

Naval activities in the Baltic Sea 1941 (3_21)

A few words in advance on icing in the Baltic Sea

This study does not propose to elaborate on naval history. Many papers and books have appeared on this subject. Further, naval activities in the Baltic Sea during the second half of 1941 are reasonably well recorded. They tell



detailed stories on win and loss, strike and destruction, life and death, etc. But they reveal virtually nothing about what this fighting did to the sea body's temperature structure from bottom to surface. This has already been explained in respect of the Baltic Sea in a previous chapter. (A) While the sea is almost fully independent from the ocean system, and the Scandinavian mountain ridge lowers the free flow of air from the Atlantic into the Baltic rim, the Baltic Sea in autumn is like a bathtub filled with hot water. If one leaves the water alone, it will cool out itself; instead, if the water is stirred it will cool out more quickly. Naval activities produce the latter category of effect. If the temperature is lower in the Baltic Sea, the freezing of the sea will start earlier.

(B) Using the temperature and icing data available as a benchmark, this investigation tries to conclude that 'Barbarossa' caused an extreme winter in Sweden. Actually, Middle Europe from Stockholm, via Copenhagen, Rotterdam and London had been drawn back into the ice age. Presumably this is valid for the region between Riga and Moscow as well.

Further details: (A) Baltic cooling, 2_17; (B) Cold axis, 3_22)

To understand better the following list of some major, interesting or illustrative events, the freezing process as described by Palosuo in 1953¹ is reproduced below: "Freezing began earlier than usual in the northern part of the Bothnia Bay in the autumn of 1941. The shallow bays froze in the middle of October as a result of the first frosts, which started. But the freezing over was quite exceptionally early in the south, in the region of the Gulf of

¹ Palosuo, p.33.

Finland, during the following frost period, at the end of October when ice formed in the coastal bays. During the third frost period, which started in the middle of November, ice covered the inner archipelago of the Gulf of Finland. It was exceptional to have three successive periods of frost as early as this. A new and comparatively harsh period of frost began in the early part of December. In the middle of December the open sea of the Gulf of Finland, the area within view of the fixed observation stations along the coast as far west as Pellinki, was completely covered with ice.”

The early freezing in the Gulf of Finland is a clear sign that the mining, bombing, shelling and sinking of ships, etc did a considerable, effective and early cooling job.

‘Barbarossa’

The Deutsche Reich planned and commenced the invasion of the Soviet Union under the codename ‘Barbarossa’ on 22 June 1941 without declaring a formal war. With three million soldiers the German Army marched eastwards from the Baltic Sea to the Carpathians.



Flotilla in the Baltic Sea

The weather was fine for three months. Rain and mud dominated in the campaign from early October until the freezing took over from mid-November onwards. Weather conditions turned arctic by mid December that stopped any further advance and the conquest of Moscow. Any chance for Germany winning the war was lost under these icy conditions. This is not the occasion to speculate why the Red Army was better able to cope with these conditions, although it hardly comes as a surprise assuming that they had learnt from their devastating experience in Finland in December 1939. (A)

Further details: Russian –Finnish war 1939, 2_41.

Participants in the naval action in the Baltic Sea

The Germans mobilised about a hundred naval vessels; viz. 10 large mine layers, 28 torpedo boats, and 2-3 dozen minesweepers. Air support was entrusted to the Luftwaffe.

The Russians had six big war ships, 21 destroyers, 65 submarines, six mine layers, 48 torpedo cutters and 700 air planes.

The naval forces of Finland and Sweden were also present even though on a much lower level. The Finns working in loose cooperation with the Germans commanded possibly about a dozen smaller units that were able to assist in mine laying operations. During the first two months of the Barbarossa campaign they laid, along with German ships, about 5,000 mines and 3,500 sweeping obstacles². The Germans were able to use Helsinki as a naval base. The Swedish navy was not only involved in surveillance missions but also in laying mines. On a mine barrage that Sweden had laid at the request of the Germans, three German mine layers which were returning from mine laying missions in Finland ran into mines and sank on July 9th ³.

That Finland was actively involved in this mission is illustrated in the 'Finnish communiqué issued on December 7, 1941. (extract from NYT, 8 December 1941):

- Sea: Between Seivasto and Ino our coastal guns engaged in battle with an enemy fleet unit headed towards Kronstadt. An enemy battery at Yhinmaki participated. One enemy destroyer was hit. A snowstorm interrupted the battle.
- Karelian Isthmus: The enemy was active. Our artillery and trench mortars scored direct hits.
- Svir River Front: Our own artillery scored hits on artillery stations and trenches.
- East Front: In the north enemy attacks were repulsed. In the south,



after fierce fighting, our troops captured the town of Karhumaeki.

- Air: Our own air forces bombed military targets.

Mining of the Baltic

Mine warfare played an important role during the campaign 'Barbarossa'. Probably 20,000 or more mines were laid and many thousands swept and destroyed. Although many of the Russian mines were less than 100 kg, the

² Koburger

³ Rohwer

⁴ Koburger

The Soviet Baltic Sea Fleet alone laid 10,000 mines, by far the largest number in the Finnish Gulf and outside Soviet Ports in the Baltic, e.g. Riga and Reval⁴. In early August a dozen Russian naval vessels laid mines as far away as west of Bornholm⁵. Probably the last distant operation was a mining operation close to Gdansk from 20 October to 15 November⁶.

Reichsmarine made most intensive use of mines. They had laid a barrage with more than 1,000 mines from the mouth of the river Memel (Neman) to the island of Ödland/Sweden before the campaign Barbarossa had started. Another network of fields was later laid further west (Kolberg/ Bornholm)⁷.



The objective was twofold, to protect the vital commercial routes and to prevent the Baltic Fleet from operating. With this objective the mine-laying operations continued until November⁸.

The effectiveness of mines was high. The Russians lost almost 100 merchant vessels due to mines. One illustrative event occurred in early December when the Baltic Fleet desperately tried to evacuate the Finnish island of Hangoe. 7,500-tons *Josif Stalin* carrying ammunition and military personnel, during drifting, was hit by four mines that initiated a tremendous detonation, killing four thousand of the troops aboard. 2,000 men survived. Since the evacuation from Hangoe started on October 31 the Baltic fleet lost, in half a dozen missions, three destroyers, three fast minesweepers and other craft and transporters *Josif Stalin*, *Andrey Zdanov*, the icebreaker *October* plus a host of smaller vessels⁹.



The effectiveness of mines was also demonstrated when the Baltic Fleet needed to evacuate their fleet bases at Reval. More than 200 ships had to be moved to Kronstadt. Over 4,000 mines lay on the way out, some of them laid so close together that the distance between individual mines was sometimes only 30 feet¹⁰. Once the convoys had passed minefields, the vessels were bombed or torpedoed. The move cost the

⁵ Rohwer

⁸ Rohwer

⁶ Rohwer

⁹ Koburger

⁷ Koburg

¹⁰ Woodward

Baltic Fleet over 50 naval ships and some 36 transporters and auxiliaries, the total loss of life was high, at least 6,000 men were lost.

Other naval activities

Rohwer¹¹ lists about 85 major naval activities including mining operations during the period from June to early December. Only a few can be cited here in general terms.

The Baltic fleet had 65 submarines of which only a few were in service. Nevertheless, they were a permanent threat to navigation and certainly initiated hundreds of attacks with depth charges. For example: on October



13th submarine SC-323 attacked the cruiser *Köln* off the Swedish coast, in vain, but later sinking the 3,724-ton steamer *Baltenland*¹². The Soviets lost 27 boats until the end of the year.

Coastal batteries were abundantly placed along all Baltic coastlines.

There is hardly any information available at what locations, how often and with how many shells they ‘penetrated’ the sea. At many locations, before the German army could set up a supply line, the place was fiercely defended by coastal batteries. In September the Baltic Island (e.g. Özel, Dagö, Mön) were still held by Soviet forces. It took quite some efforts by a flotilla of cruisers and aerial bombing to silence the coastal batteries¹³.

The involvement of bomber and fighter planes occurred frequently. The Baltic fleet had their own air force wing with about 700 planes, but no airfields left very soon. The Luftwaffe flew many missions but details are not easily available. Only significant hits are reported, e.g. a 1,000 kg bomb hit the battleship *Marat* at the pier of Kronstadt, destroying the front part of the ship¹⁴. The Luftwaffe flew 600 sorties against the Baltic Fleet in Kronstadt, either to sink the fleet or to drive them out of the port¹⁵.



Another occurrence must have required enormous protective measures, which quickly passed unnoticed. Suddenly all available German capital naval ships

¹¹ Rohwer

¹⁴ Rohwer

¹² Rohwer

¹⁵ Kronberger

¹³ Kronberger

navigated the Baltic during September, the *Tirpitz*, the pocket-battle vessel *Admiral Scheer*, the light cruisers *Köln*, *Nürnberg*, *Emden*, and *Leipzig*, etc. with a number the escorting destroyers. The flotilla moved as far north as the Åland islands¹⁶. When an invasion by the Baltic Fleet was no longer a threat to Sweden, the task force left the scene.

During these autumn months many merchant vessels were engaged in the transport of ore from Sweden and Chrome from Finland to Germany and of military goods to Finland on return.

Losses in the Baltic



While it is impossible to account for the full number of all explosive means adopted that ‘stirred and shook’ the Baltic sea, the drama that occurred in less than 6 six months might be illustrated by the loss of ships recorded. In very rough figures the total losses for the Baltic Fleet

were 120 naval and 90 non-military vessels; the Reichsmarine lost 35 ships and about 15 cargo ships (some to German mines); the Baltic countries lost 100 merchant vessels and together with Sweden and Finland about 15 naval vessels in total.

The total number of ships sunk in the Baltic Sea in the second half of 1941 is about 370 which may represent 500,000 tons.

The Southern Baltic Sea

The ‘Barbarossa’ campaign, as recorded and presented above, concerned the section north of the Memel –

Ödland line. In the course of ‘Barbarossa’ only few mine fields were newly laid south and west of this line. No significant military encounters were reported from this sector. To this extent, this part was firm under German



¹⁶ Woodward

¹⁷ Liljequist, 1941/42

control. But while this was the case, presumably many mines laid earlier had now been swept. In addition to high naval traffic, exercises and training of personnel along the German coast, with the start of 'Barbarossa' a huge coastal transport operation also started from west to east to ensure continuous supplies to the army in the East.

Baltic Sea ice winter 1941/42

The Swedish meteorologist Gösta H. Liljequist¹⁷ wrote immediately after the extraordinary winter 1941/42 (excerpt):

“The winter 1941/42 was colder than the winters 1939/40 and 1940/41. At Stockholm it was one of the very coldest winters since 1756, when regular temperature observations were started. If we graduate the severity of a winter according to the value of the mean temperature of the three coldest months of the winter half year, 1941/42 is found to be the coldest winter since 1756.

The formation and breaking up of the ice took place at a rather normal time in the Gulf and Sea of Bothnia: The formation of ice in the Baltic and at the West-coast started in the first part of January, generally one or two weeks earlier than normally. The ice conditions grew worse after a mighty invasion of cold air on January 24th, when temperatures between -25° and -30° C were recorded in the whole country; at the same time the wind force was 6 Beaufort scale or more.

The thickness of ice was about 100 cm in the Gulf of Bothnia – the maximum value observed this winter being 125 cm – and 60 cm in the Sea of Bothnia. In the Baltic the values varied; between 50-60 cm were generally observed.

The ice period was generally longer than in 1939/40 but about the same as in 1940/41, except at the West-coast and in the Sound, where it lasted longer. On June 6th all Swedish waters were ice free”.



Summary

Although the Baltic Fleet and the Reichsmarine never met face to face for a traditional sea-battle, 'Barbarossa' unleashed destructive force in the Baltic Sea, which this region had neither experienced at any time during World War I, nor during the two principal clashes two years before, when the Reichsmarine attacked Gdansk and the Baltic Fleet shelled and bombed Finnish islands and cities along the Gulf of Finland in December 1939. While the latter events had been able to make a significant contribution to the first war winter conditions, the third war winter owes its origin even more to anthropogenic reasons.