Seas under naval stress

Naval warfare: 1914-1916

When WWI started, in August 1914, the German Navy had 28 U-boats. Their capacity was limited. From August 1914 until December 1916, the U-boats sank 2,200,000 tons of enemy ships. This means a total number of 1,500 Allies' vessels, or an average of about three vessels per day. On the other hand, the loss of U-boats increased mainly due to a newly developed depth charge with 300 pounds TNT or amatol, in 1915, which had become available and fully operable since 1916.

Naval Warfare: 1917-1918

The situation became dramatic for Britain in early 1917. U-boats sank more ships than shipyards could deliver. In April 1917 only, the annual rate of the previous years was reached in only one month (860,000 tons). In 1917, U-boats alone sank 6,200,000 tons, the equivalent of more than 3,000 ships.

The total loss of the Allies shipping was of about 12 million tons: about 5,500 merchant ships, 10 battle ships, 18 cruisers, 20 destroyers and 9 submarines. The total loss in naval units for the Allies and the Axis was of 650 ships (including 205 U-boats) with a tonnage of 1,200,000 tons.

Depth Charges – What it meant to attack a U-boat?

The onslaught of U-boats culminated with the sinking of almost one million tons per month (like, for instance, in April 1917). Although the British Navy was able to prevent hundreds of real or suspected attacks, the result was not at all encouraging. Only 11 U-boats could be sunk in a four-months period. New protection measures became a major necessity: convoying, patrols, a new promising weapon, depth charges, etc.

Sea Mines

The main minefields from the North Sea were on the Britain's East Coast including the Strait of Dover, Helgoland Bight and Northern Barrage. A rough figure for each of these areas is 50,000 mines. The total number of mines in the North Sea was of 190,000 and the total number during the whole WWI, of 235,000 sea mines.

Minesweeping is an activity that stirs and shakes the sea on an unprecedented scale. The 'stir impact' on the seas could possibly be many times higher than the mine laying and the impact of mines that 'hit a target' together. Britain alone had more than 700 fully operational minesweepers. Germans had a considerable number, too. Around 500 ships swept the North Sea every day, day and night.

Barents Sea and Baltic Sea

Many intense encounters in the Barents Sea could have played a major role in the icing of the high North, in February 1915 and the harsh winter in the North-West of Europe (1916/17). Since early 1915, more than 450,000 tons of coal and 90,000 tons of weaponry had been shipped to the Russian port Archangel. Russian and German navies had laid thousands of sea mines. Dozen of minesweepers were permanently in service. U-boats sank 25 ships in late 1916 and 21 vessels between April and November 1917.

Dozens of mine fields with thousands of mines were placed in the Eastern Baltic Sea. Many naval activities took place every day, for four years. British and Russian submarines operated successfully. The increase of sea icing during the war years (1914-1918) can be attributed to the naval warfare from the Baltic waters.