



SUMMARY OF THE BOOKS

U-boats had been a serious threat to the Allies since 1916. They regarded it paramount to prevent U-boats from leaving the North Sea into the Atlantic. To 'close' the northern outlet of the North Sea, about 150 sea miles (ca. 275 km), a long barrage between the Orkney Islands and Norway would be required. Off the Norwegian coast the water is 300 metres deep and the coast off Orkney about 100 metres. Sea currents can reach 3-4 nautical miles/hour. That was a challenge and required the development of a new mine, the MK6, to meet it. The charge consisted of 300 pounds of grade B trinitrotoluol (TNT). The mine itself was supposed to have a destructive radius of 100 feet (ca. 30 m) against submarines. Calculations showed that approximately 100,000 mines should effectively prevent U-boats from passing the line. Actually, only about 70,000 mines were laid until October 1918.

Mines were available by March 1918, laying started. "Shortly after mine laying had commenced mines began to explode prematurely. By counting the explosions it was estimated that between 3 and 4 per cent of 3,385 mines laid blew up". In the middle section "A" mines were supposed to be laid as follows: 10 rows of mines at 80 feet submergence, 4 rows of mines at 160 feet submergence, 4 rows of mines at 240 feet submergence. Corresponding rows were laid before the Orkney Islands (section B) and Norway (section C).

From a detailed account by Daniels here are some illustrative events:

__When deep level mines exploded, 'a circle of brown discolored water was spreading slowly around the vessel'. July 6th, a mine had been found on the Norwegian coast in the vicinity of Bergen (Daniels, p.108).

__July 14th, 5,395 mines had been laid in 4 hours and 22 minutes (Daniels, p.109).

__Approximately 5% of the mines exploded prematurely – a slight increase over previous statistics.

__July 29th, 5,399 mines laid with 14% of mines going off (Daniels, p.111), at one time even 19% in section C (Daniels, p.112).

__August 18th, 12% of mines exploded prematurely.

__Section A; mines which had been laid in this area by the British in March 1918, had in the meantime been swept up. (Daniels, p.115).

__September 29th, the Norwegian Government said that mines would be laid in the vicinity of Udsire Island, and it is understood that this had been done by October 07th (Daniels, p. 119).

__With the signing of the armistice on November 11th, the building of the mine barrage ended. (Daniels, p.120).

__Final Status of Barrage (extract): up to November 11th a total of 56,760 United States and 16,300 British mines have been laid. Completion of the barrage within the Norwegian territorial waters had been effected by Norway herself.

Mine sweeping started in spring and ended in autumn 1919. From more than 73,000 mines

__about 5,000 exploded prematurely soon after laying

__20,000 mines were disposed of while the work was in progress

__from the remaining ca. 50,000 mines

__more than 30,000 mines were already 'gone' in spring 1919, either drifted away, or exploded during winter storms;

__rest 20,000 were swept in 1919.

Six months of sweeping operation comprised seven sweeping missions involving more than 70 vessels and 10 supply vessels.