

# The rise of the Soviet Navy, a re-visited Western view

*av Gjert-Lage Dyndal*

## Abstract

Artikkelen har tatt utgangspunkt i den omfattende eldre litteraturen om den sovjetiske marinen, og har med (den mer sparsommelige) nyere litteratur og et tidsmessig distansert forhold til den kalde krigen gjort et forsøk på å gjøre en ny vurdering av den Sovjetiske marinen vekst under den kalde krigen. Artikkelens ambisjon er å anspore til videre debatt og motivere en ny generasjon forskere og militærfilosofer til å gripe tak i de oppfattelser som var og fortsatt er om kvaliteten til den sovjetiske militærmakten, dens hensikter, ambisjoner og balansering av styrke-enheter særskilt. Artikkelen argumenterer for at den sovjetiske marinen og de tilhørende flystyrker for de maritime miljøene, under ledelse av Admiral Gorshkov, var særskilt russisk og godt balansert for sin hensikt.

OVER A COUPLE of decades, from the mid-1970s till the early 1990s, several academics and strategic think-tanks were greatly occupied with trying to understand the purpose of and threat posed by the rising Soviet Navy. Under the leadership of Admiral Gorshkov from 1956 till 1985 the Soviet Navy became a powerful and global actor.

There are numerous books, articles and reports from the period: Several of these older studies and analyses are still valid, and many of them are used in this analysis.<sup>1</sup> Both observed actions such as exercises, naval port visits, visits by politicians and bi-lateral agreements are still good sources of information from this period of writing. However, many analyses were biased on the fact that the researchers and writers were strongly influenced by the two-bloc reality, and not least because of a lack of trustworthy sources. The analysis of the Soviet Navy was often hampered

by the mirroring of Western concepts and theories, for example assessed and judged directly against the US Navy and NATO as for system (aircraft, ships, etc.) capabilities and the balancing of forces.

We, historians and other researchers from after the Cold War period may still be biased, not least because of the perception of a “clear Soviet loss” in 1989–91. This was probably more an issue for the early 1990s. Today, as we have got the Cold War at arm’s length, re-assessments and new research by historians of earlier disclosed sources should emerge. However, there are challenges. The Soviet and Russian archives were to a large extent opened and accessible in the 1990s, but have later effectively been closed to primary-source research. Today, and for the past decade, Russia and the Russian Navy are in view of most Western analysts in a crisis of identity and occupied with restoring their national pride and capabilities. As a consequence,

reliable research from Russia in this field today is scarce. An additional reason for the poor status of research on the Soviet Navy is that modern military and security thinkers have, from the late 1990s, largely been occupied with the emerging multi-polar world and the wide spectre of new challenges, including several limited wars and global terrorism. As a result, we have experienced little new, both profoundly new from primary sources and re-assessments of the old regarding the Soviet naval expansion from the early 1960s till its peak in the early 1980s. There is, especially, a lack of any new overarching assessments of the Soviet Navy.

This article aims at reassessing our Western knowledge and perspectives, hopefully to provoke or motivate new research on how we today understand the remarkable birth and build-up of the Soviet Navy: How did it come about, and for analysis; what were the capabilities and what was the purpose? As it was very hard to analyse and understand the intentions, NATO, nations and analysts often came to focus on capabilities during the Cold War. As stated by SACEUR (Supreme Commander Europe), General Lyman Lemnitzer, in 1968: "Planning can be based on intentions only when one knows what they are... We really do not know what the Soviet leaders have in mind."<sup>2</sup> As for assessments of naval and maritime forces, the Soviet capabilities were normally compared with those of the US Navy and NATO, both regarding ships and aircraft, and the balancing of forces.

Seen at a distance, more than two decades after the end of the Cold War, the balancing of the Soviet Navy and the maritime air forces stands out as unique and original, clearly not a mirror of Western forces, but balanced to its tasks. This arti-

cle draws together the authoritative works of the time and more recent research explaining this uniqueness.

The article focuses mainly on the Gorshkov-era, and on the theatre comprising the North-Atlantic and the Scandinavian High North. However, to be able to understand Admiral Gorshkov and the Soviet build-up it is necessary to understand the early history of the Soviet Navy, as well as keeping a global perspective on the developments. The exact Soviet maritime capability and deployments in the Atlantic and the Mediterranean were in fact at the forefront of Western discussions in the early 1970s.<sup>3</sup> The rationale for largely focusing on the High North is because it is necessary to limit the scope to be able to examine enough empirical material to make an assessment, and that we from this period and this theatre<sup>4</sup> are most likely to understand the underlying thoughts of Gorshkov – the architect of the rising Soviet Navy.

## The Soviet Navy and Western Sea Power theory

To be able to assess and discuss the uniqueness of the Soviet Navy, it is useful to understand three main elements, and corresponding strategies, of Western sea power.

The terminology *Command of the Sea* (or *Mastery*) has been a central part of maritime military literature for more than a century. Alfred T. Mahan is seen as a representative for the fight for *Command of the Sea*, and well known for his belief in the "decisive battle" as the main tactic for achieving this aim.<sup>5</sup> Julian Corbett was, in contrast to Mahan, not so much occupied with the thought of *Command of the Sea* as that of "*Communication*". Corbett argued that the use of the sea – what he called "*Communication*" – was the object

of naval warfare. He argued that with safe communication as the sole purpose, the fundamental requirement was the means of exercising *Sea Control* for being able to use the sea.<sup>6</sup>

Raoul Castex also noted the importance of communication: "... (when) communication is open, this permits a double action, economic and military, against the enemy".<sup>7</sup> Both Corbett and Castex argued the importance of Sea Control, even though it was not necessarily the ultimate reason. Castex was mainly occupied with those nations that were not able to seek out the enemy for any large or decisive battles. His answer was to build a navy on the maritime strategy and tactics of *Manoeuvre and Sea Denial*.<sup>8</sup> This included naval raids on enemy communication and less capable ships, uses of mines and amphibious operations. He constituted clearly an alternative to Mahan and those in favour of the decisive battle. His thoughts are very important for the medium and smaller powers that face superior forces.

I will reflect on these concepts in the discussions, and towards the end assess the uniqueness of the Soviet Navy.

## The foundation of the rising Gorshkov Navy

### The early history

From the 1930s, Stalin had visions of an ocean-going navy. Large ocean-going surface forces were considered a requirement for all great powers at the time. According to the Commander-in-Chief of the Navy after the Second World War, Admiral Kuznetsov, this desire was further strengthened by Stalin and the Soviets' inability to support the Republicans with naval forces' diplomacy in the Spanish Civil War in 1936.<sup>9</sup>

Stalin decided on the building of a "large sea and ocean fleet" in 1936–37<sup>10</sup>; although this was contradictory to the prevailing perceptions of a defensive-oriented navy for coastal defence and support of the army. The Soviet Armed Forces (and probably even Stalin) still seemed to have an ambiguity in perceptions on Sea Power and the prioritization, and an "ocean-going fleet" did not materialize. By October 1940, a drastic re-evaluation came about, and the priority came back to the traditional mission of destroying the enemy's naval forces, similar to that of the Tsarist Navy.<sup>11</sup>

Following the Second World War – "The Great Fatherland War" – Stalin's early envisaged "ocean-going fleet" plan of the 1930s was again on the agenda. Admiral Kuznetsov made a ten-year naval plan consisting of battleships, heavy and light cruisers, a large number of destroyers and submarines, as well as aircraft carriers and landing ships – a traditional ocean-going fleet. With the experiences of the Second World War and the early Cold War stance, Stalin kept the personal ambiguity with him: a profoundly defensive naval posture for coastal defence, but still combined with a wish for greater naval forces. He balanced this by emphasizing the defensive nature of the Soviet Navy, and at the same time discarding the building of aircraft carriers and battleships in favour of submarines and heavy cruisers.<sup>12</sup>

However, the naval plans of the early Cold War were greatly influenced by the realities of the country's post-war economy and a national focus on merchant shipbuilding. The shipbuilding industry managed to argue the continuation of production of older naval designs.<sup>13</sup> For the latter half of the 1940s, the focus was on combining efforts of all branches, and the main

purpose of the navy became defence against aggression from the sea and the support of ground forces.<sup>14</sup>

The Korean War further influenced the Soviet Navy's developments, marking 1952 as an "important historical junction".<sup>15</sup> The greater Soviet military leadership noted the considerable superiority of the American naval forces, and in the early 1950s the naval building programmes received support for increased numbers of submarines with increased operational ranges, landing ships and heavy cruisers. The Soviet Union also focused more on supporting its allies. Naval cooperation was one such measure, for instance by preparing Poland's Baltic Sea ports for permanent basing of Soviet warships.<sup>16</sup>

For the Soviet military, the southern coast of the Baltic Sea was important as a flank and transport area for the ground forces of the European Central Front. Khrushchev talked of the Baltic Sea as a "Sea of Peace" in the 1950s – a traditional perspective on the areas as a *mare clausum*.<sup>17</sup> With this background, Sweden found itself more at risk than in previous decades as the technology and the Soviet forces in the region came to include great air strike forces, strategic air landing and amphibious capabilities.<sup>18</sup>

With regard to the ocean-going fleets, the production was halted on the three in-line Stalingrad-class heavy cruisers and seven Sverdlov-class light cruisers. In addition, three new cruisers which had become operational were dismantled.<sup>19</sup> The lack of air cover from carriers and surface fleets, comprised mainly of ships of older design, confined the Navy of the 1950s to operations within the reach of its own supporting air power. The British Naval War Manual of the era stated that the Soviet surface forces

did not constitute a decisive threat to British and NATO forces.<sup>20</sup>

## The death of Stalin; and Khrushchev changing the maritime strategy

The death of Stalin in March 1953 threw the Soviet political and military leadership into a troublesome period. Khrushchev became first secretary of the Central Committee in 1953, and gained more influence from 1954. He had a temporary setback following the Polish defiance of the USSR in 1956 and during the Hungarian Revolution of the same year.<sup>21</sup>

Khrushchev replaced Bulganin as Prime Minister in March 1958, becoming the undisputed leader of both the State and the Party. The role and position of Khrushchev as leader has been heavily debated. As Mawdsley and White point out, the period of the late 1950s and early 1960s has been and still is somewhat confusing for historians. At the time, Khrushchev was seen by the West as a "transitional leader" and "supreme leader" from 1957–1964. A more contemporary perspective is that Khrushchev was an "original leader", who truly tried to modernise the system. His ideas have been viewed as the origin of the Perestroika of the 1980s. Another contemporary perspective on the leadership struggle of this era, argued by Mawdsley and White, is that it was greatly influenced by the rising and powerful ruling elite.<sup>22</sup> The elite in Soviet politics were probably at their strongest during this Khrushchev-period.

Regarding defence policy, military strategy and doctrine, and technology, great changes came about.<sup>23</sup> In this dynamic period, Khrushchev pressed for a greater focus on nuclear forces at the expense of con-

ventional forces.<sup>24</sup> This was motivated both by his personal strategic perspective with an emphasis on deterrence, as well as the aim of cutting costs and manpower. His ideas were not unique, as this belief in missiles and cutting conventional forces came at the time of the same debate in Western countries (for example Britain and the famous “Sandy’s Defence Review” of 1957). Such a strong belief in modern technology and single systems, strategic missiles in Khrushchev’s case, would still prove “over-optimistic”. The best example of the latter is the Cuban crisis, where the Soviet lack of capability to support the deployment of the systems by conventional sea control forces hindered the operation. As for his aim of great reductions in the conventional army, this also proved too dramatic. Following the first Berlin crisis, a compromise was reached in 1961 which recognised the importance of traditional conventional forces.<sup>25</sup>

Khrushchev was a “modern” thinker with strong beliefs in nuclear and computer technologies, this in parallel to an argued “Revolution in Military Affairs” both by the military and industry at the time. Stalin’s ambitious naval planning was criticised in this perspective. According to Khrushchev, both carriers and submarines were the systems which had proved themselves during the Second World War. However, the costly aircraft carriers had become increasingly vulnerable to the (nuclear armed) long-range missile systems. Khrushchev concluded: “We must concentrate on developing our defensive weapons, our means of sinking enemy ships, rather than on building up an offensive surface fleet of our own...”<sup>26</sup> Khrushchev’s stand and promulgations should probably also be understood in his need to justify great reductions of conventional forces in the Soviet military.<sup>27</sup>

## Khrushchev opting for submarines

As Khrushchev came to power, with new thoughts on military technology and strategy, the then most influential admiral, Kuznetsov, had to give way to a new Commander-in-Chief of the Navy. Admiral Sergei Gorshkov (1910–1988) became Commander-in-Chief of the Soviet Navy in 1956, and would, argued in this article, become one of the most influential and important naval thinkers of the modern world. He held the official position till 1985. He probably remained in power so long because he was a skilful and pragmatic leader, following the official course set by Khrushchev and criticised Stalin’s naval position when needed. From the late 1950s, Admiral Gorshkov acquired more influence over maritime strategy, and with that he re-initiated surface ship programmes. Gorshkov’s fascination with large surface forces was apparent. It was also part of his personal experience as commander of such fleets. In his memoirs that were published after his death he makes this very clear:

Large ships – battleships and cruisers – always appeared as the standard for fleet smartness, having a reputation for tight discipline (and) model organisation. To serve on them was not easy, but young commanders knew that, after such schooling, they were guaranteed success on any ship.<sup>28</sup>

However, the Soviet Navy and Admiral Gorshkov under Khrushchev focused primarily on a massive submarine-building programme. A fleet of attack submarines aimed at disputing the sea control of the NATO navies was the goal.

## The GorskhoV navy rising

### The submarine developments

The Whiskey-class diesel-electric submarines were classic medium-range patrol and torpedo-attack submarines (SS). They were produced in large numbers, and the class was operational from 1950 till the 1980s. The Zulu-class diesel-electric patrol and attack submarines came into service in 1952, and the Quebec-class diesel-electric, developed for coastal patrol, came into service by 1954. A mark of history came with the revolutionary Zulu IV ½<sup>29</sup> and the following five Zulu V-class boats that were converted from earlier Zulus in the late 1950s. From the second boat onwards, they were armed with two SS-N-4 SLBM<sup>30</sup> missiles, in addition to torpedoes. Also, two new versions of the Whiskey-class called the Long Bin and the Twin Cylinder were issued in 1959-60, armed with the first submarine cruise missile, the P-5 (SS-N-3 Shaddock).

In Britain, these Zulu and Whiskey-class submarines were assessed as far more capable than the conventional British attack submarines. About the same time, the Golf-class<sup>31</sup> diesel-electric appeared. From 1958 to 1962, 23 missile submarines of this class were built, and they were fitted with the SS-N-4 from the beginning.

Two other classes of conventional patrol and attack submarines (not equipped with missiles) were also built in the following years. The Foxtrot-class came into service in 1958, and consisted of 62 boats for Soviet use. They were initially designed for anti-surface and anti-submarine warfare operations in northern latitudes.<sup>32</sup> The Romeo-class came into service the same year, but only 20 were built. These classes were also complimented by a more speci-

alised diesel-electric submarine, the Juliet-class, in 1962.

The Soviet Navy strongly believed in these patrol and attack submarines. However, the drawbacks of conventional submarines also became clear, especially regarding technological advances with helicopters and better radar systems for the forces hunting them. On patrol out in open waters they were very vulnerable to ASW aircraft while charging their batteries.

The November-class<sup>33</sup> became the first Soviet nuclear-powered submarine. It was in service by April 1958, and 14 submarines were soon built. The November-class only carried torpedoes, but as the first Soviet nuclear submarine, it was significant.<sup>34</sup> Together with the two classes of Hotel and Echo nuclear submarines they constituted what was known as the “HEN generation”, the early nuclear submarines.

### The early Cold War Soviet controversy over large surface ships

As earlier discussed, Stalin had been in favour of larger combatants for the High Seas. However, the focus was kept with defensive naval forces and large numbers of cruisers and destroyers following the Second World War for the early years of the Cold War.

In the 1950s and early 1960s, the Soviet Baltic Fleet was about the size of the Northern Fleet, and they were both defensively oriented. The Baltic Fleet concentrated its operations on the eastern parts of the Baltic, but by the late 1960s, a more self-conscious Soviet Union began to operate in the western parts as well.<sup>35</sup> As the main larger surface vessels were transferred to the Northern Fleet by the mid-1960s, the amphibious forces were retained. The So-



viet Baltic Fleet effectively became a close-sea navy. Soviet regional sea control forces, the large forces, were designed to control their own shorelines and give cover for force projection forces supporting the army in the ground war.

Carrier aviation has had a troubled position in Soviet naval thinking. The naval leadership has generally argued the need for carriers, especially as a means for giving air cover to surface forces at sea. Kuznetsov was the foremost advocate of carrier aviation; he considered air cover for ships at sea to be essential. Stalin was clearly in favour of large ships, but he was in opposition to aircraft carriers, and Stalin did not support them being included in the construction programmes of the 1940–50s. The bureaucratic infighting and misperceptions of cost and practicality did not help their advocates.<sup>36</sup> By 1954, Kuznetsov finally did manage to get an ASW carrier approved. In the period 1956–57, doctrines and reports, research, and even land-based training tests all reflected the naval leadership's desire for carriers. This was a source of irritation for Khrushchev.<sup>37</sup>

During Gorshkov's first years of office, he also spoke in favour of the carriers and large ships (as earlier mentioned), but by 1960 he had adjusted his perception in line with the "official view". Gorshkov echoed the ideas of Khrushchev and Chief of General Staff Sokolovskiy in his statement of 1960: "Large ships, like cruisers or aircraft carriers, have on the whole become outdated as a means for conducting war at sea and are merely a good target for modern missiles".<sup>38</sup> British intelligence made note of the official Russian literature arguing the vulnerability of carriers in modern war, either for the purpose of limited war or a total war.<sup>39</sup>

Soviet aircraft carriers did not come about in this period, and compared to the US Navy's 23 attack and anti-submarine carriers of the late 1960s<sup>40</sup>, we are clearly discussing a very different navy. This crucial lack of aircraft carriers and organic air cover for the protection of surface naval forces, outside the reach of land-based fighter aircraft, limited their ability to operate with conventional force projection forces and the ability to fight naval battles on a global scale.<sup>41</sup>

Soviet naval operations on a global scene were sporadic up to the mid-1960s. The first large task force to operate outside its own waters after the Second World War came in 1954, when Gorshkov took a cruiser and two destroyers on a visit to Albania.<sup>42</sup> The following years saw some visits to Egypt and Syria by Soviet naval forces, and the first greater exercise in the Mediterranean came in 1960.

### **Soviet ASW forces, as a response to the American Polaris system**

The American George Washington-class Polaris submarine, officially launched on 30 December 1959,<sup>43</sup> but which became operational by 1960, immediately influenced NATO and Soviet strategies and tactics, and not least the development of new technological responses. For instance, the 1963 American public announcement that a Polaris submarine was on patrol in the eastern Mediterranean provoked both a verbal and practical response by the Soviets. The Soviets argued that the Mediterranean should be a nuclear-free zone.

Kuznetsov had always been a firm advocate of aircraft carriers, as discussed above. Gorshkov had a rather pragmatic perspective and actually spoke both in favour of as well as against aircraft carriers. This

was probably done both to avoid conflict with those supporting his predecessor and the military and political leadership who at the time were critical of any large combatants. However, from the mid-1960s and onwards, Gorshkov focused on the role of carriers for ASW and air cover for his surface forces. It was a different rationale than the offensive US Navy use of large aircraft carriers.

The Moskva-class ASW cruisers, or sometimes labelled ASW carriers, *Moskva* and *Leningrad* of 25,000 tons, were laid down in 1965–69. They were from the beginning assigned to the Black Sea Fleet and operated in the Mediterranean. They were initially a response to the threat posed by the Polaris system, but they also became useful for protection of the surface ships which began to operate for the purpose of diplomacy in the latter half of the 1960s.

As the strategic submarine missiles got greater ranges (American Polaris A-II, A-III, and in time Poseidon), the Soviet Navy could no longer effectively hunt down the strategic submarines. The Soviet submarines soon followed this missile evolution, and with this the Soviet ASW forces shifted from an offensive to a defensive role; the protection of the “Bastions” of the 1970s. The Soviet Navy maintained this defensive ASW posture for the protection of its own forces, and did not build up an offensive ASW capacity parallel to the NATO and US Navy triad-concept of worldwide SOSUS, ASW aircraft, and attack submarines.

The Soviet surface fleet expanded from 1961 and gradually increased its activity by the mid-1960s. In this period, the Soviet Navy effectively supported the greater strategies of the Soviet Armed Forces by creating an extension of Soviet defence zones, this as a direct response to

the Polaris threat towards the mainland. The Soviets needed to extend their defence zones, and against the threat of the US submarines in the eastern Mediterranean, the Norwegian Sea, the Sea of Japan and the Indian Ocean<sup>44</sup> – this could only be done by a more effective surface fleet.

## Aircraft developments

The Cold War Soviet medium-range and long-range bomber and strike aircraft era started with the development of the Tupolev Tu-4 Bull in 1947. They were succeeded in the 1950s by the Myasischev M-4 Bison, the Tupolev Tu-16 Badger and the TU-95 Bear.

The M-4 Bison has been somewhat overlooked, chiefly because of its failed performance in its original role as a long-range strategic bomber. The early Bison A aircraft from the early 1950s simply did not possess the range capabilities needed for those missions. The Bison B and the specialised Bison C with their long-range search radar for maritime reconnaissance and Electronic Intelligence (ELINT) operations became important for naval operations.<sup>45</sup> But, the fact that the aircraft design was not suited for carrying large missiles still made this an expensive aircraft to maintain only for reconnaissance and tanker roles.

The Tu-16 Badger was first flown in 1952, and entered service with the strategic aviation forces by 1955.<sup>46</sup> Within a few years most of the aircraft were fitted with flight-refuelling equipment. In the 1960s, after the rocket troops took on the strategic strike role, the aircraft were steadily transferred to the expanding navy.<sup>47</sup> The Badgers became the first missile carrying aircraft for the navy.

The first missile variant, the Badger B, was initially equipped with the 80km range



AS-1 Kennel<sup>48</sup> anti-ship missile and later with the more advanced anti-ship and land-attack missile AS-5 Kelt<sup>49</sup>. The Badger C production line came at about the same time – and with the AS-2 Kipper<sup>50</sup> missile for anti-ship and land-attack and its effective radar installation, it became a feared strike aircraft. The development of these first cruise missiles had begun in the early 1950s, and they were from the start intended chiefly as radar-guided anti-ship missiles.<sup>51</sup> The Badger D aircraft was equipped with the same radar and electronic surveillance capabilities as the previous aircraft of the series, but were more specialised for maritime reconnaissance. The Badgers E through L aircraft designations pointed to various roles; including reconnaissance, intelligence, and jamming. Some Badger (Tu-16Z) aircraft were also fitted for air-air refuelling roles to keep up with the later Tu-22s with a refuelling capability.

Due to the development of the Badgers, SACLANT (Supreme Commander Atlantic) became greatly concerned at the growing threat from the expanding Soviet naval strike aircraft fleet. The air threat had now “considerably increased” according to SACLANT’s 1958 Emergency Defence Plan. As a consequence, the NATO Strike Fleet made special air defence arrangements with Norway to upgrade and link early warning information from shore-based systems to SACLANT’s naval forces in 1958.<sup>52</sup>

The reach of Soviet air power in maritime operations became an even greater threat with the introduction of the magnificent Tu-95 Bear aircraft. As twitter Sweetman wrote, thirty years after its development: “unquestionably the most spectacular of contemporary warplanes”.<sup>53</sup> Prototypes flew in the early 1950s, and by 1956 the aircraft was operational. For the

next 10 years, 49 Bear A were produced for the traditional bomber role and were soon reconfigured to carry nuclear bombs, and further 71 missile-carrying Bear B and 23 Bear C for strike purposes were produced and operational by 1959.<sup>54</sup> The Bear D, operational by 1964–66, had a long-range maritime reconnaissance and targeting role and mid-course guidance for the long-range surface-to-surface as well as air-to-surface missile systems.<sup>55</sup> The Bear D was equipped with the powerful Big Bulge radar and a secure communications link. The Bear D was renamed Tu-142 during the 1960s, indicating that it was a genuine maritime aircraft.

The Tu-22 series, where the initial production line aircraft were named Blinders, was projected in the mid-1950s. It would give a supersonic penetration capability to the existing concept of the Tu-16 Badger. The effectiveness of Western air defences with high-altitude SAMs and radar-controlled supersonic interceptors required a greater performance of the strategic bombers. But, by the time the aircraft was fully operational, Soviet strategies had shifted to rely on strategic missile systems rather than aircraft. The radical doctrinal change of the Soviet Union<sup>56</sup> in the early 1960s assigned the land-based strategic ballistic missiles to the principal role of strategic strike and deterrence. Many of the first Tu-22s (as well as other types) were consequently transferred from the strategic aviation forces to naval aviation for precision maritime strikes and for strikes in the European regions along the flanks.<sup>57</sup> These Tu-22s were named Blinder B.<sup>58</sup> The Blinder C became an important ELINT aircraft for maritime reconnaissance. These latter B and C batches were considered fully operational by the late 1960s.

Another interesting aspect of the Soviet long-range reach air power was the development of the long-range and long-endurance fighter Yak-25P of 1953, later replaced by Yak-28Ps in 1960. In addition to the Tu-126 Moss AEW and the Tu-128 long-range interceptors<sup>59</sup>, this gave the Soviet Union a considerable reach in the northern areas. These were designed as interceptors and for denying the air space to Western aircraft at far greater distances than normally capable for land-based fighter aircraft.<sup>60</sup> Soviet long-range air power strike capabilities were immense, and clearly posed a great threat to NATO maritime forces and communication.

### The influence of the Cuban Missile Crisis of 1962

Experience gained during the Cuban Missile Crisis is often cited as a rationale for the Soviet Navy build-up. However, this is an over-simplification of the story. The crisis did not create much change in NATO or US maritime strategy and capability-building. The conflict was short and successful from a Western point of view. For the Soviets, the operation would have a greater impact. The Cuban Missile Crisis had some clear lessons for the Soviet Navy. At the tactical level the Soviet Navy learned that:<sup>61</sup>

- all Soviet submarines which were detected by US forces were surfacing for snorkelling or communication needs at the time of detection,
- all submarine detections took place during daylight hours,
- the submarines were detected visually by aircraft or surface ships (probably also by radar),

- the Soviet submarines managed to evade after completion of snorkelling.

At the strategic level it was evident that submarines were not the best tool for projecting influence by diplomacy over other nations, nor for fighting limited wars or conflicts.

The Cuban Missile Crisis has been seen as the rationale behind the new and more offensive Soviet naval strategy that evolved during the late 1960s and early 1970s. This explanation may be partially right, but must not be overrated. The explanation is more complicated. Gorshkov's writing has generally been viewed and accepted as his true belief regarding naval strategy, and his quest for an ocean-going fleet was evident in this writing. This was probably a common perspective within the naval leadership also, which had been fostered in the "old school" tradition. Before the Cuban Missile Crisis in 1962, the original plan was to send the Baltic Fleet on a mission of diplomacy.<sup>62</sup> This never came about, probably because the status of the surface fleet was too limited after Khrushchev's shift away from the original ocean-fleet plans in the mid-1950s.

Gorshkov's real views were unacceptable in 1956 when he entered office as the leader of the Navy.<sup>63</sup> The Cuban Missile Crisis should be viewed as an operation which confirmed these beliefs. The crisis might be viewed as a turning-point for Khrushchev rather than for the naval establishment. The surface fleet build-up had already started by 1961. As the Cuban Missile Crisis unfolded, for instance, four Kynda-class cruisers were under construction in Soviet shipyards. After Khrushchev's humiliating defeat in the Caribbean, he told his naval chief that neither he, nor his successors should ever again experience this.<sup>64</sup>

Gorshkov could promise this, as the naval build-up was already underway. However, we saw that the ambitions of such a capability for political diplomacy on the international arena would not materialise until after Brezhnev came to power in 1964.

In fact, what we have learned is that the Cuban Missile Crisis rather normalised the views on sea power which had prevailed from the mid-1930s until Khrushchev came to power. Still, it is clear that the Cuban Missile Crisis inflicted on Khrushchev's fate as a leader, and that the naval posture of the leadership changed with Brezhnev coming to power. Under Brezhnev, the services gained more independence for planning and manning, and conventional forces got increased attention.<sup>65</sup> From 1964, the Soviet Navy also gained a more prominent place in the Soviet military. This was also the case for the industry: it is a wide spread perception that the Soviet Armed Forces constantly were tail-chasing Western military technology, and that it was predominantly top-down led. However, this perception has been challenged by recent research.<sup>66</sup> In fact, there was considerable competition between different design bureaus in the process of creating new capabilities. Especially after the Khrushchev period, the military-industry complex gained great influence.<sup>67</sup>

Author Sergei Chernyavskii describes the Admiral of the Fleet as central to the increased naval influence within the military and the political circles: "Gorshkov was not only a gifted strategist, but also excelled at bureaucratic politics, and proved remarkably successful in convincing the Soviet leadership of the imperative of developing an ocean-going fleet".<sup>68</sup> According to Andrei Kokoshin, the Soviet Navy even attained its highest status in history within the Armed Force in the late 1960s.<sup>69</sup>

The experiences of the Cuban Missile Crisis probably accelerated and underlined the wish for a surface fleet for the purpose of military diplomacy, thus an important cause, but not the only explanation.

## The Gorshkov Navy

### Scandinavia's shifting position

The definition of unified "theatres of military action", TVDs ("teatry voennykh deistvii"), were central in Soviet strategic planning and organisation. Within these theatres, there were unified concepts and perceptions about the character of war, defined by the characters of each of the TVDs. There were also clear perceptions that a war might well be limited to one or more of the TVDs. From the Soviet position, the Scandinavian Peninsula and the Norwegian Sea made up an independent theatre up to the mid-1980s and was regarded as an important battle-theatre. The entire north-western TVD was expected to "constitute an active military battlefield" from the very outset of a war.<sup>70</sup> This "area of military action" was central for three main reasons: first for defensive purposes for stopping the offensive NATO forces, carriers at first, and later also the Polaris submarines; secondly for offensive purposes for securing access to the northern Atlantic; and thirdly for conducting their own offensive operations towards the European continent and the British Isles.

The Scandinavian Peninsula was important throughout the Cold War. From its earliest years, the American nuclear-armed strategic bomber fleets had had their transit route over the northern parts of Scandinavia toward the central areas of the Soviet Union. In parallel, the Anglo-American carrier fleets operated in the North Sea and

the Norwegian Sea in the late 1940s and 1950s for force projection, as well as for air protection for the strategic bombers.<sup>71</sup> This early Cold War American-led offensive use of the region lasted from the beginning of the Cold War till the early 1960s. By then, the nuclear-armed long-distance strategic missiles and the strategic nuclear submarines emerged as the main Cold War weapon, and the Soviet Navy dispositions and focus changed. Southern Scandinavia and the Baltic Sea became a solely tactical flank to the Central Front, while the High North soon became an independent theatre of war.

### Fighting for the Norwegian Sea

By the composition of the Soviet naval and air forces of the late 1960s, there were mainly two dominant scenarios for the fight for control of the Norwegian Sea; namely who would have air superiority in the area – the Soviet Union or NATO? Control of the Norwegian Sea was dependent on who would be able to seize control of the airfields of northern Norway. The following general strategic perceptions were widespread in Western thinking. It remained much the same from the late 1960s until the end of the Cold War: If the Soviets were able to capture northern Norway with its airfields, this would pose a multi-threat to NATO. With forwarded land-based air defences and combat aircraft, the Soviets would have air superiority, which in turn would enable their naval surface forces to move south-west. In the case of Soviet land-based strike air power, it would pose an immense offensive threat to northern continental Europe and Britain.

If NATO could keep control of northern Norway, they could effectively close off all Soviet naval surface forces, intercept

the strike aircraft, and be able to put great ASW forces into the hunt for the Soviet submarines that were designed to dispute NATO's control of the Norwegian Sea and attack Europe and Britain with missiles.

As for combat between military forces, tactical nuclear weapons were expected to be used against groupings of enemy forces and the destruction of rocket sites. This single and general conviction at the military strategic level of decision-makers in the Soviet Union had a crucial impact on the conduct of maritime warfare and its technical development. Sokolovskiy stated about nuclear weapons "...profound changes will take place in the methods of carrying out military operations in naval theatre". Further he specified:

In a future war the tasks of destroying shore targets, of defeating grouping of the naval forces of an aggressor, his assault carrier formations and rocket-carrying submarines at bases and on the high seas, disruption of sea and ocean communication, will be accomplished by strikes of rocket troops and mobile operations of rocket-carrying submarines co-operating with rocket-carrying aircraft.<sup>72</sup>

Even Khrushchev had argued that large surface ships, for example carriers, were "large sitting ducks" for surface missiles.<sup>73</sup> Later in his writing Sokolovskiy stressed that bombers and fighters were more successful at destroying moving targets than the rocket troops with their ballistic missiles.<sup>74</sup> Here we see some of the background for the Soviet Navy's heavy focus on aircraft in the anti-surface role of missions. This was supported by Khrushchev, who favoured "modest surface ships with anti-ship missiles and long range naval aviation".<sup>75</sup>

The British perspective is well described in the Naval War Manual of both 1957 and 1961. The threat of nuclear bombardment would be greatest to those forces in harbour. At sea, the threat would constitute submarines, operating independently but also in co-operation with long-range scouting aircraft. In addition to the submarine, the long-range bomber or strike aircraft armed with long-range missiles would be a great threat. Regarding the Soviet surface forces: "Surface raiders are not likely to be used on any scale, but may possibly be deployed in more remote areas to attack independent shipping and to extend the protection of forces".<sup>76</sup>

The Soviet vision and the threat posed to Western forces is well summarised in the thought-provoking words of Sokolovskiy of the High Command of the Soviet forces: "Long-range bomber aircraft, armed with long-range missiles, retain the capacity of delivering independent blows to enemy targets, especially at sea and in the ocean, but also on the coast and in the deep areas of the enemy territory".<sup>77</sup> Further, he stated about the balance of the surface, submarine, and air platforms:

... the Navy will keep such important tasks as combating the enemy's naval forces on the sea and at the bases and also disrupting his ocean and sea transport. These problems can be solved most effectively by submarines and planes armed with nuclear rocket weapons and torpedoes. A certain number of surface ships are also necessary to safeguard the activities of submarines and to perform secondary missions such as protection of naval communication lanes and co-ordination with ground troops in operations carried out in coastal regions.

Continuing about naval aviation: "Naval aviation must be able to attack warships at

sea at distances at which they will not be able to use their aircraft carrier forces and missiles for attacking targets in the socialist countries", and "... naval aviation will be called upon to destroy enemy transports at sea and at their bases."

In conclusion, it is clear that the Soviet submarines and the long-range bombers and missile-carrying strike aircraft primarily and, secondarily, the Soviet surface navy, were the main threats to Western conventional forces. Consequently, the NATO forces of northern Europe had to be planned and structured for establishing control of northern Norway and the Norwegian Sea.

## **Submarines and Maritime Air Power, the core Soviet Navy Sea Denial Forces**

### *The modern attack submarines*

During the second half of the 1960s, new powerful classes of nuclear submarines became operational. The Charlie-class cruise missile submarines, of which twelve Charlie I submarines were built from 1968, were equipped with the short-range anti-ship SS-N-7 Starbright and 6 torpedo/launch tubes for the missile-torpedo SS-N-15 Starfish or Type 53 torpedoes. The Charlies were not too successful, as their lack of speed made them ineffective as hunters.<sup>78</sup> The Victor-class attack submarine came along in 1967, of which 16 Victor I submarines were built and equipped with 6 torpedo/launch tubes for SS-N-15 or Type 53 torpedoes. This class had better performance than the rest of the fleet, and have in fact been operational in the Russian Northern Fleet till today. The Charlie and Victor classes, as well as the first SSBN Yankee-class, marked the change to a "modern submarine fleet".

Another interesting development was the fast interceptor and hunter submarines of the Alfa and Papa classes developed in the late 1960s, with early prototypes around 1970. These boats were designed to achieve speeds of 35-45 knots submerged and at depths of 3,000 feet.<sup>79</sup> The projects received great attention – and fear, both due to their technical developments and potential conceptual use and impact. However, both classes became haunted by technical difficulties and did not become important war machines of the Cold War.

### *Land-based Maritime Air Power*

The Soviet submarine build-up has traditionally received the greatest attention, but another important development was the threat posed by an extraordinary land-based maritime naval air force (of which the aircraft and systems have been described earlier).

This second threat from the Soviet military forces has been underestimated in military history literature. The capabilities and reach of Soviet maritime air power, both for strikes against maritime targets and land targets along the flanks of Europe, have not been given their rightful attention. The well-balanced and capable land-based air power of the Northern Fleet would have seriously displaced the power balance of Britain and northern Europe operating from the northern Norwegian coastline. Jonathan Alford, former Director of the International Institute for Strategic Studies, and a great debater on strategic issues in the 1980s, summed up the joint nature of maritime operations, and specifically the northern flank issue:

In part this is about the Soviet interdiction of the trans-Atlantic routes; in part this is about the Soviet need to keep NATO

naval forces well away from important Soviet assets; and in part it is about the reinforcement by the sea of the NATO north – and all are interconnected...

I will assert that it is the Norwegian airfields which are – or ought to be – of greatest concern. I suggest the following syllogism: who controls the Norwegian Sea depends on who controls the North Norwegian airfields: who controls those airfields depends on who gets there first: and who gets there first depends on who controls the Norwegian Sea.<sup>80</sup>

For the Soviet Union to be able to control the Norwegian Sea, or at least deny it to NATO forces, the two most important tasks of the Soviet Fleet and aircraft from the very outset of a war would be to destroy carrier-based enemy striking units and to get hold of the airfields of northern Norway. The absence of carrier-borne aviation in the Soviet Navy – and their need for forward bases – brought northern Norway into military strategies. The bases in northern Norway became a prerequisite for defensive operations to fight enemy carriers and for air cover of their own naval forces, as well as for offensive strike operations against Europe, the British Isles, and the northern Atlantic. The Soviets expected that NATO ASW ships, as well as ASW and air defence aircraft would protect the attack carriers. Still, they were strong in their belief that those forces and weapons could not effectively defend the vulnerable carriers from the Soviet submarines and aircraft armed with long-range missiles.

As Sokolovskiy stated: "... our fleet of missile-carrying submarines and aircraft permit approaching the aircraft carrier to the distance of missile launch without entering the zone of anti-submarine and air defence of the attack carrier force".<sup>81</sup> To be able to do this, the geo-strategic impor-



tance of northern Norway in this game was quite clear.

## Global reach and diplomacy

As argued previously, we assess that Gorshkov was a genuine believer in the Soviet need for an ocean-going fleet and large ships. However, his statements from the late 1950s and up to 1960–61 still favoured the “official views”. This period saw considerable doctrinal discussion in Soviet politics, but the influence of the Army and strategic-missile advocates<sup>82</sup>, including Khrushchev, was significant. By the early 1960s Gorshkov argued more for large ships. David Winkler has argued that Gorshkov’s “deliberate campaign to urge Nikita Khrushchev to reverse his naval outlook” came from the threat posed by the first Polaris system of 1960.<sup>83</sup>

Some scholars, for example McGwire<sup>84</sup>, noted this change at the time, prior to the Cuban Missile Crisis. The planned scrapping of Stalins Sverdlov-class was prevented, and the Kynda-class missile-cruiser was commissioned by 1962 as intended from the start. The construction of various large ships came about in the early 1960s. As argued earlier; the turning away from the sole submarine fleet focus, and a quest for larger ships, clearly started to materialise before the Cuban Missile Crisis. But although building started early in the 1960s, the Soviet Navy’s presence on the oceans did not materialise until the mid-1960s, with a rapid increase in activity on a global scale by the late 1960s with the famous Okean naval exercise out in the north Atlantic in 1970 marking the change.<sup>85</sup>

The first major operations by Soviet naval forces in the Mediterranean were in 1964, and increased from the mid-1960s. The Caribbean was also visited regular-

ly. The Indian Ocean was first visited by hydrographic survey ships in 1967, with the first naval task force spending four months showing the flag during the following year.<sup>86</sup> The rationale for operations in this area was the Polaris deployment and reach from the northern Indian Ocean as argued earlier, but also for naval diplomacy and in support of space operations. The first Soviet deployments were most evident with the Black Sea and Pacific Fleets. Another aspect, or fear, of Soviet expansion on the oceans, especially across the Indian Ocean, Middle East and Africa, was argued regarding the British withdrawal of its military presence in the region.<sup>87</sup> There was a vacuum to be filled, and many feared that the Soviet Navy might fill this gap. It turned out that the Soviet Union gained less footing than expected in these regions, as the countries kept their newly gained independence and the US increased its influence.

By 1975, the two ASW cruisers/carriers of the Moskva-class were followed by the first Soviet class of conventional carriers for fixed-winged aircraft, the Kiev-class aircraft carrier of 43,000 tons.<sup>89</sup> The four ships of this class were built to operate vertical take-off and landing (VTOL) fighter aircraft. The first and only full-size aircraft carrier of Western standard was first laid down in 1982 as Riga, launched as Leonid Brezhnev, on sea trials as Tbilisi and finally named *Kuznetsov*.<sup>90</sup> The Navy had fought for this final development throughout the Cold War, even though officially denied at the higher levels.<sup>91</sup> Still, the rationale for conventional aircraft carriers in the Soviet Navy has never fully been understood in the West, and has also constantly been debated in the Soviet Union. It may be understood in perspectives of global reach and diplomacy, strengthening of the region-

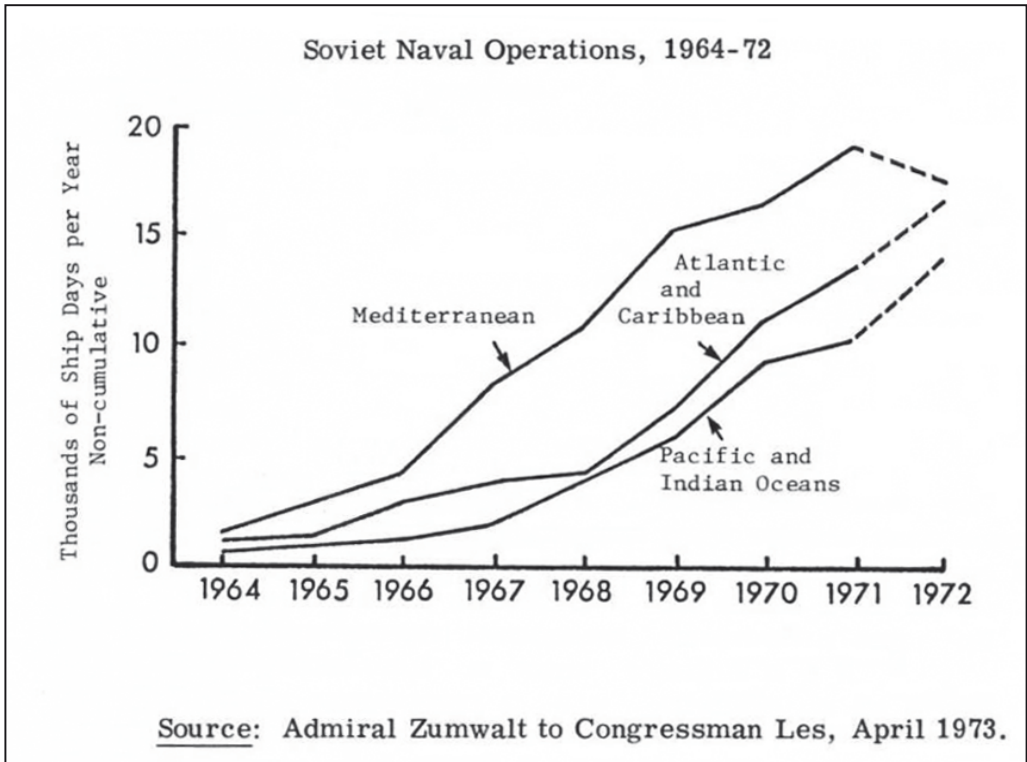


Figure: *Soviet Naval Strength and Deployment.* <sup>88</sup>

al sea control forces and even just for the case of self-esteem. The broad perspective is that their rationale may be explained by several parallel needs.

The increased global reach boosted the political leadership with the prospects of a traditional ocean-going fleet, prominently with the Okean Exercise of 1971 and several port visits to socialist states around the world. The idea of an ocean-going fleet was clearly not new, although we may say that an ocean-going fleet became a reality in the 1960s – even though this was not a fleet capable of fighting a Mahanian naval war at sea. It was primarily for extending the safety zones and for diplomacy.

By the late 1960s, when Soviet confidence had grown, they also began to design

nuclear-powered cruisers. This was a natural development in the light of Gorshkov's fascination with large surface combatants. Even though the developments started early, the Kirov-class of four cruisers did not become operational until 1980. This class remains today the ultimate surface combat ship.

### **A new central element; the Soviet SSBN**

By 1967, NATO woke up to a new great threat; the SSBN. The submarine development, including some early SSBNs (Golf-class) with shorter attack ranges, had gone through some evolutionary steps – but from the late 1960s it considerably

influenced maritime strategy as well as the greater nuclear strategies and the balance between the superpowers because of its second-strike capacity.<sup>92</sup>

The basic design of the first nuclear-powered submarine, the November-class attack submarine, was used to create the first nuclear powered strategic submarine, the Hotel-class. The first of this class, the famous K-19, was commissioned at the end of 1960.<sup>93</sup> The Echo-class cruise missile tactical submarine soon joined the ballistic missile Hotel-class. The first Echo I was in service by 1960, and was armed with the P-5 cruise missile and had 6 torpedo tubes for Type 53 torpedoes, as well as 4 torpedo tubes for Type 40 torpedoes. The Echo II entered service in 1962, armed with the P-6<sup>94</sup> anti-ship and coastal-strike cruise missile (The P-6 was given the same name as the P-5 – the SS-N-3 Shaddock by NATO) and the same torpedo configuration. The submarines carrying these first generation missiles, with their relatively short range and requirement of a surface launch, made the submarines very vulnerable to air ASW forces. Projects to create missiles with underwater launch capability resulted in the SS-N-5 Sark SLBM missile. It had a far greater range and was able to launch from depths of 40-60 metres.<sup>95</sup> Many of the earlier submarines were, from 1963 to 1967, refitted with the D-4 system for launching these missiles..

Submarines were now nuclear powered, as well as able to launch long-range missiles whilst submerged. This was a significant development for maritime warfare.

In the case of the ballistic-missile submarines, the US had a great lead with their George Washington-class Polaris submarine of 1960. These second-generation missiles ensured a true second-strike capability. The Soviet matured response to this

weapon system was the Yankee-class ballistic missile submarines (SSBN). This first true Soviet strategic submarine was armed with 16 SS-N-6 Serb SLBMs with a range of 2,400 km.<sup>96</sup> But even with this range the strategic submarines had to move out of the Barents Sea to their combat patrol areas and strike positions. The first generation strategic submarines had to move out through the GIUK Gap, and this fact, in addition to a steady decline in NATO maritime capabilities in the late 1960s and early 1970s, was the basis of the rationale behind the focus on the GIUK Gap in NATO, US, and UK maritime thinking in the 1970s.

The well-known “Bastions” of the Barents, as well as the north-eastern Pacific, did not become a reality until after the SS-N-8 Sawfly<sup>97</sup> SLBM entered service with the Delta-class in the early 1970s. The SSBNs have since become the main focus and the greatest concern of the North Atlantic. As Bertram and Holst state in their introduction to their book “New Strategic Factors in the North Atlantic” from 1977: “For the Soviet Union and the United States, as well as for France and Britain, the North Atlantic will, for some time to come, remain an area which lends itself for the deployment of strategic nuclear forces”.<sup>98</sup>

## Gorshkov’s rising navy maturing

After the dynamic 1960s, the 1970s were a period of more stable challenges, however steadily increasing, for NATO in the High North. The Soviet naval position became more defined. As described by David Glantz, the Soviet Navy embraced a concept of theatre-strategic operations and conventional forces in the 1970s and 1980s.<sup>99</sup> In Western literature, a great debate focused

on its true purpose; with perceptions ranging from the utterly traditional perspective of the Soviet naval posture as truly defensive and subordinate to the Army, to those who argued that the Soviet Navy was aiming at a superpower's navy to challenge the United States in a true Mahanian style.<sup>100</sup> Neither can be entirely true when looking at their balance and history.

Admiral Gorshkov was in charge of the Soviet Navy for three decades, and as this period saw such great changes in terms of technological evolution and a fluctuating Cold War, it is difficult to make a simple description of its naval posture. Stalin had a clear vision of an ocean-going fleet, but did not truly accomplish it. The late 1950s were exceptional, as Khrushchev tried to cut conventional forces, and direct the Navy's focus towards submarine warfare. The cost of building an ocean-going fleet was great. Nevertheless, Brezhnev still supported this investment. He also gave the services more freedom to develop strategic thinking and balance their forces. The military-industrial complex also gained great power. Naval spending was questioned more during Andropov's short time in power and discussions of halting the Soviet naval programmes surfaced. Chernenko was more in line with Brezhnev, and probably saved the naval programmes of the mid-1980s.<sup>101</sup> From 1985 until the end of the Cold War, the Soviet Navy's activities were greatly reduced.<sup>102</sup>

In total, the history of the red Soviet Navy shows a remarkably firm understanding of sea power. The navy we saw, what we may call "Gorshkov's Navy", may be characterised as both asymmetric and alternative. But it was perfectly balanced for its tasks.

In the words of Gorshkov:

In the search for the lines of development of our fleet we started not by simply copying the fleet of the most powerful maritime power of the world. The composition of the fleet, its weapons, ship design and the organisation of its forces were primarily determined by the tasks which are set before the armed forces and hence before the fleet by the political leadership of the country, its economic potential and the conditions in which the fleet will have to solve these tasks.<sup>103</sup>

It was clearly not "Mahanian", and it was clearly not simply defensive. To the extent that we may compare it with other navies and maritime philosophies, the most useful parallels are to be found within German naval thinking of the late nineteenth and early twentieth centuries<sup>104</sup>, and in the theoretical works of Castex<sup>105</sup> in the 1930s. Donald Mitchell perfectly summed up the Soviet naval developments from the Second World War until the 1970s: "Between 1945 and 1962 the Soviets attempted to achieve sea power. From 1962 to 1972 they attained it".<sup>106</sup> This was clearly a steady evolution towards a strong and balanced naval and merchant fleet, only broken by Khrushchev's ideas of an alternative submarine-focused fleet.

The navy Gorshkov created rested on four main military capabilities: strategic deterrence submarines; balanced sea denial and regional sea control forces and regional force projection forces for fighting a maritime war with NATO; and global naval diplomacy forces for times of peace and crisis.

## Conclusion

With the George Washington-class of Polaris submarines, the US early had a definitive lead in naval strategic forces in the 1960s. This lead lasted up to the mid-1970s. The

Soviet Navy's modern SSBN fleet first saw light in 1967 with the Yankee-class. The year was an important milestone, which was correctly noted by NATO intelligence.<sup>107</sup> The Soviet Navy surpassed the 40 US SSBNs with 55 Soviet SSBNs by 1975.<sup>108</sup> These highly important warships of the Cold War were then protected by land-based air power and a regional focused naval surface fleet for sea control, the well-known "*Bastion Concept*".

As for the war-fighting navy, Gorshkov created this from sea denial forces of attack submarines and long-range land-based strike aircraft. As he so clearly stated: "Today submarines and naval aviation, equipped with the most up-to-date weaponry, in which missiles play a major part, constitute the main type of forces of our fleet".<sup>109</sup> In traditional naval perspectives, at least of any of the Western schools, this was not a balanced naval force. It was, however, well suited for its purpose and thus balanced to its tasks.

Gorshkov's war-fighting *sea denial force* was both defensively and offensively oriented. It was defensive in the sense that it would protect the Soviet coastlines as well as halt American and NATO offensive forces. Offensive in the sense that it would attack and deny NATO the crucial sea lines of communication between North America and Europe.

Gorshkov also created a balanced *regional sea control force* of surface ships, submarines, and aircraft. This was needed for the "*Bastion Concept*", but also became important as the Soviet naval forces became more focused on amphibious operations by the mid-1960s. The Soviet Naval Infantry (and airborne units) were re-activated as a force by the mid-1960s. However, this was a limited force compared with the capabilities of the US Marines. Range and

lift capacity were limited and the logistical support insufficient for operations over any distance. The Soviet traditions and focus for amphibious forces were different from those of the main Western maritime nations. The Soviet Navy had been focused on limited tactical operations as cutting off or disrupting enemy forces and supporting the progress of the main body.<sup>110</sup> Thus, the assessment is that the Soviet naval capacity for force projection must be viewed primarily as one of a regional reach and purpose, and then of course important for the neighbouring countries of the southern Baltic Sea and northern Norway.<sup>111</sup>

The final element was the *naval diplomacy surface forces*. Admiral Gorshkov stressed the importance of the fleet as an instrument of the policy of the state; it was simply the most important aid to diplomacy in peacetime. He argued that military forces were needed for global influence, and that this was crucial for the growth of the State.<sup>112</sup> For instance, before and during the Arab-Israeli War in 1967 Soviet naval forces greatly increased their presence in the region, and the ports of Syria, Egypt and Algeria were frequently visited. The Soviet naval forces were clearly determined to use the navy to show force in order to promote their interests, in this case in support of the Arabs. In the same period, they gained access to ports in the southern-Arab world and across the African continent; Angola, Somalia, Ethiopia, South Yemen and Guinea.<sup>113</sup>

In parallel, the Soviet Union also engaged in building up a merchant fleet. This made possible the goal of developing trading partners and supporting friendly governments on a global scale. From the early 1950s to the late 1960s, the Soviet merchant navy grew from some 500 ships to more than 1,400 ships and by the late

1960s continuously visited ports around the world. This was a modern fleet, and it matched the numbers of the US merchant fleet. Sea power for diplomacy, a necessity for any global power, had a prominent position in Gorshkov's thinking.

The Soviet Navy clearly became an important force at sea by the late 1960s, and demonstrated a considerable global reach during the 1970s. The rationale behind this expansion has been a never-ending question in Western debate. Many scholars have stressed the Soviet need for access to the high seas. This seems to be a miscalculation if one thinks of it in terms of challenging the US Navy in classic battles. The Soviet Navy's surface fleet was great, but still definitely inferior to the American and NATO naval forces. First and foremost the lack of organic air power supports this assessment, but also the fact that they largely lacked organic logistical support for the forces at sea, despite several international support bases.<sup>114</sup>

To conclude; too many articles and analyses of the Soviet Navy and Gorshkov have started out with a debate on to what extent it was a balanced navy, whether it was defensive or offensive and whether it was a blue-ocean or a coastal navy. The

balancing of the Soviet Navy has too often been evaluated, judged and assessed against the benchmark US Navy. Both the defensive-offensive debate and the question to whether it was a blue-ocean navy have largely been discussed in perspective of a Mahanian-style and purpose navy. However, the Soviet Navy is so fascinating because it was, and largely still is, profoundly Russian and special.

Admiral Gorshkov created a balanced navy, but balanced to its tasks; it was both defensive and offensive, and it became a navy of global reach for diplomacy – but not as a Mahanian navy. Admiral Gorshkov was an original naval leader and thinker, where he focused on creating a navy balanced to its tasks; for protection of the homeland and the support of regional ground-forces, ensuring regional sea control for strategic strike (the “Bastion Concept”), to contest enemy conventional sea power forces with sea denial forces, and not least to be able to deploy naval and merchant fleets for global diplomatic influence.

The author is a Colonel at the Norwegian Defence University College and holds a PhD from the University of Glasgow.



## Notes

1. There is a tremendous body of literature from the period mid-1970s till early 1990s, and this article is by no means able to deal with all the perceptions and discussions which went on at the time. The article does not aim at criticizing former works of the period, as it would be easy (and unfair). I rather choose to bring forward those authoritative perceptions that may be supported, and maybe adjusted, according to recent research.
2. Quoted by Spencer, Robert: "Alliance perceptions of the Soviet threat, 1950-1988" in Carl-Christopher Schweitzer (ed.): *The Changing Western Analysis of the Soviet Threat*, Pinter Publisher, London 1990, p. 9.
3. *Ibid.*, p. 39.
4. According to Grove, Eric, "...these waters formed the most important maritime boundary between the two Cold War power blocs...". Grove, Eric: "The Superpowers and Secondary Navies in Northern Waters during the Cold War" in Hobsen, Rolf and Kristiansen, Tom: *Navies in Northern Waters, 1721-2000*, Taylor & Francis, London 2004, p. 211.
5. Mahan, Alfred Thayer: *The influence of Sea Power upon history 1660-1783*, Pelican Publishing Company, Louisiana 2003.
6. Corbett, Julian S.: *Some Principles of Maritime Strategy*, Naval Institute Press, Annapolis 1988, p. 112.
7. Castex, Raoul: *Strategic Theories*, Naval Institute Press, Annapolis 1994, p. 41.
8. *Ibid.*, pp. 184-202.
9. Kokoshin, Andrei A.: *Soviet Strategic Thought, 1917-91*, The MIT Press, Cambridge, Massachusetts 1998, p. 164.
10. Yegorova, Natalia: "Stalin's Conception of Maritime Power: Revelations from the Russian Archives", *The Journal of Strategic Studies*, vol. 28, April 2005, p. 158; *Ibid.*, Kokoshin, Andrei A., p. 164.
11. *Ibid.*, Kokoshin, Andrei A., p. 165.
12. *Ibid.*, p. 160.
13. See for instance: *Op. cit.* Yegorova, Natalia, see note 10, pp. 157-186; Rohwer, Jurgen and Monakov, Michael S.: *Stalin's Ocean-Going Fleet*, Frank Cass Publishers, London 2001.
14. *Ibid.*, Yegorova, Natalia, p. 162.
15. *Ibid.*, p. 178.
16. *Ibid.*, pp. 170-178.
17. *Fred och säkerhet, Svensk säkerhetspolitik 1969-89*, Statens Offentliga Utredningar [Sweden] 2002:108, Edit Norstedts Tryckeri, Stockholm 2002, p. 83.
18. Agrell, Wilhelm: *Fred och fruktan, Sveriges säkerhetspolitiska historia 1918-2000*, Historiska Media, Lund 2000, p. 101.
19. Chernyavskii, Sergei: "The Era of Gorshkov: Triumph and Contradictions", *The Journal of Strategic Studies*, vol. 28, April 2005, p. 290.
20. *UK Naval War Manual (1957/1961)*, p. 87.
21. From [http://www.questia.com/library/encyclopedia/khrushchev\\_nikita\\_sergeyevich.jsp](http://www.questia.com/library/encyclopedia/khrushchev_nikita_sergeyevich.jsp)
22. Mawdsley, Evan and White, Stephen: *The Soviet Elite from Lenin to Gorbachev*, Oxford University Press, Oxford 2000, pp. 136-137.
23. Kainikara, Sanu: *Politics in Russian Air Power*, Universal Publishers, Florida, 2007 p. 220 and p. 238. Many Western observers have argued that doctrinal developments and debates were limited under Stalins leadership, but this has been counter-argued by David Glantz (Glantz, David: *Soviet Military Operational Art*, Frank Cass, New York 2005 (reprint of 1991 version), pp. 160-161). Still, the world clearly saw a great change in Soviet doctrinal thinking about this time.
24. Friedman, Norman: *The US Maritime Strategy*, Jane's Publishing, London 1988, p. 152.
25. Tunander, Ola: *Cold War Politics*, PRIO, Oslo 1989, p. 26.
26. Kurth, Ronald: "Gorshkov's Gambit", *The Journal of Strategic Studies*, vol. 28, no. 2, April 2005, p. 266.
27. Bluth, Christopher: "The Soviet Union and the Cold War: Assessing the Technological Dimension", *Journal of Slavic Military Studies*, 23/2010, p. 284.
28. Translated by and quoted in *op. cit.*, Kurth, Ronald, see note 26, p. 267.
29. Podvig, Pavel (ed.): *Russian Strategic Nuclear Forces*, The MIT Press, London 2004, p. x of tables and p. 283. This Zulu IV ½ fired the first nuclear missile from the White Sea to a test range on the Kola Peninsula on the 16 September 1955 (Miasnikov, Eugene in Podvig, Pavel (ed.): *Russian Strategic Nuclear Forces*, p. 237).

30. SLBM: Submarine-launched ballistic missile.
31. It was a Golf I that was lost in 1968 off Hawaii, and later partially salvaged by the USN/CIA in 1975. This was a spectacular story known as "Project Jennifer".
32. Ketov, Ryurik: "The Cuban missile Crisis as Seen Through a Periscope", *Journal of Strategic Studies*, vol. 28, April 2005, p. 218.
33. It was named Leninskiy Komsomol, and was launched on 09 August 1957. The K-3 was the first Soviet submarine to reach the North Pole. Several units of this class suffered reactor accidents.
34. In 1968, a Soviet November class nuclear submarine surprised the US Navy by keeping pace with a high-speed (31 kts.) task force led by the nuclear-powered aircraft carrier Enterprise. The next year, responding to the "November surprise", the US Navy initiated development of the new "Los Angeles" class of fast hunter submarines, <http://www.globalsecurity.org/military/world/russia/627.htm>
35. Hallerbach, Rolf: "Baltic Strategy Past and Present" in Grove, Eric (ed.): *NATO's Defence of the North*, Brassey's, London 1989, p. 77.
36. Kolnogorov, Vadim: "To Be or Not To Be: The Development of Soviet Deck Aviation", *Journal of Strategic Studies*, vol. 28, no. 2, April 2005, pp. 339-342.
37. Ibid., p. 344.
38. Ibid., quoted by Kolnogorov, p. 345.
39. "The Russians and Carriers", note by Cooper, National Archives, Kew, UK (NAUK) AIR 8/2355, 19 July 1963.
40. Ignatius, Paul: "The Soviet Navy", *Vital Speeches of the Day*, vol. 34, issue 16, 1 June 1968.
41. The Soviet Navy has tried to cover this flaw since the 1960s, as most Soviet naval surface ships have since been equipped with extremely long-range and effective surface-to-air missile systems for air denial purposes.
42. Winkler, David F.: *Cold War at Sea*, Naval Institute Press, Annapolis 2000, p. 47.
43. Polmar, Norman: *Chronology of the Cold War at Sea 1945-1991*, Naval Institute Press, Maryland 1998, p. 65.
44. The increase in Soviet operations in the Mediterranean (from about 1964) and in the Indian Ocean (from about 1968) also stemmed from a strategy of projecting influence. (See various articles in MccGwire, Michael, *Soviet Naval Developments*, Praeger, New York 1973).
45. Sweetman, Bill: *Soviet Military Aircraft*, Presidio Press, California 1981, pp. 140-141.
46. Dalnaya Aviatzia (DA), Soviet Strategic Aviation.
47. Aviatsiya Voenno-Morskovo Flota (AVMF), Soviet Naval Aviation.
48. KS-1 missile-NATO designation: AS-1 Kennel.
49. KSR-2 missile-NATO designation: AS-5(A) Kelt.
50. K-10S missile-NATO designation: AS-2 Kipper.
51. Kadyshhev, Timur in op. cit., Podvig, Pavel, see note 29, p. 344.
52. Berdal, Mats: *Forging a maritime alliance. Norway and the evolution of American Maritime Strategy 1945-1960*, IFS Studies, vol. 4, Oslo 1993, pp. 106-107.
53. Op. cit., Sweetman, Bill, see note 45, p.182.
54. Butowski, Piotr: *Combat Aircraft, vol. 4, no. 6*, AIRtime Publishing Inc, UK, May 2003, p. 548.
55. Gething, Michael: *Sky Guardians, British Air Defences 1918-1993*, Arms and Armour Press, London 1993, pp. 120-121.
56. After the "secret speech" of Khrushchev in 1956, in which he denounced the cult of personality – it is viewed as a turning point in Soviet military thought. In the period 1958-60 the theorists of the High Command agreed that the military doctrine needed revision. At the IV session of the Supreme Soviet of the USSR on 14 January 1960 – Khrushchev outlined a new Soviet military doctrine. (Harriet Scott's editors' introduction of Sokolovskiy, Marshall: *Soviet Military Strategy*, Crane, Russak & Company, New York 1968).
57. Op. cit., Kainikara, Sanu, see note 23, p. 210.
58. The Blinder B's were armed with the AS-4 Kitchen missile, where the naval strike version was capable of a 320km air-to-surface range. (Op. cit., Sweetman, Bill, see note 45, p.169.) It is reported to have a range exceeding 700km in other sources.
59. Gordon, Yefim and Komissarov, Dmitriy: *Soviet Air Defence Aviation, 1945-1991*, Hikoki Publications, Manchester 2012, pp. 275-276.
60. Note: Soviet fighter aircraft were not equipped with in-flight refuelling systems until 1979 with the Mig-31. (Sutyagin, Igor in op. cit., Podvig, Pavel, see note 29, p.410.)
61. Op. cit., Ketov, Ryurik, see note 32, p. 231.

62. Savranskaya, Svetlana: "New Sources on the Role of Soviet Submarines in the Cuban Missile Crisis", *Journal of Strategic Studies*, vol. 28, April 2005, pp. 235-237.
63. Op. cit., Kurth, Ronald, see note 26, pp. 266-267.
64. Op. cit., Winkler, David F., see note 42, p. 50.
65. Op. cit., Friedman, Norman, see note 24, p. 152.
66. See discussion and researchers/sources in op. cit., Bluth, Christopher, see note 27, pp. 285-286.
67. Ibid., p. 286.
68. Op. cit., Chernyavskii, Sergei, see note 19, p. 281.
69. Op. cit., Kokoshin, Andrei A., see note 9, p. 129.
70. Wardak, Ghulam and Graham Turbiville: *The Voroshilov Lectures*, vol. 1, National Defence University Press, Washington 1989, p. 116.
71. See for instance: Berdal, Mads: *The United States, Norway and the Cold War, 1954-60*, Macmillan Press Ltd, London 1997; Tames, Rolf: *The United States and the Cold War in the High North*, University Press, Cambridge 1991. Further: later this same focus on the region was repeated in the 1980s as part of the Lehman and US Navy's forward Maritime Strategy.
72. Op. cit., Sokolovskiy, Marshall, see note 56, p. 203.
73. Op. cit., Kurth, Ronald, see note 26, p. 266.
74. Op. cit., Sokolovskiy, Marshall, see note 56, p. 253.
75. Op. cit., Kurth, Ronald, see note 26, pp. 266-267.
76. *UK Naval War Manual (1957/1961)*, p. 87.
77. Op. cit., Sokolovskiy, Marshall, see note 56, p. 254.
78. Op. cit., Friedman, Norman, see note 24, p. 170.
79. Jordan, John: *Soviet Submarines. 1945 to the present*, Arms and Armour Press, London 1989, pp. 116-126.
80. Alford, Jonathan in Till, Geoffrey (ed.): *Britain and NATO's Northern Flank*, ST.Martins Press, New York 1988, p. 77.
81. Op. cit., Sokolovskiy, Marshall, see note 56, p. 300.
82. E.g. Sokolovskiy, Zhukov, Frunze.
83. Op. cit., Winkler, David F., see note 42, p. 27.
84. MccGwire, Michael: "Current Soviet Warship Construction", in op. cit., MccGwire, Michael, see note 44, p. 136.
85. Op. cit., Kokoshin, Andrei A., see note 9, p. 130.
86. Fairhall, David: *Russia looks to the Sea*, The Trinity Press, London 1971 p. 232.
87. Ibid., pp. 233-235; Mitchell, Donald: *A History of Russian and Soviet Sea Power*, Andre Deutch Limited, London 1974, pp. 577-581.
88. Zumwalt quoted in Berman, Robert: "Soviet Naval Strength and Deployment", in op. cit., MccGwire, Michael, see note 44.
89. Op. cit., Polmar, Norman, see note 43, p. 157.
90. Ireland, Bernard: *Aircraft Carriers*, Lorenz Books, London 2005. Further: a second carrier, known as Varyag, of the class was under construction in Ukraine but never completed. The hull was later sold to China.
91. Mawdsley, Evan: "The Russian Navy in the Gorskov Era", in O'Brien, Phillips (ed.): *Technology and Naval Combat in the Twentieth Century and Beyond*, Frank Cass, London 2001, pp. 176-177.
92. For an earlier in-depth analysis of NATO analysis and response to the Soviet Navy fleet build-up in the High North, see Dyndal, Gjert Lage: "How the High North became Central in NATO Strategy", *Journal of Strategic Studies*, 34:4, 2011, pp. 557-585.
93. It was political prestige that pushed the early deployment of K-19, which nearly ended in a nuclear melt-down off the Norwegian coast after a collision with the US *Gato* submarine.
94. Op. cit., Miasnikov Eugene, see note 29, pp. 238-239.
95. Ibid., pp. 237-238.
96. Ibid., p. 240.
97. The SS-N-8 had a range of 7800 km, and the Bastion strategy soon became a reality. By 1975 the missile had even been tested launched from the piers.
98. Bertram, Christoph and Holst, Johan (eds.): *New Strategic Factors in the North Atlantic*, Universitetsforlaget, Oslo 1977, p. 5.
99. Glantz, David M.: *The Military Strategy of the Soviet Union, A History*, Frank Cass, London 1992, p. 170.
100. Based on op. cit., Mahan, Alfred, see note 5, (and other writing and lectures by Mahan) a line of thought of "Mahanianism" and perceptions of "Mahanian" navies have been created. The general overview from a strategic point of view is that "Command of the Sea" is an aim almost in its own right, be-

- cause this will lay the foundation for national wealth and greatness. Tactically, Mahan stressed centralisation of conventional naval forces and sea battles between capital ships. He believed in the decisive battle for achieving Command of the Sea.
101. Op. cit., Friedman, Norman, see note 24, p. 156.
102. Grove, Eric (ed.): *NATO's Defence of the North NATO's Defence of the North*, Brassey's, London 1989, p. 3.
103. Gorshkov, Sergei: *The sea power of the State*, Naval Institute Press, Maryland 1979, p. 281.
104. Recommended reading: Hobson, Rolf: *Imperialism at Sea: Naval Strategic Thought, the Ideology of Sea Power and the Tirpitz Plan, 1875-1914*, Brill, Boston 2002.
105. Recommended reading: Op. cit., Castex, Raoul, see note 7.
106. Mitchell, Donald: "Traditional Russian Maritime Strategy" in op. cit., McGwire, Michael, see note 44, p. 243.
107. Op. cit., Dyndal, Gjert Lage, see note 92, pp. 557-585.
108. Op. cit., Chernyavskii, Sergei, see note 19, p. 294.
109. Ibid., p. 189.
110. Hall, Robert: "Soviet Deployments, Potentials in Soviet Military Doctrine, and Nordic Security", in Zoppo, Ciro Elliot (ed.): *Nordic Security at the turn of the Twentieth-first Century*, Greenwood Press, New York 1992, p. 197.
111. Also Norman Friedman argues this was for the European theatre, and not the global power-projection as some has argued. Friedman, Norman: *The Fifty Year War*, Naval Institute Press, Annapolis 2000, pp. 380-381.
112. Op. cit., Gorshkov, Sergei, see note 103, pp. 247-248.
113. Walsh, David: *The Military Balance in the Cold War*, Routledge, London 2008, p. 142.
114. Oswald, Julian: "The Soviet Navy – A Western View", *RUSI Journal*, August 1996, p. 45.