

Shoot First— Our Navy Is Ready!



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The President's terse order served warning that Uncle Sam will strike fast and hard, should undersea pirates dare to invade our waters. Yes, the U. S. Navy is ready for action; and here is proof—a thrilling picture of our sea power's ability to hunt subs by a man who knows the Navy from the inside

By Corey Beckwith

YOU are a reporter by training, a writer by profession, and a student of naval affairs by avocation. What's more, you're lucky enough to spend a week somewhere off the Atlantic coast with a portion of the Atlantic Fleet. The schedule goes like this:

Monday and Tuesday—aboard submarine.
Wednesday—aboard Navy blimp.
Thursday—aboard submarine rescue and salvage vessel.
Friday—aboard submarine rescue chamber for actual operation.

You come away from the naval base with the firm conviction that ship for ship, gun for gun, and man for man, there is no fighting force anywhere in the world to equal the United States Navy. And you know now, that should Nazi submarines or any other Axis warships appear in United States waters, the Navy is ready to take care of them. . . .

The submarines lie in a row, black-hulled and ominous

in the gray of dawn, moored to their tender. You walk across a gangway, and over the duckboards of a pigboat that is charging her batteries while on the surface, her Diesel exhausts throwing plumes of spray. The next boat is the one to which you have been assigned; you climb to the tiny bridge and look straight down into her control room.

A khaki-clad junior-grade lieutenant welcomes you with the Navy's traditional greeting: "Glad to see you aboard, sir!" You descend, and feel slightly in the way amid what is at first a confusing maze of gadgets—levers, dials, valves and wheels. This control room is the brain center and the heart of the boat.

A little later, and the submarine has cast off her moorings and is standing down the channel, running on her Diesels. You go back to the bridge to watch. Ahead and astern are other submarines; farther out toward the open sea sleek gray destroyers are steaming proudly, and yonder is a bulky tender which is to serve today as a target ship.

You remark upon the beautiful lines of the destroyers.

"Oh, they're pretty ships, all right," agrees the young officer on the bridge. "But dangerous, in time of war."

"More so than submarines?" you ask.

He looks surprised. "Submarines aren't dangerous! We can always dive in time. We can hide, and then get in a couple of torpedo shots, and it's all over. You'll see."

Morale is like that everywhere in the Navy; whatever ship you're on is the best damned ship afloat, and don't you forget it. But morale is particularly high in the pigboats. Mostly, their crews are picked men, trained at the Submarine School, men who have proven themselves capable of quick, cool thinking and acting in any emergency.

Thousands of men ship over for the pigboats. They draw extra pay for this duty. Submarines have the reputation of feeding their crews better than any other ship, and this in a Navy noted the world over for the high standard of its food.

But it isn't either of those items which makes a man once a pigboat sailor always a pigboat sailor. It's the pride of service, the joy of seeing jobs well done, and helping to do them that way.

THE job is beginning now. The last landmark has been lost in the shore haze, and the sea rolls limitless and blue, with whitecaps kicking across the swells. The destroyers are out of sight, and so is the target ship.

The captain comes to the bridge. He is a lieutenant,

and very young—submarines are a young man's game—and he is handsome enough to have stepped off a Hollywood studio set. He ascertains position and heading from the officer of the deck, and looks pleased as he surveys the sea.

"Nice day for periscope observations," he says. "Not too rough, so that you have to put a couple of yards of the scope out of the water. Just enough whitecaps to hide the feather."

Then he looks at his watch, and issues the command which makes the entire boat a beehive of activity:

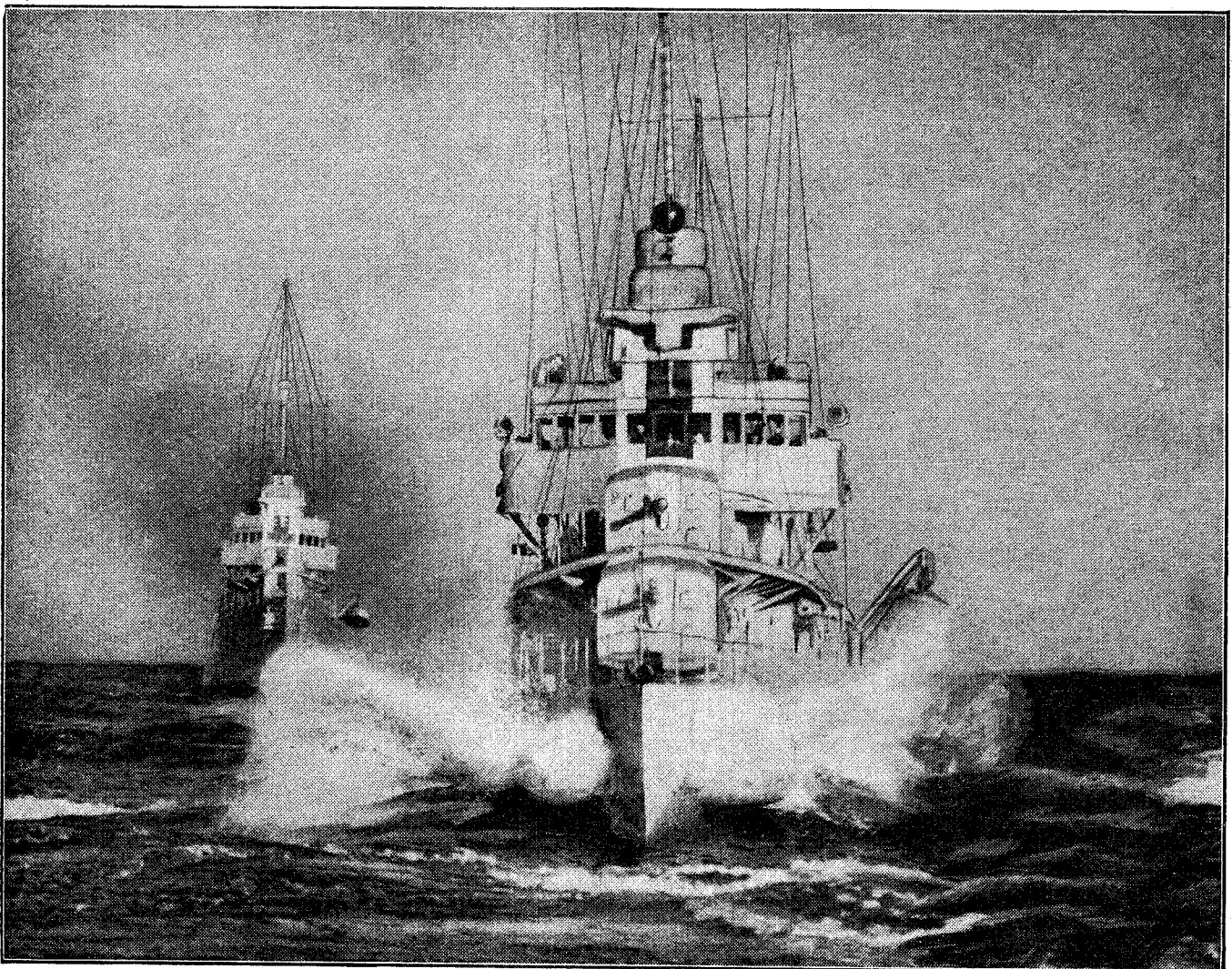
"Rig for diving!"

The bridge is cleared of charts, binoculars and all other loose gear. The searchlight is unrigged and taken below. Last to come down are the commission pennant and the colors. And at the last minute, there comes a regulation growl from the executive officer, who has discovered a three-inch length of tape fluttering from the radio antennae.

"Get up there and cut off that Irish pennant!" he tells a quartermaster. Even a pigboat prides herself on being smart.

Reports come from below. "Stern planes rigged for diving." "Bow planes rigged for diving!" "Control shifted to control room—bridge has the conn!"

Everything is ready now. Vents have been tested. There is plenty of air in the tanks. Aft, in the engine room, the watch is ready to shift to the motors.



U. S. destroyers, on the job policing the seas

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The warning growler sounds throughout the boat. You scurry down the ladder. The hatch clangs shut behind the last man; he dogs it securely with a mallet. The deck slants slightly forward, and the eyeports in the conning tower go awash. You notice a slight but not uncomfortable pressure against your eardrums. Without pressure in the boat, the dive would not be made—lack of pressure indicates a leak somewhere.

You stand on the deck of the crowded control room and watch the depth-gauge needle swing to the right. In no time at all it shows eighty feet.

The electric motors are humming sweetly; air hisses and water gurgles and rumbles as ballast is shifted. The trim of the boat is perfectly maintained, although the shifting of five hundred pounds from fore to aft must be compensated for. The diving officer keeps an unrelaxed vigil over depth gauges, pressure dials and the like; he fires a constant barrage of orders to pump from one tank to another, or to blow from main ballast into the sea.

The captain is working at the mooring board, figuring with mathematical nicety an underwater course that will

bring him to the vicinity of the target ship at the proper time. From the loud speaker on the overhead, the men handling the sound apparatus report:

"Screw bearing zero three five, sir. Sounds like a destroyer."

THE captain orders a change of course. You can see the boyish excitement in his eyes, but nothing in his voice betrays it. That destroyer and the other destroyers on the surface are hunting this submarine with their own sound apparatus. If they are able to get directly above, they simulate dropping a depth charge and send a sound message that ends the game so far as the submarine is concerned. On the other hand, if the sub can elude them. . .

"Screw beat growing fainter, sir!"

The captain smiles. That means he stands a chance of penetrating the destroyer screen and getting a crack at the target ship. For ten or fifteen minutes more, just to make sure, the pigboat twists and gropes and turns.

"Take her up to periscope depth!"

The diving officer issues commands. You see the needles of the depth gauges swing left as ballast is blown.

"Up periscope!"

The captain hooks both arms over the periscope handles, and walks the scope around. A tiny beam of daylight from the lens produces a startling effect as it shines against his eyeball.

"One destroyer—two destroyers!" he murmurs, and walks around farther. "Ah—there she is! What's our heading?"

The helmsman sings out, and the captain takes a quick bearing. It would be dangerous to leave this tell-tale periscope snaking through the water for very long.

"Eighty feet!" the captain orders. "Man the torpedo tubes!"

"Torpedo tubes manned, sir!" comes the answer through the loud speaker.

"Eighty feet, sir!" reports the diving officer.

"Keep the bearings coming there, men!"

"Aye, aye, sir!"

Now there is another officer and a quartermaster at the mooring board. With every report from the sound apparatus, with a stop-watch going, and with speed and heading translated into time and distance, the submarine is closing for the kill.

"Torpedo room!"

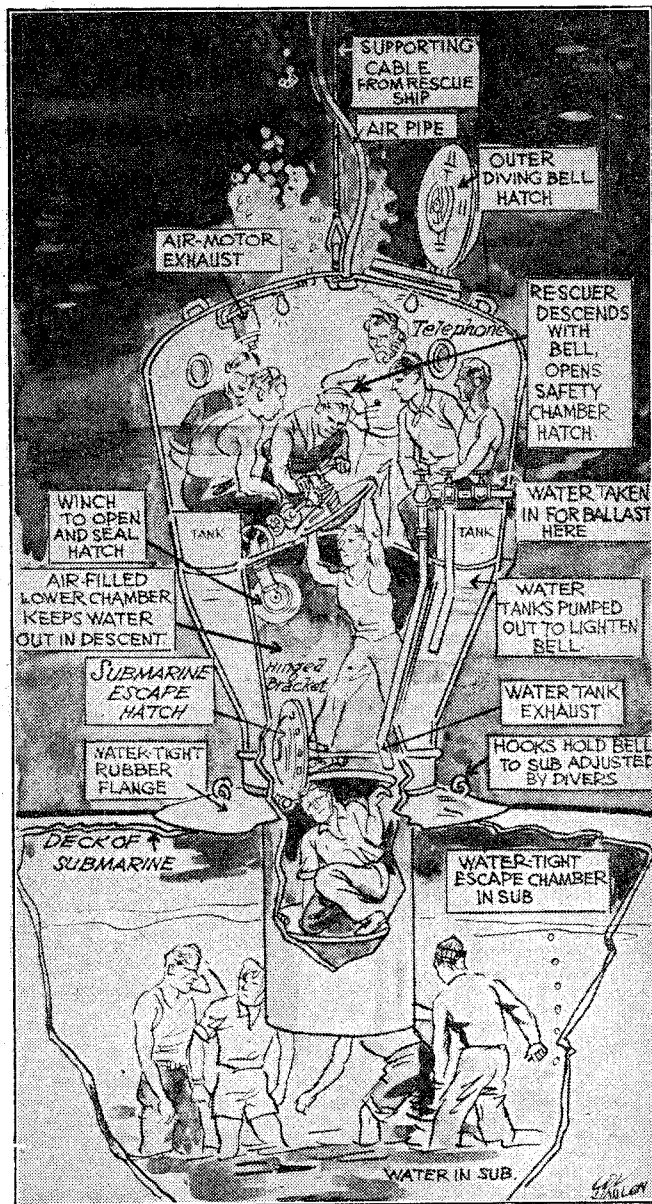
"Torpedo room, aye!"

"Fire on three four four!"

There is a smoke bomb being readied. A tense minute passes. The boat is turning, bringing her deadly snouts to bear on the target. All this is cold, precise mathematics; it is navigation, piloting and ordnance combined. And it is strategy perfected by that wildest of craft—the submarine.

The bow lurches slightly—once—twice. The torpedoes are on their way. The smoke bomb is set off to rocket above the sea as a triumphant signal that the destroyer screen has been evaded, the target ship theoretically sunk. Those are practice torpedoes, of course; they will be chased down now by the same destroyers and recovered before another submarine starts her run.

The skipper orders another smoke bomb of a different color, a little later. It means the sub is going to surface in a few minutes; craft above are warned to keep clear. When the order to "surface" is given, there is more activ-



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Rescue on the ocean floor—a diagram explaining how the diving bell works

ity—more excitement, it seems—than in submerging. And in both, the crew functions with perfect teamwork.

You learn that a submarine can dive from the surface and reach a depth of eighty feet in considerably less than a minute; that by blowing all ballast in an emergency, she can get to the surface just as quickly.

You have seen how she stalks prey in the darkness below, and accurately. You learn that while morale is high, the Navy spares no effort to keep it that way; for instance, because submarines on patrol may spend all daylight hours submerged—thus depriving their crews of sunlight for long periods—there have been experiments with sun lamps aboard the pigboats. And if you should be inclined to think a Navy using sun lamps has gone soft, just try to make something of it with the next pigboat man you meet.

Submarines are usually employed far in advance of the other forces of a fleet, screening it, and lying in wait for the advance units of the enemy. If U-boats ever attempt to come to these shores, there may be underwater duels with our own submarines. And having seen the efficiency with which the pigboats of our fleet operate, you are not doubtful about the outcome.

But it takes the flight in the Navy blimp to show you one of the simplest and most effective ways of tracking down and destroying the undersea prowler—a method not practicable in Europe today, but peculiarly suited to our own defense scheme.

Eyes of the Blimp

YOU board the “rubber cow,” as the Navy calls these non-rigid airships, as she swings at her mooring mast in the sand dunes. The car attached to her silver belly is small; there are only the pilot, a radioman, an engine-man, and another observer aboard.

The ship takes off with dexterous ease after her ground crew walks her away from the mast; she climbs steeply under the thrust of twin motors, and out over a strip of beach where surf runs like a lacy fringe, the pilot opens his sealed orders.

They instruct him to keep a rendezvous at ten o'clock, over the same tender which was target ship yesterday and is performing that duty today.

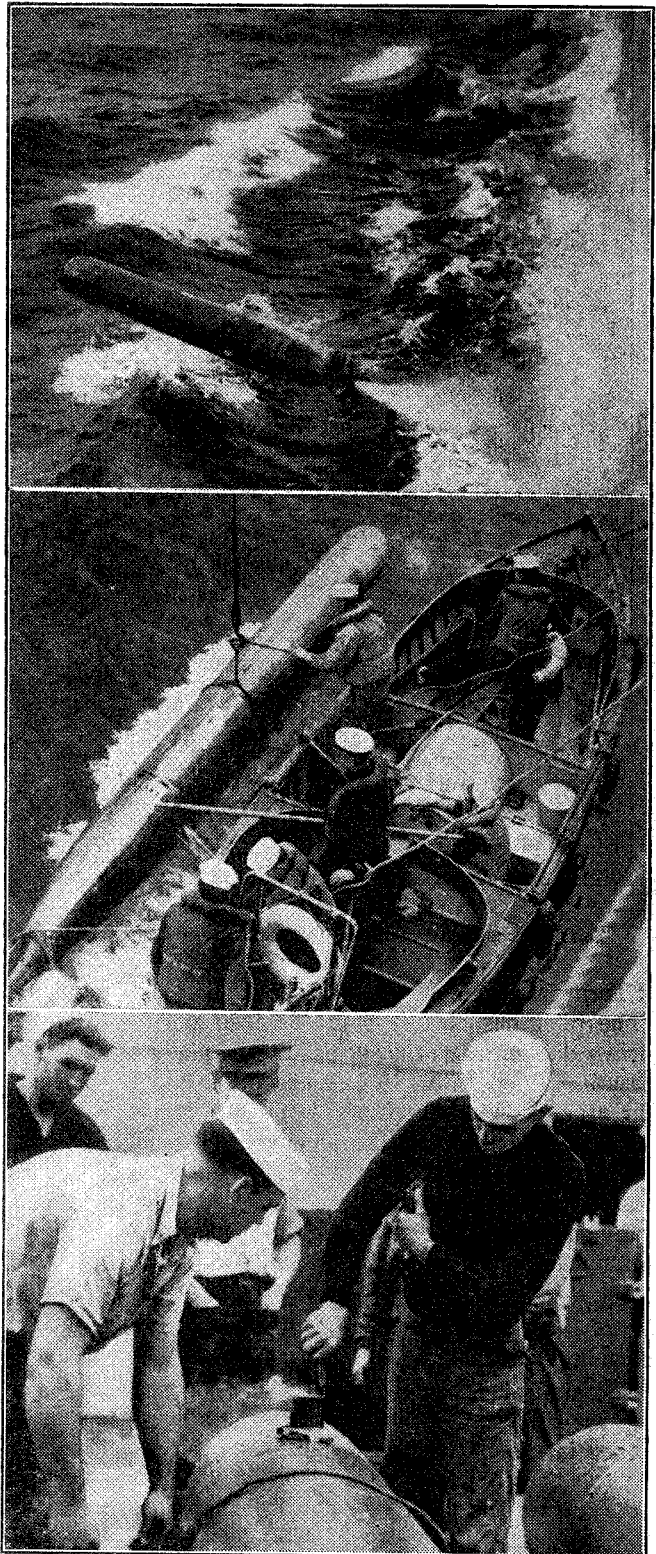
The coast drops astern. This is a lazy method of travel, from all the feeling you get in the control car; you see with surprise that the ship is doing better than fifty knots. The altimeter reads three hundred feet, and there is a sameness on the surface of the sea broken only when you sight the destroyers out yonder, and then the bulky tender.

The pilot guns his engines. You feel the ship slant steeply as she climbs. Four hundred—five hundred. And then the nose swings into the wind, and the “rubber cow” hangs there, suspended, motionless.

Remember that, because it is an important item in the employment of blimps against enemy submarines. Remember that no airplane can do this—that, aside from a bird, only a blimp can hover.

The game you saw played below the surface yesterday is on again. This time you have an unexcelled view, a box seat. And you are watching another phase of the contest in which teamwork is so highly developed.

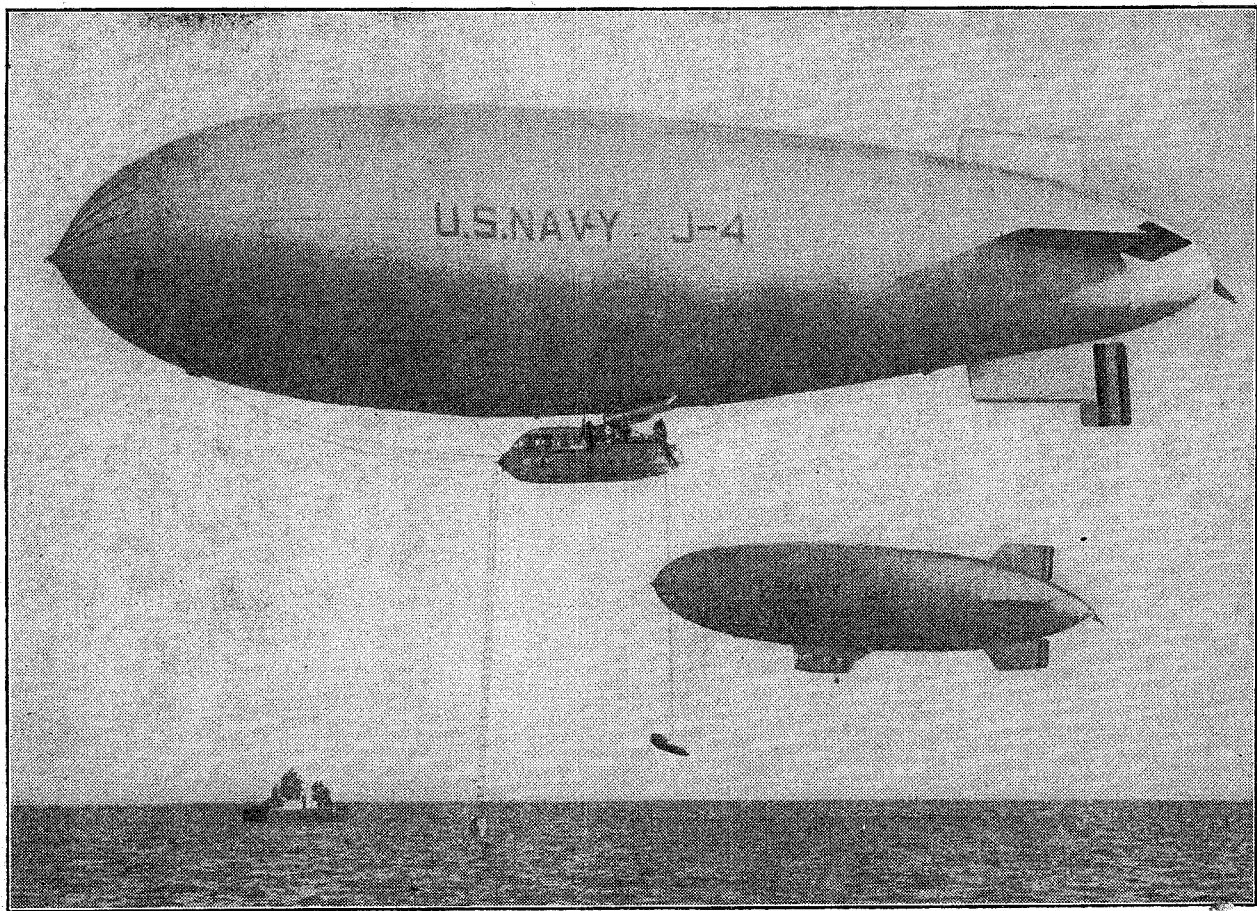
The pilot of the blimp starts shuttling. Weaving back and forth over the target ship and in advance of her



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Torpedo practice. At the top the torpedo drops into the water after being fired; in the center it is being recovered; at the bottom the gun crew removes the torch case, a flare by which the torpedo is located

heading. All three members of the crew watch the surface keenly, and train glasses on distant horizons. If there were a submarine at forty or fifty feet, her whaleback would present a darker green shadow in the emerald and blue of the sea. If she hoisted her periscope for a quick reconnoiter, the feather of foam would be visible from the blimp as from nowhere else.



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The "rubber cow" practices first aid. Here the J-4 is moored over a rubber lifeboat, which is being drawn up to the blimp

"Torpedoes off the port bow!"

The pilot has already seen the twin streaks—smooth furrows drawn across the surface by the missiles streaking beneath. He opens his throttles to the full, and puts the ship around. You watch the sea come up as he dives and swings on the same course those "tin fish" are making; you look on in breathless fascination as a smoke bomb bursts in the sky and the torpedoes pass just astern of the target ship. There is a line dragged back there, and the submarine probably will be credited with a hit.

But just now, according to the game, you are on the side of the pigboats to the extent of helping recover the valuable torpedoes.

The destroyers have sighted that smoke bomb, and they are helping, too. They come up at a speed that puts a bone in the teeth of each, but they are still thousands of yards away. The torpedo wakes turn white as the fish make surface and plough along a little way before coming to a stop.

When their yellow noses have turned to the sky, the blimp pilot swings low over each of them and heaves a smoke bomb from his window. The destroyers have boats in the water even before they have lost way; a few minutes later the fish are being hoisted aboard the submarine—and another run will be started when the destroyers have once more taken position.

YOU begin to understand the value of blimps, particularly since those of our Navy are filled with helium. One incendiary bullet can destroy a hydrogen gas bag, but helium is non-inflammable. And Uncle Sam has practically all of the world's supply.

It is not likely that Axis planes will appear over our harbor towns; there will be a fleet in the Atlantic to be reckoned with, first. Neither need we fear that surface warships will suddenly show up, to bag the rubber cows with sky guns.

No, but any submarine has a good chance of eluding surface patrols and coming in close to wreak havoc on our shipping. And there is where the blimps come in.

There are other things to watch for, in addition to periscope wakes and submarine shapes under the waves. Few submarines can avoid bilging a little Diesel oil now and then. The oil rises and creates a slick. Surface vessels don't always see it, and a plane streaking overhead at two hundred miles an hour can't observe it very closely.

But the lowly rubber cow can squat in the sky until that slick moves, or spreads, or the current moves it on and a new one rises. By this time—it could be hours—the blimp pilot is certain that his quarry is lying down there, waiting for darkness to come so he can get in his dirty work.

The blimp can drop depth charges with the same accuracy with which its pilot heaves a smoke bomb. Or it can radio for a destroyer or patrol boat to come up for the kill, while it hangs directly over the spot as a marker.

Our Navy has a number of these non-rigid airships, all working in close co-operation with surface craft, pigboats and everything else that goes to make up a fleet. We are building more.

YOU have gone from under the sea into the sky, and now you are about to go back below the sea again, but in a different manner. You are going to see how the

Navy rescues men from stricken submarines, just as it did when the *Squalus* went down.

No other Navy in the world has developed so highly the procedure of submarine rescue work—this despite the fact that neither our submarine lung, once known as the Momsen lung, nor our nine-ton steel rescue chambers, are secret. The British have the Davis lung, but until recently at any rate, it was not nearly so efficient as ours.

This huge bell, shaped like a sawed-off top and capable of bringing nine men from the bottom in each load, rests on the deck of the salvage vessel. There is a yellow buoy floating in the sea, yonder; a small boat puts out and hoists it aboard. It bears a brass plate with the ominous inscription: *Submarine sunk here. Telephone inside.*

The salvage ship executes an expert bit of seamanship which few persons realize still exists in the modern Navy. Her skipper lays a four-point mooring: Four anchors, buoy-marked, are dropped at the corners of a rectangle. The sunken submarine is virtually in the center of this. When the mooring is laid, with six-inch manila lines run from the ship to each buoy—a difficult task for the small motor whaleboats in the rough sea—the salvage vessel can be moored as steadily as if she were at a pier.

This sounds complicated, but teamwork counts again. The whole job is done in some forty minutes. Now a diver is going over the side, going down the descending line secured to the submarine's deck.

"Topside!" he says suddenly.

"On the bottom!" the talker answers.

"I'm on the deck of the submarine."

It doesn't take long now. The cable to be used for the downhaul of the big rescue bell is passed down to him on the descending line. You watch the bubbles break surface while he works to shackle it to the escape hatch cover of the sub.

"Hoist away on the descending line!"

On the salvage ship they attach a tackle to the rescue chamber. A steam winch puffs, and the boom swings nine tons of steel outboard and lowers it till it touches the water. You get ready to go aboard that steel lung.

THE two operators have been testing the compressed-air engine and seeing that the cable is wound true on the reel. They had a little trouble on that last trip up from the *Squalus*, when the downhaul cable got fouled.

The diver is hauled aboard the tender. It's time to go. You climb over the bulwarks and up the steel-runged ladder. The bell is painted white inside, and lighted; you can look down through the lower hatch into the sea. You sit on a five-gallon can of water—there is a whole circle of them. Ballast, the operator explains, in addition to the ballast in the regular compartment of the bell.

The upper hatch has already been closed. Now the lower one is shut, and you sit looking through tiny glass eyeports in the steel bottom of the bell. The sea is a luminous green.

"Blow main ballast!"

One of the two operators opens a valve. Air hisses, and water rumbles out. The chamber is always operated with a positive buoyancy; its air motor pulls it down on the downhaul cable against this buoyancy. If the cable broke, it would rise to the surface.

"Flood the lower compartment!"

That chief gunner, topside on the deck of the rescue

ship, has operated this chamber many a time. He is taking no chance of anyone on the job getting rattled; he knows every move to be made, and is calling them out. . . .

You hear the air motor. It sounds not unlike a toy machine gun, or a compressed-air riveter heard at a distance. The cable is running over that spool in the flooded lower compartment. The bell rocks and sways as it goes under the surface; it has a motion like a top that is almost spent. The sea is still rather rough.

You sit with your back against the chill steel bulkhead, and wonder how it would feel to be down in a submarine that was really helpless . . . waiting to hear a diver's heavy shoes on deck . . . waiting for this chamber to clamp itself on the topside. . . .

THE operator reports. "Twenty-five feet." A couple of minutes pass. The swaying decreases. "Fifty feet!" More time goes by, and the light dims in the eyeports. "Seventy-five feet!" the steel at your back grows colder.

There is a cushioned shock, and all motion stops. The operator peers through the eyeport in the bottom. You sense that something is wrong.

"Cable must be snarled," says the man at the engine. "Topside! I'm going to slack off a little!"

He puts the engine into gear again, and lets the bell rise a couple of feet.

"What's wrong?" topside inquires anxiously.

"Not a thing," responds the operator. "We just got here quicker than I expected. We're on the submarine!"

He lowers the chamber again. Now the process is reversed—main ballast is flooded. The lower compartment is blown, and vented. A fog appears on the eyeports in the bottom, and that's a sure sign a vacuum seal has been made over the hatch with the thick rubber gasket at the bottom end of the chamber.

The chamber's lower hatch is opened, and you can see the submarine hatch, with the downhaul cable shackled to its center. Four stout holding-down rods are bolted—just in case the submarine should roll so much as to loosen the chamber's vacuum seal—and the fair-lead of the cable is unrigged to permit opening of the submarine hatch.

It comes open. You see a few gallons of water spill into the pigboat. You see faces looking up at you.

A couple of officers come up to inspect the bell. Two submarine sailors who have never ridden in it, and who may have to ride in it some day, board the bell as passengers.

It is only a few minutes until the escape hatch has been closed, the fair-lead rigged, the holding-down rods removed. The lower hatch of the chamber is closed, the lower compartment flooded.

This breaks the seal. Main ballast is blown again, and the ascent started. The light grows stronger.

You reach the surface some fifty-five minutes after the hatch was shut over your head. Sea and sky look very blue, and topside is a nice place to be.

But you know that chances are, nine times out of ten, this rescue outfit could save the survivors from any submarine lying at four hundred feet or less.

You look back over a busy week. It seems to you that the Navy is ready. It's ready to fight anything that could come over, and ready to take care of its own in the event of any disaster.

You're proud to be an American, proud to be a stockholder in such a Fleet.

Only in the fitful lightning flashes could that
nightmare fisherman be seen



By Theodore Roscoe

Author of "I was the Kid with the Drum," "Frivolous Sal," etc.

Ghost on Lonesome Hill

Every town has its haunted house; but naturally the one in Four Corners was something super, infested as it was by a spectre who roved its fearsome interior in search of bottled ships and a flying fortune. It also had something new in the way of a ghost-breaker: a newspaper johnny who fished for peril at the bottom of a hidden well

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EVERY community has its haunted house. The one on Lonesome Hill is typical. Shutters askew. Bald spots where the shingles have weathered. Doors sagging open to wind and rain. Veranda tumbled down to the weeds.

"Folks from Four Corners won't go near it," Cap'n Caleb of the Canada local pointed out. "Nor the summer people, either, 'count of the place's got such a bad reppitation. Furniture's still in the house. Carpets 'in' everything. 'Cept for where the cupola's was blown off in last summer's storm, Old Mansion's just as it was when Sheep Colebaugh killed his brother, Winth'up, there, seventeen years ago."

"Murder, eh?" The elderly stranger raised amused gray brows.

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"Jury couldn't decide." "The old conductor shook his head. "Sheep—real name was Shepherd, but he kind of looked like a sheep—he was bad beat up. Claimed Winth'up was whalin' him with a stove poker, an' he struck in self-defense, usin' a hatchet.

"There's a bash on Sheep's scalp, big as New York, and his reddish hair stuck to the poker in Winth'up's fist. But the prosecutor claimed Winth'up might've hit *Sheep* in self-defense, 'stead o' the other way around. Tried to prove a robbery motive, seein' as Sheep was heavy in debt. Case fell down, though—the only one Aminidab Coward ever lost. Police couldn't never find the money."

"Fight over a legacy, was it?"

"No, but Winth'up had been to County Bank that afternoon and drew out thirty thousand dollars. Queer skinflint—wouldn't never accept nor write out checks. All the Colebaughs was tighter'n purse-strings, and Sheep