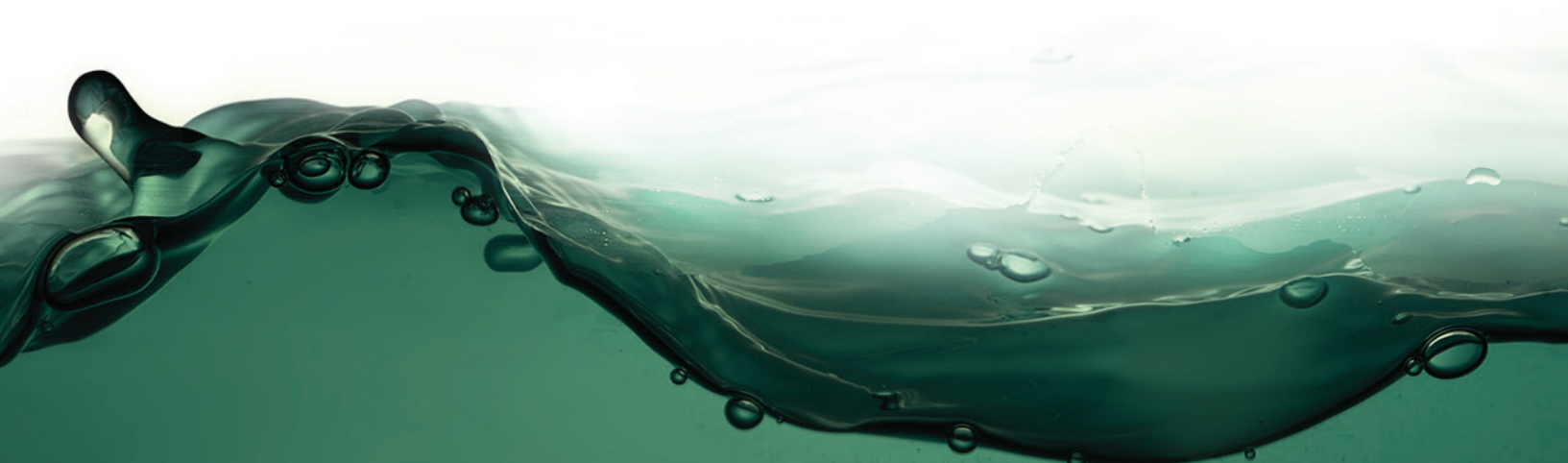




BALTIC SEA POLICY BRIEFING



1 / 2013

Bo Österlund

Mare Balticum - Mare Nostrum

from Mare Clausum via Mare Sovieticum to Mare Liberum
-The process of security policy in the Baltic

Mare Balticum - Mare Nostrum

from Mare Clausum via Mare Sovieticum to Mare Liberum
-The process of security policy in the Baltic

Bo Österlund

ISSN 2323-4989

Bo Österlund

Commodore (Ret)
Flag Officer
One Star Admiral



Since the early 1980s, Commodore (flag officer, one star admiral, ret) Bo Österlund has studied closely the changes in the Baltic security policy and the pertinent research on the subject during his operative duties in the Finnish Naval Forces, as CO of the Gulf of Finland Naval Command. As military Attaché in Stockholm, and as Commander of the Military Command of Turku and Pori. His study “The Changing Baltic” was published in collaboration with Professor Mikko Viitasalo: he has also written several articles on the issue, and participated in planning the preparative security measures concerning sea traffic and the Finnish harbours. In recent years, a particular interest has been focused on the security of energy and maintenance activities and sea traffic in the Baltic region.

The challenges of security policy have throughout our stormy history been characteristic of the Baltic region where the sea has always served as a traffic route, a centre of trade, a theatre of war, a seat of partitioning states, a seat of creating spheres of influence as regards security or defence policy. Sea control' or denial of sea control has always created tensions between the parties involved.

All in all, it can be alleged that the Baltic Sea unites, protects, shelters, transports, provides a livelihood but also isolates and separates.

This article is a combination of what has changed in our past, what is changing at the moment, and what seems to change in our near future as regards the process of security policy. The situation in the Baltic area will be evaluated from the angle of the widely understood significance, momentum, and use of naval forces.

Today, the naval war equipment to be used in the Baltic Sea in the year 2025 or so is already in operation, under construction, or on the designer's desk.

Mare Balticum – Mare Nostrum

In the course of centuries the Baltic Sea has provided traffic routes for seamen, soldiers, pilgrims, travelers, and consumers, it has offered the livelihood and sustenance to those engaged in maritime occupations. Basic products, and, subsequently, processed commodities as well as the demand for these have found their way from the Baltic coasts and their vicinity to coastal harbours and further out across the sea to the opposite coast and, finally, the residents and consumers in the hinterland. From the Baltic Sea the vessels sailed towards the east, using the waterways to the Caspian Sea and the Black Sea, and further south to the Mediterranean Sea and the water routes and connections to the Far East. The Baltic Sea was reached by ships from the west, across the North Sea, the Atlantic, and the Norwegian Sea or via the several rivers flowing into it. With the developing Russian network of rivers and canals the trade reached an ever-increasing multitude of consumers in the large country. Along the inland routes

it was possible to erect defence constructions concealed from the sight of interested curious eyes, and to be provided with by vitally important plantations and granaries. The navigable rivers also made it possible to concentrate secretly battle ships and to take the hostile adversary by surprise at an unexpected moment, in an unexpected manner, and at unexpected sites.

As far as security policy is concerned, the Baltic Sea has been, from time immemorial, regarded as an inland sea of the coastal states in contradiction to say the Mediterranean Sea which, at times, has been blocked up. The Roman Empire had strong arguments in regarding the Mediterranean Sea as their own "Mare Clausum" (Closed Sea) since the Roman jurisdiction was valid all along its coastline. The Romans were, however, well aware of the fact that the sea was not infinite, it extended only as far as the opposite coast. The sea embraced anyway all the surrounding coasts, and came therefore to be called their own sea "Mare Nostrum" (Our Sea).

The people of the world live and work mostly on dry land, and have always a firm solid ground under their feet. Consequently, this may result in, and has, in fact, already resulted in a situation where the energy of all political activity is focused on sites where the operators have solid ground under their feet. Every now and then, the importance of sea routes seems to have been on the wane.

James E. Toth (1955, 1) describes the paradox of this situation in his work "Strategic Geography" as follows: "Man's natural habitat is land, and land dominates his conscious Endeavour; social, economic, political, and military: Yet, almost three quarters of his world is ocean. It is the original source of life for all earth's species; it is essential means of global transport for man's produce, commerce, and military strength. While the world ocean is beyond sight of much of mankind, its influence is ubiquitous."

In the latter half of the 19th century the great master of naval strategy and geopolitics, Rear Admiral Alfred Thayer Mahan famously stated his view on the arguments of the control of the sea and the power projection of naval forces as follows: "Control of the sea by maritime commerce and naval supremacy means predominant influence in the world... (and) is the chief among the merely material elements in the power and prosperity of nations" (Livezey 1981, 281-282).

Mahan believed that international politics was mainly a struggle over who gets what, when and how. The struggle could be about territory, resources, political influence, economic advantage or normative values. The contestants were the leaders of traditional nation-states: military and naval forces were their

main instruments of sea power politics.

Some centuries prior to Mahan Sir Walter Raleigh held that "he that commands the sea, commands the trade, and he that is lord of the trade of the worlds is lord of the wealth of the world" (Padfield 1999, 1-2). Sir Raleigh's theses seem to be directly applicable to the Baltic Sea.

The Danish Straits – the Bolt of the Baltic Sea

Discrepancy between the coastal states of the Baltic Sea on the upkeep of the Baltic Sea as a free sea area, and the free use of the sea routes across it, arose as early as the early 15th century when Denmark began to enforce and collect customs duties on all foreign vessels sailing in or out through the Sound. England and the Netherlands, the two Sea Powers which pursued widespread trade in the Baltic region protested forcefully against this one-sided decision. Denmark attempted to solve the dispute by promising to safeguard the trafficking of foreign vessels in the straits and keeping the Danish sea territory free from pirates as a compensation for collecting the duties. Sweden chose to proceed along its own path in the question of customs duties. The King of Sweden raised and gathered a navy and an army, concentrated his troops on the opposite shore, and then defeated first Denmark and thereafter also Lübeck (Ehrensverd, Kokkonen, and Nurminen 1998, 26-27).

Since the beginning of the 1530s Sweden had acquired a leading position as a sea power independently of its contestants, relying on its own military navy, which enabled it to widen its sphere of influence to almost every corner of the Baltic region. With his naval forces and his land troops King Gustavus II Adolphus conquere-

red every significant port with the exception of Lübeck on the coasts of the Baltic Sea, in the 1620s and the 1630s, i.e. in the latter half of the Thirty Years' War. The town of Lübeck was an important landmark even later in history during the Cold War when the countries of the Warsaw Pact were expanding their sphere of interest after the Second World War.

As a result of those conquests Sweden gained a dominating position in the Baltic region (*Dominus Maris Baltici*). As a consequence of the Roskilde Peace Treaty in 1658 the scope of the supremacy of the Swedish control of the Baltic area was at its widest. It comprised the Gulf of Bothnia, the northern and southern coasts of the Gulf of Finland including Estonia and its large islands (Ehrensverd, Kokkonen, and Nurminen 1998, 26-27). In the south Sweden ruled over the narrow coastal strip of Mecklenburg – West Pomerania; even on the coast of the North Sea a restricted sector of land was under Swedish control. Denmark controlled, however, as before the strategic gate lock of the Baltic Sea, the southern shores of the Danish Straits, and the incoming and outgoing shipping lanes.

The control of the Straits has ever since those days been the Achilles heel of Baltic Sea Power philosophy. He that controlled the Straits was capable of having surveillance of all the vessels sailing into or out of the Baltic Sea, and thus of evaluating the trend of military changes in the area almost in real time. Besides, he could evaluate the need of interference with the course of events. In this connection, it is worth mentioning that in 1974, according to subsequent statistics registered during the Cold War, there were observations of 1059 western war ships in transit through the Straits. The greatest number of vessels was registered in 1985 with as many

as 3273 observations. This figure includes the squadron of US aircraft carriers which sailed into the Baltic Sea for the first time in history (Holmström 2011, 259). At the end of the Great Northern War, when the Peace Treaty of Uusikaupunki was being worked out, the idea of the Baltic Sea as a future *Mare Clausum* was raised, i.e. it would be closed in principle but open to the battle vessels of the coastal states. These ideas were materialized when Denmark, Prussia, Russia, and Sweden cemented the armed neutrality treaty determining this agreement in St Petersburg on July 21, 1780 (Ehrensverd, Kokkonen, and Nurminen 1998, 27). The purpose of the agreement was then to blockade the Danish Straits from English battle ships. With this treaty Russia deprived Sweden of its position as the leading sea force.

The domain of Prussia had by that time expanded largely in the southern Baltic Sea. When the effects of Napoleon's wars reached the Baltic coast in the early 19th century it became evident that it was no longer feasible to retain a temporary or even local sea control' in the Baltic Sea. It would have required far too heavy investments in the navy to increase an adequate and dominating capability of performance, and to create thus a counterbalance to the navies of the Great Powers. Even then the plan collapsed, however, due to lacking economic resources, and the idea of parity had to be abandoned.

Sweden proclaimed in the year of the 1807 Treaties of Tilsit that it was no longer prepared to blockade the Baltic Sea. In other words, the country was not, after the ending of its position as a Great Power, any longer prepared to invest sufficiently in its naval forces, as the close-up of the Baltic Sea would have required. In consequence, the Danish Straits were opened

to transit traffic through the Sound, the Great Belt, and the Little Belt even for foreign war ships.

During the Crimean War 1854 – 1856 English and French naval squadrons penetrated into the Baltic Sea with the purpose of blockading the ports of Russia including those of the Grand Duchy of Finland, and to arrest the sea traffic of the Czarism. The squadrons sailed deep into the Gulf of Bothnia and the upper end of the Gulf of Finland threatening the Finnish coasts. In those days, the target of the blockade and the bombing was in the Finnish territory: the fortress of Bomarsund in the Åland Islands was annihilated on September 2, 1854. Sweden and Denmark were not willing to participate in these events and sought shelter behind the shield of neutrality. In the aftermath, Denmark had to abandon collecting customs duties in the Sound in 1857.

Ever since those days the Danish Straits have been free to innocent transit passage, to merchant vessels as well as to official vessels and war ships. The duty to report on the passage has, however, been retained till the present day.

The Russian Fleet Was Obliterated in Tsushima in 1905

The Russian sea defence system off the Baltic coasts suffered a shattering defeat in the crucial battle of the Russo-Japanese War in the Battle of Tsushima Strait in 1905. The Russian Baltic Fleet sailed round the Cape of Good Hope into the strait between Korea and Japan in order to assist the blockaded Russian Pacific Fleet. Russia suffered in the subsequent fierce sea battle immense losses which led to the rise of the revolutionary forces against the Czar. The Czarism, however, managed to extricate this

course of events driving at the revolution.

Before Tsushima the Russian Baltic strategy was based on the Baltic Fleet with Liepaja as its main naval base. When this fleet was annihilated in Japan, Russia planned to blockade the Gulf of Finland with strong coastal artillery at the narrowest point of the gulf. The Finnish and the Estonian coasts of the Gulf of Finland belonged at that time still to the Russian Empire. Helsinki was to be fortified to be used as a naval base. The focus of the fortification plan was the Gulf of Finland, and embraced at its most extensive the whole gulf, in the south down to the Gulf of Riga, and in the north to the northern parts of the Archipelago Sea. The marine fortress was called Peter the Great's Naval Fortress and its construction began in 1912. Its primary purpose was to shelter the marine flank of the Russian capital city St Petersburg. A unique, even by global standards, chain of fortresses based on stationary coastal artillery was erected on the Finnish coasts. The narrowest part of the Gulf of Finland between Porkkala and Naissaar was blockaded with 12-inch artillery with a coverall projectile range, was stationed on both sides of the Gulf.

Alongside with the Naval Fortress, Russia began to build its open-sea fleet. According to the plan, eight battleships, four major and four minor cruisers, thirty-six destroyers, and twelve submarines were to be constructed from the year 1912. All these were meant to be adapted to Baltic conditions, and to be used in that region. This plan was, however, never entirely completed (Barnett 1989, 308).

In the First World War Germany battled against Russia in the Baltic Sea with its Reichsmarine which had been composed of the Prussian Naval Forces and the Bun-

desmarine of Northern Germany. As the Russians considered that their naval troops would be defeated by the Germans they subordinated their navy to the land army, and the navy was to focus primarily on protecting St Petersburg (Kauppi 2007). In the Gulf of Finland, the emphasis of the naval operations was put on mines. The Gulf of Finland was substantially blockaded with two mine belts which impeded German eastbound attacks. Six German destroyers sank in the year 1916 in Russian minefields. The use of submarines was destined to cut off German ore transportations from Sweden. In October, in the war autumn of 1917, the revolution broke out with the mutiny of sailors on the cruiser "Aurora" which had come off safely from the Battle of Tsushima Strait. The Baltic countries and Finland proclaimed their independence after the dethronement of the Czar and the triumph of the Bolsheviks. In consequence of this process only a narrow strip of the Baltic coast at the upper end of the Gulf of Finland remained under Russian authority. The maritime window of Russia towards the west had shrunk into a tiny aperture.

The German Reichsmarine contributed to Finland's fight for freedom considerably by transporting weapons and troops both to the Gulf of Finland and the Kvarken in the Gulf of Bothnia, and by hampering, with their mine fields, the Russians from trafficking on the sea. After the war more than 1 500 naval mines were cleared by minesweepers in the Gulf of Finland and the Åland Sea; the number of mines laid in these waters was certainly many times greater (Anteroinen 2008).

In the aftermath of the war the German Navy was annihilated at Scapa Flow in Scotland, and the construction of a new fleet had to be started from the very beginning. For some time, the Peace Treaty

of Versailles restrained, however, the development of the German armed forces.

Large-scale and lucid defensive objectives in proportion to the length of the coastline were set to the Russian post-war building programme for its Baltic Navy. Priority was given principally to the construction of patrol vessels, torpedo boats, and submarines. The intention was to construct as many as 350 submarines by the year 1937 (Åselius 2005).

At the outbreak of the Second World War with the occupation of Poland, the Soviet Baltic Fleet consisted, despite the utterly short strip of the Baltic coast at Leningrad, two battleships, two cruisers, two command ships of destroyer class, leading destroyers, nineteen destroyers, thirty-three mine sweepers, sixty submarines, and six hundred fifty-six airplanes (Polmar 1991).

At the outbreak of the Second World War, the German Kriegsmarine consisted of eleven vessels of the size of a CL (cruiser light) or bigger while seven additional ships were under construction. This small fleet was supported by twenty-one destroyers and fifty-seven U-boats (submarines), most of them usable only for minor coastal operations. Several larger vessels were, however, under construction. At the outbreak of the war, the labour on the surface vessels under construction had to be interrupted, and the half-finished ships were scrapped.

Although the German U-boats were a real threat to allied shipping until mid-1943, the surface units did not prove to be so effective towards the end of the war. Due to fuel restrictions, the wrong naval construction policy and several operational restrictions ordered by the political leadership, the Kriegsmarine

rine surface units were not able to be as successful as in 1939-1941 (Emmerich 2009).

The Kriegsmarine shielded the maritime flank of the German troops advancing towards Leningrad by laying mines, blockading Baltic ports, and by protecting the ore transportations across the Baltic from Sweden to Germany. As the Soviet Baltic Fleet retreated to Leningrad, the German naval troops blockaded the Gulf of Finland in cooperation with Finland with a transverse shore-to-shore and surface-to-bottom submarine net and, with several mine zones closing up the gulf. During the war more than 60 000 mines were laid in the Gulf of Finland, 40 000 of these by Germans, 10 000 by Finns and Russians each.

After the Armistice Agreement signed in September 1944 by Finland and the Soviet Union, Russians were able to sail out of the upper end of the Gulf of Finland (the first breakings out of the mined area took place as early as in summer 1943); they then were capable of supporting actively the Russian troops advancing towards the southwest. During the last phase of the war the Russian Baltic Fleet took possession of the Danish island of Bornholm in the southern Baltic Sea. The sea transportations of the retreating German troops as well as the German ore transportations were harassed. Despite their huge losses the Germans succeeded in evacuating by sea more than two million German citizens from Kurland to their home country.

The naval war in the Baltic Sea involved, above all, operations with mines and submarines against trade shipping and ore transportations as well as protection of the marine flank of the troops advancing along the land front.

With the reconquering of the Baltic count-

ries (assisted by the Western Allies) the Soviet Union expanded, after the post-war settlements, its scope of influence to the eastern and southern coasts of the Baltic Sea down to the town of Lübeck which is the traditional landmark in the area. Sweden, which had retained its neutrality, controlled the western coast of the Baltic Sea while Finland sentinelled the eastern coast of the Gulf of Bothnia, the archipelago sea routes leading into the Gulf of Bothnia east of the Åland Islands, the demilitarized province of Åland, and the northern coast of the Gulf of Finland.

The Iron Curtain Divides Europe into Power Domains

In March 1946, Sir Winston Churchill stated in a speech he made in Fulton, in the USA that an iron curtain had descended in Europe with the outbreak of the Cold War. His well-known words were: "From Stettin in the Baltic to Trieste in the Adriatic an iron curtain has descended across the Continent" (Churchill 1946). In reality, the Iron Curtain extended even further north in the Baltic Sea including the sea territories of the Baltic Sea up to the upper end of the Gulf of Finland. The boundary drawn in the water was cemented in 1955 when West Germany joined the NATO (the North Atlantic Treaty Organization) established in 1949. As a counterweight the Soviet Union organized the Warsaw Pact together with Albania, Bulgaria, Hungary, Romania, Czechoslovakia, and the Baltic coastal states of Poland and East Germany.

The procedure of protecting the new positions together with the armament program required to maintain the Power Domain was launched within the Soviet Navy. The naval units of Poland and East Germany were incorporated in the Soviet Baltic Fleet. The relative strengths between the East

and the West were unremittingly developing to the advantage of the Warsaw Pact. In the mid-1980s the relative strengths between the Warsaw Pact and the NATO in the Baltic Sea were estimated to be four to one (4:1). Merely numerically, this assessment does not give enough weight to the quality of the war technology at the disposal of the West. The naval troops of West Germany and Denmark were equipped with new helicopters, modern sea target missiles, and submarine systems.

Offensive Attacks from the East: A Notorious Scenario

The defence committee cooperation launched by the Scandinavian countries (Sweden, Norway, and Denmark) in the perilous year 1948 can be regarded as the basis of research when it comes to the notorious scenario of an attack during the Cold War. According to the assignment of the committee it was to "elucidate the possibilities and premises to the defence cooperation between the three Scandinavian countries". The basis of the assessment was an imaginary case in which the Soviet troops would invade simultaneously over land and across the sea into Scandinavia and further on to the Atlantic coast; in such a situation all the three Scandinavian countries would sit on the same boat, and the position could be evaluated as a whole. The idea of an alliance had to be abandoned the very next year when Denmark and Norway decided to join the NATO in April 1949 (Holmström 2011, 69 – 70). Sweden contrary to the other Scandinavian countries, returned to its previous defensive and security policy, based on peace-time non-alignment required by its state of neutrality.

As a result of the activity of the defence committee Mikael Holmström made the conclusion that Scandinavia was dealt

with in the negotiations described above practically as one unity of strategic evaluation of notorious scenarios. This idea was adopted in the NATO and registered as follows: "The defence of the area must therefore be considered as a whole with the objective of achieving one integrated and coordinated plan" (North Atlantic Defence Committee 1950, 160).

On these grounds the NATO defence scheme determined to include parts of both Sweden and Finland in the scope of the responsibility of the Allied Forces Northern Europe (AFNORTH) from the year 1962. This decision was not publicized in the two countries until the 1980s. The local board of leaders responsible for the Baltic area BALTAP (Baltic Approaches), based in Karup, Denmark, was in NATO maps accountable for all naval operations in the whole Baltic Sea. This area consisted of the whole Baltic Sea with its gulfs and bays, regardless of the existing national boundaries of territorial waters.

One or two attack wedges and foreign aid

This common notorious scenario of an attack pointed at Scandinavia, and the basics of the Swedish defence scheme during the Cold War was commented on, in broad outlines, by the former Commander-in-Chief, General Bengt Gustafsson in the magazine "FOA-tidningen" (Rehnavall 1998). According to his report Sweden prepared to repel one or two Red attacking manoeuvres from the east. The enemy was assumed to advance in two directions, one in northern Finland across Lapland towards Norrland, and the other from the shipping ports of the Baltic countries and Poland across the central Baltic Sea towards Gotland. The vanguard advancing across the sea was assumed to take hold of bridgehead stations in southern and

eastern Sweden. According to Gustafsson, also the alternative possibility of only one but more extensive attack manoeuvre was discussed in a few cases; such an operation would advance either in the south or in the north in order to acquire more space to allow subsequent concentrations of troops.

The eastern coast of Sweden is susceptible to a menace of attack from Trelleborg in the south up to Sundsvall on the coast of the Gulf of Bothnia. When it comes to politics and warding off an attempt of landing, political decision-makers decimated in the 1980s the needs of resources, to the amount required to repel only one hostile arrow of manoeuvre. Politicians were of the opinion that it was not economically feasible to repel two simultaneous attack operations advancing from two separate directions. Therefore, later in the first decade of this century, Sweden began in order to cover this deficit of performance, evaluated by military authorities, to add to its defence resolutions the following assertion: "...the possibility of resorting to foreign military assistance" (The Swedish Government 2008). This clause was adopted to be the basis in outlining the defence scheme and to guarantee the possibility of acquiring further (possibly indispensable) resources. Also in Finland, an analogous stipulation was entered into the reports of security and defence policy given by the Cabinet of Finland in the 2000s: "The Finnish defensive capacity should be dimensioned to guarantee the independence and territorial inviolability of the country as well as the living conditions of its population. The acceptance of foreign aid in case of crisis should be taken into consideration in developing the defence system" (The Finnish Council of State 2001, 43).

In the plans of the Warsaw Pact the main focus of naval operations was laid on the

Straits of Denmark and the defence of the domestic country. The focus of air defence was thrust forward to southern Sweden. The purpose of taking possession of the Danish Straits was to blockade the arrival of additional NATO vessels into the Baltic Sea and, simultaneously to ensure the thoroughfare of their own naval units in the Straits supported by sufficient air shelter and anti-aircraft defence. The importance of protecting the Baltic Sea traffic was emphasized. The Baltic Sea has remained the crucial sea route of the Soviet and later Russian traffic which is incessantly increasing in density, particularly when it comes to transporting energy materials, e.g. gas, crude oil, and coal.

One of the themes of the Polish staff map exercise manoeuvre in 1954 was to take possession of bridgehead stations in Jutland in Denmark and in southern Scania in Sweden. This operation was to be exercised by a few units of the 28th Army of the Warsaw Pact and three contingents of the Baltic Fleet. The bridgehead in Sweden was then to be continued up to the verge of the North Sea (Danish Institute for International Studies 2005, 638).

"Mare Sovieticum"

These scenarios guided also the development of the naval vessels of the Warsaw Pact and the NATO. The submarine unit of the Soviet Baltic Fleet outnumbered the total number of submarines in all other Baltic states together. The boats were armed mainly with torpedoes or, alternately, with naval mines. In 1978, there were three cruisers and thirty-five destroyers while in 1988 this unit had shrunk into no more than ten destroyers.

The depreciative statement concerning the Baltic Sea made by the Commander of the

Soviet naval troops, Admiral Sergei Gorshkov during the Warsaw Pact exercise manoeuvre in 1972 was interpreted in the West as an accentuation of the Soviet project called "The Baltic Sea – the Sea of Peace". According to a few opinions the Soviet ambitions aimed at "Mare Sovieticum", i.e. creating a blockaded Baltic Sea without any control of the Danish Straits (Grove 1989, 75). When it comes to landing craft or hovercraft vessels the Soviet Union was superior in numbers, and held the leading post in the world. At the end of 1982, the landing fleet consisted of more than three hundred units, and one third of these were assumed to be based in the Baltic area. The fleet consisted of two Ivan Rogov Class landing ships, each of which had the capacity of taking in a battalion of soldiers; including twenty tanks, and four helicopters. In addition there were eighty landing craft (Classes Polnocny, Alligator, and Ropucha), more than one hundred landing boats, and fifty hovercraft vessels. The first troops to be transported in the first contingent were the landing brigade based in Baltijsk, and the Polish landing division, altogether approximately 8 000 men. The capacity of transporting even large troops by sea to reach far-away goals was a factual reality (Österlund 1983, 4 – 12).

Sweden which was non-allied in peacetime and neutral in war-time began to follow peace-time procedures, and decided to decimate the number of its surface naval vessels more than thirty per cent in its defence resolution of the year 1958. The focus was set on developing the air force and the antitank weapons. The emphasis in developing the naval vessels was put on creating a navy of minelayers, minesweepers, and naval missiles (Larsson 2009). The purpose of the relatively strong Swedish submarine fleet (more than ten boats) was to extend the recon-

naissance and surveillance activities in cooperation with the steadily growing air force as far out as possible up to the opposite shore occupied by the enemy, and the shipping ports in the Baltic countries and in Poland. The situation awareness thus acquired was meant to provide a sufficient profit of time for Sweden's own countermeasures. According to Swedish estimates it was possible to create surface situation awareness in the Baltic region with three submarines moving under water: one at the mouth of the Gulf of Finland, one in the central Baltic Sea, and the third in the southern part of the Baltic Sea.

The Disintegration of the Soviet Union

The year 1990 was to be the turning point in the development of the Soviet marine power. The regime and the supporting alliance (the Warsaw Pact) disintegrated. In that year, eleven submarines and nine major surface vessels were constructed. That year was, however, the most productive since 1982 as far as ship building is concerned (U.S. Naval Institute 1991 – 1992). Stopping the wheels of ship building was not so simple, the machinery kept grinding once it was started.

In describing the post-cold-war trend of the Russian navy I will quote Sir Winston Churchill and his speech on the radio to his British fellow-citizens in October 1939: "I cannot forecast to you the action of Russia. It is a riddle wrapped in a mystery inside an enigma; but perhaps there is a key. That key is Russian national interest". Basically, it is a question of zero sums: Reaching an ascendance always implies a loss of power of the weaker participant. Acquisition or non-acquisition of military power decides the order of the world.

The end of the Warsaw Pact in 1990, and

the disintegration of the Soviet Union in 1991 altered the naval strategic positions also in the Baltic Sea. The Russian strategic domains of interest were removed from the southern Baltic Sea northwards closer to the Finnish territorial waters. The Navies of the Baltic coastal states of the former Warsaw Pact, their doctrines and duties underwent considerable changes. The Russian Baltic Fleet lost its crucial supportive areas, military ports and bases in the Baltic countries.

Admiral Vladimir Yegorov, Commander of the Russian Navy stated in 1994 that the Baltic fleet had lost eighty per cent of its bases, sixty-four per cent of its shipyards, fifty per cent of its surface battle ships and of its manpower, sixty per cent of its air force, and thirty per cent of its airports (Yegorov 1995, 128).

The Volksmarine of the DDR vanished totally from the theatre. In autumn 1990, at the reunion of the two German states, the Volksmarine had approximately one hundred and thirty vessels, minor patrol vessels included.

In the last days of the Soviet Union there were already signs of contractions of the Russian Baltic Fleet. The year 1991 was the critical turning-point. New vessels were added to the Baltic Fleet as late as in 1990 which was a very productive year when it

comes to ship building. According to the yearbook "Military Balance 1990-1991) the Soviet Baltic Fleet was estimated to consist of about seven hundred and fifty vessels in 1990; according to the following edition of the same yearbook (1991-1992) there were only one hundred and sixty left. The main naval base was to be the district of Kaliningrad, which, according to the then Commander of the Fleet Felix Gromov was meant to emphasize the Russian status in the Baltic Sea, and the capacity to defend Russian national interests.

In Russia, the 1990s were a decade of curtailments. At the end of the decade the navy comprised mainly minor surface battle ships. In the years 1988 – 2000 four cruisers disappeared from the list of vessels, the number of destroyers diminished to two, and that of submarines from thirty-nine to two; the number of landing vessels had decreased from nineteen to five, and that of patrol vessels from one hundred and fifty to twenty-six units. The vessels to be used operatively were relatively new. Seventy per cent of them were under fifteen years of age (Leijonhielm, Hedenskog, Knoph, Oldberg, Unge, and Vendil 2000, 101). The development of the vessel material of the Russian (formerly Soviet) Baltic Fleet at the following control points of time 1985, 1990, 2000, and 2010 is presented in table 1 below.

TABLE 1
Russian Baltic Fleet naval vessels

	1985	1995	2000	2010
Destroyer, Frigates	28	23	6	6
Submarines	26	8	2	3 (diesel)
Landing Craft	25	15	5	4
Minelayers and Minesweepers		55	13	15
Patrol Vessels	247	65	26	19

Source: IISS (1985-1986; 1995-1996; 2000-2001, 2011)

According to the estimate of Admiral Felix Gromov the resources of the Russian Baltic Fleet were halved, and they were now compatible with the German, Swedish and Polish fleets. Russian experts estimated that in the year 2020 the Russian Baltic Fleet might be only one third of the Swedish and one fifth of the German fleet in size. The decrease of the naval forces should be seen, above all, as a result of the dwindling economic resources of the transition period. Meeting the challenges of the expanding NATO cooperation required operations with a material which had to be qualitatively more sophisticated. In fact, Russia joined the NATO programme of Partnership for Peace in 1994, and has ever since participated in the annual BALTOPS naval manoeuvre exercises open to all partnership countries of the NATO. Instead of the previous main theme of the exercises, the defence of the Danish Straits, the exercise is now focused on maritime surveillance, salvaging, and general manoeuvres associated with naval cooperation. Finland and Sweden joined the Partnership for Peace programme and the BALTOPS exercise operations in the same year.

According to Swedish estimates the Russian Baltic Fleet had lost its capacity to take possession of the Danish Straits by a landing operation, and also the capability of performing a landing attack across the sea to the Swedish east coast (Leijonhielm, Hedeskog, Knoph, Oldberg, Unge, and Vandil 2000, 101 – 105).

The Polish navy also lost some of its strength at the beginning of the 1990s. According to the "Military Balance" (The International Institute for Strategic Studies), Poland had at that time still fifty-five surface battle ships. The number of Polish submarines was three. The most

significant feature in this process was the fast demolition of the naval landing craft of the former alliance (The Warsaw Pact) consisting of forty-six vessels which would have made a large-scale and imposing landing manoeuvre possible. After this there were no transport facilities or prerequisites to exercise a naval attack on the Danish Straits.

The Expansion of the NATO in the Baltic Area

The focal points of the Baltic security policy changed with the expansion of the NATO. Poland joined the NATO in 1999 and the Baltic countries in 2004. Russia remained in a geographical straddle split position – to use sports terminology . One leg leans on St Petersburg, the other on Kaliningrad where the staff and the main naval base of the Baltic Fleet are located.

The protection of the Russian sea connections and its energy transportation routes became even more important with increasing foreign trade. The volume of sea-borne service transportation to Kaliningrad across the Baltic has increased by multiple integral coefficients since the beginning of this century. It recompensed the problems emerging in land connections (Oldberg 2008).

In the year 2000 the Baltic Sea had grown into one of the most active in the world when it comes to sea traffic. By the year 2017 the unpacked cargo and container traffic is assessed to triplicate; oil and oil product transportation is expected to increase by forty per cent from the level of the first decade of this century (Baltic Sea2020, 2011).

President Vladimir Putin has emphasized the strategic interests of Russia on all seas

and oceans. At the beginning of the year 2011 we could read in American sources that Russia had concentrated tactical nuclear weapons in Kaliningrad. This step was by no means in accord to the spirit of the Nordic non-nuclear zone (Umbach 2002, 176).

In the year 2002, Commander of the Russian Baltic Fleet, Vice Admiral Vladimir Valujev publicly expressed his regret about the increased activity of the NATO off Kaliningrad when Poland had joined the western defence alliance (NATO) in 1999.

In the programme of naval policy endorsed by President Putin in March 2000, the Russian interests are established to drive at protecting the use of the resources of the oceans, and at obstructing other states or blocs from trying to dominate in sea districts important to Russia. Reaching this goal requires adequate resources and a well-balanced development of a fleet which is armed with conventional and nuclear weapons. The sea doctrine extending until the year 2020 accentuates the necessity of developing the infrastructure of the Baltic ports since more than one hundred and fifty-three million metric tons of the Russian trade (imports and exports) travel even today via the Baltic Sea. It amounts to almost twenty per cent of the total sea traffic volume in the Baltic Sea which is about eight hundred and fifty million metric tons. Also the modernization and renewal of the merchant marine and the importance of economic cooperation are emphasized. The preparatory work aiming at the planning and installing the natural gas pipeline across the Baltic Sea has required the use of the Baltic Fleet and its vessel material (Oldberg 2008).

After the turn of the millennium also the Baltic Fleet has been developed with the

increased economic resources of Russia. Although the Russian naval forces have obtained additional resources and more non-military assignments in accordance to the economic development of the country, the new focal points, increased exercise manoeuvres or the growing number of ship orders have not yet affected considerably the numerical development of the vessel material. The Navy operating in the Baltic Sea has not yet reached the level of the early 1990s. It is still numerically inferior to the NATO fleets of Germany and Poland. Consequently, also the mean age of the vessels is on the rise, and the naval technology is getting out of date.

The fleets of the Baltic countries consist mainly of donated patrol vessels, mine hunters, and mine vessels. The flagship of the Estonian Navy is the frigate "Admiral Pitka", a donation from Denmark in the year 2000. The Latvian Navy has at its disposal four patrol vessels and six mine-sweepers. The Lithuanian Navy has in recent years abolished most of the vessel material dating back to the time of Soviet regime. Its present Navy consists principally of patrol vessels and mine hunters received from Denmark and Norway. The tactical assignments of the navies of the Baltic countries focus on the surveillance of their own coastal waters, and the maintenance of their mine hunting and sweeping capacity. Several international manoeuvres in mine hunting and sweeping have been exercised in the territorial waters of the Baltic countries during the whole first decade of the 21st century, and the territorial sea areas have been cleared of foreign naval mines.

At the beginning of this century the Russian Baltic Fleet consists of two destroyers, nine middle-sized frigate-type vessels, four landing vessels, and two diesel-driven

submarines (according to some sources the number of submarines is three). The number of minor vessels is twenty-seven, eight of these are anti-submarine vessels, four are missile boats, two hovercraft, and six mine sweepers. The total number of operational vessels amounts thus to thirty-eight. Seven of these are, however, according to a Swedish source, under repair or in storage. At the end of the year 1995 the Russian Baltic Navy consisted still of more than one hundred and fifty surface vessels and eight submarines (The International Institute for Strategic Studies 2000 – 2001).

The Nord Stream

From the year 2005 onwards the Russian Baltic Fleet has been involved in the Russo-German project of a natural gas pipeline crossing the Baltic Sea. In 2006 Vladimir Putin, President of Russia, made the following statement: "This is a major project, very important for the country's economy, and indeed for all Western Europe. And of course we are going to involve and use the opportunities offered by the NAVY to resolve environmental, economic, and technical problems because since the Second World War no one knows better than seamen how to operate on the bottom of the Baltic Sea". Larson (2007, 35) continued "nobody has similar means to control and check the bottom; nobody can better accomplish the task of ensuring environmental security".

The management of the project has declared that a 200-metre-wide zone of security will be established above the pipeline on both sides, and this will be safeguarded by using armed forces or paramilitary troops if necessary.

The Russian exports of energy (fossil fuels) increased, due to foreign rising demands,

from the beginning of the 21st century onwards. Russia, which at the end of the 1900s had exported only a third of its energy yield, increased its exports to cover more than fifty per cent of its energy production.

About one third of the exported oil travels across the Baltic Sea via the port of Primorsk at the far end of the Gulf of Finland. The first vessels at Ust-Luga were loaded in March 2012, and the annual volume of exports through this port is estimated to amount to thirty-five million metric tons once the infrastructure of the area has been accomplished to meet the necessary level of performance. The increased share of Gulf of Finland in oil exports seems to be accomplished at the cost of the Polish and Baltic ports. Russia is looking forward to finding a form of logistics more independent of other operators.

Sweden and submarines

In the development of naval units Sweden accentuates today the modernization of an effective fleet of submarines at reasonable expenditure. The Navy proposes a procurement of two submarines of the new generation. The programme also includes a suggestion of acquiring two patrol vessels adapted to operations of long duration. The leading thought in the development of anti-aircraft defence is to create regional units of anti-aircraft defence to protect sea traffic.

In the operational ideology concerning the use of force, the Swedish Navy aims at maintaining its capacity of performance in the following sections simultaneously: Incessant capability of operating one vessel in the Baltic Sea, and another in the North Sea west of the Danish Straits; the

retention of the capacity of all its units of rapid deployment to repel a limited attack from the sea; to keep a certain part of its material of vessels and troops on a higher level of preparedness required for international operations (the duration of the action is suggested to be four months); to maintain an amphibian battalion in operational preparedness in case of international manoeuvres; to retain the ability to participate in squadrons of battleships (national or multinational) with its total or partial naval organization of preparedness (Törnqvist 2012, 9 – 20).

In the composition of the Swedish naval forces the vessels are organized as follows: submarines and their mother ship in a submarine squadron, missile corvettes and patrol vessels with their mother ship in two squadrons of surface battle. The naval base of the submarine squadron and one of the surface battle squadrons is located in Karlskrona, the base of the other surface battle squadron in Berga south of Stockholm. The focal points seem to be in the southern Baltic Sea parallel with the natural gas pipeline within the economic zone of Sweden and in the area of the Danish Straits. In fact, ninety-five per cent of the Swedish direct foreign trade is transported by sea west of the longitude of Karlskrona, virtually west of the Danish Straits in the North Sea.

According to a Swedish research report, ninety per cent of the vessel material of the Russian Navy was built in the Soviet period. In the last fifteen years only six strategic submarines have been fully modernized in accordance to the modernization programme of the navy. Expert estimates suggest that most of the vessels will come to the end of their life span by the period of activity 2025 – 2030. The Russian deve-

lopment budget concerning the armed troops for the year 2020 has appropriated as much as 4 700 000 million rubles (one hundred and fifty-six billion US dollars) to the constructing of one hundred vessels: twenty submarines, thirty-five corvettes, and ten to fifteen frigates, for instance. The Russian Baltic Fleet is, however, expected to be developed mostly to improve the capacity of landing and sea transportation facilities although this Fleet is not chosen to be a focal point of development. One, maybe two frigates may be included in the programme of development (Pallin 2012).

The purchase of Mistral landing ships from France displays Russia's need to construct a new weapon of rapid performance, although the first two vessels are to be stationed in certain other fleets (RIA Novosti 2012).

The three submarines of the Russian Baltic Fleet will probably be removed from Kronstadt closer to the open sea to Kaliningrad, and the traditional Admiralty Shipyard from St Petersburg to Kronstadt.

The variables described above have increased the volumes of traffic in the Baltic Sea. It deserves mention that at every moment almost three thousand merchant vessels is playing in the Baltic Sea. The longitude passing Karlskrona in Sweden is annually crossed by as many as approximately one hundred thousand vessels eastbound or westbound. This storage system trafficking in the Baltic Sea transports more than fifteen per cent of the total goods transportation of the world. The traffic has triplicated from the daily level of about nine hundred vessels at the turn of the millennium. By the year 2030 the volume of the traffic is estimated to reach the daily level of four thousand vessels. Between one hundred and fifty and two hundred

major oil tankers are simultaneously waiting at about twenty ports within the Baltic area. Twenty-four per cent of the Baltic Sea traffic is directed into the interior market inside the Danish Straits, and seventy-six per cent to the exterior market outside the Danish Straits. The main artery of the Baltic area's own merchandise is the route from the north to the south towards German ports.

The Baltic Sea: Strategic Importance Remains Though in a Different Shape

During the Cold War the vessels of the NATO and the Warsaw Pact encountered almost daily. The Soviet Union controlled the coast from Lübeck up to Vyborg. Today, the Baltic coasts are under the surveillance of either the NATO or the EU countries. The Russian territory extends to the coast in the southeast, in Kaliningrad, whose sole land route to the mother country runs through Lithuania which is a member of the NATO. In the east Russia commands the seaport of St Petersburg whose sea traffic route in the Gulf of Finland runs north of the NATO country Estonia and south of the EU country Finland.

The strategic significance of the Baltic Sea has, by no means, diminished since the controversial positions taken by the blocs during the Cold War; the strategic image only appears to be different depending on from which direction one is inclined to assess the situation. The role of the Baltic Sea as an energy transportation route is getting more and more considerable. The part of the Baltic Sea as seen from the Russian end of the Nord Stream natural gas pipeline in Vyborg or from the German end at Greifswald appears to be totally different. The major manoeuvre exercises of the Russian armed forces ZAPAD and LADOGA in autumn 2011 showed the

growing presence of Russia in the Baltic area, both quantitatively and qualitatively. Navy units were concentrated in the operational area both from the North Sea and the Black Sea wherefrom the majority of the landing vessels were collected. In the manoeuvre it played the main role which it did also in the manoeuvre exercise of protecting the Nord Stream natural gas pipeline (ZAPAD 2009). The manoeuvre exercise NORDIC COASTS hosted by Finland in September 2011 brought also a number of visiting vessels to the northern Baltic Sea. All these events still have their ends, and their impact will be felt close to our own coasts.

The guiding principle in the development of the Baltic fleets until the year 2025 seems to be the reduction of economic resources in all coastal states. The Russian investment in the development of its armed forces is statistically different from the general trend. As far as new constructions are concerned, most of the additional resources of the Russian navy will probably be concentrated on other units than its Baltic Fleet. Thus, the decreasing defence appropriations need to be spent on adequate security. In future, the development of the navy is determined by funds, not notorious scenarios. With the diminished denseness of war ships and number of days on the sea the maritime situational awareness² required by joint decision-making will be emphasized. Such awareness acts as a trigger to create the need of interfering with the events, but it also gives a cognizant opportunity not to interfere. Such an opportunity will not arise without situational awareness.

The situational awareness is shared to national operational headquarters, and, when necessary, the decision of sending a vessel to the location of the situation will

be made in future in cooperation regardless of the state boundaries. The cooperation between the Nordic armed troops will probably develop further from its present level in the direction of operational cooperation. The co operational network of Baltic situational awareness SUCBAS³ (Sea Surveillance Cooperation Baltic Sea) is formed by the naval forces and marine authorities of Finland, Sweden, Denmark, Germany, Poland, Lithuania, Latvia, and Estonia. Russia has not yet joined this Baltic joint effort despite the invitation to participate.

Marine cooperation in the Baltic Sea seems to go towards the anti-aircraft control alternating system used by the NATO in the Baltic area. "Pooling and Sharing" is not any new concept. When resources are diminishing, cooperation between reasonably similar countries operating according to similar principles and decisions in security policy will be the clue to the solution. The solution will be the sharing of duties, resources, and responsibilities. The Secretary General of the NATO, the ex- Prime Minister of Denmark, Anders Fogh Rasmussen, is an advocate of this solution although the "Lead Nation" adjusting the various activities has not yet been discussed. Another alternative process of development, detachment from the NATO and Russia should also be considered, i.e. the opportunity of closer cooperation between the non-allied countries Finland and Sweden, their naval forces and marine vessels. In fact, the amphibious troops and vessel units exercise common manoeuvres regularly even now on a tactical as well as technical level.

With the apparent decrease of the US presence in Europe, and the simultaneous accentuation of the significance of the development of national defence systems

in European countries, we in the Baltic coastal countries have to spend the dwindling appropriations of defence in the most reasonable but also, at the same time, most effective way. We have the great asset of secure, reliable, and regular sea traffic transporting goods and containers, as well as energy transportations which are all of vital importance to us. The Baltic Sea traffic is about ten per cent or slightly more of the total cargo amount in the world amounting to approximately eight thousand million metric tons annually. More than forty-five per cent of the energy consumed in Finland is imported. The main products are oil, coal, and natural gas. The two threats of the phrase expressed by maritime experts: Without sea transportations one half of the world's population would starve, and the other half would freeze (famine and chill) might come true here in the north where the coasts of the Baltic Sea so often freeze up in winter. The Baltic Sea is in fact the only sea area in the world which may be totally frozen in wintertime.

The contents of the survey segment of the Baltic security policy extending up to the year 2025 are determined partly by the accessible vessel material. In assessing the accessibility one might use as an object of comparison the path of development for the newest Visby Class corvettes of the Swedish Navy. The two first vessels of this type were ordered in 1998, and the two first corvettes were ready at the beginning of this century; their operational preparedness was completed at the beginning of the 2010s. If the time segment includes the period spent on planning and constructing, and the habitual period of use of twenty – twenty-five years, this vessel class will be operational even in the 2030s. By surveying these time windows we already know with what implements the perfor-

mance capacity of the Baltic naval troops will be retained in the next fifteen years.

The shale gas discovered in the Baltic territorial waters of Poland and also in the Polish mainland is now exploitable by using new technology, and it will provide a new factor in the energy market of the area. The Polish gas deposit is, according to Polish sources, estimated to be at least 5 300 000 million cubic metres. This amount equals to the quantity transportable in the Nord Stream natural gas pipeline in one hundred years, which makes it quite a noticeable source of energy. The advent of this gas to the Baltic energy market will affect directly the price of Russian oil; the growing fuel supplies will probably lower the prices. If the exploitation begins in a short time, its effects become evident as a direct growth in sea traffic. Transportation of fifty-five thousand million cubic metres of liquid gas will need annually six or seven hundred tankers. Floating gas terminals are already being planned off the Baltic coast.

The consequences of global climatic change (the greenhouse effect) have been visible for quite a few years. The contraction of the arctic icecap has indirect as well as direct effects on the Baltic area. The Arctic Council consists of Russia, Norway, Denmark, each commanding a sector of the Arctic coast, Finland, and Sweden, neither of which is in possession of any strip of the Arctic coast but whose territories extend north of the Arctic Circle. Also Iceland, the USA, and Canada are members of the Arctic Council. Each member state will preside the Arctic Council by turns. Sweden began in 2012, and the mandate will end at the end of the year 2013. The Council deals with questions of economy, environment, and security policy, for instance.

Remarkable deposits of oil, natural gas,

and minerals are expected to be discovered in the arctic area, and they will probably upset the fuel market. One of the consequences of climatic change will evidently be the opening of the Northeast Passage north of Russia as well as the Northwest Passage between the United States and Canada to international sea traffic. The voyage from Europe and the Baltic Sea to the Far East using the northern route will be reduced with more than six thousand kilometres which means a time-saving of more than thirty per cent. The shorter distance will have a direct impact on the price of the transported commodities, and create rivalry in the energy market, in particular in the Baltic Sea. The know-how of Finnish shipbuilding is already being utilized in the construction of vessels designed to operate in Arctic waters. One vessel type, designed by the Finnish corporation Aker Arctic Technology is adapted to operating in arctic circumstances; its use is based on the principle that in normal conditions the bow is ahead but in deteriorated ice conditions the vessel is turned to sail with its stern foremost. The run is easier, the ice friction is reduced, and the fuel consumption is decreased. The opening of the Northeast and the Northwest Passages is expected to provide new markets for these vessels of Finnish design. Natural gas tankers for the transportation of liquid gas have been constructed in Finland since quite a few years.

The unsettled border problems in the area and the proprietorship rights to the natural resources will add to aspects of tension in the work of the Council. Denmark which presided the Council prior to Sweden left its own territorial quarrels in Greenland unhandled and to be discussed during the presidency of Sweden in 2012.

The prevalent or growing significance of

the area was exposed also at a Seminar of the Commanders of Nordic armed forces held in Canada at the beginning of April; the themes discussed were relevant to these subject matters. According to General Ari Puheloinen this meeting is to become a repeated tradition. The agenda of the Council in the near future will cover also the position of indigenous peoples, vessels run aground, and related environmental catastrophes. In conclusion I take the liberty of quoting an old Chinese proverb which seems to be well-adapted in attempting to foretell the future of the Baltic Sea: "IF WE DO NOT ALTER OUR DIRECTION WE WILL FIND OURSELVES WHERE WE ARE HEADING."

Notes

1. Sea control

According to the U.S. Navy:

Our modern understanding of sea control has its origins in the writings of Rear Admiral Alfred Thayer Mahan and Sir Julian Stafford Corbett. Mahan built his theory of "command of the seas" on naval superiority, the concentration of forces, and decisive battles. Corbett subsequently introduced the concept of "control of the seas" as a relative, rather than absolute, condition that applies naval power toward the broader goal of achieving national objectives. According to Corbett, control of the seas is not an end in itself but a means to conduct operations in peace and war that produces effects on land. As our memories of classic blue-water naval battles fade and we find ourselves increasingly engaged in complex littoral operations spanning great distances to counter challenges associated with failing states, regional instability, crime, and violent extremism, the writings of Corbett deserve a closer read. Recognizing that total control of the seas is not practical, then Vice Admiral Stansfield Turner coined the phrase "sea control" to connote "more realistic control in limited areas and for limited periods of time." (Turner, S. 1974. Missions of the U.S. Navy. Naval War College Review, vol. XXVI, No. 5. Page 7. Newport: Naval War College Press)

According to the British Navy:

British Maritime Doctrine applies these boundary conditions and introduces the notion of purpose. Sea control is the condition in which one has freedom of action to use the sea for one's own purposes in specified areas and for specified periods of time and, where necessary, to deny or limit its use to the enemy. Sea control includes the airspace above the surface and the water volume and seabed below. (British Ministry of Defence 2004. British Maritime Doctrine 3rd edition BR 1806. Page 289. Norwich: TSO)

2. Maritime Situational Awareness is the understanding of activities carried out in the maritime domain and surrounding environment, in order to support timely decision making in the fields of Maritime Security and Maritime Safety.

Maritime Security is the combination of preventive and responsive measures to protect the maritime domain against threats and intentional unlawful acts.

Maritime Safety is the combination of preventive and responsive measures intended to protect the maritime domain against, and limit the effect of, accidental or natural danger, harm, environmental damage, risk or loss. (The Wise Pen Team: del Pozo, F., Dymock, A., Feldt, L., Hebrard, P., di Monteforte, F. S. 2010. Maritime surveillance in support of CSDP (Common Security and Defence Policy). The wise pen team progress report. http://www.eda.europa.eu/Libraries/Documents/Wise_Pen_Team_Progress_Report_101222.sflb.ashx, accessed April 24, 2012)

3. SUCBAS is a cornerstone for sea surveillance information exchange and co-operation within the Baltic Sea area and its approaches. The aim of the co-operation is to enhance Maritime Situational Awareness benefiting maritime safety, security, environmental and law enforcement activities in the region by sharing relevant maritime data, information and knowledge between the participants. Realising that the Baltic nations have similar obligations and challenges often are of a border crossing nature, the SUBAS cooperation secure that the scarce resources available are utilised in the most efficient manner.

In recognition of the fact that responsibility for of maritime surveillance, maritime safety, maritime security, the maritime environment and maritime law enforcement are implemented differently in each country, SUCBAS information can be shared among national governmental institutions with a maritime responsibility regardless if these are civil or military at the discretion. (SUCBAS 2011. <http://www.sucbas.org/>, accessed April 24, 2012)

References

- Anteroinen, J. 2008. Suomen miina-aseen historia. Power Point presentation. Presented March 28, 2012 in Helsinki.
- BalticSea2020, 2011. Sjöfart. <http://www.balticsea2020.org/oestersjoens-utmaningar/sjoefart> (accessed December 3, 2011)
- Barnett, R. W. 1989. Soviet maritime strategy. In *Sea Power and Strategy* by C. S. Gray and R. W. Barnett. Annapolis: US Naval Institute.
- Churchill, W. S. 1939. Radio speech. <http://www.quotationspage.com/quote/24927.html> (accessed January 8, 2012).
- Churchill, W. S. 1946. Modern History Sourcebook: Iron Curtain Speech, March 5, 1946. <http://www.fordham.edu/halsall/mod/churchill-iron.asp> (accessed April 14, 2012).
- Danish Institute for International Studies 2005. Danmark under den kolde krig. Den sikkerhedspolitiske situation 1945-1991. Bind 1: 1945-1962. Copenhagen: DIIS.
- Ehrensvärd, U., Kokkonen, P., Nurminen, J. 1998. Mare Balticum: 2000 år av Östersjöns historia. Keuruu: Otava.
- Emmerich, M. 2009. German Kriegsmarine. <http://www.german-navy.de/kriegsmarine/> (accessed April 21, 2012)
- Grove, E. 1989. *Nato's Defence of the North*. Brassey's Atlantic Commentaries. London: Brassey's.
- Holmström, M. 2011. *Den Dolda Alliansen*. Stockholm: Atlantis.
- Kauppi, U-M. 2007. Finland befästes av ryssarna i början av 1900-talet. http://www.byggnadsarv.fi/rakennusperintomme/Artikkelit_sv/sv_SE/Finland_befastes_av_ryssarna/ (accessed April 21, 2012).
- Larsson, B. 2009. The Swedish Navy's naval doctrine 1958-61. <http://urn.kb.se/resolve?urn=urn:nbn:se:fhs:diva-205> (accessed April 2, 2012).
- Larsson, R. L. 2007. *Nord Stream, Sweden and Baltic Sea Security*. Stockholm: Swedish Defence Research Agency.
- Leijonhielm, J., Hedenskog, J., Knoph, J., Oldberg, I., Unge, W. and Vendil Pallin, C. 2000. *Rysk militär förmåga i ett tioårsperspektiv. En förnyad bedömning 2000*. Stockholm: FOA.
- Livezey, W. E. 1981. *Mahan on Sea Power*. Norman: University of Oklahoma Press.
- North Atlantic Defence Committee 1950. *North Atlantic Treaty Organisation Medium Term Plan. Decision on D.C. 13. Part III page 49*. NATO Strategy Documents.
- Oldberg, I. 2008. *Russian Baltic Sea Fleet - development and missions*. Stockholm: Swedish Defence Research Agency.
- Padfield, P. 1999. *Maritime Supremacy and the Opening of the Western Mind*, Woodstock and New York: Overlook Press, 1999.
- Polmar, N. 1991. *The Naval Institute Guide to the Soviet Navy. Fifth Edition*. Annapolis: United States Naval Institute Press.
- Rehnavall, H. 1998. När invasionshotet var verkligt skulle vi inte ha klarat vår uppgift. FOA-tidningen, issue 6.
- RIA Novosti 2012 : Russia's purchase of French Mistral-class warship. http://en.rian.ru/military_news/20120201/171073369.html (accessed February 1, 2012).
- The Finnish Council of State 2001. *The Finnish Security and Defence Policy 2001*. Report by the Council of State to Parliament 13.6.2001. Helsinki: Edita.

The government of Sweden 2008. Proposition 2008/09:140. Ett användbart försvar.

The International Institute for Strategic Studies (IISS). The Military Balance 1985-1986. London: Oxford University Press.

The International Institute for Strategic Studies (IISS). The Military Balance 1992-1993. London: Oxford University Press.

The International Institute for Strategic Studies (IISS). The Military Balance 1995-1996. London: Oxford University Press.

The International Institute for Strategic Studies (IISS). The Military Balance 2000-2001. London: Oxford University Press.

The International Institute for Strategic Studies (IISS). The Military Balance 2011. London: Oxford University Press.

Toth, J. E. 1995. Military Strategy Note: Strategic Geography. Washington Industrial College of the Armed Forces. Washington, D.C.: National Defense University.

Törnqvist, J. 2012. Marinen och Vägen framåt - Marinens utvecklingsplan 2012. Tidskrift i Sjöväsendet, issue 1. Karlskrona: Kungl. Örlogsmannasällskapet.

U.S. Naval Institute 1991-1992. Naval Review. Proceedings. Annapolis.

Umbach, F. 2002. The Maritime Strategy of Russia. The Gap between Great Sea Power Ambitions and the Economic Military Realities. In Maritime Strategies in Asia by Schwarz, J. et al. (ed.). Bangkok: White Lotus Press.

Vendil Pallin, C. 2012. Russian Military Capability in a Ten-Year Perspective – 2011. Stockholm: FOI.

Yegorov, V. G. 1994. Cooperative security in Northern Europe. In Vilnius/Kaliningrad: Ideas on Cooperative Security in the Baltic Sea Region, ed. Ritva Grönick. Helsinki: Nordic Forum for Security.

Åselius G. 2005. The Rise and fall of the Soviet Navy in the Baltic 1921-1941. Cass Series: Naval Policy and History. London and New York: Frank Cass.

Österlund, B. 1983. Neuvostoliiton merijalkaväestä. Rannikon Puolustaja, Issue 3. Helsinki. Rannikkotyöstön Upseeriyhdistyksen, Rannikon Puolustajain Killan ja Rannikkotyöstökoulun tiedotuslehti.



www.centrumbalticum.org