

The Submarine War—IV

New Torpedoes Silent, Accurate, Deadly; Modern U-Boats Can Aim Them by Sound

By HANSON W. BALDWIN

The torpedo, as additional ship sinkings showed yesterday, has been the most effective and the most dangerous naval weapon of this war.

It presents a challenge to naval designers which has not yet been met, and therefore suggestions that ship designers should sheathe ship hulls in some material that would dampen the effect of underwater explosion cannot be wholly dismissed.

Yet the bulky nature of the sheathing material needed and the difficulty of applying it without materially impairing the military or sea-keeping characteristics of a ship would militate against any such solution. And the great increase in size, destructive capacity and accuracy of the modern torpedo—as compared to the torpedo of the first World War—make the design problem a very, very difficult one.

A modern torpedo not only tears a gaping hole in a ship; it frequently smashes it apart or breaks its back. The Japanese, for instance, have used torpedoes with great effectiveness and destructiveness—as is evidenced from communiqués and eyewitness accounts. Eight hundred and fifteen pounds of explosives—not TNT, but an explosive which is detonated more uniformly and hence has greater destructive power—is actually enough to smash through any protection yet devised.

Modern Torpedo More Accurate

The torpedo is a more accurate and a more stealthy weapon than it was in the first World War. The Germans have employed many of the so-called "electric" type, powered by storage batteries, which leave no tell-tale wake of bubbles and hence strike silently and unseen. Others have magnetic detonating devices which detonate the torpedo when it approaches within the magnetic field of the target. This means that a direct hit is not now necessary (though, of course, still desirable); severe damage may be inflicted by an explosion underneath the hull of the ship or near by.

And submarines can now fire their torpedoes "blind" with some accuracy; by the use of accurate sound gear, an expert commander is sometimes able to secure a hit against a convoy without the use of the periscope.

To add to the complexity of the problem, the Germans are apparently using some submarines powered not by the conventional Diesels-on-the-surface-and-batteries-when-submerged installation but by a so-called oxygen-hydrogen engine that serves for both submerged and surface cruising and eliminates the heavy and dangerous storage batteries.

Thus, despite the thought, energy and effort being put upon the defense against the submarine and the torpedo, the offense still has a good many basic advantages which make the submarine problem a difficult one to solve.

But it is not an insoluble problem. It has a fourfold solution: (1) merchant ship construction must be increased qualitatively and quantitatively; (2) better protection must be provided for merchant shipping on the high seas; (3) more German submarines must be sunk; (4) the rate of construction of German submarines must be decreased. This is a coordinated job for the factories and shipyards at home, for the anti-submarine and escort vessels at sea, for the bombers based on Britain, and perhaps finally for the land forces that will

some day invade the western coast of Europe.

Lieut. Comdr. Thomas Woodroffe, British naval commentator for the British Broadcasting Corporation, recently recalled in a broadcast that Grand Admiral Karl Doenitz, submarine warfare expert, who recently was appointed Commander in Chief of the German Navy, was once certified as insane.

During the closing days of the World War Doenitz was captain of the U-68, which was sunk in the Mediterranean by a British sloop. Doenitz and other survivors were taken as prisoners of war to Britain. After some time in a prison camp he was transferred to a Manchester lunatic asylum. In 1919, Woodroffe said, "he was repatriated to Germany as insane."

The insanity, of course, may have been feigned; at any rate, there is not much doubt about the present ruthlessness and hard efficiency of the new German Commander in Chief.

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Army Administrative Faults

The Army has taken some pride in the fact that an average of about 1,000,000 troops a month are shuttled about the country. The railroads, indeed, deserve much praise for their efficient handling of this transportation problem, yet it is not at all certain that administratively the Army has much to be proud about in this record. Men are transferred rapidly and often aimlessly from one camp to another; it is not unusual to find men who have been assigned to five or six widely separated stations in their first six months of service.

These quick transfers not only increase transportation problems but augment the administrative burden tremendously. Pay records and personal records sometimes are hopelessly behind; mail gets lost. In one instance a Negro soldier who had been married for two years and whose wife was about to have a child was inducted last November. In the interval he has been at four posts, Camp Upton, L. I.; a camp near St. Louis, Mo.; then back to Fort Belvoir, Va., and now to a camp in California. He has received in this period one-half of one month's pay, and though he registered an allotment for his wife upon induction she has received nothing for three months.

The plight of some troops abroad has been at times even worse. This correspondent knows of a number of instances where some troops in North Africa have received no mail, or virtually none, since October, and some have not been paid for months.

In a global war of this magnitude, administrative problems are terrific, but they could be handled in many instances far better than they have been.