

## Foreword

Many military and naval historians believe that World War One was the most significant event of the Twentieth Century. It was the first “total war” because for the first time, the destruction of the enemy’s economy, and by extension, the civilian population’s will to resist, became war goals. It was also the first war in which each nation’s war effort included all the nation’s resources. It is considered to be the first “modern war” because it featured the wide-spread use of automobile transport vehicles, and new weapons; tanks, aircraft, and submarines. But there was one other new addition to warfare, mine warfare on a massive scale. Taprell Dorling, in *Swept Channels Being An Account of the Work of the Minesweepers in the Great War*, published in 1935, set the number of mines laid by all the belligerents at 235,983.

Both sides entered the war unprepared for the minelaying and minesweeping operations that would be required. They literally started from scratch. Both sides converted outdated warships to minelayers and minesweepers, and both sides used former commercial vessels for the same purposes. Both sides also pressed fleets of fishing trawlers and drifters into service.

Along with the need for ships was the attendant need for crews to man them. The result was that both sides went to war with mine forces that were inexperienced and hastily trained. Their training was often “on-the-job-training.” Many of those ships were lost to the very weapons they either employed, or were attempting to remove. The whole business of mine warfare is extraordinarily dangerous as illustrated in Chapters 1 and 9, which details the losses of the USS *Richard Bulkeley* and the HMS *Princess Irene*.

Commanders David Bruhn and Rob Hoole have done a masterful job of explaining and illustrating mine warfare equipment and its use. Minelaying had to grow from having the capability of laying a few mines to being able to lay whole fields in a very short time. Speed was important to working at night because of the need to get in and out quickly before the Germans discovered what was happening on their doorstep. Minesweeping was done under the same conditions, especially when the Germans and the British started mining the same areas, such as off the Horn Reefs.

None of the special mine warfare gear was on hand so, together with techniques for its use, it had to be developed and improved as the war went on. At the start of the war, British mines were deficient in many ways. The two they started the war with, the Service mine and the Elia mine, became something of a joke to the Germans, whose propaganda depicted British mines as being no concern to U-boat captains. In one propaganda account, an unnamed U-boat captain flaunted a recovered mine displayed on his boat's foredeck. The truth was that initially, the Germans assumed that British mines were as good as German mines. But they soon discovered that, with care, the U-boats were able to pass under and over British minefields. And if they blundered into a minefield, they might even be able to pass through it safely. But German captains did not develop a cavalier attitude toward British mines, which, despite their deficiencies, did sink U-boats.

But what British mines lacked in reliability was largely compensated for by laying them in huge barrages, in a "ladder" pattern, each rung of the ladder being a layer of mines. By 1917, the British were manufacturing the H2 mine that was a knock-off of the very effective German E-mine. The H2 mine was used to build the Folkstone-Gris Nez Deep Mine Barrage in November-December 1917, effectively closing the Dover Strait to the U-boats.

As one would expect, the initial British minesweeping attempts were rather primitive, and involved a great deal of danger. Imagine being on a ten-knot fishing trawler while dragging a steel cable, hoping to foul and snap a mine cable, allowing the mine to rise to the surface, wholly untethered. You now have a free-floating mine on the surface that you need to destroy before it drifts off and becomes a wandering, ship-sinking explosive charge. You shoot at it with a rifle, no easy feat when firing from a rolling, pitching deck and aiming at a bobbing floating target. The book's clear explanations and sharp illustrations allow you to understand the process as it developed through the war and culminated in 1919 with the clearing of the Northern Mine Barrage. This was probably the most hazardous undertaking accomplished, since the mines being swept were the American Mark VI, so sensitive that almost anything would cause it to explode.

Bruhn and Hoole have laid out these things in a well-organized narrative that puts the Royal Navy's mine warfare in the greater context of the war at sea, 1914-18. The result is a book that is entertaining, interesting, and informative.

Dwight R. Messimer