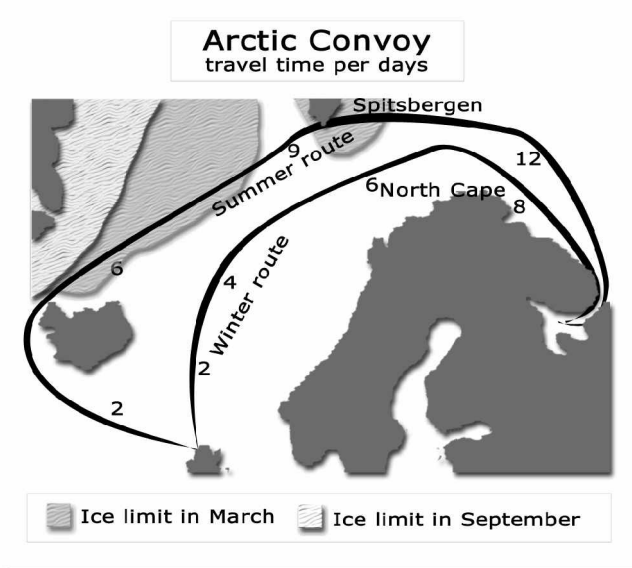


The Arctic Convoy

Russians received about 4,000,000 tons of cargo, including 7,000 aircrafts and 5,000 tanks via the most difficult and dangerous route going from Britain to Murmansk. Climatically, this was the most sensitive sea route and probably many times more effective in climate changes terms than the naval activities at one thousand miles further south. Out of the total shipped cargo, 7% was lost in the sea. Danger came not only from the arctic climate, but from the attacks of the German Navy and Luftwaffe from their North Norway bases. The Luftwaffe had 264 aircrafts in that area, while the British Fleet Air Arm and the Royal Air Force flew 17 combat missions to North Norway between January 1942 and November 1944, which involved around 600 airplanes.

Convoys started to sail in August 1941; the 35th convoy sailed in May 1945; convoys guarded a total of 715 ships. 100 merchant ships, with a total of 600,000 tons, were lost. The German side lost five surface naval ships including a battle ship and a battle cruiser and 32 submarines. British Navy lost 20 surface vessels and one submarine.



To avoid possible confrontations with German forces, the convoys sometimes travelled to the far North. For example, in July 1942, the ships which formed the convoy PC17 navigated close to Edge Island (Spitsbergen), at 77°N, and at the edge of the ice border, but were still suffered the attacks of Luftwaffe aircrafts and of U-boats.

The convoys were escorted by a considerable number of ships. Fighting at the East and West of the North Cape had some serious consequences as this was the theatre of the most destructive WWII battles. For the Norwegian and Barents Seas, military presence didn't pass unobserved: naval war had a huge impact on the sea.

Atlantic Sea Mines

Between 1940 and 1943, an 110,000 mines barrage was placed by Britain between Orkney and Iceland. The 'Mk XX' mines were supposed to prevent U-boats from reaching shipping routes in the Atlantic. Whether the barrage was a serious threat to

U-boats or not is not a certain fact. It seems that it was not. But it would have been a tremendous threat to the sea if the mines had exploded prematurely.

Summary

Even if information can't be very extensive in such a brief presentation of the naval warfare between 1942 and 1945, it is enough to give a general idea of the climatic phenomenon and to raise the awareness that oceans had been 'stirred and shaken' in a way that could have caused their unusual cooling which lasted four decades.