the helpless form and carried it to the seacopter. The air-lock hatch swung open, and Bob was shoved aboard. Entering themselves, they soon had the gasping figure safely inside the Sea Hound’s cabin.

“I’ll get him out!” Bud offered.

Swiftly he undamped the suit's view pane and hauled out the nearly unconscious man. Bob Anchor's mouth hung open and his chest heaved spasmodically as he gulped in lungfuls of air.

Stretching him out on the deck, Tom applied artificial respiration for several minutes. When Bob's breathing became more quiet and regular, the dark-haired young chemist was moved to a bunk.

Dr. Clisby got a bottle of smelling salts from the first-aid locker and waved it under Bob's nose. Soon his color became normal and he was able to talk.

"Man, what a close call!" the young chemist gasped with a wry smile.

"What went wrong?" Bud queried.

"Something happened to his air supply," Tom replied.

Taking a small kit of tools, he crawled inside the defective Fat Man and tinkered for several minutes.

"Flutter valve was jammed shut," he announced as he emerged from the suit. "But it's fixed now."

The near-tragic accident was temporarily forgotten when the group excitedly discussed the helium strike on the mountain shelf.

"Judging by the quantity of gas bubbles, this whole area is loaded with helium!" Bob Anchor declared.

"Fine," said Bud. "But what method are you going to use to get the stuff two miles up to the ocean surface?"

There was a spurt of comments and suggestions from the two chemists. Then Dr. Clisby flashed a quizzical smile at Tom.

"Some of our ideas may be usable," he said. "But I think we're going to have to rely on those famous Swift brains to supply the best answer. How about it, Tom?"

The young inventor grinned. "I'm already working on something at Enterprises that may help us," he admitted. "Tell you about it later. But first let's get the blaster on board and start back to Fearing."

Bob Anchor wanted to help, but Tom insisted that he rest. Bud, of course, was needed at the controls to maneuver the seacopter. Though it was a difficult task, Tom and Dr. Clisby managed to release the launcher and blaster. Then, with the help of a hoist, they brought them in through the air lock.

Moments later, the Sea Hound rose slowly from the ocean depths. As it broke surface, Bud reversed the blade pitch and gunned the rotors to high speed. Like a huge flying fish, the craft soared off above the waves.

Tom stood at the cabin window, wrapped in deep thought, as they streaked through the sky toward Fearing Island.

"Look at that furrowed brow," Bud teased. "It's a sure sign that genius boy is cooking up something big! Right, pal?"

The young inventor chuckled. "All right. You wanted to know how I propose getting the helium in large quantities. I believe the only feasible way is to sink a huge air bubble over our drilling setup. We could maintain a breathable atmosphere inside the bubble and work there."

"A huge air bubble?" Dr. Clisby frowned. "I'm afraid I don't understand. How could such a bubble be formed?"

"That's where my new invention comes in," said Tom. "It's a selective matter repeller. I've named it the repelatron. If it works out successfully, we could use it to repel the water all around us, thus creating a livable air space."

"How does your repelatron operate?" Bob Anchor inquired, greatly intrigued.

Tom grinned. "Well, here's the principle. As you know, matter is made up of molecules, which in turn are composed of atoms. And each atom has a central nucleus with one or more electrons orbiting around it, like tiny planets going around a sun."

As the young inventor paused, Bud Barclay said, "I get the idea so far. But keep it simple."

"Well, the inner arrangement of these atoms is different in each kind of matter. For instance, iron has one kind, carbon another. And because their atoms are different, they each give off a distinct type of radiation, which can be seen under a spectroscope."

"Quite so," agreed Dr. Clisby. "And by studying the color spectrum of its radiation, we can identify what kind of matter we're looking at."

"Sort of a chemical fingerprint in technicolor." Bud chuckled. "Is that right?"

"Precisely," Dr. Clisby replied.

"The molecules in sea water," Tom went on, "are made up of various kinds of atoms, each of which gives off its own special radiation, as I just explained. If I can pick up and analyze the radiation at the helium wells, and then generate a counter radiation wave, I can repel the sea water."

"That's right," said Bob. "This counter radiation will be exactly out of phase with the incoming radiation-and thus exert a repelling force on the sea water."

"Right."

Dr. Clisby and Bob Anchor were amazed at the idea, though somewhat dubious about the outcome.

"It's terrific, all right," said Bob. "But will it work?"

Bud Barclay, who had never known Tom to fail, said loyally, "Listen! If Mr. Brain Wave says the plan figures, it's in the bag! Only thing is," he added with a grin, "the contraption's way over my head. I never got beyond being a pilot."

"But what a pilot!" Tom exclaimed. "The world's best! And look, Bud. You remember that resistorizer gadget I cooked up down in New Guinea?"

Tom was referring to the adventures that he and Bud had experienced in his ultrasonic cy-cloplane when

the inventor had to cope with a deadly knockout ray developed by an unscrupulous scientist.

“Sure.” Bud nodded.

“Well, that gadget was a radiation neutralizer because it changed the knockout waves that were fired at us into heat. What my new repelatron will do is simply to hurl back any source of incoming radiation waves. In other words, the two opposing rays will repel each other, just like two similar poles of a magnet.”

Bud scratched his head. “It sounds like a neat trick.” He brooded for a moment, then burst out, “Say, wouldn’t the same idea work on other stuff besides water?”

“Yes,” said Tom, “if I can iron out the bugs.

Later on, if my first model proves to be successful, I’d like to build repelatrons to repel other substances, like iron, aluminum, and so on.”

The young scientist got up and paced the deck excitedly.

“Just think!” he exclaimed. “In time, I might even design special repelatrons to be used as motive power for rocket ships and aircraft.”

The others were carried away by the sweeping picture which his words painted.

“Tom,” said Dr. Clisby, “this could be a terrific achievement. You could manufacture repelatrons to be used as military force rays and protective screens to defend our country against attacking missiles!”

The young inventor grinned. “One job at a time, Doctor,” he said simply.

When the travelers sighted Fearing Island, Tom signaled for clearance. A few moments later the Sea Hound hovered down and landed on the airfield.

“The old place looks pretty good,” said Bud. “First thing I’ll do is-“

He never finished the sentence, for at that moment the island rocked violently and everyone was thrown to the ground.

“An earthquake!” Dr. Clisby cried out.

CHAPTER IV

THE MYSTERIOUS CHESTS

AS THE earth tremor continued, Tom realized that a tidal wave would surely follow. He looked around for a place to which he and the others might escape.

At that instant came a deafening crash from across the island. A huge cargo rocket whose needle nose loomed against the sky in a launching platform had toppled, bringing a gantry crane down with it in a mass of tangled wreckage!

Tom groaned. But he was relieved to see that the dispatcher's tower, though swaying, was still standing. He cried out, "Men, get to the tower fast!"

All of them started off at top speed, for already they could see a wall of water about to inundate the island. The group reached the building with only seconds to spare.

As they raced up the stairs, the dispatcher's voice could be heard calling orders through the mike. "Attention! Danger! Tidal wave!" he warned. "Everyone take to a high place!"

From the windows Tom and his friends could see workmen running to higher ground. By now the quaking of the earth had ceased, but the sea water was rolling over the island in a mighty ten-foot-high wave. The tower trembled and the men held their breaths, hoping that the building would stay erect.

"I hope everyone's safe," Tom said in a low voice, thinking particularly of his father. The infirmary was on the first floor of a low building.

As the water began to recede, Tom grabbed up binoculars to survey the damage. In relief he noted that no men seemed to have been caught outdoors. He now trained his gaze on the infirmary. Every door and window had been closed and fortunately were unbroken. The same condition existed, so far as Tom could see, in every building on the grounds.

"Your warning paid off," Tom told the dispatcher.

"Thank goodness!" the man said.

Tom asked him to get a report from each section and in a few minutes learned that everyone was safe and the damage slight.

As soon as travel outside was feasible, Tom and his friends went out on the field. To their relief, the Sea Hound had withstood the onslaught. The men uprighted an overturned jeep which started with a roar, water pouring out of the exhaust pipe.

"I guess she'll take us to the administration building," Tom said. "Hop in."

Tom stopped for a few minutes at the infirmary. His father declared that he was none the worse for the scare of the earthquake, but Tom thought he looked very pale and thin.

"Are you sure you're all right, Dad?"

"Of course. Stop worrying and go find out what happened on the island."

"Right away."

When he and his friends reached the base headquarters, Bud took Dr. Clisby and Bob Anchor to a reception room, and Tom went hurriedly to his office. Here, phones were ringing and the clerical staff was in confusion.

“You got back just in time, skipper!” said Hank Sterling, who had been left in charge during Tom’s absence. “Reports are coming in.”

Sliding into a chair, the young inventor grabbed a phone and listened as each unit gave an account of what had happened. Some electronic gear had been damaged in the communications center, as well as various other machinery not gyroscopically mounted. Luckily, the delicate rocket-tracking equipment, well-protected in this manner, was in perfect condition.

Aside from cuts and bruises, no one on the island had been hurt. At last Tom put down the phone and ran his fingers through his blond crew-cut.

“We can be thankful the damage was no worse, Hank. Take a salvage crew, will you, and see about the rocket that went over.”

“Right, skipper!”

As he left, another man clumped through the doorway in high-heeled boots. He was fat, bow-legged Chow Winkler. A former Texas ranch cook, Chow was now head chef on Tom’s expeditions. In between trips he served Tom and his father when they were not going home to a meal.

At the moment his bald head and fancy cowboy shirt were streaked with flour, his trousers were soaked, and his leathery face bore the mournful, disgusted look of a sick steer.

“Hi, pardner!” he said. “I’m sure glad to see yo’, but I cain’t face that galley o* mine. No siree! Reckon it’ll take a salvage crew to clear up that mess!”

“What happened, Chow?” asked Tom, almost grinning in spite of the situation.

“What didn’t happen? Brand my biscuits, that place looks worse’n a one-wheel chuck wagon that’s jst been hit by a Texas twister!”

Overcome, the stout cook slumped into the nearest chair.

“Pretty bad, eh?” said Tom sympathetically.

“Bad!” Chow shook his head. “When the quake hit, I was up on a stepladder reachin’ fer a bag o’ flour on the shelf. First thing I knew, the ladder crashed over an’ the bag split wide open. Then a twenty-pound cheese come rollin’ down on my head!”

Rubbing his sore bald spot, the Texan added, “That was only the beginnin’. By the time things stopped shakin’, I was swimmin’ in about four gallons o’ oyster stew the boys asked me to make. Hot oyster stew!”

The picture Chow painted was so funny that Tom roared with laughter. “Don’t worry, Chow,” he said, slapping the cook on the back. “I’ll be around with a mop, just as soon as I get a work gang busy on that rocket!”

After Chow went off, Tom picked up the phone again. “Please get me Professor Quinn at Grandyke University,” he told the operator.

Professor Quinn, an old friend of the Swifts, was one of the country's foremost seismologists.

When he answered, Tom said, "Professor, did you get a fix on that tremor we felt here at Fearing Island about half an hour ago?"

"We certainly did, Tom! Our seismograph showed it was centered on your island."

"What!" the young inventor exclaimed. He was worried. There might be more trouble ahead!

While he was talking with Professor Quinn, Bud walked in and Tom waved him to wait. Presently Tom thanked the professor for the information, then hung up.

Turning to Bud, he asked, "Are you game for another undersea workout?"

"You name it, skipper. What's the deal?"

"The quake was centered here, which could mean we might have another," Tom explained.

"I'd like to check around the island below the water line and see if we can spot any fault."

"Let's go!" said Bud promptly.

Commandeering a truck, the two boys loaded two Fat Man suits aboard and headed for the north dock. Here they climbed into the steel escape suits and descended.

Fearing Island, near the end of the continental shelf, was a rocky pinnacle that rose almost straight up from a great depth. Tom figured that the eruption had taken place at least fifty feet below the surface, so at this point he and Bud began to work their way around the rocky mass which was coated with sea growth.

For over an hour, they probed the island's foundations inch by inch with their searchlights, without seeing any sign of a crevice. Then Tom spotted an immense indentation. It was new! Completely devoid of sea growth!

"Bud! Come here! Look!" he cried out.

The opening was large enough for one Fat Man to get into. Tom told Bud he was going to do a little investigating.

"Well, for Pete's sake, be careful," Bud urged.

Tom was not gone long. Returning, he startled Bud by reporting that it was his guess that the earthquake had not been a natural one.

"Someone put an explosive in there and set it off!" Tom said grimly.

Bud was shocked into silence for a moment, then asked, "An old enemy or a new one, Tom?"

"I wish I knew, pal. At any rate, let's look some more and see if we can pick up a clue as to who was responsible."

There were no pieces of telltale metal in the vicinity, so the boys continued their search around the island, with Bud twenty feet above Tom. They had almost reached the spot directly under the north dock when a shout came over Tom's headphones. Bud cried excitedly, "Pirate treasure!"

"What!"

"On the level, skipper! Come up here and see for yourself!"

Blowing his ballast tanks, Tom rose to the same depth as Bud. To his surprise, he found his partner perched in a cavelike opening in the rock.

"Look!" Bud exclaimed. He aimed his suit's searchlight so as to illumine the interior of the cave. The yellow glow revealed a number of large dull metal chests piled inside.

"Good night!" Tom gasped. "You really stumbled on something!"

"I'll bet there's enough gold in those chests to buy a bank!" Bud babbled on. "Let's get a blowtorch, Tom, and open one!"

"Not so fast," Tom cautioned. He extended one of his Fat Man's pantograph arms and scratched the surface of the nearest chest. "That stuff looks like lead to me-and it hasn't been down here very long, either!"

"You mean-" Bud hesitated.

"There's no telling what's inside. Let's not take any chances."

Bud stared through his view plate. "You mean just leave 'em here?"

"No," Tom retorted. "We'll haul one up to the surface first, and then 'Open with Care'!"

Most of the chests proved to be too heavy to maneuver. But finally the boys picked out the smallest of the lot and managed to shove it to the ledge of the cave opening.

Here they each gripped one end with the mechanical arms of their Fat Men, and then blew their ballast tanks. Slowly the steel eggs rose to the surface, gripping their prize securely.

After the boys had beached the chest, Tom radioed the base machine shop to send a truck and crane. Twenty minutes later the heavy object was deposited safely in his island laboratory.

Doc, Slim Davis, Hank, and Arv Hanson, who by this time had heard about the strange find, gathered around eagerly to witness the opening.

"I'm still hoping this chest is full of gold-or silver at least," Bud remarked.

Tom, not daring to use any electronic tools for fear of sparks, began to chisel through the welding that fastened the lid to the chest. Finally he pried it open with a special cutting chisel.

"Atomic warheads!" gasped Hank.

"Great heavens!" murmured Doc. "There must be enough destructive power in this one chest to blow up

the whole island!”

“Which might easily have happened,” said Tom tersely. He told the group the grave fear he had expressed to Bud, and added, “I have an idea an atomic warhead went off by mistake on the other side of the island.”

“By mistake?” said Bud. “I thought it was done on purpose.”

“I’ve changed my mind,” Tom replied with a worried frown. “Furthermore, I believe the hiding of these warheads is all part of a big and sinister plot against our government.”

CHAPTER V

ATOMIC PATROLS

THE MEN in the laboratory stared at Tom as the full import of his words struck them.

“You mean,” Slim spoke up, “that the planting of the atomic warheads is the work of saboteurs hired by a foreign country—some country unfriendly to the United States?”

As Tom nodded, Hank remarked, “That figures. No private individual would have access to atomic warheads.”

Tom went on, “That’s not the worst of it, either. I’d be willing to bet they have caches of these warheads hidden under water at any number of strategic points in our oceans!”

“Planted by subs, of course,” said Bud. “Say Tom, do you think the sub that passed us at the helium field could be mixed up in this job?”

“Could be!” Tom replied. “Bud, you and I are lucky we were in those Fat Man suits during our search. They’re radiation proof and those waters around this island aren’t, thanks to that explosion.”

Knowing there was no time to lose, Tom gave instant orders for a half mile of ocean around the island to be off limits for anyone not wearing a Fat Man suit. Then he said:

“It’s dangerous to leave those other chests down there. We must get them up right away.”

“But how?” Bud asked.

“I’ll use Dad’s vacuum lifter,” Tom said, then turned to Arv Hanson. “Call Enterprises, will you, Arv, and have them fly one over.”

“Right away!” Arv hurried off to the communications building to put in the call to the mainland.

Meanwhile, under Tom and Hank’s direction, a winch and boom were set up on a rocky out-thrust near

the point where the boys had brought the first chest ashore. By the time it was ready, a big cargo jet from Swift Enterprises was already touching down on the island airfield.

The vacuum lifter was quickly unloaded and trucked to the beach. Hank rigged it to the boom and connected the power cables to a portable generator. When everything was ready, Tom and Bud would go below in Fat Man suits to guide the vacuum lifter to the chests.

“How about you two going out in a boat right now and pinpointing the right spot for the lifter to go down?” Hank asked Tom and Bud.

“Right away,” Tom agreed.

A rowboat and oars covered with radiation proof paint was brought to the dock. Tom and Bud stepped in. A few strokes of the oars brought them to a spot which they both felt was approximately above the cave opening.

“Okay. Right here!” Tom called.

Hank flicked on power to swivel the boom into position. As the boys watched it swing out over the water, they were suddenly horrified to see the hoisting cables part! The heavy machine came whipping toward Tom and Bud like a giant octopus about to strike!

“Jump!” yelled Tom.

In the nick of time, he and Bud plunged headfirst into the water. They came to the surface twenty yards away, shaking the water from their eyes.

Bud managed a grin. “Good thing our reflexes were working or we’d be deader than mackerels by now, genius boy!”

“Hurry, Bud! Out of the water! We must get to Doc right away and have him run us through a check for radiation!”

They climbed into the boat, pulled to shore, and set off for the infirmary. Two hours later the cable was repaired and the boys returned to the project.

“How about it?” Hank asked.

“We’re pure as strained honey,” Bud answered, “and ready for another plunge. Where’s my Fat Man?”

He and Tom climbed into their suits. “Give us a while to get down there and then lower away on signal,” Tom ordered Hank, then locked his view plate.

Opening valves to flood their suit tanks, the two boys settled back in their steel eggs. In a moment they were plummeting downward.

As soon as the cave opening became visible to them, they closed the valves and propelled themselves toward the undersea cliff wall.

The chests were gone!

“Tom!” gasped Bud over the sonarphone. “Someone’s beat us to it!”

“Yes,” said Tom. “And there’s no doubt in my mind who it was—the men who planted them!”

“Do you think they found out we were going to bring the chests up?” Bud asked.

“I’m sure of it. They’ve been spying on us.” Tom’s jaw set grimly. “Let’s look around.”

But the cave proved to be barren of clues. Aside from the fact that the chests were gone, the unknown marauders had left no sign of their visit. More worried than ever, Tom gave orders to surface.

Back on land, he drove to the infirmary and gave a detailed account to his father. Mr. Swift was dismayed by the news.

“Better report this at once to our friend Admiral Hopkins at Navy Intelligence,” he suggested.

When the long-distance call was placed to Washington, Admiral Hopkins promised instant action. “I’ll order out every available sub to comb our coasts for other caches,” he told the young inventor. “Thanks to your warning, we may be able to prevent a terrible disaster!”

Tom promised that his own seacopters would assist in the hunt in lower waters, beyond the operating depth of conventional undersea craft. One of his jetmarines would also patrol the waters around Fearing Island to prevent any more chests from being secreted.

Shortly before six the next evening, Tom, Bud, and Mr. Swift, now able to travel, said good-by to Dr. Clisby and Bob Anchor who would remain at Fearing while the others made a trip home. From the Enterprises landing field they drove to the Swift home in Bud’s red convertible.

Tom’s slim, pretty mother and his blond, blue-eyed sister, Sandra, greeted them at the front door.

“Oh, I’m so glad to have you all safely home again,” said Mrs. Swift, embracing them.

“Glad to see me, Sandy?” Bud asked with a wide grin.

“Any girl likes to see her date show up, doesn’t she?” Sandy retorted impishly. With a mischievous twinkle in her blue eyes, she added, “You were coming to dinner tonight, I believe?”

In the big, cheerful living room, another girl was waiting to greet the homecomers—Sandy’s school chum, Phyllis Newton. Phyl, dark-haired and beautiful, with laughing brown eyes, was the daughter of Mr. Swift’s long-time associate, “Uncle Ned” Newton. Like Sandy, she was a year younger than the two boys. Phyl was Tom’s favorite date and the two couples often went to parties and dances together.

“Did you boys bring Phyl and me any treasure from your deep-sea dive?” asked Sandy gaily.

“No pearls that deep,” Tom answered. “But Bud will tell you about the pirate chests he found. Before he could bring you any of the gold doubloons, somebody stole them.”

Over a delicious dinner of roast turkey and apple pie a la mode, Mr. Swift and the boys described their adventures. But they refrained from telling of the atomic warheads planted under Fearing Island, for fear of worrying Tom’s mother and the girls.

“I do hope this new helium project won’t take you away from home too much,” said Mrs. Swift.

Mr. Swift smiled fondly at his wife. “Don’t worry, Mary dear. No expedition will ever keep us away a day longer than necessary!”

Early the next morning Tom drove to his laboratory at Swift Enterprises. Here he plunged feverishly into work on his repelatron.

The electronic circuits for his first model had been designed before he left with his father on their cruise to the city of gold. But his mind was already teeming with ideas for changes and improvements.

After sketching out the new circuit diagrams, Tom set to work with an array of tubes, transistors, wires, condensers, and resistors.

Shortly before eleven o’clock Bud joined him. Though he seldom fully understood Tom’s inventions, the young flier never ceased to wonder at the amazing products of his friend’s fertile brain.

“How’re you coming, skipper?” he inquired.

Tom laid down his soldering gun and wiped the perspiration from his forehead. “Almost done -with the improved pilot model, anyhow. Keep your fingers crossed.”

Bud stared at the compact but tangled mass of electronic parts and shook his head. “Looks like spaghetti to me.”

Tom burst out laughing. “Actually it’s quite simple. There are only six main parts to the gadget.”

“Go ahead and name ‘em-just to confuse me,” Bud retorted.

“Well, first, this is the detector, to pick up the radiation from whatever we want to repel-in this case, water. Then there’s an analyzer to break down the radiation into its separate components; an amplifier to boost the strength of the signal; and a phase inverter to put the radiation exactly out of phase.”

Tom paused and grinned at Bud, whose eyes were already assuming a glazed look. “Next is the power amplifier to produce the output wave. And last is the radiator which sends out the radiation to repel the water.”

Bud gave a deep sigh. “You lost me on the booster,” he said.

Tom chuckled. “Never mind, Bud, you’ll see when it works. Which reminds me, I have a job for you.”

“At your service, boss!” Grinning, Bud snapped a smart salute.

“Hop over to Fearing and get the seacopter ready for another trip. We’ll be taking a full crew from Enterprises this time, including a photographer.”

“What are we after?” asked Bud, his face turning serious. “More helium samples?”

“No. Sea water samples from around the helium area,” Tom explained. “I’ll have to analyze the water’s exact molecular structure in order to plan my full-scale repelatron properly.”

“What’s the matter, skipper? Couldn’t you make a solution good enough to use?” Bud asked.

“Salt water,” Tom answered, “differs from one place to another. The repelatron must have an exact sample of what it is to repel.”

Bud nodded. “Right, pal. I’m on my way!”

As he hurried off to the Enterprises airfield, Tom went back to work. It was nearing noon when the pilot model of his new machine was finally ready for a tryout with fresh water. Tom had installed the electronic chassis in a metal case, and the radiator was housed in a shiny silver sphere.

Switching on the power, he lowered the sphere into a tank of distilled water. To his delight, it worked perfectly! On all sides of the sphere, the water drew away, leaving it dry and untouched in its surrounding air space!

Just then, the wall phone rang. Leaving the repelatron in operation, Tom walked over and lifted the receiver.

“Tom Swift Jr.,” he began.

But his words turned into a startled gasp as he heard a sound of shattering glass behind him!

CHAPTER VI

THE STALKING SUB

TOM whirled around from the telephone to see what had happened. Water had flooded out of the tank, over his workbench, and splashed across the floor! Other bottles of distilled water in the room had been hurled against the wall and crushed. Walls and floor had been showered with water and broken glass.

“Can’t talk now! Call back, please!” Tom cried out. Putting the phone back on the hook, Tom dashed to the laboratory table and switched off the repelatron.

In spite of the mess and breakage, the young inventor could not restrain a pleased grin. His device, with its improvements, worked even better than he had hoped! It not only repelled the water around the radiator sphere, but it had literally hurled it from the tank, and even acted on bottles of water ten feet away!

“Man alive”-Tom chuckled to himself-“if it works this forcefully at the helium wells, I’d better watch out. It might cause a tidal wave!”

As he started to clean up the broken glass, Chow Winkler came galloping into the laboratory.

“Brand my atomic saddle, what’s goin’ on?” the old Westerner panted. “Sounded like there was a loco steer loose in here I Where is he? I’ll git him!”

“Relax, old-timer.” Tom grinned. “It was only my new repelatron.”

“Your new wimizatron?”

“Repelatron,” Tom repeated.

The stout cook glowered suspiciously. “If that means a new janitor, you’d better fire him pronto before he breaks somethin’ else!”

Tom slumped down on a stool, shaking with laughter. “Don’t worry, Chow, it’s not alive. It’s just an invention of mine.”

“Per smashin’ things up? Must be a funny sort o’ contraption!” Chow stared at the odd-looking device on the workbench. “Reckon you’re jest pullin’ my leg, ain’t you, Tom?”

“Not really, Chow,” the young inventor replied. “The purpose of this device is actually to repel water.”

“Well, it sure works fine!” Glancing around at the dripping walls and puddles on the floor, the cook scratched his balding head. “But why in the name o’ prairie grass d’you want to fuss around with a thing like that? Wouldn’t a squirt gun do jest as well?”

“Afraid not, Chow,” Tom answered. “You see, I’m trying to figure out a way to get helium gas from some wells located about two miles underneath the ocean. And in order to carry out such large-scale operations there, we’ll have to create a big air space so we can work on the mountainside.”

“You mean it’ll be like a giant bubble?”

“That’s right,” Tom nodded. “We’d be inside it-and not get wet!”

Chow’s weather-beaten face, tanned brown as leather by the desert sun, gaped in amazement. “Well, I’ll be a bang-tailed bronc! Jest think o’ that-folks livin’ inside a bubble!”

“Shouldn’t bother an old space-puncher like you,” said Tom with a smile. “Not after living up on Little Luna with no air at all!”

The Texan chuckled as he recalled their recent space voyage to the phantom satellite. “Brand my asteroids, that was really somethin’! But I reckon livin’ in a bubble might be a bit nerve-janglin’ jest the same! What if a whale comes pokin’ his nose in the galley?”

“You might offer him a cup of tea,” Tom quipped.

“That ain’t all,” Chow grumbled. “On a stormy day it might even rain cat-and-dog fish on us!”

The young inventor roared with laughter. “Seriously, Chow,” he admitted, “we will need some kind of fish screen for our helium city. But so far I’ve been concentrating on my repelatron for holding off large quantities of sea water. If that works, I’ll put a protective covering over us.”

“You figurin’ on buildin’ a whole city down there?” the cook asked, amazed.

“It’ll have to be a pretty big setup,” Tom conceded. “Besides a full-scale repelatron, there will be the

drill rigs, crew's dormitory, gas tanks--

"How about some kind o' cook shack?"

"There'll be one," the young inventor promised. "But you'll have to figure out some new angles on cooking."

"How's that, partner?"

"No salt in the water. It might make a solution similar to the ocean around us," Tom explained tersely. "Then the repelatron would hurl it right out of the airdome."

Chow looked unhappy. "But how in tarnation d'you expect me to run a decent galley? How'll things taste?"

"I'm sure you can manage." Tom grinned. "You can still bake and fry, or use a can opener."

Chow merely snorted contemptuously, as Tom went on, "Any liquids which aren't pure water or salt water can be used. Like milk, cocoa, or fruit juice, for example. And for washing or cleaning, we can use ultrasonic equipment as they do in many industrial plants."

The old cowpoke considered. "Well, mebbe. But how about me? I sure don't want to be shot out o' that there bubble, an' I got plenty o' salt water in my blood."

"That's different," said Tom. "It's not like that in the ocean, so you're safe."

Chow felt reassured and stomped off.

After a lunch of ham sandwiches and tomato soup which Chow brought in on a lunch cart, Tom went back to work on his repelatron. By changing the design of the power amplifier, he was able to perfect the control of the repelling force, with no further accidents to his workshop.

Getting up from his lab stool, Tom stretched his cramped muscles. "Well, at least the new pilot model works okay," he reflected with satisfaction. "Now to go back to the wells and do some work."

Picking up the phone, he called one of the hangars on the Enterprises airfield. "Get a plane ready for take-off, Mike," he told the crew chief. "Make it one of our Pigeon Specials. I want to fly over to Fearing Island."

Then he rang up Scotty McGurk, the small, red-haired Scotsman, who was the plant's photographer. "Bring the deep-sea camera out to Hangar B," Tom said. "We're going on a sea-copter cruise. You'll get pictures of a mysterious underwater mountain while the rest of us look over the spot with a view to building a small city there."

"Aye-aye, skipper!" replied Scotty, delighted.

Twenty minutes later they were on their way in the sleek two-place aircraft which Tom had chosen for the trip. Produced by the Swift Construction Company under Uncle Ned Newton's management, the Pigeon Special had become one of the most popular light planes on the market.

After landing at the rocket base, Tom and Scotty hurried over to the sprawling hangar where four of the

Enterprises' seacoasters were usually berthed. Here they found Bud working with a team of mechanics on the Sea Hound.

"Everything shipshape?" Tom asked.

"We can take off as soon as they finish checking the rotor bearings," Bud reported.

"Good work! I'll line up a crew."

Besides Bud, Scotty, and the two government chemists, Tom picked out three of his best sea-copter men from among those stationed at the base.

Before leaving, Tom talked to Admiral Hopkins to tell him about his plans and to ask if any Navy subs would be in the area.

"No," the admiral replied. "By the way, our men haven't found any caches of warheads yet. Thanks for calling and have a good trip," he said, then hung up.

Soon Tom and his fellow travelers were soaring eastward across the Atlantic in the Sea Hound. About a hundred miles from the helium site, Tom submerged so Scotty could shoot some pictures of the undersea life-his favorite hobby.

"Mon, whut a picture that'll be!" he exclaimed, catching a wing-finned monster that flashed into view with its mouth agape.

"It's an angelfish." Tom grinned.

Suddenly Bud, watching the sonarscope, sang out, "I see a submarine! It's trailing us, skipper!"

Tom frowned. It must be a foreign craft. Was it a friendly one? He stepped to the scope to watch the blip himself.

"How long since you first noticed it?" Tom asked.

"Just a few minutes. But she's holding steady on the same course."

Dr. Clisby joined them, his forehead creased in a worried frown. "If it continues to follow us, Tom, we'll lead it straight to the helium beds and give away the secret!"

"Maybe we can shake it." Tom gunned the jets to high speed. "How about it, Bud?" he called as the indicator needle crept to a hundred knots.

"Still on our tail!" Bud reported.

Tom throttled back to half speed, and the mystery sub did likewise. At ten knots it still lagged behind.

Exasperated, Tom opened throttle again- forty knots, fifty, sixty, seventy, eighty. Still the undersea stalker refused to be shaken off.

"What're they doing? Playing tag?" growled Bud.

“If they are, they’ll get no free tickets to jump our claim!” Tom gritted his teeth.

Swinging the helm to starboard, he veered sharply off course and headed away from the helium fields. After ten minutes the unknown sub was still following them closely.

Tom switched on the sonarphone and spoke into the mike. “Sea Hound calling strange submarine! Can you read us? . . . Come in, please! . . . Sea Hound calling the submarine just astern!”

Receiving no answer, he tried a ship-to-ship challenge in International Code. Still the mysterious craft made no response.

“Looks as if they’re not eager for a friendly chat,” observed Bob Anchor grimly.

“I’m going way down and see what happens,” Tom muttered.

With a flick of his hand, he cut in more power from the atomic reactor. Then, as the rotors hummed at increased speed, he shoved the control wheel forward. Like a stone, the seacopter plummeted downward.

Tom was hoping to maneuver under the mystery submarine and then return to his original course after shaking it off. But to his dismay the sonarscope showed that their pursuer was still in contact.

“Okay, we’ll give ‘em a real workout!” Tom decided. “I’d like to find out what that sub can do. It may give me a clue as to what country owns it.”

Holding the wheel forward, the young skipper continued the descent. Down, down they plunged. Outside the cabin window the waters grew darker. Still the unidentified submarine dogged their wake.

“Wow! How much deeper can they go?” Bud wondered.

Soon both were nearing the ocean bottom.

Tom felt a chill of foreboding. Some foreign power had a submarine capable of going to the same depth and performing the same hydrobatics! But the United States Government was not aware of this, he knew.

“Ready on camera, Scotty!” Tom snapped, deciding to double back and take the submarine by surprise but avoid any encounter with it.

Plunging downward suddenly, he brought the seacopter around in a fast turn. As it swept past the mystery submarine, he stabbed the murk with the Sea Hound’s searchlight.

“Got ‘er!” yelled Scotty.

“Now we’ll let them think we’ve left for home!” Tom told him, gunning the jets to full power.

CHAPTER VII

A HOODED FIGURE

THE SEACOPTER rose out of the ocean and set off in a straight line for Fearing Island. Soon the South Atlantic was left behind.

“Are we going all the way back?” Bud questioned.

“Depends on whether we can shake that sub,” Tom answered. “I’m going down again now and find out.”

He dived and started back for the helium area. After going many miles, he sighed in relief. There had been no sign of the mystery submarine.

“I guess we’ve lost contact,” he said finally.

A cheer of relief burst from the Sea Hound’s crew.

“Wonderful, Tom!” cried Dr. Clisby. “I guess our helium secret is still safe!”

“Let’s hope so,” said Tom. Secretly he felt none too certain about this, now that he knew the commander of the mystery submarine was interested in him.

Meanwhile, Scotty had developed his photograph of the craft. The film was chemically processed within the housing of the camera itself and a print made in a minute. The photographer, not wanting to interrupt Tom, had waited until now to show it to him.

“Take a look, skipper!”

The others gathered around to peer over Tom’s shoulder. The mystery craft was whale-shaped, with a tail design that showed it was obviously jet-propelled. Not the slightest mark of identification was visible.

“What a monstrosity!” remarked Bob Anchor, noting its squat, bulging contours.

“Let’s call it the Mad Moby,” joked Bud.

“It may look funny,” Tom said seriously, “but don’t forget that baby can travel-and dive! I can see that she’s designed to carry plenty of cargo, too.”

“Such as atomic warheads?” Dr. Clisby suggested.

“No telling,” he said, but was reminded of the cache at Fearing Island.

In thoughtful silence the group continued their undersea cruise. There was no sign of the Mad Moby. After reaching the helium fields, Bud and Bob Anchor donned Fat Man suits and proceeded to collect numerous samples of sea water at various depths throughout the bubbling area.

In the meantime, Tom maneuvered the Sea Hound as close to the underwater mountain as he dared, and with Dr. Clisby’s help roughly sketched the topography of the site.

When the work was finished, Tom left the area, still elated that they had outwitted the mystery submarine. Soon they were air-borne again and heading back to Fearing Island. When they landed at the rocket base, Dr. Clisby and Bob Anchor hurried at once to Tom's island laboratory to analyze the samples of sea water.

Meanwhile, Tom arranged to have the photograph of the whale-shaped submarine transmitted immediately to the Defense Department in Washington over the Swifts' private video network. Half an hour later an urgent phone call came back from Navy Intelligence.

"Tom, we've checked every possible source," Admiral Hopkins reported, "but so far we have no clue to that sub's identity. There's nothing like it listed in the latest issue of Jane's Fighting Ships or any other authority. And we've never had word on such a craft from any of our secret agents abroad."

The young inventor flashed a worried look at Bud, seated close by, then said, "Admiral, judging by the mystery ship's performance, she can outdo any military sub in the world. It can dive as deep as our seacopters, and, as for speed, we barely managed to outrun it!"

Admiral Hopkins' voice was grave. "This is serious news. I'll warn all our patrols to be on the lookout for it!"

After hanging up, Tom told Bud about the Navy's failure to identify the mysterious craft. A moment later Bud smiled wryly. "Tom, if that sub can't be traced, maybe your space friends have managed to arrive on earth and taken to sub travel!"

"Wish I could believe that," the young inventor retorted. "It would make things a lot easier."

Tom thought back to the time when a black missile from outer space had landed at Enterprises. The object had contained a message from beings on another planet. Tom and his father had finally succeeded in establishing communication with the senders, who hoped eventually to come to earth themselves. First, however, the problem of penetrating Earth's atmosphere would have to be overcome.

During the space beings experiments to accomplish this, they had sent a second rocket containing specimens of their planet life. Later, they had moved a small asteroid into orbit around the earth. But so far they had not been able, apparently, to translate the Swifts' messages telling them about Earth's atmosphere and what to expect when they arrived here.

Tom flew back to Enterprises with Bud. They took with them the analysis of the samples of sea water from the helium area.

It was past seven in the evening when they landed at the sprawling experimental station. Most of the working staff had gone for the day, and only a few men were still on duty at the airfield.

"Come on, I'll treat to a steak somewhere in

Shopton," Bud suggested, heading for his red convertible.

Tom shook his head. "Thanks, but I have work to do on my repelatron. I'll get something later."

Tom slid behind the wheel of a jeep and drove to his private laboratory. He immediately went to work on the problem of adjusting his repelatron for the molecular structure of the sea water from the helium

area.

“Hmm, it looks as if I may have to redesign the radiation detector completely,” he muttered.

Soon his workbench was littered with sketches, scribbled calculations, and a jumble of electronic parts. Tom became so absorbed in his work that he completely forgot about eating.

Hours went by. Outside, the moon glided across the sky and soon the night was half over. Finally Tom paused in his work and stretched wearily.

“Good grief, it’s ten to three!” he noticed, glancing at the wall clock.

Getting up from his workbench, he went over to check an equation on one of his small analog computers. It was standing on a bank of electronic equipment.

Behind him, the door to the laboratory opened silently. Unseen by Tom, a hooded figure in a long gown crept into the room. Whisking out a hammer from under his robes, the intruder dealt a smashing blow at the repelatron!

Tom whirled at the resounding crash of the hammer on metal. Before he could move, another blow completed the wreckage!

Enraged, Tom hurled himself at the hooded figure. With one hand he grabbed wildly at the intruder, with the other hand he groped on the workbench for something with which to defend himself.

Before he could find a weapon, the figure brought down the hammer with stunning force on Tom’s head! The young inventor groaned and slumped to the floor.

Regaining consciousness, Tom shook his head groggily. His eyes focused with effort on the wall clock. Finally he could see the time clearly.

“Only five to three!” he muttered. “I wasn’t out long. If I act fast, maybe there’s still time to catch that fiend!”

Staggering to his feet, Tom made his way over to the wall panel of the public-address system. His thumb stabbed a switch button, setting off an alarm all over the Enterprises experimental station.

“Hear this!” he gasped. “Everyone alerted to -an enemy-on the grounds. A hooded figure!”

The words were barely out of his mouth when Tom’s last ounce of strength gave out. He toppled dizzily to the floor!

CHAPTER VIII

TELLTALE THREADS

WHEN Tom awoke, the first thing he noticed was a faint odor of ether and antiseptic. His eyelids flickered open and he saw a white coverlet and the rungs of a metal bedstead. With a start, Tom sat bolt upright. He was in the Enterprises infirmary!

“Thank heavens you’ve regained consciousness, son!” murmured a voice nearby. Mr. Swift gripped Tom’s hand. Then the young inventor realized that his whole family was clustered around the bedside, with Doc Simpson in the background. Tom managed to grin wanly at them as he felt the bandage on his head.

“We’ve been so worried about you, dear!” his mother said, bending down to kiss his cheek. “Even though Doc Simpson says that you’ll be all right.”

The young medic smiled reassuringly. “Yes, he will, Mrs. Swift.” Then, grinning, he added, “Being a hardheaded scientist, Tom won’t have any after effects from that bump on his skull.”

Stepping forward, the young physician took Tom’s wrist and glanced at his watch. Seconds later he said, “Pulse rate normal. Feel hungry?”

“I could eat a horse!” Tom chuckled. “Just remembered-I didn’t have supper last night.”

“No supper!” Doc Simpson clucked his tongue reprovingly. “That explains your condition. No food and no rest. It wasn’t only that blow on the head that kept you unconscious so long. It was nature forcing you to recharge your batteries.” Pressing a button beside the bed, he added, “With a good lunch inside you, you’ll feel like a new man.”

“Lunch!” Tom exploded. “Hey, what time is it?”

Doc grinned. “Almost noon.”

“Well, good grief, I can’t stay here all day!” Throwing off the covers, the young inventor started to jump out of bed, but Sandy pushed him back firmly.

“Now stay put. Do you want to bring on a relapse?”

“But that hooded figure-the guy who conked me!” Tom said insistently. “Was he caught?”

Mr. Swift shook his head. “I’m afraid not, son. A night watchman found you, and the security guards searched every inch of the plant. But there was no sign of a stranger anywhere on the grounds.”

Tom stared at his father in dismay and groaned. “That means we must have a subversive right on our own staff!”

“I know,” said Mr. Swift gravely. “It’s not very pleasant to think one of our own men is working against us, but we’ll ferret him out. In the meantime, you take it easy.”

Overruling Tom’s anxious protests, his family joined in urging him to lie back and rest. With a sigh, the young inventor, realizing he still felt shaky, obeyed.

Soon a nurse brought in a tray of food with an appetizing aroma. Tom’s family watched with smiling approval as he ate the meal with relish. Then, hoping he would sleep for a few more hours, they left him.

Tom waited until they were gone, then grabbed up the phone from the night table by his bed. He dialed Harlan Ames, chief of the Enterprises security division.

“It’s Tom, Harlan,” he said. “Any clues yet on last night’s saboteur?”

“None so far,” the security boss admitted glumly. “If you feel well enough to talk, I’d like the whole story.”

Tom gave him the facts briefly.

“Looks like an inside job, all right,” Ames commented. “I’ve had your lab locked up until we could go over it together.”

“Be there right away!” Tom promised. He assured Ames that he felt much better. “Food fixed me up fine.”

Next he called Bud Barclay. “Get a jeep over here, pal,” he requested urgently. “The patient is ready for an airing.”

“How about that clout on the head?” Bud countered in a worried voice. “Did Doc Simpson say it was all right for you to get up?”

“Don’t worry about me. I’m okay,” Tom assured him. “And I’ll feel a lot better if I’m sure that masked figure didn’t steal my repelatron drawings and formulas!”

Slipping into his clothes, Tom hurried down the hall. As he ducked out the front door of the infirmary, Bud pulled up in a jeep.

“Swell patient you are!” Bud grinned wryly. “I’ll bet Doc Simpson crowns me when he finds out I helped you escape!”

“Move over and stop fussing.” Tom chuckled. “You can tell him I overpowered you with a hypodermic syringe!”

Taking the wheel, Tom sped past the north airstrip toward the sleek, glass-tiered laboratory building. Harlan Ames, dark-haired and slim, was waiting outside the door of Tom’s private lab.

“Glad you’re okay, skipper,” he greeted them. “How’s the head?”

“Few sizes too big, but still there.” Tom opened the door and they went inside.

The smashed repelatron was still lying on his workbench, along with his scribbled calculations and hasty sketches.

“Apparently your assailant didn’t take anything,” Ames remarked.

“This stuff wouldn’t do him much good,” Tom replied. “What I’m worried about are the original plans.”

Taking an electronic key from his pocket, Tom flicked a combination and beamed it at a steel wall cabinet. As the door slid open, he reached in and drew out a sheaf of blueprints.

“Still here!” the young inventor exclaimed in relief.

Satisfied that the secret of Tom’s new invention was safe, Ames began to dust the laboratory for fingerprints. Unfortunately the doorknob had been handled by the night watchman and others, and any visible footprints on the rubber-tiled floor had been obliterated by the rescuers who had gone to Tom’s assistance.

Suddenly the security chief heard a cry of excitement from the young inventor.

“Find something?” he inquired.

Tom held out a small wad of tangled threads that looked as if they might have been torn from a piece of fabric.

“Where did you find this?” Ames asked.

“Here on the floor, right by the workbench,” Tom replied. “Probably got ripped off when I struggled with that intruder. Wait a second. I’ll put it under a microscope!”

Going over to another table, Tom slipped the strands into place under the lens, then peered through the eyepiece and twirled the adjusting knob.

“Take a look,” he said a moment later.

Both Harlan Ames and Bud examined the find. Apparently the fabric had been woven from dark blue and white cotton threads.

“Any idea where they might have come from?” Tom asked.

Ames frowned. “Not a regular suit.” His eyes widened and he snapped his fingers. “What about the airfield mechanics? Their coveralls are woven out of stuff like this!”

The suggestion upset Bud, who had many friends among the hangar crew. But he agreed with Tom that they should make an immediate check.

After consulting the work-assignment schedules at the main building, Tom made two phone calls. One was to the control-tower operator who had been on duty from midnight until six a.m., and the other to the ground-crew chief who had been in charge of the airfield. Both were old-timers in the Swift organization.

Piecing together their accounts, it soon became clear that only three mechanics might have had an opportunity to sneak away from their jobs unobserved. Their names were Smith, Tonas, and Niffman. All three were employed at Hangar E, where the experimental planes were berthed.

When he hung up the phone, Tom relayed the news to his two companions.

“Want me to haul ‘em in for questioning?” Ames asked.

The young inventor shook his head thoughtfully. “Better not. If one of them’s guilty, he might become suspicious and try to leave town. Let’s wait until they come on duty tonight.”

That evening, after dinner at the Swift home, Tom and Bud drove back to the plant. The three mechanics were due to report with the late shift at ten o'clock. Half an hour after the time for punching-in, the two boys picked up Harlan Ames at the security building, then drove over to Hangar E.

As they walked in, Doke Smith, a sandy-haired, husky young fellow of twenty-three, was tinkering with the afterburner of a sleek racing jet.

"Hi, skipper!" he greeted Tom cheerfully. Catching sight of Bud, he grinned. "What're you doin' here, fly boy?"

"Planes-I can't keep away from 'em," Bud bantered. "Where'd you get that rip in your coveralls?"

"What rip?" Smith looked surprised as he noticed a tear along one leg. "Oh, that. Search me. Caught it on an engine cowling, I guess."

The other two mechanics were busy in different parts of the hangar. Tom, Harlan, and Bud quizzed each of the three men in turn, keeping their questions casual and friendly.

It was hard to believe that any of them might be guilty of the brutal assault on Tom. But the fact remained that none could provide a complete alibi. The huge hangar was crowded with planes and equipment, with the result that most of the time the men were not even in sight of each other. All three claimed to have gone dashing wildly out on the field when the alarm sounded the night before.

A search of their lockers revealed no trace of the hooded cloak. Yet, Tom concluded, it would have been impossible for the culprit to have smuggled it past inspection at the main gate when coming on or going off shift.

Acting on a sudden hunch, Ames asked Milt Tonas if the planes now in the hangar had been there the night before.

"Far as I know," said Milt, a quiet-spoken, middle-aged man.

"Were any planes taken out during the day?"

"Don't think so. But you can check the flight sheet over there on the wall."

With Tom and Bud helping, the security chief began checking every ship in the hangar. A few minutes later Bud stuck his head out the hatch of a newly designed cargo jet.

"Eureka!" he hissed, holding up a black-hooded robe. He explained that the sinister-looking garment had been tucked out of sight under the engineer's seat. It had two eyeholes cut in the hood.

"Wait a second!" whispered Ames, after examining the cloak and passing it to Tom. He hurried back to check the flight schedule again, and returned a moment later, his face grim.

"This job's due for a test flight at two a.m., and Reuben Niffman's down as flight engineer."

There was a tense, uneasy silence as the two boys and the security chief looked at one another. Was Niffman their man? On the test flight, he could easily dispose of the robe by jettisoning it through the cargo hatch.

“Well, let’s get it over with,” said Tom quietly. He had little relish for the prospect of having a once-trusted employee arrested.

Niffman looked up from his work as the three approached. He was a tall, slender man in his late twenties.

“Ever seen this before?” Ames asked him, holding up the cloak.

Niffman’s face went ashen. His eyes seemed to glaze with fear as he stared at the telltale garment. Before anyone could stop him, he jerked a pistol from the pocket of his coveralls.

“Stop!” he screamed. “You won’t take me alive! Don’t come any closer or I’ll shoot!”

CHAPTER IX

UP ELEVATOR!

TOM and his two companions fell back in horror as Niffman waved the pistol wildly. The trusted mechanic had suddenly turned into an armed madman!

“Put that gun down!” Harlan Ames commanded. “Hurry! Drop it!”

“You can’t bluff me!” Niffman shrilled in a high-pitched voice. “This gun’s loaded, I tell you! Try anything and I’ll kill everyone in this hangar!”

Hearing his screams, Doke Smith and Milt Tonas dropped their work and came rushing to see what was happening. But at sight of the threatening weapon, they froze in their tracks.

“Now look, Rube,” Tom spoke quietly. “You have nothing to be afraid of. We want to talk to you. Hand over the gun and I promise you we won’t press any charges.”

Casually Tom took a step forward, holding out his hand.

But Niffman again brandished the pistol. “I’m warning you. Don’t come any closer,” he screeched, “or I’ll shoot!”

Determined not to show any fear, Tom advanced another step, then another. Ames and Bud held their breaths.

“You had your warning!” Niffman yelled. He was waving the gun around, his finger on the trigger.

Crack! One shot, then a series of them. Bullets sprayed wildly about the hangar.

Tom ducked for cover behind the nearest plane, then hurled himself at the crazed mechanic, grabbing for

his gun hand.

Niffman fought back, trying to wrench his wrist from Tom's steely grasp. Bud and Harlan leaped to Tom's assistance. In a few seconds their combined strength brought Niffman to his knees. Tom and Bud forced his arms together and Ames snapped on a pair of handcuffs.

Realizing he was now helpless, the mechanic broke down completely and began weeping hysterically. Then he babbled wildly:

"Tom Swift, you're trying to wreck the laws of nature! You can't repel water-the whole world would be flooded! Human life would be wiped out!"

As Niffman glared at the inventor, his three captors realized that he was beyond all reasoning and made no attempt to reply to his accusation.

"What do you think we should do with him, Tom?" Harlan Ames asked.

Tom replied, "No sense having him arrested while he's in this condition. We'd better take him over to the infirmary."

He, Bud, and Ames carried the mechanic, who now was too weak to walk, and drove to the Enterprises medical building. Here Doc Simpson took charge and injected a tranquilizing drug.

Out of the patient's hearing, Tom asked, "Do you think we'll be able to get any sensible answers from him?"

Doc Simpson shook his head. "I doubt it. He'll probably fall into a deep sleep soon. The shock of being discovered has evidently unbalanced his mind. Could be days before he's able to talk lucidly."

In glum silence Tom left the infirmary with Bud and Harlan. Tom's brain, meanwhile, had been dwelling on a new worry. Niffman had spoken about "repelling water," which meant that he knew the purpose of Tom's latest invention. But how had he found out? Besides the two government chemists and a few highly trusted men working on the project with Tom, only the young inventor's family and closest friends had been told about the repelatron!

Tom mentioned this to Bud and Ames as they drove to the main gate.

"I'll check on Niffman right away," Ames promised. "Maybe his friends or neighbors can give us a lead on what he's been doing lately outside of business hours."

"Okay. See you tomorrow, Harlan. Thanks!"

Tom and Bud transferred to Bud's convertible for the ride to the Swift home and tumbled wearily into bed. The following morning Tom went to check up on the building of the giant repelatron to be used at the underwater helium wells.

"It's almost ready to have the delicate instruments installed," the foreman reported.

"Great!" said the young inventor, smiling.

Next, Tom went to see Art Wiltessa, a young project engineer for Swift Enterprises, who would design

the special pressure proof, transparent dome to enclose the undersea air bubble and keep out fish or other foreign objects. The dome would be made of Tomasite, a plastic, radiation-proof material, which was extremely strong and durable, and had been invented by Mr. Swift.

For a few days Bud saw little of his chum. One morning, looking for Tom, he strolled into the small machine shop on the ground floor of the laboratory building. Complete with forge, casting equipment, and machine tools, the shop was often used by Tom when he was constructing the first models of new inventions. Right now the young scientist was hard at work on a new invention.

Bud stared at it and said, "Don't tell me what this is for. Let me guess."

The object in question consisted of a metal platform, about five feet square, with fins or vanes extending out on each side of it. In the center was a shiny metal sphere.

"Go ahead." Tom chuckled at the baffled look on his friend's face.

"Well," drawled Bud, "I'll say it's an elephant's back-scratcher."

Tom grinned. "Not quite. It's an undersea elevator."

"How's that?"

"An undersea elevator for hauling things up or down between the airdome and the surface of the ocean," Tom explained. "It'll slide on cables."

Bud shook his head in silent amazement, then asked, "What makes it go?"

"A repelatron. This metal ball in the center is the radiating part of the machine."

Bud said quickly, "I thought the repelatron was to repel water to create a living and working space."

The main repelatron will do that," Tom said. "This one will create a bubble space around the elevator."

"But you just got through saying it would make the elevator go up and down."

"It'll do that, too, by altering the bubble's buoyancy."

"Better draw me a diagram," Bud declared.

"Okay." Tom rapidly sketched a small ship. "Suppose this ship is built out of metal weighing a thousand tons. It floats. But what would happen if you squeezed the ship into a solid hunk of metal-like this?"

"She'd sink."

"Right. The solid hunk of metal wouldn't weigh any more than the ship, but it would displace a lot less water. In other words, if you shrink something down so it takes up less space in the water, it also becomes less buoyant-or more sinkable, you might say."

Bud nodded. "So?"

"So we'll do the same thing with the bubble around the elevator," Tom explained. "By cutting down the

force of the repelatron, we make the bubble shrink to a smaller size. Since we're now displacing less water, the elevator will automatically tend to sink."

"Fine, but how about getting back up again?" Bud demanded.

"Turn the repelatron up full force. The bubble now becomes larger, displacing more water, so the elevator starts to rise."

"Well, I'll be a scootin' sky ghost!" Bud shook his head in admiration. "Don't know how you do it, genius boy, but it sounds terrific. How about these fins sticking out on each side?" he added. "What are they for?"

"Stabilizers to keep the elevator steady as it rides up and down. And here on the bottom are shock absorbers to cushion the jolt when the elevator reaches the landing stage."

"Nice work, pal!" Bud clapped his friend on the back. "I hereby grant you the official Barclay seal of approval! How soon do we give it a try-out?"

"Tomorrow morning." Tom grinned. "Want to come along?"

"It's a date!"

Later that afternoon the young inventor put through a long-distance call to Washington. Speaking to Admiral Hopkins, he asked if any Navy submarines would be cruising in the vicinity of Fearing Island during the next twenty-four hours.

"Don't think so, Tom, but let me check and make sure." Calling back a short time later, he reported there would be none in that area.

"Why? Has something new come up?" Admiral Hopkins asked.

"I have an undersea experiment scheduled," Tom explained. "Just wanted to make sure no submarine commander would mistake us for enemy saboteurs and let fly with a torpedo!"

Next morning the elevator device was loaded aboard a cargo jet and Tom and Bud took off with it to Fearing Island. Doc Simpson accompanied them on the flight in case of any mishaps during the experiment.

"How's Niffman?" Tom asked.

"About the same. Sleeps a lot and keeps babbling when he's awake. Doesn't make any sense yet," the physician replied. "But I feel his condition is temporary."

After landing at the rocket base the elevator was transferred to a small tug. Tom had invited Dr. Clisby and Bob Anchor to witness the trial and all climbed aboard.

The tug steamed to a point not far from the island where the fathometer showed a depth of about a hundred and fifty feet. Here a boom was swung out to support the elevator cables. These were then reeved through pulley blocks and payed out into the water, with a heavy framework attached to anchor them firmly on the bottom of the ocean when Tom reached it.

“Okay, let’s rig the elevator!” Tom ordered.

While this was being done under Hank Sterling’s direction, Bob Anchor begged to go along on the first descent.

“Sure.” Tom grinned. “But it won’t be like riding down in a skyscraper building!”

As soon as the elevator guides were clamped in place around the cables, Tom, Bud, and Bob went aboard the platform. The elevator was then lowered by winch until it touched the surface of the water. With his heart racing nervously, Tom murmured, “Here goes!” and switched on the repelatron full force.

An awed gasp burst from the watchers on the tug. A huge hollow depression, like a giant dimple, had opened up in the surface of the water, directly below and around the elevator!

“Cast off the winch lines!” Tom ordered, feeling a thrill of excitement at this first success.

A moment later the elevator hung poised above the water dimple, sustained entirely by the force of the repelatron.

“We’re going down!” Tom reversed the switch slowly, cutting down the action of the repelatron.

As the repulsion force decreased, the elevator began to sink. At the same time, the dimple grew smaller. As the trio slowly descended below the waves, the water closed in above their heads. They were enclosed in the air bubble!

Bob gasped, “Whew! What a feeling!”

“Weird,” agreed Bud, as they sank down, down through the greenish waters.

In a short while the ocean floor became visible below, with its tangled mass of green vegetation. Tom could not suppress a pleased grin at the elevator’s operation.

Suddenly Bud let out a cry of alarm. “Tom! Look!” he pointed.

A whale-shaped craft was heading straight toward them at terrific speed!

“The mystery sub! It’s going to ram us!” Bob yelled.

White-faced, Tom slammed the switch lever to full power. The elevator shot up just in time! With a shuddering wake, the submarine roared past below them!

As the elevator broke the surface, pains were shooting through Tom’s chest. Bob and Bud were leaning over and writhing in agony.

“Quick! Get them aboard!” Doc Simpson cried to the horrified tug crew. “They have the bends!”

CHAPTER X

DEEP FREEZE

IN FRANTIC haste Tom, Bud, and Bob Anchor were hauled up onto the deck of the tug. Every crew member realized the boys were suffering the deadly cramps brought on by a too-sudden change of pressure. Doc Simpson at once gave them injections to ease their pain.

“We must get them back to the island!” the medic ordered. “They’ll need treatment immediately!”

“But my invention!” Tom protested in spite of his agony. “We can’t just abandon it!”

“We’ll stay here and unrig the setup, skipper,” Hank promised. “You four take the motorized lifeboat.”

This was lowered, with the three victims propped comfortably inside. Doc Simpson took the helm and raced back to Fearing Island. Meanwhile, the tug had radioed news of their mishap and an ambulance was waiting on the south dock.

From here the boys were rushed to the infirmary and wheeled into the operating room.

“What happens now?” asked Bud, looking askance at huge tubs of ice standing in readiness.

“Hypothermia,” said Doc Simpson tersely.

Bud grimaced. “Sounds horrible.”

“Relax,” Doc said. “We’re just going to freeze you, that’s all.”

“Freeze us?” echoed the three patients.

The physician nodded as he hastily prepared anesthetizing equipment. “We’ll lower your body temperature to 75 degrees and keep you that way until your circulatory system gets back to normal. You won’t feel a thing.”

“I’m numb already!” Bud groaned.

Luckily the boys’ condition, though painful, was not serious, since they had submerged only a hundred feet. By the following day Tom and his friends were recuperating comfortably in a three-man hospital room.

“Some visitors just flew in,” the young physician told them when he dropped by to check their progress. “Like to see them?”

“Sure, bring them in!” said Tom, who was growing restless at inactivity.

“Hold on!” warned Bud. “If it’s Dr. Clisby or other government experts, don’t start figuring chemical equations or I’ll have another pain!”

Doc chuckled. Opening the door, he ushered in Mrs. Swift, Sandy, and Phyl.

“Wow! I feel better already!” Bud exclaimed, beaming at Sandy.

“Well, don’t get frisky,” she warned, her eyes dancing, “or I’ll tell the doctor to put you back in deep freeze!”

The lighthearted banter cheered everyone. Phyl said, with a special smile for Tom, “You boys look fully recovered, thank goodness!”

She and Sandy distributed fruit and cookies they had brought from Shop ton.

Tom, meanwhile, was saying to his mother, “How’s Dad?”

“Completely recovered,” Mrs. Swift reported. “He’s at The Citadel right now on a special research problem.” The Citadel was the Swifts’ atomic energy plant in the Southwest. “Dad said you’ll have to carry on with the helium project pretty much on your own.”

“With Bob and Bud here, and Dr. Clisby to help, it shouldn’t be too tough,” Tom said, smiling.

“You’re lucky to have such fine people to work with,” his mother agreed warmly. “But do take care of yourself and get some rest!”

“I’ll keep an eye on Tom,” Bob Anchor spoke up. Like everyone who knew her, he was touched by Mrs. Swift’s quiet charm.

Then, in answer to Sandy’s and Phyl’s questions, the boys described their recent mishap but did not mention the submarine which they thought had planned to ram them.

“The elevator worked to perfection,” Tom explained. “I just brought it up a little too fast.”

“Now tell us what you girls have been doing,” said Bud. “Turning down all other dates, I hope.”

“My, what an optimist!” Sandy teased.

Phyl laughed, her dark eyes sparkling. “After all, we had you two on ice!”

“You’re licked, fellows!” Bob Anchor chuckled as the two boys pretended to fume.

Next day, since they were much better, Doc Simpson released them from the hospital. Tom and Bud said good-by to Bob, who would continue work on some reports for the Bureau of Mines. The young inventor and his pal took off for Shopton.

As they winged over the water toward the mainland, Bud remarked, “Do you suppose that sub was the same one that trailed us the other day, or is there a whole fleet of Mad Mobys?”

Tom looked grim. “I wish I knew the answer to that one, Bud. Whether it was the same one or not, I wonder if it carried atomic warheads.”

“You mean,” said Bud, “that the sub was planning to hide warheads in this area again, and just happened to spot us by accident?”

“Could be,” Tom agreed. “I hope we stopped them! Anyway, our patrol is pretty efficient.”

The young inventor was silent for a moment, then he said, "You know, Bud, there's another spot I'm even more worried about."

"For instance?" queried his pal.

"That mountainside near the helium fields," Tom replied. "If our enemies cached some warheads there, and they detonated by accident, the explosion could wreck our whole operation!"

Bud gave a low whistle. "Brother, and how! Maybe we ought to take a look-see, skipper."

"I intend to," Tom vowed. "We'll leave tomorrow if I can get things organized here."

As soon as they landed at Enterprises, Tom hurried to his worktable. A host of problems connected with the helium city were pressing—an air-purification plant, the gas-bottling process, and construction of buildings inside the dome.

Under pressure, the young inventor's mind seemed to work at top speed. Hour after hour he hunched over his bench, testing parts and circuit hookups, sketching out ideas, dashing off memos, and taking phone calls.

One of these was from Miss Trent, the Swifts' cool, efficient secretary. She asked Tom to drop by later to sign a batch of letters in his father's absence.

"Be there at three," he promised.

Tom left his work and in a company jeep drove to the Enterprises main building where he shared a big modern office with his father. The spacious room was fitted with huge desks, gleaming models of their inventions, cushioned leather chairs, and push-button drawing boards.

After signing the letters, Tom hurried to the door, giving Miss Trent a smile.

"If anyone calls, I'll be over at the Swift Construction Company. I want to see about some magnesium girders for the helium project."

Hopping into his sports car, Tom sped across town to the construction company. Its manager, Ned Newton, had worked side by side with Tom Swift Sr. through their youthful years.

As he drove through the gate onto the company airfield, Tom was startled by a sleek little plane stunting crazily overhead. It was a Pigeon Special.

"Hope that's not Sandy!" Tom gasped. He recalled that she had mentioned she might demonstrate the plane to a prospective customer.

Tom waited no longer. He sped to the control tower and raced upstairs, two steps at a time.

"Who's in that Pigeon Special?" he asked.

"Your sister, but I'm afraid she's in trouble."

Tom snatched up a pair of earphones. Then he said into the mike, "Sandy! What's going on?"

“Oh, Tom, it’s you! I don’t know. The plane’s out of control. I’m trying to right it, so I can land. But it keeps banking. I can’t straighten it out.”

“Sis, can you climb a little and parachute?”

“No, Tom. I-I can’t do anything with these controls!”

“Then I’ll come up and drop you a ladder to climb into my plane!”

The words were hardly out of his mouth when the plane suddenly started downward. “I think I can land,” said Sandy.

Tom and the dispatcher gaped in horror as the plane went into a spin. But a moment later Sandy pulled out of it and managed to make a pancake landing!

“Good night!” the dispatcher gasped, his shirt drenched with perspiration. “If Sandy has-”

Tom did not hear the rest. He was already halfway down the tower stairs. As he dashed out on the field, he saw his sister emerge from the plane, shaken but unhurt.

“Thank goodness!” he cried.

Sandy was glad to fall into her brother’s arms. She was shaking like a leaf, but in a few moments recovered her poise.

“Tom!” she cried out suddenly. “Do you know what I think? That the man I was going to demonstrate the plane to ruined it.”

“But why? Where is he?” Tom demanded.

“I left him at the hangar. He wanted me to go up alone so he could see how the Pigeon looked in the air.”

“Let’s find him,” Tom urged. “But what makes you think that he damaged the plane?”

“Well, just before we were to go up, a phone call came for me,” Sandy explained. “It was from a man who wanted an appointment for a demonstration. He kept me talking a long time.”

Sandy paused and gazed toward a hangar. “I left him right there,” she said.

Inquiry brought out the fact that the man had left the premises the instant Sandy was in the air. And also, that while she was at the phone, the stranger had been in the cockpit at least ten minutes.

“Guess your hunch was right, Sis,” said Tom. His eyes narrowed. “The man on the phone was probably an accomplice and the two of them tried to kill you! But I’ll catch up with them, and when I do-”

Sandy took her brother’s hand. “Tom, don’t get mixed up with dangerous characters like that. Or,” she warned, “you may never get that helium city built!”

Tom calmed down a bit and called the police. Sandy gave the chief a description of the suspect -a tall,

slender man with blond hair that he wore rather long on the sides. He had given the name Paulus White. The telephone caller, who had a rather high-pitched voice, was Firth Webster.

When the telephone conversation ended, Tom said, "Come on, Sis. I'm driving you home right away."

On the way they tried to figure out why anyone would want to harm Sandy. "I hope it has nothing to do with my present work," Tom said.

"How could it?" Sandy asked.

Tom was grim as he answered, "If anything had happened to you, it would be a long time before I'd feel like continuing the project. And perhaps that was what those two scoundrels were counting on."

The police found no trace of White or Webster under those names and decided they had been assumed. After a long night's sleep Sandy declared she felt fine.

Tom, relieved, could not resist teasing his sister just before he left the house. "You can't keep a good woman down on earth-or up in the air, either. Well, happy landings today! Now I'll go see my other patient."

He drove to the Enterprises infirmary to see Doc Simpson.

"How's Niffman coming?" Tom inquired.

"Not too good. I'm forced to keep him under sedation. When I don't, he becomes violent."

"What's your diagnosis?"

The medic groaned. "Hard to say exactly. He shows definite schizophrenic symptoms."

"Does that mean that he was mentally unbalanced even before this happened?" Tom asked.

"Not necessarily. It could have been brought on by drugs, such as lysergic acid or one of the adrenalin derivatives. I have a hunch someone may have doped him, in order to give him enough courage to smash your invention."

Tom asked how soon the effects of such drugs would wear off.

"It should be fairly soon now," Doc replied. "Perhaps within the next day or two."

Tom was thoughtful as he drove home that evening. The worried inventor hoped that Niffman would be ready to talk by the time the cruise to the undersea mountain was over.

"And then I'll find out more about those men, White and Webster-the fiends!"

The next morning Tom and Bud flew to Fearing Island, where the Sea Hound was ready for take-off. A cargo plane would accompany them, carrying the giant vacuum lifter machine and a dozen empty lead cases the size and shape of those which had contained the atomic warheads. It was Tom's plan, if he found a cache, to substitute the new cases.

Soon the Sea Hound was headed over the Atlantic, followed by the cargo craft. Bud was at the

seacopter's controls. As they neared their destination, he submerged and guided the vessel toward the helium area. Soon their searchlight was sweeping the plateau on the mountainside.

Suddenly Bud cried out, "Tom! The gas is gone!"

Not a bubble of helium rose through the water!

CHAPTER XI

MOUNTAIN CACHE

THE whole crew of the seacopter crowded to the cabin window. Looks of dismay appeared on the men's faces as Tom played the searchlight back and forth, probing the inky waters with its yellow glare. Nowhere could they glimpse any trace of the helium bubbles, nor of the capped well.

"What a tough break!" Bob Anchor groaned. "The helium deposit must be played out!"

"It can't be-not so soon." Tom scowled. "Maybe this isn't the right location."

"Sure it is," said Bud. "Look at the chart. And there's the undersea peak up ahead."

"That doesn't necessarily prove it," Tom insisted. "If we're off course, we might be in a spot that looks like the other one. Let me check the automatic navigator."

Tom had invented this device especially for the Sea Hound. It measured the change in frequency of sonar pulses to determine the ship's speed and drift over the sea floor. A computer translated this information, along with the compass course, into latitude and longitude readings which showed up on twin dials.

Pulling his emergency tool kit from a locker, the young scientist unscrewed an inspection plate. Then he checked the electronic circuits inside and tested various parts.

"Anything wrong?" asked Bob, noticing the puzzled look that furrowed Tom's brow.

"I'm not sure, but I have a hunch the ocean water around here may be throwing the readings off. It might be due to the extreme pressure at this depth, or possibly some kind of electrochemical action on the pulse transmitter."

Tom decided to run some tests on it when they got back to Fearing Island. In the meantime, he ordered Bud to cruise along the slope of the undersea mountain while he maneuvered the search beam.

A few moments later Bob Anchor cried out, "There's the helium spot! I can see the bubbles!"

Cheers went up from the crew as they gazed at the steady upsurge of gas.

“Boy, what a relief!” Bob exclaimed. “I was really worried there for a while!”

“And I!” Tom relaxed and grinned.

“Now what, skipper?” Bud asked.

Tom took over the controls. “We’ll comb the whole mountainside to look for any hidden chests. You beam the searchlight, pal, and everyone look for warheads.”

For over an hour Tom guided the seacopter in first a descending, then an ascending course. The slope of the nearby peak proved to have more likely hiding places than the rest of the area.

Suddenly one of the crewmen shouted, “Bring the spot over to starboard a little, Bud, and raise it a few degrees. Think I saw something in an opening!”

Tom throttled back on the directional jets, and Bud maneuvered the searchlight. As the yellow beam stabbed through the murk, it settled on a crag jutting out from the main peak. A small shadowy aperture was visible in the cliff face.

Tom brought the seacopter around and steered in closer. As it approached the cliff, the Sea Hound’s probing beam revealed a cave. Inside were a cluster of grayish-black chests!

“Nice going, Jerry.” Tom clapped the crewman on the back. “This looks as if it’s what we’ve come to get!”

Turning the controls back to Bud, Tom climbed into a Fat Man suit and went out through the air lock. Propelling himself toward the cave, he found a foothold on the rocks and waddled inside.

“How about it, skipper-more lead cases?” called Bud on the sonarphones.

“Ten of them!” Tom reported.

Returning to the Sea Hound, he gave the order to surface so they could make contact with the cargo plane.

To everyone’s amazement, the weather had suddenly changed. Mountainous whitecaps greeted them as the seacopter emerged. Angry dark clouds obscured the sky, and sheets of rain lashed the cabin window under winds of gale velocity.

“Jumpin* jets!” Bud gasped, clinging to a stanchion. “Break out the oilskins, me hearties! We’re in for a real blow!”

A jagged bolt of lightning lit up the cabin, followed by a peal of thunder that made the craft quiver. The Sea Hound wallowed and pitched like a nervous dolphin!

“What’s the matter, fly boy?” Tom teased Bud. “Lost your sea legs already?”

Bud’s rollicking grin had faded fast as his face took on a slight greenish tinge. “My legs are still here,” he gulped, “but I seem to have misplaced my stomach!”

Tom and the other crewmen scanned the overcast, but the cargo jet was nowhere in sight.

“I’ll try the radio,” Tom decided.

Switching on the transmitter, he called over the mike:

“Sea Hound to Swiftjet! Can you read us?”

The static was so bad it was impossible to make out any response. Rather than waste time in a futile search that might leave the whole crew seasick, Tom decided to submerge and stand by until the storm subsided.

In half an hour he surfaced. The skies had cleared and the sea calmed down. There was no sign of the cargo plane, but before long it was sighted in the distance.

“We got blown off course,” Arv Hanson reported by short wave. “Find any warheads?”

Bud described the cache they had located in the undersea peak, adding, “Get the vacuum lifter ready. We’ll guide you into position.”

In a few minutes the Sea Hound reached a point directly over the cave.

Tom picked up the mike. “Use us for a target and start lowering,” he ordered. “Current’s pretty strong near the bottom, so we may run into trouble. Don’t switch on power till I give the signal.”

“Aye-aye, skipper!”

The cargo plane was equipped with hovering jets, similar to those on the Sky Queen. Arv jockeyed the craft until it was lined up directly over the seacopter, then locked the controls. A hatch opened in the plane’s belly and the giant lifter disk dropped into view, supported by steel cables.

While waiting for the disk to descend within a few feet of the Sea Hound’s hull, Tom took out a buoy. To it was attached a cable which connected with the seacopter’s sonarphone. It would relay messages from the seacopter to the plane’s radio.

“We’re going to submerge,” Tom radioed. “Give us a few seconds, then resume lowering.”

With his keen blue eyes fixed on the instrument dials, Tom eased the control wheel forward. The Sea Hound plummeted straight toward the bottom. From the plane overhead, Arv and his flight crew watched it disappear beneath the waves.

“Okay. Lower away!” Hanson told his men.

Fathom after fathom, the seacopter sank into the depths. Meanwhile, the lifter cables were steadily unreeling just above them.

Reaching the cave in the undersea peak, Tom used the reversing jets to back off a little, so that the search beam could illumine the area of operations.

“Hey, what happened to the lifter disk?” Bud muttered, when it failed to appear.

“The current’s probably sweeping it out of range,” Tom replied. “Swing the searchlight around.”

Bud complied and they finally sighted the machine about a hundred yards to port, dangling at the end of its cables. The subocean current had swung the disk like a pendulum.

“Avast on the winch up there!” Tom signaled. “You have enough cable payed out.”

“Are we on target?” Arv responded.

“The disk isn’t, but we’ll attend to that. Just stand by.”

Chip Kelly, an experienced seacofterman, took over the controls while Tom, Bud, and Bob Anchor each squirmed into a Fat Man suit. Waddling into the air lock, they emerged a moment later through the outside hatch.

Guided by the brilliant glare of the Sea Hound’s search beam, they propelled their steel eggs toward the vacuum machine. The ocean current pressed hard against them and the disk. Bud and Bob, who reached the lifter ahead of Tom, found it hard to maneuver the device with their mechanical arms.

“The thing’s temperamental.” Bud chuckled over his sonarphone. “Wants its Uncle Tom!”

“Be right with you, pals,” Tom responded.

Between them, the three boys got a firm grip on the disk. Then, gunning their propulsion jets at full force, they managed to push it. Heading across current, they steered toward the cave opening in the cliff face.

As the boys moved through the water, the Sea Hound swiveled its search beam so as to keep them constantly illuminated.

“Now conies the ticklish part,” said Tom.

Maneuvering the lifter device through the cave entrance, they brought it close to one of the chests. Segmented feelers extended out from the rim of the disk, like the tentacles of an octopus. Each one had a series of holes through which the vacuum pumps would exert their gripping force as the lifter took hold.

The boys set the disk flat on top of the chest and arranged its tentacles in gripping position. Then Tom signaled the Sea Hound by sonar-phone:

“Okay. We’re all set. Notify the plane to switch on power and hoist away!”

In a moment the vacuum lifter gave off a loud, humming noise. Then the steel cables started reeling in.

As the chest was dragged out of the cave, it scraped against the rock, knocking loose one of the tentacles. Bob Anchor reached out his pantograph arm to place it back in position.

A second later he let out a scream. “Help! I can’t get loose!”

Dangling from the lifter disk, Bob was swinging back and forth in his steel egg, powerless to move. The chemist was being dragged upward along with the lead chest!

“Avast heaving!” Tom cried, and the Sea Hound relayed his signal.

Slowly the cables were payed out again, and after much maneuvering the unwieldy load was deposited on the lip of the cave. Then the power was turned off so Bob could free himself.

“What were you trying to do—a one-arm trapeze act?” Bud quipped.

“Sure,” said Bob. “How’d you like the underwater circus?”

Once again the power was switched on. This time the chest was hoisted up through the water without incident. When the disk was lowered again, it bore an empty lead case to be substituted for the one removed.

The whole operation seemed painfully slow, since Tom, Bud, and Bob had to return to the Sea Hound twice for a rest and to replenish the oxygen supply in the Fat Men.

“Okay, that’s it,” Tom reported to the plane. “Let’s start for Fearing.”

When the seacopter surfaced, Bud radioed a final message to the cargo jet. “Race you back to Fearing, Arv! Last one home gets the water cure!”

“If that means a chance to dunk you, you’re on, fly boy!”

As the jet streaked off through the blue, Bud gunned the rotors and sent his craft spearing skyward in hot pursuit. Neck and neck, they raced across the ocean, but the Sea Hound finally pulled ahead and came in first.

“Ah, now for the payoff!” Bud gloated, as the jet arrived thirty seconds later on the island airfield.

Arv good-naturedly acknowledged himself the loser. All hands were eager to watch the dunking, so a truck was commandeered to carry both crews to the south dock.

After they had piled out on the pier, Arv said, chuckling, “Okay. Toss me in!”

Looking at the burly six-footer, Bud suddenly realized he had bargained for more than he had anticipated. Sweating and grunting, he tried to pick Arv up in his arms. No use! In the end, both pilots landed in the water with a mighty splash.

“A photo finish!” Tom howled, as the crewmen roared with laughter.

Meanwhile, the lead chests were being transported to a lead-lined concrete bunker on the rocket launching area. Twenty minutes later Tom, Bud, Arv, and the two government chemists, wearing radiation proof suits, prepared to open them.

Nine of the cases proved to contain the same type of atomic warheads as were planted under Fearing Island. But as Tom pried up the lid of the last one, his face blanched.

“Run, everybody!” he yelled. “This may explode!”

CHAPTER XII

A SURPRISING DINNER

PANIC hit the little group of observers! In a wild rush they stampeded out of the blockhouse. It was not until they were some distance away that the men realized Tom was not with them.

“What’s he doing?” Bud cried in alarm and started running back. “Tom! Come here! Tom!”

Meanwhile, the young inventor, holding his breath, had carefully closed down the lid of the chest, which, he had noted at a glance, was filled with deadly nuclear sticks of fissionable material!

“Probably exposed as soon as I opened the chest. It must have some type of contact device,” Tom reflected tensely. “Better get this thing sealed up fast!”

Working with cool precision he scooped the chest onto a dolly and relayed it into a huge lead container. Turning a lever, he sealed it off from the rest of the bunker.

“That should do it,” he decided, heaving a sigh of relief.

Next, he plugged in the radiation absorption machine and set the timer. An alarm bell would ring over the intercom when the contamination fell to a safe level.

A few hundred yards beyond the concrete bunker, Tom’s friends waited anxiously. They had persuaded Bud not to return to the blockhouse. Finally, to their relief, Tom appeared. He locked the door securely, pocketed the electronic key, and came toward them.

“You all right, pal?” Bud inquired.

“I’m okay,” Tom assured them, “but the bunker’s hotter than a stove.” Briefly he explained about the radiation sticks in the chest.

“This is even more fiendish than the warheads!” Dr. Clisby exclaimed angrily.

Tom nodded, tight-lipped. “I’ll report our find to the Navy right away,” he said.

With Bud at the wheel, he drove off in a jeep to the headquarters building. Here he asked the telephone operator to contact Admiral Hopkins in Washington on the Swifts’ private line. Tom and Bud went into the office to wait.

“Just found another cache of warheads, sir,” Tom told him when the admiral came on the line. “I thought you’d want to be notified immediately.”

“Yes, indeed, Tom. Where was the cache located?”

“Near the undersea helium beds which we’re planning to tap,” the young inventor replied. “There were ten chests. One of them contained nuclear sticks designed to give off very dangerous radiation when opened.”

Over the phone Tom could hear a furious but stifled mutter. Apparently the admiral was having a hard time holding back some salty quarterdeck remarks about the unknown enemy who had secreted the chests.

Aloud the Navy officer said, "Tom, if we ever lay hands on the scoundrels responsible for this, they deserve to be treated like mad dogs!"

Tom smiled, then sobered again. "I wonder if they have caught on to the fact that we're looking for their stuff, and hoped to annihilate me and some others."

"It's a good guess," said Admiral Hopkins, "especially since one of our subs found another cache just last night. The chests were filled with bombs."

"Where were they?" Tom asked. "On the East Coast?"

"No, in the Caribbean near one of our biggest defense bases. The chests weren't planted very far down under the island. If the bombs had gone off, thousands of people would have been wiped out!"

Tom shuddered at the thought of such terrible havoc. "Another thing, Admiral," he went on. "We planted dummy chests in place of the ones we removed."

"Excellent idea, Tom. I'll have the Navy subs do the same, so as not to tip off the enemy that we're locating their devilish equipment."

After the young inventor finished his conversation with the officer, Bud asked, "More bad news?"

Tom nodded. "Another cache. I won't rest until we find out who's back of this, Bud!"

"Don't worry, skipper. We'll find 'em!" Bud's words carried such a ring of determination that Tom felt renewed hope. But the elusiveness of the opposing force had him baffled.

"What's the next item on the program?" Bud asked.

"Back to Shopton. Let's get over to the airfield and hop a plane."

When they reached Enterprises, Tom asked Bud to assist him in his private lab.

His pal grinned. "Guess I can do the monkey-wrench work," he replied.

Tom plunged into the job of finishing a small portable repelatron which might adjust itself to various types of salty solutions. The boys were still hard at work at closing time when most of the employees went streaming out through the main gate.

Some time later Chow Winkler stuck his bald head through the doorway. "Some folks never know when to take a break," the old cook remarked.

Tom looked up in surprise. "Hi, Chow! Say, what time is it?"

"Nigh onto seven o'clock."

Tom gave a whistle. "Gosh, I had no idea! Guess we'd better get home to dinner, eh, Bud?"

“Suits me,” said the husky young pilot, laying down a Phillip’s-head screwdriver.

“Hold on now, partners!” Chow interposed. “You fellers ain’t goin’ nowheres. Why, brand my propellertrons, seems like I hardly get a chance to see your faces lately! Besides, I figured you’d sure be here all night a-workin’, so I fixed up some real fancy vittles to line your insides with.”

The old Westerner spoke so earnestly that the two boys were touched by his thoughtfulness.

“Thanks, Chow, that’s swell.” Tom smiled. “I could sure use one of your super-deluxe specials!”

“Comin* right up!” beamed the cook happily.

“But watch out for these newfangled contraptions around here,” Bud teased. “They might subatomize the molecular frumzoid content of the food particles, especially if cooked at less than super-duper degrees centigrade.”

“Never you mind, Buddy boy,” the cook said, grinning back. “You’re kiddin’ me, an’ anyways, I reckon there ain’t no invention yet kin spoil the taste o’ good Texas-style grub!”

Still beaming, Chow hurried off to the plant kitchen.

Tom immediately phoned his mother and explained why he would not be home. Then, having completed work on the small repelatron, he went to a far corner of the laboratory to look at some construction plans he had promised his father he would deliver to Arv Hanson.

Meanwhile, Bud did a quick cleanup job. He put away tools and sorted out the jumble of electronic parts strewn over the workbench. Presently the boys heard a shrill whistle on a bosun’s pipe just outside the laboratory.

“Chow down!” boomed a foghorn voice, and the roly-poly sun-bronzed cook appeared, wheeling a tiered cart loaded with covered dishes.

The meal was to be served in a small dining room just off the laboratory. Chow laid the table with a snowy white cloth, dishes, glasses, and silverware. Then he lifted the lid of a soup tureen. Out floated a cloud of steam, bearing with it an appetizing aroma.

“Mmm! Smells delicious!” Tom said. “What is it?”

“Armadillo soup,” Chow replied proudly as he ladled it out. “Reckon you’ll say it’s the finest you ever tasted!”

Tom had turned a bit pale. “Don’t know that I ever tried any before,” he said cautiously, not wanting to hurt the Texan’s feelings.

“Course you ain’t never had any o’ this kind before,” said Chow, “ ‘cause I jest got the idea the other day.”

Bud stared at his soup dish suspiciously. “You mean you stewed up one of those armor-plated critters one sees in the zoo?”

“Oh, I took the shell off,” Chow assured him. “Jest cooked the pink tender meat-folks like the flavor fine down on the Rio Grande. You will, too, when you taste it. Go ahead and try some.”

“Well, okay,” said Bud. “But I sure hope the molecular frumzoid content hasn’t been subatomized.”

“Quit your funnin’, boy, an’ spoon in. I want to see the look on your face when you-“

Chow’s words ended in a shriek as the soup suddenly flew from the dishes.

“Great jumpin’ Jehoshaphat!” The cook turned white as a ghost as he stared at the empty dishes and spattered walls. “What was that you was say in’ about subatomizin’ the frumzoid tadpoles?” he quavered weakly.

Both boys were shaking so hard with laughter they could hardly talk. Finally Tom managed to find his voice.

“Don’t worry, Chow. Something tells me Magician Barclay is back of this!”

Reaching down, he brought out the new portable repelatron from a shelf under the table. Bud confessed to being the culprit and explained that he had flicked on the switch just an instant before. He had put one spoonful of the soup into the repelatron as a sample.

“Brand my boot heels, I might ‘a’ known that varmint was up to somethin’!” Chow groaned, mopping his forehead.

Finally the meal proceeded. Though the taste of the armadillo soup was unusual, both Tom and Bud found it delicious. The rest of the meal proved to be equally appetizing. Chow looked happy when the boys praised his cooking in glowing terms.

“Guess I kin take a joke long as I’m cookin’ fer folks who ‘predate good grub!” he beamed.

While Tom took the construction drawings to a far part of the building where Arv’s office was located, Bud helped Chow clear away the dishes, then sponge off the spattered soup from the walls. The old Texan hung around for a moment, chatting idly, but finally went off, wheeling his cart.

Bud carried the repelatron back to the lab and set it down. He began to amuse himself by making a costume jewelry pin for Sandy out of a piece of copper.

Gradually a strange feeling crept over him. His throat seemed dry and painful. Dropping his work, Bud slumped down on a stool. The whole room was swimming before his eyes.

“Tom!” he called anxiously. His voice came out in a hoarse croak.

There was no answer, and Bud’s nerves grew taut as he fought down a surge of fear. He tried to get up from the stool but he staggered and his legs gave way. What was happening to him?

“Help!” the young pilot cried out in panic.

CHAPTER XIII

NIFFMAN'S STORY

TOM was just coming down the hall on his way back to the laboratory when he heard Bud's call for help. Startled, he broke into a run.

"Bud! What's wrong?" he cried, bursting into the laboratory.

His friend was sagged against the worktable, his head drooping. Tom threw an arm around Bud's shoulders and raised him so he could see his face. Both of Bud's eyelids were fluttering weakly. His skin was flushed, hot, and dry.

"Bud, talk to me! For Pete's sake, tell me what happened!" Tom pleaded.

"I ... I ... don't know . . ." The words trailed off. Bud could hardly move his jaw and his mouth hung open. Tom noticed with alarm that his pal's tongue was dark and swollen.

"Good night, what's wrong with him?" the young inventor wondered desperately.

Plucking a paper cup from the wall container,

Tom tried to fill it at the lab faucet. To his amazement, nothing came out!

A sudden thought struck Tom. The repelatron! Maybe it was turned on, repelling all water from the room as well as from Bud!

Dashing across the laboratory, he checked the repelatron which Bud had brought back from the dining room and laid on a workbench. The device was switched on to low power!

"Poor Bud's dehydrated!" Tom exclaimed aloud.

He turned off the switch, then hurried back to the sink and tried the faucet again. This time, after a few coughs and gurgles, water came out.

Tom filled the large paper cup and held it to Bud's lips. He swallowed it down in greedy gulps and mumbled for more. After complying, Tom eased him back gently against the worktable.

"We'll soon have you fixed up, Bud!" he tried to reassure his friend. "I'll get Doc Simpson."

He phoned the infirmary, spoke a few moments with the physician, then called Chow in the plant kitchen. "Hop to it, Chow, and get some salt over here! Lots of it!"

"Sure, boss. Is somethin' wrong?"

"Bud's ill. Please make it snappy!"

By the time Chow arrived, lugging several bags of salt, Tom had filled a huge experimental vat with

warm water and was stripping off Bud's clothes.

"Great snakes! What's happened to him?" the cook gulped in a frightened voice.

"The repelatron was on. Something went wrong with its detector. It was sending out a very general radiation. Too much moisture was taken out of Bud's tissues," Tom explained. "Pour the salt into the water and we'll let him soak for a while."

Hands trembling with nervousness, Chow slit open the salt bags with his jackknife and dumped the contents into the tub. Then he helped Tom ease the scarcely conscious victim into the water up to his chin.

As they held him there, Doc Simpson arrived, checked Bud's temperature, pulse, and respiration.

"You reckon he'll pull through?" quavered Chow.

"Sure," Doc replied. "He just needs a chance to replace the moisture he's lost."

Bud was also given water to drink and the bottle of smelling salts from the first-aid cabinet was waved under his nose. Half an hour later Bud felt better and insisted upon getting out of the bath.

"Whew! What a dopey trick I pulled!" Bud said. "I must have clocked the switch on accidentally when I set the thing down."

While Bud was pulling on his clothes, Doc insisted that he go to the infirmary for rest and a further checkup.

"Will you come along, Tom?" Doc requested. "Reuben Niffman's mind is clear and he's ready to talk."

"Good!" said Tom.

After Bud had been put to bed, Tom and Doc went to Niffman's room. They found the mechanic sitting up in bed. He looked rested, and his eyes had lost their weird, glassy stare.

"I sure am sorry for what happened," he said to Tom, reddening. "I'll do everything I can to make up for it."

"I'm glad you're better, Rube," the young scientist told him kindly. "Was someone else responsible for your condition?"

"Yes. A doctor named Calvin Klevalog."

Niffman explained that Dr. Klevalog had introduced himself in a local restaurant one evening. During their conversation Niffman had told the doctor of a sprained muscle that was bothering him. The physician had offered to give him free treatments and pills. Instead, he had apparently used the opportunity during his visits to Niffman's apartment to establish hypnotic control over the mechanic.

"I didn't realize all this until just now," Rube added, "for over a period of time I became convinced that everything Klevalog said was true. He told me that you had invented a water-repelling machine that would wipe out humanity, and kept repeating that I must destroy it and steal the plans. Finally my will power and reasoning ability became so weakened that I said I would."

“But after I smashed your machine and knocked you out that night, I felt dizzy and was afraid to hang around and look for the blueprints. I rushed back to the hangar and took some more pills. Then I went back to work.”

“Have you any idea what this Klevalog’s plans are?” Tom asked him. “Or how he found out about my water-repelling machine?”

“No.”

The young inventor was sure that the hypnotist’s concern for his fellow men was merely a pretext. But what was back of it?

“Doc,” he asked, “have you ever heard of Klevalog?”

Doc nodded. “He acquired a rather shady reputation in another city from misusing hypnotism, so the state medical society had him barred from practice. But I had no idea he was carrying on the same thing here in Shopton.”

“Is Klevalog listed in the telephone directory?” Tom asked.

“No, I’ve looked,” replied the plant physician. “While Niffman was delirious, I heard him mention Klevalog, so out of curiosity I phoned the medical society. They had no information on his whereabouts.”

Niffman was able to give a good description of his tormentor. “He’s a heavy-set guy, about five-ten, with a reddish mustache,” the mechanic reported. “Eyes are sort of yellow green, and they really bore into you when he uses that hypnosis business!”

“I’ll pass the description along to Harlan Ames,” Tom said. “No telling what Klevalog may try next.”

Suddenly Niffman snapped his fingers. “Wait a minute! What day is this?”

When Tom told him, he went on, “I’ve just remembered something. I’m supposed to hear from Dr. Klevalog tomorrow evening. He phones me every Thursday. Since he missed me last week, I’m sure that he’ll call tomorrow to learn how I made out about getting the plans.”

“What time?”

“I don’t know exactly,” Rube replied. “He said he’d call me at home sometime before I left for work on the night shift.”

“Good! Maybe we can set a trap!” Tom said.

It was arranged that Niffman would remain in the hospital overnight, and a plan for capturing Klevalog devised with Harlan Ames before he was released.

Early the next morning Tom set to work on the problem of providing his undersea airdome with an atmosphere. A group of engineers met in his office to talk over the matter.

“Seems to me the simplest way would be to bring in tank oxygen,” said Art Wiltessa. “Then we could remove the carbon-dioxide waste by the usual soda-lime method and recirculate the same air over and

over again.”

Jack Grady, who had worked on the air-conditioning setup for Tom’s space station, offered another suggestion. “Water is made up of hydrogen and oxygen,” he pointed out. “So how about producing the oxygen we need right from the sea water by electrolysis?”

Tom nodded thoughtfully. “That’s a clever idea, Jack, but it would take an awful lot of power and waste the hydrogen, too.”

“Hmm. Guess you’re right, skipper.”

Tom frowned and ran his fingers through his hair. “I think Art’s idea of using tank oxygen would be good for small domes in undersea exploring. But for our big permanent dome, maybe we could imitate the fishes.”

“How do you mean?” Art asked.

“To breathe, they absorb the oxygen from air dissolved in the water, and give off their waste carbon dioxide in exchange.”

“You mean you’re going to fit everyone on the expedition with a pair of fish gills?”

Tom smiled. “No. I think we could do it with a special air-conditioning machine.”

Going over to a blackboard, Tom sketched out his idea. “We’ll pump in sea water and extract its dissolved oxygen by osmosis through a membrane-like this. Then we dry the oxygen in a dehumidifier and pump it into the dome through a heating and decompression unit. The stale air is then drawn out by a compressor, and the waste carbon dioxide is given off to the same sea water in exchange for the oxygen we removed. Of course there would be constant circulation of both sea water and air.”

The engineers were enthusiastic. “Tom, I think you have the answer right there!” Jack declared. “What’ll you call this latest invention of yours?”

Tom smiled. “An osmotic air conditioner describes it, I guess. But there’s one danger to such a setup,” he added.

“What’s that?”

“If the surrounding sea water should become polluted, it might have a serious effect on living conditions inside the dome.”

“A guard system would prevent that,” Art suggested.

Tom nodded thoughtfully. He said nothing about a grim possibility that had just occurred to him. What if the pollution were caused at long range by a clever enemy?

CHAPTER XIV

A BAITED TRAP

AS THE meeting among Tom and his engineers broke up, Art Wiltessa came over to speak to the young inventor.

“The plastic dome’s almost finished, skipper,” he reported. “Like to see it?”

“Sure would, Art. Let’s go right now.”

Outside the Enterprises main building, they hopped on motor scooters and rode across the grounds to a sprawling workshop. Blue-white flashes of welding arcs glimmered through its long stretch of glass windows, and the noisy chatter of riveting hammers and humming lathes came drifting out.

Tom and Art drove their motor scooters inside onto a conveyor belt. It whisked them rapidly to a room at the far end, where they hopped off, leaving their scooters to be parked automatically.

“Here she is, skipper!” Art announced proudly as they approached the dome.

The experimental dome was constructed of shimmering, translucent Tomasite plastic. Hemispherical in shape, the dome was a hundred and fifty feet in diameter. Four hoisting rings at the top provided the attachments for lowering it by cable to the sea bottom.

“Looks swell, Art!” Tom commented. “Let’s take a peek inside.”

A zipper flap had been opened and thrown back to provide entrance to the dome. The two young engineers stepped inside, where several workmen with rivet guns were putting the finishing touches on the framework.

The dome was braced by a spider web of slender magnesium rods. Lightweight floor struts provided a mounting for the repelatron which would be installed later, just before the dome submerged.

“Art,” said Tom, scanning the details with a critical eye, “I’d say you’ve done an excellent job!”

“The dome will be portable, of course,” Wiltessa explained. “And those joints you see will enable the structure to be folded up.”

“Nice work!”

“There’s only one thing that bothers me,” said Wiltessa. “Too many ribs to make transporting the dome easy.”

“Yes, you’re right,” Tom agreed. “Since the air pressure inside the dome will hold it against the water and there’ll be no pressure on it from the outside, we ought to get along with fewer supports.”

Art scratched his head, with a slight look of chagrin. “You’re right, Tom. Why didn’t / think of that!”

“No one person can think of everything, Art, but this job comes mighty close to being perfect! You did it in record time, too.” Tom gave the engineer a friendly slap on the back. “How soon will she be ready?”

“Tomorrow noon at the latest. I’ll take out all unnecessary supports.”

“Fine! We’ll give it an underwater test as soon as possible,” Tom decided. “If no bugs show up, we’ll build the giant dome of the same design for the helium city.”

Happy at the progress of work so far, Tom hurried over to the Enterprises security office. He had already relayed Niffman’s story to Harlan Ames over the telephone, and now he was eager to arrange the details of their plan for trapping Dr. Klevalog.

“I’ve given his description to the police,” Ames reported. “They have a dragnet out for him, but that bird’s probably too wily to let himself be picked up by the cops. It’ll take some clever planning to catch him off guard.”

“Suppose we give Niffman some phony blueprints and formulas for the repelatron,” Tom suggested. “Then when Klevalog phones this evening, Rube can say he has the plans. Klevalog probably will want to see them right away. When he shows up, we’ll nab him!”

Ames nodded approvingly. “Swell idea! But we’d better arrange a phone call check with Rube and have him use some kind of a code in case anything goes wrong.”

Tom agreed that this was a wise precaution, so Ames jotted down four signals. Whichever one Niffman used in answering the phone would indicate what was going on at his apartment.

“Good. That should cover everything,” said Tom, after reading the signals.

A short time later Tom and Ames drove to the infirmary, where Bud, now fully recovered, was being discharged. Doc Simpson and Bud accompanied them to Niffman’s room.

“Hi!” the mechanic greeted them eagerly. “Got a plan figured out yet?”

“I think so,” Tom replied. He dumped a sheaf of blueprints and papers on the bed. “Here’s the bait we’ll use for trapping Klevalog.”

After explaining the plan, he asked Niffman to repeat it to him, to make sure he understood every step.

“When Klevalog calls me this evening, I’ll tell him I have the plans for your repelatron,” said the mechanic. “I’ll ask him to come to my apartment and pick them up. If he says okay, I’ll phone you here at the plant immediately so you can nail him when he arrives.”

“Check!” said Tom.

“Now then,” said Ames. “It may be that he won’t give us time to set your trap. In other words, he may come straight to your place without phoning first.”

“What do I do in that case?” asked Niffman, looking a bit worried.

“If we haven’t heard from you by nine o’clock,” the security chief explained, “we’ll call your apartment to find out what’s happening.”

“But how can I talk if Klevalog’s right there?” the mechanic objected.

“We’ve thought of that,” Ames said. “You’ll have to slip us the information by means of a code message. Here are four groups of words that I want you to memorize. Use one of them in your reply.”

He handed Niffman a slip of paper containing the four code signals:

Answer number one would contain the words “feel all right” and would mean “Klevalog came here to my apartment without phoning.” Answer number two, “nice day” would mean “He didn’t come, but a friend of his is here.” Number three, “okay with me” would mean “Klevalog isn’t coming, but I’m afraid someone is watching my apartment.” Answer number four would be “before going off” and would mean “I can’t talk and you’d better come here quick.”

“Okay. I’ve got ‘em,” Niffman said, after studying the list. “I may have to shift the words around a little in case Klevalog seems suspicious.”

“That’s right. If we don’t catch on, we’ll ask you to repeat it.”

When the mechanic had changed into his street clothes and was ready to leave, Tom shook hands.

“Good luck, Rube! We’ll be waiting to hear from you!”

“Thanks, skipper,” Niffman replied fervently. “And I’m glad of the chance to help you. Let’s hope there aren’t any slip-ups!”

That evening, Tom and Bud ate dinner at the Swift home and then drove back to the plant before seven o’clock. Doc Simpson and Harlan Ames were waiting at the security office.

“It may be a while yet before we hear from him,” said Harlan Ames.

An hour dragged by, then another, with frequent glances at the clock. As the deadline approached, Ames grew fidgety.

“Three minutes to go,” he muttered, checking his wrist watch. “Somehow I have a hunch we’re in for trouble!”

At nine o’clock Doc Simpson picked up the phone and dialed Niffman’s number. Instead of Niffman, a stranger answered. The voice sounded muffled, as though the speaker was trying to disguise it.

Instantly Doc was alarmed but tried to sound casual as he said, “I’d like to speak to Reuben Niffman, please.”

“Sorry, but he can’t come to the phone right now,” the stranger replied. “May I take a message?”

Doc Simpson frowned. What now? He decided there was only one thing to do.

“Yes. Ask Mr. Niffman this question, please.

I’m Dr. Simpson at Swift Enterprises. I’m calling about a mechanic named Tonas who works at Hangar E. Understand he’s a buddy of Niffman’s. He collapsed this afternoon with a high fever and I wonder if Mr. Niffman could tell me whether he showed any symptoms of illness last night?”

“Er-just a moment. I’ll ask him.”

There was a pause. Then the stranger’s voice came back on the line. “Niffman says Tonas complained of a stomach-ache just before going off shift.”

“Hmm, thanks very much.” Doc hung up the phone and turned to his companions. “I got answer number four. Niffman used the words ‘before going off.’ That means he can’t talk and we’re to come there on the double quick.”

“Let’s go!” said Ames, jumping up from his chair.

Bud’s convertible was waiting outside. The three sped off through the night to Niffman’s address. It was a plain-looking brick apartment house.

“You boys stay here and watch the door while Doc and I go inside,” Ames ordered.

As they hurried off, Tom and Bud remained parked in the shadows, a few yards from the entrance, which was lighted. Scarcely a moment later the door burst open and a man with a reddish mustache came running out.

“It’s Klevalog!” Tom cried out.

CHAPTER XV

DOMESTIC TEST

BUD was about to leap out of the car and give chase, but Tom stopped him. “Hold it, pal! Let’s trail Klevalog and see where he goes. He might lead us to somebody else who’s in this scheme!”

“Smart thinking, chum!”

Klevalog had darted across the street and was climbing into a low-slung green sedan of foreign make. Switching on his lights, he swung out from the curb and took off with a roar.

Bud waited a moment, then whirled his convertible in a fast U-turn and sped after him. Up ahead, at the end of the block, they could see Klevalog’s taillights turning left into a one-way street.

Bud reached the corner, braked for the stop sign, then turned left in hot pursuit. There was enough traffic to give them cover, while still keeping their quarry in plain view. Fortunately, the street lights and neon business signs made the green foreign car easily visible.

Half a mile farther on, Klevalog turned right, this time onto a darkened side street. Bud rounded the corner a few seconds later.

“Tough break!” Tom muttered. “On a street like this, he’ll spot us following him!”

“He just did, I think!” Bud replied tensely. “Look at him go!”

The green sedan ahead put on a fresh burst of speed. As Bud followed, it roared along for several blocks, then turned again and began weaving in and out through a maze of connecting streets.

“Trying to shake us, all right!” Tom said.

They were rapidly approaching the outskirts of Shopton. Suddenly Klevalog’s car shot through a yellow light. The boys had to brake to a lurching stop as the signal changed to red.

“O-oh, what luck!” Bud seethed, drumming nervously on the wheel.

Far ahead, they could see Klevalog’s taillights making another turn. By the time the boys reached the same spot, the turn-off street loomed dark and empty.

“We’ve lost him!” Bud groaned.

“Maybe not,” Tom snapped. “I have a hunch he’s heading for the lake road. Let’s try it!”

Taking a short cut, they sped along a curving thoroughfare which made a juncture with the Lake Carlopa road just north of the city limits. Just as they reached the highway, a low-slung green sedan went streaking by.

“This time he won’t shake us!” Bud vowed, as he sent the convertible roaring off in pursuit.

At this time of night there were few motorists on the highway. Except for the moments Klevalog was passing a trailer truck or disappearing around a curve, the boys were able to keep his taillights in view.

“He’s turning again!” Bud exclaimed suddenly.

Moments later they followed their quarry up a winding dirt road. Soon it became little more than a rutted track. Trees and shrubbery on both sides helped to deepen the gloom as their headlights carved a yellow path through the darkness.

“There’s his car!” Tom whispered.

It was pulled over into the brush with all lights off. Bud parked and the boys sprang out to inspect it.

“Empty!” Tom cried.

“He must have gone that way!” Bud exclaimed, pointing to a narrow path. Overgrown with weeds, it was barely visible in the darkness.

Arming themselves with a flashlight apiece, the two boys hurried to explore the path. It led away from the road for about a hundred yards into a tiny clearing fringed with willows and old fruit trees. Beyond stood a ramshackle, weather-beaten farmhouse, obviously long deserted.

“So that’s his hide-out!” Tom murmured as they flicked off their flashlights.

“What’ll we do, skipper? Try to rush the place?”

“Too risky. He may have a gun. I’ll contact the police back in Shopton.” Pulling his pencil radio from his pocket, Tom flicked the switch button. “Tom Swift to Shopton Police! . . . Tom Swift calling Shopton Police!”

In a few moments the radio operator at police headquarters responded. Tom asked to speak to the chief, who promised to send help immediately.

“By the time they get here, Klevalog will be gone!” Bud fumed. “It’s a cinch he’s not going to wait around to be captured!”

“What else can we do?”

“Listen! I have an idea!” Hastily Bud explained his scheme, and the young inventor agreed that it was worth a try.

Taking a flashlight in each hand, Tom held his arms outstretched and switched on both flashlights. Then he began circling the edge of the clearing. The boys hoped that in the darkness this would give the impression that they both were moving off to reconnoiter the house from the rear. Bud, in the meantime, had remained where he was.

As soon as Tom played the beams around at the back of the house, the front door burst open and a man dashed out. Bud immediately tensed for action as the running figure dashed across the clearing.

When the fugitive reached the fringe of trees, Bud launched himself through the air in a flying tackle. With a grunt, the man went down!

“Got him!” yelled Bud. “Here’s Dr. Klevalog!”

Tom rushed to his pal’s assistance. The prisoner fought back with vicious kicks and blows. But in a few minutes the two boys had him subdued. While Tom held the fugitive, Bud tied the man’s hands tightly behind his back with his belt.

“What’s the meaning of this outrage?” Klevalog stormed. “You have no right to lay hands on me! I’ve done nothing wrong!”

“Oh, no?” Tom retorted dryly. “Then how come you were making such a fast getaway from Reuben Niffman’s apartment?”

“I don’t even know anyone by that name!” Klevalog snapped.

“And I suppose you were just playing tag with us back in Shopton?”

The prisoner scowled. “I saw you trailing me, so I got frightened. Who wouldn’t? I thought you might be gangsters or holdup men!”

“So instead of heading for a police station, you take the darkest side streets and wind up out here in the woods!” Tom eyed him scornfully.

He reached into Klevalog’s inside coat pocket and pulled out a handful of papers, among them the folded blueprints and formulas for the repelatron. Klevalog turned pale and refused to say another word.

Tom leafed through the rest of his papers and suddenly stopped with a gasp.

“Find something?” Bud inquired.

“Yes-a driver’s license for Mr. Firth Webster!”

Bud was flabbergasted. “You mean the man who got Sandy to talk on the phone while his pal sabotaged her plane?”

As Tom nodded, their prisoner gave a convulsive start but said nothing. Bud doubled up his fists and glared at the man as if he would like to punish him right then and there for his part in the near tragedy. Instead, he and Tom escorted the man to the cars. A few minutes later a sedan full of state troopers arrived.

“Caught your man, eh?” said Captain Rock, an old friend of the Swifts. “Who is he?”

“Calls himself Dr. Klevalog,” Tom replied. “But I think he’s also Firth Webster.” Tom showed the driver’s license. “I suspect he’s mixed up in something big. In the meantime, you can hold him for practicing medicine without a license, conspiracy to commit assault, theft of blueprints of mine, and being an accomplice in trying to kill my sister!”

Rock turned a cold eye on the prisoner and started to question him. When Klevalog remained tight-lipped, he thumbed him toward the car. “Okay, haul him in, boys!”

Half an hour later, Tom and Bud were back at the Enterprises security office. Here they listened as Ames and Doc Simpson told what had happened after they entered the Niffman apartment.

“Klevalog must have ducked out of sight just before we came in,” said Ames. “We found Niff-man tied up in his apartment. He says he heard Klevalog tell his guard out in the hall to run- someone named White.”

“White!” Tom exclaimed. “The plane saboteur!”

“Too bad he got away,” said Ames.

“Well, boys, our evening’s work paid off,” said Ames. “Now maybe your inventions are safe.”

“I doubt it with that man White still loose,” Tom replied.

Next morning, while Tom was busy in his office, one of the older Swift engineers, Gib Brownell, walked in.

“I’d like to ask a favor, skipper,” he said. “It may be a good bit of trouble but there’s a lot at stake-a two-million-dollar industrial plant, in fact.”

“Sounds interesting,” said Tom. “Sit down and tell me about it.”

Brownell pulled up a chair. “Do you recall reading about the sinking of a ship called the Funs ton some miles off the Jersey coast?”

“Sure do. It’s lucky that most of the passengers were saved.”

“Well, my uncle was on board,” Brownell continued, “but he died of injuries before they could get him to a hospital.”

Brownell went on to explain that his uncle’s dispatch box had been left in the safe, and had gone down with the ship. In it were a revised will, together with various letters and other papers relating to the industrial plant.

“Unless that dispatch box is recovered,” Brownell concluded, “the plant will pass into new hands. Unfortunately, the Funston is lying too deep for regular salvage operations. But if you could go down in a Fat Man suit, Tom, the company would pay you a big fee.”

Tom smiled thoughtfully, drumming his fingers on the desk. “Forget the fee, Gib. It happens I’m just about to test our new undersea airdome. This will give me an opportunity to kill two birds with one stone.”

“You’ll do it?” said Brownell eagerly.

“Sure, be glad to. Have the company wire me all the details about the ship’s depth and location, and also how to open the safe.”

“Tom, I’ll never forget this!”

After Brownell left, Tom went to his private laboratory. He was eager to make some new refinements on his repelatron before the test took place. He worked steadily until noon, when Chow interrupted, wheeling in a lunch tray of steaming chili con carne and egg sandwiches.

“You fussin’ with that propellertron o’ yours again?” asked the cook, as Tom tackled the food with a hearty appetite. “Thought you had that gadget all worked out perfect.”

“It works all right, but not perfectly by a long shot,” said Tom between mouthfuls. “I’m adding an automatic molecule detector.”

“A molly-cule detector?” Chow scowled intently. “Molly-cules are them lil bitty specks that everything is made out of, ain’t they?”

“You might put it that way,” Tom agreed. “Trouble is, when the machine’s working, it stirs up the water and causes changes in density. And when water is under different pressures or at different temperatures, its natural radiation varies slightly. On top of that, sea water contains all kinds of dissolved mineral salts, which also change the radiation.”

To make the repelatron repel all the molecules under these conditions, Tom explained that he was adding a tube through which samples of the sea water could be drawn into the machine continually. The detector would then adjust the machine’s action automatically, whenever it found any changes in the make-up of the sea water.

“Brand my coyote stew,” said Chow, “that gadget’s goin’ to do everything but talk, afore you’re done with it, boss!”

“Might be a good idea if it did.” Tom chuckled. “Then it could warn us if anything goes wrong!”

The test was set for the following evening. Tom preferred to carry out operations after dark, to avoid any mention of his repelatron getting into the newspapers. It might arouse the interest of enemy agents eager to get the invention!

The collapsible plastic dome and the repelatron were loaded aboard the Sky Queen. Tom, Bud, and a crew including Gib Brownell took off. Half an hour later the huge plane was hovering over the exact spot of the Funston wreck. The plane's cargo hatch opened. The airdome inflated itself and with Tom and Bud inside was lowered on steel cables.

The repelatron had already been mounted on a platform in the dome, with its two ends protruding outside. There were four powerful spotlights. Just before the boys reached the surface of the waves, Tom opened the switch to full power.

"Wow! Look at that!" Bud exclaimed. "It's repelling the water for at least fifty feet around this dome!"

Tom grinned, highly pleased. He reversed the switch slowly and they descended. Fortunately, the Funston had settled upright in the mud, so its deck provided a level landing stage.

"Okay. You stay here, chum, and tend the controls," Tom told his friend. "I'll go get the dispatch box."

As he unzipped the exit flap, Tom felt a glow of satisfaction over the invention. The repelatron was working superbly, and the large, transparent plastic dome was holding up to perfection.

"It's great, Tom!" said Bud enthusiastically.

Tom stepped out onto the deck. It was a strange, unearthly feeling to be walking on board a sunken hulk at the bottom of the ocean, with no water even touching its hull or superstructure. The white glare of spotlights lit up the weird scene.

Tom made his way to the captain's cabin without incident and opened the safe, using the combination which the company had provided. Inside, along with a number of other valuables, was the dispatch box, plainly stenciled.

Tom took it, locked the safe, and emerged onto the ship's deck. He gave a gasp of horror. The air bubble in which he stood was being pushed out of shape by the water. It looked as if the repelatron was working only on one side. The bubble was being flattened out.

Soon there would be no air space! The dome and its passengers would be crushed!

CHAPTER XVI

A PERILOUS PICNIC

TOM raced toward the platform. Bud was wide-eyed with panic.

“What’s happening, skipper?” he cried. “Is the repelatron losing power?”

“Don’t know yet, but we’ll soon find out. Here, take this dispatch box!”

Neither boy dared think of the awful consequences if the ocean should close in around them. Tom grabbed the switch lever and opened it several notches. The air bubble expanded a little and the dome began rising, but the water pressure was still flattening the bubble.

Suddenly the answer flashed through Tom’s mind. “Bud, I have it!” he exclaimed, as they continued rising. “Must be some kind of pollution in the water. The automatic molecule detector should be adjusting our radiation to compensate for it. But it’s not taking effect!”

“My brain’s fogged, skipper. Tell me what all that means in plain English!” Bud begged nervously.

“It means we’d better get topside fast-or as fast as we dare, anyhow!”

“Then give ‘er the gun and let’s put on more speed!” the pilot urged.

Tom shook his head grimly. “Can’t. Not unless we want another attack of the bends. Flicking on the radio, he called the plane. “We’re coming up, Hank. Start reeling in the slack!”

By the time they had risen two hundred feet, the flattening of the air space had subsided. “Relax, Bud,” Tom said, breaking into a smile of relief. “We’re out of the pollution area.”

Bud blinked hard. “A sinking boat is bad, but I’d take that to a waterlogged bubble!”

Soon the two-man salvage team emerged from the dome. It deflated and was hauled into the Sky Queen. Then the boys went aboard.

“You did it!” cried Gib Brownell, seeing the dispatch box.

The engineer was jubilant at the success of the mission. “Tom, I don’t know how to thank you! You’ll be getting a nice fat check from the company board whether you like it or not!”

“Never mind that.” Tom grinned. “Just tell them to say nothing about how we reached the ship. Might give our enemies some more ideas about stealing the repelatron!”

“I’ll warn them to keep quiet,” Gib promised.

Despite this, reporters picked up the story. They had already been covering the dramatic fight for control of the industrial plant. Two days later, at a stockholders’ meeting, the victory of the Brownell group was announced. At once the newsmen started digging out the facts.

The following morning, Tom was dismayed as he read the Shopton Bulletin while eating breakfast with his mother and sister. Blaring headlines proclaimed:

Daring deep-sea salvage crew reaches Funston

Did Divers Use Secret Invention by Tom Swift?

The story said that a Swift engineer, named Gibson Brownell, was known to be involved in the salvage job, since the purpose was to recover documents belonging to his uncle. This, in turn, led to speculation that a new “mystery device” invented by Tom Swift had been used, since the Funston was lying too deep for ordinary diving methods.

“Good night!” Tom groaned.

“Does it really matter so much?” Sandy asked.

Tom shrugged. “Maybe not, if they don’t run any follow-ups on the story.”

The telephone rang constantly at the plant that day. Wire services and newspaper reporters clamored for more information about Tom’s new deep-sea invention. They were given none.

Tom shut himself in his private laboratory, with only Bud to assist him. He struggled doggedly to correct the flaws in his automatic molecule detector. The boys worked until almost midnight, then slept on cots at the lab. They started again at eight o’clock the next morning.

Shortly before noon someone knocked lightly on the door. Bud opened it. “Sandy! Phyl!”

Grinning, the girls walked in, wearing gay sun-back dresses. Sandy announced that her car was loaded with a picnic hamper and a portable record player.

“We knew it was hopeless waiting for you two to take us out on a date, so we decided to come and get you!” Phyl added.

“Looks as if they have us trapped, Tom.”

The youthful inventor grinned at their two pretty visitors. “What’s on the schedule?”

“A cruise to Cave Island, followed by swimming and a super-duper picnic lunch,” said Sandy.

Bud, greatly tempted, looked at Tom. “The detector’s practically finished, skipper,” he said persuasively.

“Okay. Since they’re twisting our arms, we’ll go.”

The boys changed their clothes, then the young people piled into Sandy’s blue convertible. With the top down, they drove to the Shopton Yacht Club on Lake Carlopa. Here the Swifts’ sailboat, a sleek little craft, was moored. It had been christened Mary Nestor, Mrs. Swift’s maiden name.

In a few minutes Tom had cast off and they were skimming out across the green expanse of water. Cave Island lay in the center of the lake, about two miles distant.

“Isn’t it a beautiful day!” Phyl exulted. Her long, dark hair was flying in the breeze, and she was trailing her hand in the cool waves as they glided along.

“It’s perfect,” Tom agreed. “We should do this more often!”

After anchoring in the shallows, they waded ashore onto the white, sandy beach. The girls picked a pleasant picnic spot, shaded by overhanging trees. Then they hurried off to a cave to change into swim suits.

By the time they were ready, the boys had put on swimming trunks and were cavorting like porpoises in the water.

“Come on, you scaredy cats!” yelled Bud, as the girls tested the water delicately.

“Okay,” said Sandy, “but don’t you try any-“

Her words ended in a shriek as Tom sent a sheet of water flying toward them, splashing both girls from head to foot!

For over an hour they swam, laughed, and sunned themselves. Then when Tom and Bud announced that they had worked up ravenous appetites, they decided it was time to open the picnic baskets.

As the two couples strolled along the beach, they heard the sound of a plane and glanced up.

“Hey, what’s that hotrock up to?” Bud cried out.

The plane, a small gray one, was heading straight for the island. Tom watched the craft through narrowed eyes. His scalp prickled with a sudden sense of impending danger.

As it neared the island, the plane suddenly swooped down, roaring in so low that the picnickers instinctively dived to the sand. The plane circled sharply and, with an ear-splitting whine, buzzed the beach again.

“If I ever get my hands on that rockhead-” Bud stormed as he leaped to his feet.

“Look out! He’s coming back!” cried Phyl in terror.

This time, as the plane whipped past, it sprayed the beach with a heavy vapor. In a twinkling, the stifling gas began to diffuse over the island.

“Quick! Into the cave!” Tom yelled. “Grab your clothes, Bud!”

Hands over their faces, the four picnickers raced across the beach. When they reached the cave, Tom and Bud hastily barricaded the entrance with rocks and stuffed up the chinks with their shirts, trousers, and sweaters.

“Tom! Something’s happened to Phyl!” Sandy gasped in a panic-stricken voice.

Her brother’s face went white as he saw that the dark-haired girl had slumped unconscious on the cave floor, evidently overcome by the gas.

“Oh, what’ll we do?” cried Sandy fearfully.

Tom racked his brain. Suddenly he recalled that one long, sweeping branch of a giant cedar tree reached inside the cave.

“Chafe her wrists, Sandy!” he ordered.

Groping in the gloom, Tom stripped the needles from the branch, crushed them between his strong fingers, and held them under Phyl’s nostrils. Soon the pungent, aromatic scent revived her.

“Wh-what happened?” she murmured.

“That gas sprayed from the plane made you black out,” Tom replied. “But don’t worry, Phyl. You’ll be okay and we’re safe in here.”

Fortunately, a strong breeze soon dispelled the vapor and in twenty minutes they were able to venture out. There was no sign of the strange plane. Sandy gazed dejectedly at their picnic lunch, which was spoiled.

“Let’s go home and eat,” she suggested with a sigh, and the others agreed.

As soon as they arrived in Shopton, Tom phoned Harlan Ames at the plant and reported the incident.

“Any idea where the plane came from?” asked the security chief.

“None at all,” Tom replied. “It had no marks of identification, and we couldn’t see the pilot.”

“Okay, I’ll notify the CAA. Maybe the Air Patrol can spot it.”

No word came, but the next morning Tom received a long-distance call from Admiral Hopkins. The officer reported that a Navy sub had found another cache of warheads and substituted empty chests in their place.

“We’d like you to be on hand when the chests are opened, Tom,” the admiral went on. “Could you fly down to Norfolk this afternoon?”

“Yes, I could, sir. I’ll leave right after lunch.”

Taking off in a company jet, Tom landed at Norfolk and was driven to an underground safety laboratory. Here he found Admiral Hopkins waiting with a group of officers and civilian experts.

“You’re in charge, Tom,” said the admiral. “You’ve already had experience with these confounded things.”

“Right, sir.”

The others waited anxiously as Tom pried off the lid of the first chest. It proved to contain warheads like those they had seen before. But the second chest held a strange-looking cylinder punched with holes, as well as a warning note printed by hand in several languages. In English it read:

ANY PERSON WHO OPENS THIS WILL NOT LIVE LONG!

As the group looked at one another, puzzled and worried, they heard a faint hissing sound from inside the chest.

CHAPTER XVII

THE STAR MARK

THE HISSING sound was obviously coming from the perforated cylinder.

“It must be a bomb!” cried one of the civilian experts.

A fearful tension clutched the group and everyone turned pale with alarm. If the cylinder contained a nuclear device, it would not only disintegrate the laboratory but probably wipe out part of the town!

How many seconds remained before it might go off?

Tom’s thoughts were racing. “Bring a vacuum pump here and hook it up fast!” he yelled. As two Navy men rushed to comply, Tom said, “I believe the bomb mechanism was started by exposure to air. Our one chance is to seal up the chest again and exhaust it before the chemical fuse finishes reacting!”

“Let’s hope you’re right!” said the admiral fervently. Turning to one of his aides, he barked, “Rawley, you and Jones start broaching some oil drums. We’ll fill up that vat over there and dump the chest in!”

Within half a minute the pump had been set up, the chest lid tightly sealed, and a valve fitting attached through which the air could be exhausted. The pump throbbed into action.

As soon as the gauge needle showed a high vacuum, the valve was snapped shut and the pump disconnected. Then the chest was lifted by a chain fall and plunged into the huge glass vat.

A deathly silence had settled over the laboratory. Everyone left and went aboveground. Twenty minutes later Tom said:

“I’m sure that the fuse’s reaction was stopped in time, or there would have been an explosion by now. The danger is over.”

There were audible sighs of relief and several of the men came to shake Tom’s hand.

“The Navy owes you a tremendous debt,” said Admiral Hopkins. Turning back to his aides again, he smiled. “Fly that chest out to sea and give it the deep six!”

Tom did not smile, however. “The men who are planting the chests have found out we’re tampering with their caches. This warning note practically proves it.”

“But we’ve substituted dummy chests. Surely that will mislead them.”

“It might, unless they have started identifying their own cases,” the young inventor pointed out. “Let’s see

if the ones we have here are marked.”

Everyone returned to the underground laboratory. Examining the first chest which Tom had opened, they found a barely discernible star pressed into the back of it. The other chests bore the same identification. There were no other clues to its maker.

“Hmm.” Admiral Hopkins frowned gravely. “We’d better send a sub back to mark those dummy cases we planted!”

The remaining chests contained no more surprises, and by 3:30 that afternoon Tom was on his way back to Shopton. As he landed on the Enterprises airstrip, a call came from the tower:

“Tom Swift wanted by Harlan Ames,” and a few seconds later the security chief came speeding across the field in a jeep.

“What’s up, Harlan?” asked Tom as he climbed out to greet him.

“I think the Air Patrol has located that mystery plane,” Ames reported. “I mean the one that attacked you on Cave Island. The FBI found it abandoned in a field up north of Hainesville. Want to go take a look at it?”

“Sure,” said Tom eagerly. “Let’s fly the heliplane.”

This craft was another of Tom’s inventions. It had rotors for take-off and hovering, but these folded into the fuselage during flight, when the ship was being operated as a conventional jet.

Ames had marked the location on a map, and Tom found the field without difficulty. An Air Patrol officer and two men in civilian clothes were standing beside the abandoned plane.

“Hi, Wes!” called Tom to one of the FBI agents. He was Wes Norris, who had worked with the Swifts in preparation for their expedition to the phantom satellite.

“Hello, Tom,” he said. “Is this the crate that buzzed you and sprayed the gas?”

“Certainly looks like it.” Tom noticed that the plane’s identification numbers had been painted over. “Have you traced the owner?” he asked.

The agent nodded. “It was reported stolen yesterday morning. And I have a strong hunch who’s responsible. A member of a subversive group we’ve been checking on. One of them is a pilot.”

“I see,” said Tom. “Where do they come from?”

Norris held up some charred remnants of colored cloth. “This is what’s left of a certain foreign flag. You can guess which country. We found this inside the plane.”

Tom gave a low whistle. “Wow! This bunch must be in cahoots with Klevalog and the others who are trying to steal my inventions, and if they’ve found out about the helium, they probably want it for themselves.”

“Yes,” said Ames. “And it may explain where the atomic warheads are coming from!”

“They’re a dangerous group, all right,” Morris agreed. “However, the Bureau’s pressing a search all over the country for them.”

“Fine, Wes! Let us know the minute anything develops.”

That evening Tom relaxed at home in front of the TV set with his mother and Sandy.

“I sure wish Dad would get back from The Citadel,” he said. Tom missed the wise, cool-headed advice which Mr. Swift could always be depended upon to provide at crucial stages of a new undertaking.

“Sandy and I do, too,” Mrs. Swift spoke up wistfully.

Tom said he thought another inspection trip to check the undersea gas beds would be a good idea before the expedition got underway to build the helium city.

Mrs. Swift looked at her son fondly. “You will be careful, won’t you, dear?”

“Promise,” he said, hugging her as he said good night.

In the morning he called Hank Sterling at the Fearing Island base. “Get the Sea Hound and one other seacoaster ready for a cruise, will you?”

“Will do, skipper. What’s the program?”

Tom outlined his plans, then hung up and put through another call, this time to Admiral Hopkins. He invited the chief to accompany him on the cruise the next day, along with a picked group of officers and civilian experts.

“Could you make it by ten o’clock tomorrow morning, sir?” Tom went on. “We’ll be taking off from our Fearing rocket base.”

“We’ll be there!” Admiral Hopkins promised.

When Chow Winkler wheeled Tola’s lunch tray into the laboratory at noon, the cook’s leathery face had a worried look.

“This true what I hear about you leavin’ on another ocean cruise, boss?”

“That’s right, Chow. Is anything wrong?”

“Well, blame it all, ain’t you goin’ to need a cook?” the old Texan asked in an aggrieved voice.

Actually Tom had made no such plans, figuring that box lunches would be the simplest answer to the commissary problem. However, he hastily replied, “Sure we are, Chow! You’re coming along, aren’t you?”

The chef’s face broke into a grin. “Brand my tops, you bet I am, skipper! An’ jest you wait. I’ll wrassle you up some seafood that’ll make the fishes sit up an’ take notice!” Humming “Blow the Man Down,” Chow waddled off happily to figure out his deep-sea menu.

The following day the Navy group landed on Fearing Island in a plane. At once Tom escorted them

aboard the seacopter. Tom would pilot the Sea Hound with Chow, Bob Anchor, and Dr. Clisby on board, along with Admiral Hopkins and a rocket expert, Dr. Albert Prentiss. The rest of the group would accompany Bud Barclay in the other ship.

After demonstrating the seacopter's jet flight features above the Atlantic, Tom submerged about two hundred miles out to sea. Bud followed close in his wake.

Admiral Hopkins marveled at the Sea Hound's performance. "It'll be a great day when the Navy puts some of these into commission, Tom!"

When the two seacopters reached the helium fields, Dr. Prentiss was amazed and excited at sight of the myriad of huge gas bubbles pouring up from the ocean bed.

"This source of helium should supply all our rocket needs for years to come!" he said.

"How soon can we start drilling, Tom?" put in Dr. Clisby.

"I see no reason why we shouldn't begin outfitting the expedition at once," Tom decided.

When Admiral Hopkins asked to be shown where the cache of warheads had been planted, Tom steered the Sea Hound in that direction. Suddenly a shout came from Bob Anchor at the sonarscope.

"I've picked up something, Tom!" he reported. "On the starboard quarter!"

Tom's heart pounded with a thrill of alarm. "Is it a sub?" he asked.

Bob peered at the scope tensely. Then he cried out, "From the terrific speed, it must be a missile! And it's heading our way!"

CHAPTER XVIII

A HAZARDOUS RESCUE

WITH NOT even a fraction of a second to lose, Tom gunned the jets of the seacopter and threw the wheel hard apart. The Sea Hound streaked out of danger.

A second later came a muffled bo-o-o-om on the sonarphone and the craft rocked. Tom had to grab the wheel to keep from being thrown to the deck.

"They've hit Bud's ship!" Bob Anchor yelled in a stricken voice.

Tom froze with dread. Had his best friend been killed and all the men with him?

Before he could shake off the feeling of horror, there was fresh cause for alarm.

“More missiles coming!” Bob cried out.

Gritting his teeth, Tom pulled himself together. His slim, sinewy hands flew over the bank of controls as he sent the Sea Hound racing for cover in the lee of the undersea mountain.

Tom switched off the seacopter’s searchlight, and the craft lay in darkness on the ocean floor. A rocky outcrop at the foot of the mountain provided partial protection from a direct hit.

Boom! . . . Boom! . . . Boom! The Sea Hound shuddered and vibrated repeatedly as the missiles exploded all around it.

Peering at the sonarscope, the young inventor saw a dim blob of light, which showed where the other seacopter was lying, several hundred yards away. Apparently it had settled straight to the bottom after being hit.

“Oh, if only those men are alive!” Tom thought.

Gradually the last vibrations died away, and the ocean became silent. “Guess they’ve ceased fire,” Bob Anchor muttered.

Chow had emerged from the galley. “If them sidewindin’ rats has harmed any o’ our pals,” he growled, “I hope they get bio wed sky-high by one o’ their own torpedoes!”

Tom waited a while to make sure the cease fire was not a trick to lure him into revealing the Sea Hound’s position. Finally, his heart pounding, he called over the sonarphone:

“Sea Hound to Swiftcopter. Can you read us, Bud?”

There was a brief, terrifying silence. Then a feeble reply came back, “Right here, skipper. You fellows all right?”

It was Bud’s voice! Tom felt like shouting for joy. “Sure we’re all right!” said Tom. “How about you?”

“Not so hot, pal. That missile nailed us amidships and smashed the rotor blades. On top of that, the escape hatch is jammed and water’s seeping in.”

“How long can you hold out?” Tom inquired.

Bud paused. “Maybe three or four hours, if the leak doesn’t get any worse.”

“All right, plug it up as best you can and stand by. I’ll get help pronto!”

Hurrying back to the controls, Tom surfaced the Sea Hound and beamed an SOS to Shopton, telling George Billing what had happened.

“Have Hank load a big repelatron and Dad’s giant magnet on the Sky Queen, and get here fast!” he told George. “Every second counts. And have Arv Hanson follow in another seacopter.”

“Right, Tom!”

Time was growing short for the trapped men when the huge silver-winged plane came streaking into

view of the Sea Hound. Only a few minutes before, Bud had radioed that the water in their cabin was now waist-high.

“They’re here!” Tom told him over the sonar-phone. “Hang on! We’re going to lower a repelatron.”

Feverish activity followed, as the repelatron was lowered on steel cables to the surface of the water. As Tom started to step onto the platform, Chow begged to go along.

Tom looked into the old cowpoke’s worried eyes. “Sure, Chow. I can use your help.”

Equipped with acetylene torch, chisels, and crowbars, the two began their descent. Soon they were plunging downward, enclosed in a giant air bubble.

“On target!” Tom signaled, as the repelatron settled squarely into position above the disabled seacopter, sending the water back from the craft for fifty feet.

Through the cabin window, Bud and the Navy men could be seen, waving and whooping in wild relief. Twenty minutes of work on the air-lock hatch brought the near victims rushing out to freedom. They clapped Tom and Chow on their backs in thanks.

Cheers from the Sea Hound and the Sky Queen greeted the men when they rose to the surface. After a brief rest Tom instructed Hank to lower the giant magnet. With this, he hoped to bring up the disabled seacopter.

In the meantime, Arv Hanson arrived and the young inventor ordered him to remain at the undersea mountain and patrol the area until the salvage operation was completed.

“But if you pick up any sign of the enemy, radio an alarm to us and run for home!” Tom warned.

“Don’t worry, Tom.” Arv chuckled. “We’re not hankering for a torpedo hit!”

Two hours later the Sky Queen started back to Fearing at a lumbering pace, with most of the Navy men aboard and the disabled seacopter grappled to her hull. Bud preferred to make the return trip in the Sea Hound with Tom.

Darkness had fallen when they landed on Fearing. Admiral Hopkins and his companions boarded a waiting Navy transport, and Tom and Bud flew back to Shopton.

“An exciting cruise.” Bud chuckled as the boys prepared for bed. “Another one like it, and we’ll all rate campaign ribbons!”

Two mornings later Tom had just arrived at the plant when Miss Trent asked him to talk to Harlan Ames by phone.

“Hello, Harlan. What’s up?” Tom asked.

“The FBI found Mrs. Paulus White,” Ames reported excitedly. “The wife of the man who tried to wreck Sandy’s plane.”

“How about her husband?”

“She doesn’t know where he is-said he kept all his business dealings secret. But she was able to give the FBI one lead on a man named Menarsky.”

Tom jotted down the name. “Ever heard of him?”

“I sure have,” said Ames. “He’s one of the big wheels in that subversive group Norris mentioned.”

Tom gave a whistle. “I guess that ties things up pretty tight! Keep me posted on all developments, Harlan.”

The morning was spent in a flurry of phone calls, rapid-fire orders, and rush trips to various parts of the plant. By noon, cargo planes were taking off on shuttle trips, hauling equipment and supplies to Fearing Island for the expedition to the helium wells.

Later that day Tom and Bud took off by heliplane for the rocket base to check final preparations. A few minutes after leaving Shopton, Tom felt a nudge from his copilot.

“Say, space boy, look over there at three o’clock! Ever see a plane like that before?”

A strange, sleek-looking jet was arrowing in from seaward. “Some kind of a fighter,” Tom said with a frown. He focused a pair of binoculars. “Good night! It’s a robot! And coming this way!”

Tom nosed upward, shooting for altitude. The robot soared after them. “This is no joke!” he cried, opening the throttle wide.

He looped, rolled, and sent the heliplane into a screaming dive, but the robot followed every maneuver as if by magic. In desperation, Tom waited to pull out until he was almost scraping the treetops, then banked sharply and roared skyward again. But he still could not shake the needle-nosed demon off their tail!

Heading out to sea, Tom went through every acrobatic trick that his father and Rip Hulse, a wartime fighter ace, had taught him. After ten minutes, both boys were white-faced and streaming with perspiration. At times it seemed that only a split second saved them from disaster!

Then, just as they streaked past a rocky stretch of coast, the pursuing robot ran out of fuel. With a screaming whine it plunged, hit the water, and exploded in a terrifying burst of flame.

Both boys slumped weakly in their seats. Bud murmured hoarsely, “Where in Jupiter did that baby come from? Was it land-controlled or operated from another plane?”

Tom could only shrug. “One thing I do know. We’ve never had a worse enemy than the one who tried this fiendish trick.”

As soon as they landed at the rocket base, Tom ordered an immediate search for the robot’s launcher by every available plane, both at Fearing and Enterprises. He also notified Admiral Hopkins.

Though worried, Tom determined not to let the terrifying incident stop the preparations for the trip. An hour later he paused in his work to phone the control tower.

“Any results yet from the search planes?”

“No, Tom,” the operator replied. “You want the pilots to keep at it?”

“I guess it’s hopeless,” Tom decided. “Tell them to return to base.”

At eight the next morning the great move toward the undersea mountain finally got underway. A fleet of eight huge cargo planes, including the Flying Lab, lined up on the airfield to be loaded with the repelatron, folded plastic dome, and the heavy construction gear. Smaller equipment would be transported by seacoaster.

Tom took off first in the Sea Hound, accompanied by Bud, Chow, Dr. Clisby, Bob Anchor, and the crewmen. He was followed immediately by Hank Sterling piloting the Sky Queen, and a cargo jet with Slim Davis at the controls.

“We’re off to that mystery mountain despite our enemies!” Bud chortled as the trio of aircraft streaked in V-formation high across the heaving waters of the Atlantic.

“My first experience founding a city,” Dr. Clisby spoke up.

Reaching the site of the helium beds, Tom brought the Sea Hound down to the surface of the water, while the two planes hovered close by. Operations had been planned to the last detail.

Tom would go first with the giant repelatron and set up the osmotic atmosphere conditioner. Then would come the enormous plastic dome, and finally the rigging for the wells and the prefabricated dormitory, galley, and office. All the latter equipment would descend by elevator in air bubbles created by small repelatrons.

Three crewmen went down with Tom on the first trip, and the platform of the repelatron was set on the great plateau of the mountainside. Until everything was in working order, it would not be detached from its elevator.

“This is amazing!” remarked one of the engineers, Pete Elliot, as the atmosphere conditioner began to function, bringing about a perfect balance with the helium bubbling up from the ocean floor.

“A little more work and we’ll be ready to send for the other equipment,” said Tom, walking off to determine whether they had selected the best spot for anchoring the repelatron. “Pete, bring me a rock tester.”

When there was no answer, Tom glanced around. He saw that the three crewmen were weaving dizzily, about to collapse!

“What’s wrong?” Tom cried out. At the same moment he felt a wave of giddiness. “The atmosphere conditioner isn’t operating!”

Tom instantly realized that chemical pollution in the water was poisoning the air supply. The action of the repelatron might also be affected!

“Quick! Into the elevator!” he gasped.

Staggering and helping one another, the four clambered onto the elevator landing stage. Tom groped for the switch lever. Then everything blurred before his eyes!

CHAPTER XIX

TOM IS KIDNAPED

WHEN TOM'S vision cleared, the water outside the elevator bubble was blue green. They were rising steadily!

"Whew!" he shuddered with relief. "We're near the surface. I must have worked the lever even though I almost blacked out!"

His three companions were stirring groggily. Moments later, when the elevator broke surface, the sunshine and fresh salt air quickly revived them.

"What happened?" Bud asked, as willing hands helped them aboard the Sea Hound.

"Something was polluting the water down there. It fouled up the atmosphere."

A worried frown appeared on Dr. Clisby's face. "Another move by our enemy? Or was the pollution just caused by an ocean current?"

"It was carried by an ocean current," Tom said grimly. "Where it came from is another question."

A stir of alarm ran through the crew. One man asked, "You mean this gang we're up against is trying to poison the air we'll breathe?"

Tom was pacing back and forth, scowling thoughtfully. "Could be, Dave," he muttered.

Striding over to the radio, Tom picked up the mike and called Arv Hanson's seacoast. "There's a pollution current around the wells, Arv. It may mean someone's doctored the water. How about submerging to see if you can pick up anything on your sonar?"

"Sure thing," Arv replied. "Which direction is it coming from?"

Tom consulted an oceanographic chart. "The general current flow is approximately from the northeast. But that may not mean too much along the bottom. Better scout the whole area within a ten-mile radius."

"Roger!"

As the young inventor switched off the radio, Bud asked, "Suppose we can't trace the source, Tom? Anything we can do about it?"

Tom puckered his brow. "Sure. We can set up a purification plant to filter out any chemicals or foreign material. But that would take time. It could ruin our whole construction schedule."

After a hasty conference on board the Sky Queen, Tom reached a decision. He would have Billing rush

a shipment of gas masks by plane. As soon as they arrived, operations would continue under Hank Sterling's direction, with the two sea-copters constantly patrolling the area.

"Okay," Hank nodded. "But how about you, skipper?"

Tom replied that he and Dr. Clisby would fly back to Enterprises immediately in the Sea Hound to design the antipollution setup. "Which reminds me," he added, "I'd better radio Admiral Hopkins in Washington to send up some Navy engineers. They can probably give us some valuable help on the job."

By the time he landed in Shopton, the Navy engineers had already arrived. The young inventor and Dr. Clisby went into a huddle with them. The meeting lasted until eight that night. By midnight a design had been worked out which seemed to answer the problem.

Draftsmen, machinists, and production men were standing by to translate the design into actual "nuts and bolts." Working all night and into the next day, they had the equipment ready by noon. Next step was to test it in operation.

"We'll use the submarine test tank," Tom told the engineers. This mammoth concrete tank was set in bedrock on the Enterprises grounds.

The new equipment was installed and hooked up. Then Tom spun the valves and water gushed in through a row of four-inch nozzles.

A thick steel door slid shut, sealing the tank. Pressure was gradually built up equal to the two-mile ocean depth at the helium beds.

"Now to feed in the chemicals," Tom murmured.

Dr. Clisby had mixed several drumfuls of toxic solutions. These were pumped in, one at a time, while Tom and the engineers studied a cluster of gauges. When the test was over, all were jubilant.

"Works like a charm!" said Commander Gray-ton, one of the Navy experts. "With this setup in operation, Tom, the atmosphere in your airdomes should be safe at all times."

To make absolutely sure, Dr. Clisby ran a series of chemical tests on a final water sample.

"Not a trace of impurities!" he announced.

"We're certainly grateful for your help," Tom told the Navy engineers. "If possible, I'd like all of you to come along and inspect our operations."

The invitation was accepted with enthusiasm. Less than two hours later, the men were flying toward the undersea helium beds. As they approached the area, Dr. Clisby observed, "It looks as if Hank is really making progress."

"He's a man that gets things done!" Tom agreed. More than once in the past, his own life and the success of a Swift expedition had depended on the blond, square-jawed chief engineer.

The whole surface of the ocean for almost a mile around was bustling with men, seacopters, and hovering aircraft. Two Navy supply ships, a Swift tanker, and a tug operated by the Bureau of Mines had also arrived on the scene.

“Let’s go below and take a look,” Tom invited his guests.

He dived the Sea Hound to the mammoth dome, set inside the giant air bubble. The sea-copter was parked in the vacuum beyond the dome and the passengers walked through the zippered entrance.

The helium city was already taking shape. At the moment a crew of riggers was erecting the derricks.

“Tom,” said one of the Navy men, “this is the most unusual experience of my life!”

Work proceeded quickly. Tom checked the exact direction of current flow by means of radioactive tracers. A site for the antipollution station was then selected, about two miles from the helium wells, and a repelatron and a dome were lowered over the spot.

The purifying equipment was brought down in sections by elevator. In less than an hour, Tom and the Navy engineers had it set up and operating.

Chow, who had come along for what he called a “look-see,” asked, “How’s it work?”

“It’s fairly simple,” Tom explained. “This big pipe will be channeling water through the dome at all times. If the slightest trace of impurities shows up, this electronic device will detect it. The equipment will then begin its purifying action, which will affect the water for miles around.”

“Brand my octopus soup,” said Chow, goggle-eyed, “this thing’s got a sink strainer beat all hollow!”

The engineers broke into roars of laughter.

Forty-eight hours later, the helium city was an established fact. Inside the dome were a mess hall, dormitory, laboratory, gas tanks, and drilling equipment.

Tom made a final inspection with Hank Sterling. The place hummed with activity, as crewmen swarmed about the drill rigs, while others tended valves or stood by the control panel of the central power supply. The helium gas was being piped into a huge storage tank, to be bottled later.

“It’s a terrific achievement, skipper,” said Hank quietly.

“Without your help, it couldn’t have been done, Hank,” Tom replied.

As night closed over the ocean, the scene became quiet. Below the surface, all the men had gone to bed, except a few watchmen and gauge tenders. High overhead, the sky blazed with stars.

Tom was restless and unable to sleep, after his weeks of intense work under almost constant pressure. He got up, walked around, and suddenly stood still. Did he detect a tiny light inside the Sea Hound?

“No one is supposed to go in there,” Tom told himself and decided to investigate.

But once inside he found no one. “Guess I was wrong,” he thought.

Tom was about to leave when the urge came over him to do some experimental work.

He smiled to himself as he entered the laboratory. “That’s one sure way to relax!”

Under the soft light of a fluorescent lamp, he began to design a brand-new repelatron. This one, instead of repelling water, would work against metal. Tom chose aluminum as the material for his experiment.

For an hour he remained hunched over his worktable, amid a jumble of electronic parts and test gear. Finally the job was done. By means of transistors and a flashlight-sized solar-charged battery, he had been able to assemble the device in a case small enough to be held in one's hand.

Tom tested the device on several aluminum disks and found that it worked to perfection.

"Not bad for one night's work," he yawned. Then he glanced at his wrist watch. "Wow! Two o'clock! I'd better get some shut-eye."

Slipping the tiny repelatron and disks into his pocket, Tom left the lab and stepped out into the passageway.

To his amazement, the air-lock doors opened. Two strange men, holding deadly-looking automatic pistols, entered. One man had a short black beard; the other was burly and shaven-headed.

"Surprised, my friend?" asked the bearded man. He spoke in a heavy foreign accent.

Tom had frozen in dismay. These must be his mysterious enemies! Recovering, he asked, "Who are you and how did you get in here?"

"We too have a few clever devices, including an antisonar machine and some undersea suits that got us here from our subs. We left them in the air lock." The bearded man waved his gun curtly. "And now kindly step into the control cabin, Tom Swift, with your hands up!"

Tom obeyed. When they reached the cabin, his captor snarled a guttural order. Instantly the shaven-headed man stepped to the controls, which he seemed to understand perfectly.

The hum of the rotors altered slightly as he raised the seacopter from the ocean floor. Then, with a flick of the throttle, he sent the Sea Hound knifing forward through the inky waters!

Tom's thoughts were in a whirl. What was happening outside? Would anyone come to his rescue?

"I can read your mind, my friend." The black-bearded foreigner smirked. "At this moment my men are taking over your helium city. And thanks to your ingenious inventions, we will reap the rewards of all your efforts!"

Tom tried not to show the rage that was boiling inside him. The priceless helium he had worked and striven for-now it would become the prize of an enemy power!

"You, my dear Tom Swift," his captor went on, "will be held as our hostage, to make sure your crewmen surrender peacefully. Then, of course, you will be put to death!"

The black-bearded man threw back his head and chuckled mirthlessly.

"Unless," he added, "you care to make a bargain with us."

"Name the terms," Tom said.

“Quite simple. You will have your father turn over to me the complete plans for all your Swift inventions!”

CHAPTER XX

A HIDDEN WEAPON

TOM clenched his fists so hard that his nails bit into the flesh of his palms. So the scoundrels were offering him a chance to save his own life! But at what a price! All the Swift inventions, many of them for government use only.

“You expect me to accept a bargain like that?” Tom demanded in a choking voice.

“Why not?” His captor smiled suavely. “It is never pleasant to die, especially when one is so young. And I assure you that your manner of death would be most unpleasant!”

Tom could hardly keep from smashing out at the leering black-bearded face that smiled back at him so mockingly through the soft gloom of the Sea Hound’s cabin.

Controlling himself, Tom asked, “And suppose I did accept your terms. What then? Would I be allowed to go free?”

The enemy agent chuckled again. “Alas, I fear we could hardly afford to be so generous. A brain such as yours is far too valuable to us. You would, of course, be allowed to live. But you would remain a prisoner and go on developing new inventions-to serve our cause.”

“I’ll think about it,” Tom muttered, playing for time.

“I suggest you do so, my friend-very seriously!”

Tom’s face was a mask. “In the meantime, may I put my hands down before they drop off?”

“Very well. But no tricks. At such close range, a burst from this automatic pistol would leave you in very regrettable shape!”

As Tom eased his aching arm and shoulder muscles, his mind was racing for a way to escape from his dilemma.

While the seacoast rose in a slant through the pitch-dark waters, Tom engaged the men in conversation. He pretended to show a calm scientific curiosity about the undersea equipment they had used in carrying out their plot.

The shaven-headed man said little, except for occasional grunted comments. But his black-bearded companion became talkative.

“Allow me to introduce myself,” he said. “My name is Menarsky.”

“I’ve heard it before,” said Tom grimly.

“Ah, yes.” The bearded man bared his teeth in a smirking smile. “I am, of course, well-known to your stupid FBI. And this bald one here is my second-in-command, Klaus Sturko.”

“I take it you don’t expect me to say I’m happy to meet you,” Tom snapped.

“Ha-ha! That is good-very good!” Menarsky roared. “I am so glad to see that you have not lost your sense of humor!”

Presently Sturko switched off the power and eased the Sea Hound to a stop. Tom could see the ghostly outlines of a whale-shaped submarine, rolling gently among the waves alongside.

“We will now transfer to our own flagship,” Menarsky announced. “And once again I warn you, Tom Swift-no tricks!”

Sturko went first. He picked up the two bulky deep-sea suits which the enemy agents had worn entering the Sea Hound. To Tom’s amazement, the suits appeared to be made out of some tough but flexible woven-metal fabric-perhaps designed to be inflated and pressurized like space suits-allowing complete freedom of movement.

Scrambling out of the hatch to the whale-shaped sub, Sturko led the way, with Tom next. They entered through a small conning-tower hatch and climbed down a steel ladder. Another amazing discovery awaited Tom. There appeared to be no crewmen aboard!

“You are surprised, no?” Menarsky chuckled. “Our automatic pilot is of very advanced design. We do, of course, carry a crew, but as I told you, they are now busy taking over your helium city!”

Tom looked around at the neat tiers of folded bunks, the missile tubes, the clusters of control dials and gauges, the shielded housing of the atomic reactor. It was obvious that the craft had been planned by a master designer!

Menarsky watched Tom’s reaction with gloating pride. “Since you are being so reasonable, perhaps you would also like to see the ship’s laboratory and scientific equipment,” he offered.

“I would, very much,” said Tom, quite sincerely.

Menarsky led the way aft and opened a steel door, while Sturko followed close behind. As Tom stepped into the laboratory, his eyes widened in admiration.

With the exception of his own setup on the Flying Lab, probably no other craft on earth was so thoroughly equipped for scientific research.

Tom whistled. “This is amazing!”

“You like it, eh?” Menarsky replied. “Well, you can work here too, my young friend, if you care to join us.”

Pleased by Tom's reaction, he began pointing out other pieces of equipment. Sturko, too, was obviously very proud of the setup. From time to time, he threw in a guttural comment when Menarsky failed to mention some feature of the laboratory's resources.

Tom pretended to be thoroughly absorbed in what they were saying. Meanwhile, his mind was working at top speed. Both men had hung their weapons in a rack, apparently confident that Tom Swift was safely their prisoner.

Suddenly a breath-taking idea flashed through Tom's mind. He had a secret weapon of his own, all but forgotten in the excitement of his capture!

"And now let me show you an interesting biological experiment I have been carrying on," Menarsky went on. "Observe these queer-looking webs which result when a spider is injected with certain drugs-drugs which I later intend to use on human beings."

Skillfully, Tom managed to get between the two men. As they bent over the worktable, he took the aluminum disks out of his trouser pocket and slipped them into the pockets of the two men on either side of him. Then his fingers probed back into his own pocket and flicked on the switch of his miniature repelatron.

Suddenly Tom made a dash for the door!

"Halt!" screamed Menarsky.

He tried to reach for his pistol from the rack, while Sturko endeavored to lunge after the young inventor. To their dismay, neither could move from the spot! They strained forward frantically, but found themselves held back as if by an invisible wall of glass!

"What have you done to us?" Menarsky shrieked, as his shaven-headed companion poured out a stream of guttural oaths.

"A little secret weapon your spies failed to inform you about," Tom jeered from the doorway.

"They will die for this!" Menarsky howled, almost purple with rage.

"That will depend on a United States judge and jury!" Tom retorted coolly.

Stepping quickly into the passageway, he slammed the watertight door, then latched it with its steel dogs, locking the men in securely.

Taking no chances, Tom grabbed a hammer from the engine compartment and smashed the ship's controls beyond repair. Then he raced up the ladder to the escape hatch and made his way aboard the Sea Hound.

A moment later he had warmed up the radio and was beaming an urgent call to Shopton on the Swifts' private wave length.

Billing's assistant was thunderstruck by the news. "I'll round up help here and also notify Admiral Hopkins at once. Roger!"

Within half an hour a government flying boat reached Tom. He and the Navy men went aboard the Mad

Moby.

Tom's prisoners tried to put up a fight with their automatic pistols, but Tom quickly subdued them with his aluminum repelatron. They were handcuffed, then ordered to talk.

At first the men refused, but when they heard that Klevalog was in jail and that Paulus White was about to be captured, Sturko talked freely. Menarsky tried to stop him, but his henchman hoped for a lighter sentence if he told the truth.

His country had secreted atomic warheads and bombs along the Atlantic coast to be used by their subs. "We could not carry enough at one time from our own land for the big attack that was planned," Sturko explained.

The prisoners were flown off in the flying boat.

Tom set off by air for the helium site. On the moonlit surface of the ocean below, he could see the cluster of ships and seacopters that tended the needs of the dome crews. Grim silence reigned-evidence that all had been captured swiftly and efficiently by the sneak attack. Half a dozen of the whale-shaped subs which had brought the attackers were moored alongside.

"Wish I could go down there and capture those thieves!" Tom reflected. But knowing that he could not do it singlehanded, he continued his flight westward.

As dawn broke, he sighted a speedy United States destroyer, a light cruiser, and a baby flattop rushing to the scene at full steam. Soon a squadron of jet Skyhawks took off from the carrier's flight deck. Tom followed them.

When the first wave of aircraft reached the captured helium ships, they were greeted by a frantic hail of tracers and rockets. Fortunately, none of the Skyhawks was hit.

The Navy pilots roared in low, sweeping the decks with a warning fire that sent the unprotected enemy gunners scurrying for cover! Realizing they had no chance against such overwhelming force, the gang of subversives radioed a quick surrender.

Two of the whale-shaped subs, which evidently had stand-by crews aboard, tried to make a getaway by submerging. But they were promptly dive-bombed in warning before their conning towers were awash. Rather than risk certain destruction, they surfaced and also surrendered.

Tom now landed and manned the first elevator carrying fighters to the helium city. Taken by surprise, the subversive guards soon gave up against such overpowering odds. They were taken to the surface and herded into the brigs of the Navy vessels.

When it was all over, Tom rushed to release Bud and the others from the dormitory in which they had been locked.

"Boy, am I glad to see you!" Bud gave his pal a bear hug. "I thought both of us had had our last adventure."

"Not us," Tom told him with a grin.

His words proved to be prophetic, for very soon Tom and Bud were engrossed in an even more exciting

adventure, Tom Swift in the Race to the Moon.

Admiral Hopkins, who had arrived by this time, slapped Tom on the back. "Magnificent work, Tom. Your country owes you a great debt of gratitude. You'll be in for a hero's welcome back in the States!"

Tom, who disliked the glare of publicity, groaned. Then he turned to Chow. "Lend me a ten-gallon hat and one of your loud cowboy shirts, will you?"

"What fer, boss?"

"I'll pretend I'm a Texas wrangler who just came along on this expedition to round up some sea cows!"

THE END

TOM SWIFT AND HIS DEEP-SEA HYDRODOME

By VICTOR APPLETON II

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