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# HIDING IN PLAIN SIGHT: ASSESSING THE RUSSIAN 'BASTION' STRATEGY

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## INTRODUCTION

The development of Russia's sea-based nuclear strategy differs significantly from that of the United States. An obvious illustration of this distinction may be seen in the development of the erstwhile Soviet Union's fleet of nuclear-powered ballistic missile submarines (SSBNs). The Soviet Army had demonstrated a logical progression in both weapon design and deployment toward a defined goal: specifically, the creation of a safe strategic reserve, withheld both physically and operationally to offer intra-war deterrence. The initial plan for the Soviet nuclear triad included the use of SSBNs close to American territorial seas. They quickly realised, however, by the early 1970s, that American and Western Anti-Submarine Warfare (ASW) capabilities had surpassed the Soviet submarines' capacity to avoid detection. As a result, the 'anti-SSBN' strategy was re-evaluated, and the Soviet Navy's primary priority shifted from being a blue water fleet to being focussed on safeguarding key submarines and critical infrastructure using a sort of layered defence.

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**After the Cold War, a beleaguered Russia did not adhere to the Soviet NFU policy, and started frequently altering its nuclear strategy in response to worries about its security environment and the capabilities of its conventional forces.**

The bastion defence is the name given to the Soviet idea for defending their strategic submarines through a layered defence. It was most likely inspired by a collection of articles that appeared in "Navies in War and Peace" in the *Morskoi Sbornik* issues from 1972–73, which chronicled the career of the Soviet Navy. These ideas were put forth by Sergei G. Gorshkov, who was the Soviet Union's admiral of the fleet at the time. Western academics came to the conclusion that Moscow had abandoned earlier priorities of combatting the North Atlantic Treaty Organisation's (NATO's) SSBN fleet in favour of defending its own SSBN force in domestic waters. The precise reasons for which the Soviets may have adopted an SSBN bastion strategy have been the subject of fierce debates among Western strategists, but they all came to the same conclusion: the Soviet SSBN fleet would be protected in its home waters from any initial strategic nuclear or protracted conventional hostilities.

This function of the SSBN fits in well with the Soviet Union's overall nuclear weapons doctrine. Moscow made a formal commitment to refrain from using nuclear weapons first in 1982. It is safe to say that the majority of Western experts studying Soviet military affairs concurred that the Soviet Union was serious about its stated policy of 'No First Use' (NFU) and that the use of nuclear weapons was planned only to prevent the West from using atomic weapons in the first instance. A few analysts and academics, however, also held the view that the Soviet Union included nuclear weapons in its strategies for fighting wars. After the Cold War, a beleaguered Russia did not adhere to the Soviet NFU policy, and started frequently altering its nuclear strategy in response to worries about its security environment and the capabilities of its conventional forces.

The aim of this chapter is to draw lessons from Russia's experience with its SSBN programme for India's nascent SSBN programme. The article begins

with a brief overview of the operating posture of Russian SSBNs, with particular focus on why the Soviet Union had to choose a bastion strategy for deterrence patrol. Following that, the article details how Moscow, in the past and present, has operationalised its bastion strategy. It then discusses the drawbacks of the Russian bastion strategy. Finally, the article tries to look at the lessons that the Indian sea-based nuclear deterrence programme can learn from Russia's rich SSBN history.

**The US defence planners expected the Soviets to quickly replicate the Polaris patrol pattern established seven years earlier, and to keep at least 50 per cent of its underwater strategic deterrent within striking distance of the continental US.**

## HOW DO THE RUSSIAN SSBNs PATROL THE OCEANS?

When the Soviet Union introduced the Yankee class SSBN with its 16 SS-N-6 missiles in 1968, it matched the American submerged-launch Polaris fleet ballistic missile capability.[1] The US defence planners expected the Soviets to quickly replicate the Polaris patrol pattern established seven years earlier, and to keep at least 50 per cent of its underwater strategic deterrent within striking distance of the continental US.[2] In 1972, Defence Secretary Melvin R. Laird warned Congress:

> There seems little doubt that out-of-area operations by these (Yankee) submarines will increase over the next several years continuing the recent trend of more extensive and regular Soviet submarine deployments.[3]

1. "Yankee-class (Project 667A/AU)", *Military Factory*, undated, at https://www.militaryfactory.com/ships/detail.php?ship_id=yankee-class-project-667a-submarine-soviet-union
2. Jan S. Breemer, "The Soviet Navy's SSBN Bastions: New Questions Raised", *The RUSI Journal* 132, no. 2, 1987, p. 40.
3. "Annual Defense Department Report FY1973", US Department of Defence, 1972, p. 39. Available at https://history.defense.gov/Portals/70/Documents/annual_reports/1973_DoD_AR.pdf?ver=cClita1yclKflg3F0Rb3bw%3d%3d

However, it soon became apparent that the burgeoning Soviet SSBN fleet would not copy the patrolling patterns of its American counterpart. Talking more about the patrol patterns of the Soviets in the 1970s, Jan Breemer wrote:

> By the early 1970s, Yankee deployments off the American coastline typically included three units, roughly 12 per cent of the then-deployable force. Throughout the Cold War, Soviet SSBN "out-of-area" patrols had reportedly averaged some only 15 per cent. Western analysts who took stock of this unanticipated development in the early 1970s proposed that the effectiveness of Western Anti-Submarine Warfare (ASW) capabilities had forced the Soviet Union to withhold its Yankees in home waters. Only when war was imminent would the SSBNs attempt to "break out."[4]

The Soviet Union introduced a new class of SSBN, the Delta, in 1971. The boat was armed with a new type of missile, the SS-N-8, which had a range of more than 7,800 km, allowing it to strike continental US targets from within Soviet Union coastal waters. The Deltas were even slower in terms of operational tempo than the Yankees. "Unlike the earlier Yankee class with its shorter-range SS-N-6, the Deltas had yet to be observed moving to and from patrol stations in the Western Atlantic or Eastern Pacific," Jan S. Breemer wrote 13 years after the first Delta boat was commissioned in 1972.[5] The deployment of the long-range SS-N-8 was deduced to reflect a Soviet decision to protect their SSBNs from Western ASW by limiting their deployment to sea areas within easy reach of protective anti-submarine measures. The Arctic Ocean, the Barent Sea, and the Sea of Okhotsk were designated as "sanctuaries," "havens," or "bastions."

A preliminary doctrinal definition of the bastion concept could be a heavily defended area of water in which friendly naval forces can operate

4. Breemer, n. 2, p. 40.
5. J.S Breemer, "The Soviet Navy's SSBN Bastions: Evidence, Inference, and Alternative Scenarios", *The RUSI Journal*, 130, no. 1, 1985, p. 18.

safely. Kristian Atland of the Norwegian Defence Research Establishment defines the bastion as:

> …defendable maritime area in which "unfriendly" naval and air forces can be kept at an arm's length, or at least controlled and contained. When a state decides to establish a bastion area, for instance, to protect the safe operation of its strategic submarines (SSBNs), it typically utilizes its natural advantages in terms of geography, sets up a sensor system to monitor the activities of hostile attack submarines (SSNs), and arranges for intensive patrolling of the area by subsurface, surface and air defence forces.[6]

The bastion defence appears to be a geographically and horizontally layered defence, spanning all domains with overlapping military capabilities from several different weapon systems, greatly enhancing the durability of Russia's defence network. Both the Barents Sea and the Sea of Okhotsk, which are still significant to the Russian Northern and Pacific Fleets, were designated as bastions for the Soviet Red Banner Northern and Pacific Fleets, respectively.

The Kola Peninsula to the Barents and Norwegian Seas, and farther west to the Greenland-Iceland-United Kingdom (GIUK) gap make up the Northern Fleet's Bastion defence zone. The Kola Peninsula's security and the Northern Fleet's access to the North Atlantic and beyond are both goals[7] and priorities of the bastion concept.[8] Additionally, it serves as a "base of operations for Russian power projection towards Europe, the United States, and NATO Alliance Nations" in the event of a major conflict or war by blocking access to the Murmansk and Kola regions and to crucial infrastructure like harbours,

6. Kristian Atland, "The Introduction, Adoption and Implementation of Russia's "Northern Strategic Bastion" Concept, 1992–1999", *Journal of Slavic Military Studies*, 20, no. 4, p. 499.
7. Siemon Wezeman, "Military Capabilities in the Arctic: A New Cold War in the High North?", *SIPRI*, 2016, p. 22, available at https://www.sipri.org/publications/2016/sipri-background-papers/military-capabilities-arctic.
8. Mathieu Boulègue ,"Russia's Military Posture in the Arctic", Chatham House, June 28, 2019, available at https://www.chathamhouse.org/2019/06/russias-military-posture-arctic/2-perimeter-control-around-bastion.

**Traditionally, the bastion defence has been envisioned as having two major sectors: an outer area for sea-denial operations and an inner area for sea-control operations.**

airports, maintenance facilities, and logistical facilities.[9] This protects the Russian Arctic and its right flank. According to one study, it is reasonable to expect that this sector, with the aim of sea-control, will also include the "Russian littoral area stretching from Wrangel Island in the East Siberian Sea to the Norwegian border" given the "establishment of the new Russian Joint Strategic Command North (OSK Sever) and the military build-up in the Russian Arctic".[10] The bastion defence won't be fully functional for years, but Russian military power gets stronger every year.

Since the Soviet times, the Sea of Okhotsk, located between Russia's Kamchatka Peninsula on the east and the Kuril Islands on the southeast, has been used as another "bastion" for sheltering Russia's Pacific naval SSBNs. It is a forbiddingly remote and frequently ice-bound area almost entirely surrounded by Russian territory, providing relative sanctuary for the Russian Pacific Fleet SSBNs.

Traditionally, the bastion defence has been envisioned as having two major sectors: an outer area for sea-denial operations and an inner area for sea-control operations.[11] To protect the SSBNs in their operational area, according to Mathieu Boulègue, "control is ensured through sea denial and interdiction capabilities at sea and in the air".[12]

The bastion defence, which is currently being used to defend both the strategic submarines of the Northern Fleet and access to the Atlantic, is in many ways a reflection of Russia's traditional anti-access homeland defence strategy. The main objective of an anti-access strategy is to

9. Geir Arne Hestvik, "Conflict 2020 and Beyond: A Look at the Russian Bastion Defence Strategy", Combined Joint Operations from the Sea Centre of Excellence, Royal Canadian Navy, 2020, p. 4, available at http://www.cjoscoe.org/infosite/wp-content/uploads/2020/08/Conflict-2020-and-Beyond_A-Look-at-the-Russian-Bastion-Defence-Strategy.pdf
10. Ibid.
11. Ibid.
12. Boulègue, n. 8.

intimidate an adversary through physical defence while also making use of softer instruments of power like diplomatic, informational, and economic means.[13]

The following section will describe the many motivations behind the Soviet Union's decision to operationalising and laying the ground work for the bastion strategy for successive generations of the Russian SSBN fleets.

## MOTIVATIONS FOR THE BASTION STRATEGY

US analysts speculated in the published proceedings of the second Dalhousie University seminar on Soviet naval developments in October 1973 that the Soviet Union had deployed the majority of its SSBNs in its own waters in order to potentially withhold some of them from an initial nuclear exchange as a reserve force for intra-war deterrence.[14] The Delta and SS-N-8 were developed in response to a Soviet decision in 1963-64 to "develop an SLBM system with sufficient range to strike at North America from the comparative safety of the home fleet areas."[15] It believed that the Yankees would be kept in home waters to survive the initial exchange in preparation for a subsequent "surge" against "disrupted Western defences."[16] Bradford Dismukes of the Centre for Naval Analyses, one of the conference attendees, also believed and suggested that the Soviets could surge their Yankees while being protected by the navy's "pro-SSBN" general purpose forces.[17]

It was, however, James M. McConnell's argument in a report prepared for the US Congressional Research Service in 1976 that gave much credence to the idea of a Soviet SSBN withholding strategy. McConnell, also of the Centre of Naval Analyses, discovered evidence in the so-called "Gorshkov

13. Sam J Tangredi, *Anti-Access Warfare, Countering A2AD Strategies* (Maryland: Naval Institute Press, 2013), p. 77.
14. Michael MccGwire, Ken Booth and John McDonnell, eds., *Soviet Naval Policy--Objectives and Constraints* (New York: Praeger Publishers, 1975).
15. Ibid., p. 516. SLBM or Submarine Launched Ballistic Missile.
16. Ibid.
17. Bradford Dismukes, "The Soviet Naval General Purpose Forces: Roles and Missions in Wartime", in *Soviet Naval Policy-Objectives and Constraints* (New York: Praeger Publishers, 1975): pp. 581-583.

Series" in the 1972-73 issue of *Morskoi Sbornik*, a Soviet naval journal, that the Soviets had downgraded the earlier task of combatting Western SSBNs (anti-SSBN) in favour of protecting their own strategic submarine force (pro-SSBN).[18] He contended that the Deltas would be "conserved" in home waters, where they would act as a "fleet-in-being" in a war-time "withholding strategy," protected by friendly anti-submarine warfare forces.[19]

However, the explanation of the Soviet bastion has not been this simple. Three models of explanation cropped up from the mid-1970s to the late 1980s which indicated that although there was broad consensus over the authenticity of a Soviet SSBN bastion strategy, scholars and analysts were deeply divided over the Soviet motivations for such a patrolling strategy.

### *The Doctrinal Model*

Two different doctrinal explanations for the Soviet bastion decision have been advanced. James M. McConnell owns the older one, which is central to the concept of the Soviet SSBN fleet as a "strategic reserve." McConnell provided numerous interpretations of decisions made at the Soviet Communist Party's 24th Congress in 1971, decisions he believed marked a shift in the Soviet Navy's mission priorities from anti- to pro-SSBN.[20] He also saw Admiral Sergei Gorshkov's seminal book *The Sea Power of the State*, published in the spring of 1976, as strengthening the case for a Soviet SSBN withholding posture which effectively converts the Soviet SSBN fleet into a strategic 'fleet-in-being'.[21] McConnell concluded:

- the pro-SSBN mission did not exist prior to the 24th Party Congress of 1971;

18. James M. McConnell, "Military-Political Tasks of the Soviet Navy in War and Peace", in John Hardt and Herman Franssen, eds., *Soviet Ocean Developments*, Congressional Research Service, 94th Congress, 2nd session, 1976, (G.P.O., Washington, 1976), pp. 183-209.
19. Ibid.
20. Jan S. Breemer, "The Soviet Navy's SSBN Bastions: Why Explanations Matter", *The RUSI Journal*, 134, no. 4, 1989, p. 33.
21. Ibid.

- the war-time role of Soviet SSBNs had shifted from initial shootout participation to intra-war deterrence; and
- the anti-SSBN mission had been downgraded, with anti-submarine forces re-allocated to SSBN defence.[22]

The implications of a withholding strategy, according to McConnell, were two-fold. First, whereas previously, the Soviet doctrine was for the SSBNs to participate in the war-starting strategic nuclear strike, they would now be withheld for intra-war deterrence and compellence.[23] The goal of intra-war deterrence and compellence was to achieve late-war bargaining. It meant that submarines carrying medium-range SLBMs could either be used for theatre strikes against time-critical targets or held back for later use against an intercontinental enemy. If the latter option is chosen, a "surge" deployment of Soviet SSBNs from the bastions would occur. Analysts speculated that this surge would occur during the initial conventional stage of a war, providing a "signal" to the West, or that it would occur after the initial nuclear strikes, threatening follow-on attacks.[24]

According to McConnell, the second implication of a Soviet strategic 'fleet-in-being' was the construction of the Delta class SSBN with the SS-N-8. The missile's intercontinental range, according to McConnell, demonstrated that the Soviets intended to maintain the integrity of their strategic "leverage" in protected home waters. He stated:

> No longer will Soviet SSBNs have to run the gauntlet of Western ASW forces through relatively narrow exits and then attempt to survive, precariously, on the World Ocean. (The SSBNs would be kept instead) in local waters,

22. James M. McConnell, "The Gorshkov Articles, the New Gorshkov Book, and Their Relation to Policy", in Michael MccGwire and John McDonnell, eds., *Soviet Naval Influence-- Domestic and Foreign Influences* (New York: Praeger Publishers, 1977), pp. 563-620.
23. James M McConnell, Robert G D Weinland, and Michael K MccGwire, *Admiral Gorshkov on 'Navies in War and Peace*, Report No. CRC 2757 (Arlington, VA: Centre for Naval Analyses, 1974), p. 74.
24. J.J. Tritten, *Strategic Targeting by Soviet SSBNs* (Monterey CA: Naval Postgraduate School 1988), p. 5.

> protected in a war-time environment over a protracted period by the main ASW and other forces of the Russian fleet.[25]

In summary, McGonnell maintained that the "fundamental" choice to withhold the Soviet Navy's SSBN fleet for intra-war deterrence was a doctrinal reason for Moscow; while the capability to reserve in home waters was made possible by technical characteristics (i.e., long range of the SLBMs).

Michael MccGwire's book, *Military Objectives in Soviet Foreign Policy*, offers an alternative doctrinal explanation for the Soviet bastion decision. According to MccGwire, the rededication of the Soviet SSBNs from participation in the initial strategic strike to withholding can be traced back to a Politburo decision in 1966 to reject the "inevitability" of nuclear war with the US, as well as the corollary decision to prioritise plans and capabilities for fighting and winning a protracted conventional conflict.[26] According to MccGwire, Soviet decision-makers realised that the 'safe' pursuit of this type of superpower war was also dependent on the longevity of their strategic nuclear forces' countervailing deterrence. Naturally, the task of deterring the United States from turning a losing conventional 'long war' into a mutually-devastating nuclear exchange was assigned to the Soviet Union's most numerous and capable strategic arm: the Strategic Rocket Force's (SRF's) land-based missiles.[27]

While MccGwire conceded that the Soviets could reasonably be convinced that the SRF could maintain the current strategic nuclear balance, he argued that they could not be sure that their credibility as the country's "main branch" would not be "outflanked" by American technological innovation. The Soviet SSBN fleet was transformed into a strategic "insurance force" that would be held back and protected in bastion waters so that "in the event of war, the ICBM force could be rendered impotent in some way or another,"

25. McConnel, n. 23, p. 74.
26. Michael MccGwire, *Military Objectives in Soviet Foreign Policy* (Washington DC: The Brookings Institution, 1987), pp. 36-66.
27. Breemer, n. 20, p. 34.

according to MccGwire.[28] This was done to "hedge" and "insure" against the possibility of an American SRF-neutralising "breakthrough." According to his theory, if the latter happened, the SSBNs would revert to their previous role as a "balancing force" and would be utilised either right away or later, depending on the needs of the military.[29]

As a result, while McGonnell believed that all or some Soviet SSBNs would be withheld to influence late-war bargaining, MccGwire believed that they would be used as a "strategic war reserve," possibly to offset the threat of American SSBNs. MccGwire has postulated the second purpose, and wrote in 1976:

> The Soviets may believe that the United States is planning to carry on the war after the initial exchange, by taking over some undamaged part of the world as a socio-economic base. In that case, the Soviets would wish to hold back SSBNs so as to deny the United States that option. Similarly, if they believe that the United States intends to withhold some Polaris, they would probably wish to hold back at least some of their own, on the off-chance that there would be any targets left to strike.[30]

MccGwire's 'insurance' explanation is now a widely accepted one for the Russian bastion strategy. In times of war, Moscow's first and foremost naval priority is to ensure the survival of its SSBN force so that it can continue to serve as a 'national strategic reserve'.

### *The Material-Technical Model*

The material-technical explanation for the bastion concept provides two reasons for the adoption of the bastion strategy by Moscow:

- Technical and operational flaws of the Soviet SSBNs, particularly their acoustic vulnerabilities, prevented the Soviet Navy from emulating the high-speed oceanic patrols of American SSBNs.

28. MccGwire, n. 26, p. 153.
29. Ibid., pp. 98-102.
30. Breemer, n. 5, p. 21.

- It was technological ingenuity, i.e., the development of the long-range SS-N-8, that enabled a withholding strategy and not a pre-planned doctrine.

Explaining why technical vulnerability was the reason behind the Kremlin's decision to develop the SS-N-8, then US Defence Secretary Donald H Rumsfeld thought, in 1977, that production of the Yankee class had stopped, "in part, no doubt, because the boats would have to go on station within range of US and allied ASW forces in order to cover targets in the United States."[31] For example, the Yankees and Deltas had to travel through a narrowly confined strategic maritime transit route called the GIUK Gap—acronymic for Greenland–Iceland–United Kingdom and infested heavily with US and NATO ASW forces—to target the continental US; giving NATO a significant advantage in the deadly serious 'hide-and-seek' struggle in the choke point.

The new Deltas, armed with SS-N-8s sorted this problem for Moscow as Rumsfeld explained how the new SLBM benefitted the Soviet Union in two ways:

- They could 'cover major targets in the United States from launch points as distant as the Barents Sea and the North Pacific';
- and such deployments, relatively close to home ports, allow more time on station (the equivalent of having additional SSBNs) and provide a degree of sanctuary from Anti-Submarine Warfare (ASW) forces.[32]

With the development of longer range SLBMs by the 1970s, the Soviet boomers were no longer required to transit through the dangerous GIUK Gap. However, the technical model's rationale failed to adequately explain why Soviet advancement in quieter subs did not result in any change in its operating patrol patterns over time. Admiral Wesley L McDonald, Supreme Allied Commander, Atlantic (SACLANT), described the Typhoon class

31. "Annual Defense Department Report FY1978", US Department of Defence, 1978, p. 63, Available at https://history.defense.gov/Portals/70/Documents/annual_reports/1978_DoD_AR.pdf?ver=2014-06-24-150750-460.
32. Ibid., p. 63.

SSBN in 1987 as the "quietest submarine yet to be built anywhere," but the Typhoon's acoustic superiority had not resulted in a change in the Soviet Navy's peace-time SSBN patrol routine.[33]

**The bureaucratic model sees the bastion strategy as proof of the Soviet Navy 'militarism,' which is entirely unrelated to military efficiency.**

### *The Bureaucratic Model*

Kenneth R McGruther's book, *The Evolving Soviet Navy*, contains the most compelling bureaucratic model of the bastion strategy. McGruther reported in 1978 that the Soviet Navy's new types of ships and weapons were "to a large extent only explainable in terms of economic pressures, bureaucratic politics, and institutional perspectives."[34] He agreed that the "first-generation" Soviet blue water fleet of the 1960s was the "rational" result of threat responsive necessity and the technologies available at the time. However, to possess new impressive looking ships and powerful weapon systems, the Soviet naval leadership looked for "the trick... to find a way to continue the existing trend by expanding the rationale—or finding a new one".[35] To summarise, the bureaucratic model sees the bastion strategy as proof of the Soviet Navy 'militarism,' which is entirely unrelated to military efficiency.

As a result, the bureaucratic model suggested that political prudence required the Soviet Navy to craft its position in a way that avoided accusations of self-aggrandising parochialism. It rephrased its organisational preferences in terms of national preferences. Furthermore, the model suggests that the development of the SS-N-8 was re-cast in a way that promoted its newer capabilities as evolutionary continuations of pre-existing and long-agreed-upon organisational missions.

33. Wesley L McDonald, "A Priority Shift from NATO Could Invite Disaster", *The Almanac of Seapower 1987* (Arlington, VA: Navy League of the United States, 1987), p. 70.
34. Kenneth R McGruther. *The Evolving Soviet Navy* (Newport, RI: Naval War College Press, 1978), p. 24.
35. Ibid., p. 25.

This trick is not unique to the Soviet Union alone as claimed by the proponents of this model. The United States itself had several cases which Breemer detailed as:

> During the 1950s, the US Army would justify its long-range ballistic missile programme as a natural extension of its artillery role, and the Air Force would claim responsibility for developing the Intercontinental Ballistic Missile (ICBM) by portraying it as an unmanned strategic bomber. Similarly, the US Navy has found that costly shipbuilding programmes are likely to be funded more readily if they are justified in terms of international obligations and coalition warfare instead of unilateral US, or even worse, US Navy, purposes.[36]

### *Cultural Motivations*

Aside from the threat of Western ASW forces and the desire to build the SSBN force into a 'withheld reserve', another reason has been advanced for the use of the bastion strategy. It claims that the Soviet failure to deploy the Yankees and Deltas to the high seas is due to the Russians' proclivity to defend the homeland near their borders in the past.[37] Some have interpreted it "as symptomatic of a cultural dislike of the insecurity and independence of thought" that come with life on the open sea.[38] They assert that the (bastion) approach is consistent with both conventional Czarist/Soviet continental naval policy based on geography, naval inferiority, caution, and inshore direction, as well as the psychology of the Russian people.

While there are no doubt that national "traits" affect state policies, there are many exceptions. For instance, when its U-boats launched the most devastating naval campaign the world had ever seen, Wilhelmian Germany had no marine or naval tradition to speak of.

36. Breemer, n. 20, p. 35.
37. Breemer, n. 5, p. 20.
38. Ibid.

### *Other Justifications*

By the late Cold War period, many Soviet observers felt that it was exceedingly impossible that the US would launch a devastating surprise attack. Having so few units in a firing position or actually on patrol would be justified by this perspective alone. After all, a fully deployed and alert second strike posture is only necessary when there is an imminent threat of a bolt from the blue sneak attack.

The cost savings from servicing units continuously at sea was another justification offered for the bastion approach. There is a chance that the considerable wear and tear on SSBNs that are always on patrol will exceed what can be repaired.[39] Analysts have remarked that Moscow chose to produce new units rather than maintain existing ones in order to carry out its central plan. The increased demand for maintenance and rework workers in addition to uniformed nuclear reactor specialists may be enough to maintain higher material readiness rather than wearing out complicated equipment at sea.[40]

## BASTION OPERATIONALISATION IN THE PRESENT

Since the late 1970s, the Soviet Union had equipped its SSBNs with a 'layer' of operational defence forces during the Cold War. The Soviet Union developed a defence in depth that reached out 2,000–3,000 km from its coastline to protect its SSBNs in waters close to home.[41] Once it was acknowledged that the Soviets had switched from an anti- to a pro-SSBN strategy, the implications for the roles and missions of the Soviet fleet as a whole became clear: ships and aircraft that had previously been tasked to haunt enemy SSBNs were now called to defend the Soviet Union's own

39. Walter M. Kreitler, *The Close Aboard Bastion: A Soviet Ballistic Missile Submarine Deployment Strategy* (Monterey CA: Naval Postgraduate School 1988), p. 26.
40. Tom Stefanick, *Strategic Antisubmarine Warfare* (Lexington Massachusetts: Lexington Books, 1987), p. 34.
41. Rear Admiral William O. Studeman, Director of Naval Intelligence, *Testimony from House Armed Services Sub-Committee on Sea Power and Strategic and Critical Materials* (Washington DC, March 1, 1988), p. 3.

**The Russian Navy raised the number of corvettes from 50 to 68 units between 2008 and 2017, the number of different types of submarines from 61 to 71 units, and the number of armed Patrol Boats (PBs), Fast Attack Craft (FACs), and Fast Patrol Boats (FPBs) from 172 to 290 units.**

SSBN sanctuaries against US ASW forces. In order to support SSBNs in this designated area, the Soviet Navy went to tremendous lengths to dedicate its all-purpose forces to the objective.

In the present times, since 2007, Russia started a significant modernisation effort for its navy.[42] Many academics would contend that with all that money, Russia was aiming to build or rebuild a sizeable blue sea navy, similar to the one it had during the Cold War. At first glance, it appeared to be the case, but in reality, medium and smaller classes of ships, boats, and craft have had the highest increase in the naval forces since 2008.[43] Instead of blue sea operations, these smaller vessels are more appropriate for brown water or littoral operations. The Russian Navy raised the number of corvettes from 50 to 68 units between 2008 and 2017, the number of different types of submarines from 61 to 71 units, and the number of armed Patrol Boats (PBs), Fast Attack Craft (FACs), and Fast Patrol Boats (FPBs) from 172 to 290 units.[44] The number of cruisers, destroyers, and frigates increased during this time from 32 units to a total of about 25 ships.[45]

From a financial standpoint, smaller ships are typically less expensive to build or purchase, and increasing the number of platforms offers defence in depth and boosts resilience. Even while Russia still maintains high-value units or targets, they might not all be as crucial strategically because smaller submarines and corvettes may be able to affect targets just as effectively. By supplying many of its recently commissioned units with the Kalibr naval land-attack cruise missiles, the Russian Navy has also greatly improved its power

42. Amy F. Woolf, *Russia's Nuclear Weapons: Doctrine, Forces, and Modernization* (Washington: Congressional Research Service 2022), p. 15.
43. Ibid.
44. Ibid.
45. Ibid.

projection and long-range strike capabilities.[46] This weapon system reportedly has a range of about 2,500 km, giving the Russian forces in the Norwegian Sea, the North Atlantic, or even the bastion defence sectors in the High North, the capacity to launch precise strikes deep into NATO territory.[47] In this regard, Russian weapons and military systems are taking precedence over the platform on which they are housed.

**The Northern Fleet has gradually added potent and multi-layered air defence and coastal defence capabilities to meet its sea denial and interdiction mandate for defending the Kola Peninsula.**

The Russian Navy is particularly interested in guarding the Kola Peninsula. Two-thirds of the Russian Navy's nuclear attack capabilities are housed in the Northern Fleet, which has its headquarters in Murmansk Oblast, mostly on the Kola Peninsula. The remaining third are stationed in the Pacific Fleet.[48] To secure the safety of the Kola Peninsula, Moscow formed the new Joint Strategic Command North (also known as the "OSK Sever") in 2014.[49]

The Northern Fleet has gradually added potent and multi-layered air defence and coastal defence capabilities to meet its sea denial and interdiction mandate for defending the Kola Peninsula. "This is in line with increased sea and air patrols in the Arctic for perimeter defence. The Northern Fleet is now operating a hardened, Arctic-capable, multi-layered air defence and sea denial system", that, according to Mathieu Boulègue of *Chatham House*, includes:

- S-400 (NATO: SA-21 Growler) and S-300 (NATO: SA-10 Grumble) air defence systems for long-range protection;

46. Joshua Menks, (U.S. Navy), and Michael B. Petersen, "The 'Kalibrization' of the Russian Fleet", US Naval Institute, May 2022, at https://www.usni.org/magazines/proceedings/2022/may/kalibrization-russian-fleet.
47. Woolf, n. 42, p. 15.
48. Matthew Melino, Heather A. Conley, and Joseph S. Bermudez Jr, "The Ice Curtain: Modernization on the Kola Peninsula", *CSIS*, March 23, 2020, at https://www.csis.org/analysis/ice-curtain-modernization-kola-peninsula.
49. Boulègue, n. 8.

- P-800 Oniks anti-ship cruise missiles (NATO: SS-N-26 Strobile) and Kalibr-NK land-attack cruise missiles (NATO: SS-N-Sizzler) for medium-range protection;
- Pantsir-SA (NATO: SA-22 Greyhound) and Tor M2-DT (NATO: SA-15 Gauntlet) systems for short-range base defence; and
- 3K60 BAL (NATO: SC-6 Sennight), K-300P Bastion-P (NATO: SSC-5) and 4K51 Rubezh (NATO: SSC-3 Styx) systems for coastal defence.[50]

Additionally, Russia has reactivated or built new permanent sites in the Arctic. James Gray, a British lawmaker, explains how numerous bases have been set up all along Russia's Arctic coastline.[51] While the Northern Fleet has been outfitted with versatile sea denial assets along the Arctic Zone of the Russian Federation (AZRF) and beyond, military infrastructure in the Russian Arctic intends to strengthen Russia's air defence and sea denial capabilities on land and close to the coast. Liquefied Natural Gas (LNG) facilities, such as the Yamal and Gydan LNG plants, are increasingly considered strategic assets, and the bastion defence concept takes this into account.[52] Some of the biggest human-made structures to be created in the higher Arctic are the "trefoil" bases that have been constructed on the Russian Arctic islands to serve as permanent garrisons for the troops.[53] Along with these garrisons, several deep-water ports, airfields, and other infrastructure have been built. The Russian Defence Ministry declared in January 2017 that it would construct more than 100 installations in the Arctic by the end of that year.[54]

50. Ibid.
51. UK Government, "On Thin Ice: UK Defence in the Arctic", House of Commons Defence Committee, July 2019, p. 21.
52. Boulègue, n. 8, p. 7.
53. Tom Parfitt, "Russia Unveils Its Giant New Arctic Base", *The Times*, April 18, 2017, at https://www.thetimes.co.uk/article/russia-unveils-its-giant-new-arctic-base-p0qjg3jl6; Samuel Cranny-Evans and Mark Cazalet, "Fire and Ice: Russia Arms Itself for the Arctic", *Jane's International Defence Review*, June 27, 2018, at https://janes.ihs.com/InternationalDefenceReview/Display/1837256.
54. "Russian Defense Ministry to Build Over 100 Facilities in Arctic Region", *TASS*, January 25, 2017, at https://tass.com/defense/927159.

In order to maintain its Pacific bastion in the Sea of Okhotsk, Russia's military is also working to upgrade the Viliuchinsk naval facility significantly. Giving more details on the importance of the base, John C. K. Daly of The Jamestown Foundation writes:

> Viliuchinsk is the Pacific Fleet's ballistic nuclear missile submarine (SSBN) base on the southeastern coast of the Kamchatka Peninsula, which makes up the western coastline of the Sea of Okhotsk. The Viliuchinsk upgrades include constructing new hardened submarine shelter pens for the Pacific Fleet's SSBNs and attack submarines. Given the distance of Pacific Fleet warships from European-based Northern Fleet maintenance and repair facilities in the Kola polar region, the harbour is also to receive a modern floating dock for berthing and repairing the Russian Navy's recent Borei- and Project 885 Yasen–class submarines to lessen the facility's current near-total reliance on shipyards at the other end of Eurasia. [55]

Exercises and training events have become more rapid-paced. The Northern Fleet performed 213 missile launching drills and 4,700 training exercises in 2017.[56] In the White Sea, in May 2018, the Borei-class *Yuri Dolgoruky* tested shooting a "volley" of four ballistic missiles.[57] The Northern Fleet performed an unannounced drill in June 2018 that was its biggest in ten years a few weeks later.[58]

The function of bastions is evolving due to their growing durability and ability to engage far-off targets. While safeguarding nuclear assets continues to be a crucial task, especially for existing bastions, newer sites are assuming new functions. This is pretty evident as strategists explore how China and Russia are using an offensive bastion strategy to shift the regional power

55. John C.K. Daly, "Russia's Pacific Fleet Upgrades Kamchatka Submarine Base", *Eurasia Daily Monitor*, 18, no. 187, December 2015.
56. n. 51, p. 21.
57. Ibid.
58. Thomas Nilsen, "Alarm-Drill: 36 Russian Warships Sail out to Barents Sea", *The Barents Observer*, June 13, 2018, at https://thebarentsobserver.com/en/security/2018/06/36-russian-warships-sails-out-barents-sea.

balances and expand their global influence. Dr James Lacey of the US Marine Corps War College gives his insight on how Russia is re-evaluating the role of bastions:

> Russia…still needing to protect its ballistic submarines, never fully dismantled its northern bastions, which are becoming increasingly strong as Russia's northern fleet is revitalized. But the mission of Russia's great northern bastions is no longer exclusively defensive. Rather, they have become the strategic centre for Russia to extend its influence throughout the resource-rich Arctic Ocean. Similarly, it is hard to look at Kaliningrad without seeing a bristling defensive bastion in the heart of NATO—one that can easily take on an offensive role as a fortified pivot in support of Russian forces manoeuvring in either the Baltic states or Poland. Farther south, Russia appears intent on making the Black Sea a Russian lake, with Crimea rapidly becoming the core of a military bastion capable of employing offensive fires to dominate the surrounding seas.[59]

**DRAWBACKS OF BASTION STRATEGY**

Presumably, the Soviet "solution" to a survivable deterrent was the bastions. However, the Soviets had inadvertently helped their adversary overcome the "basic strategical challenge of the naval battle," i.e., "identifying the enemy", by placing the majority of their SSBNs in geographically constrained sea-waters.[60] The first identification and localisation of the enemy submarine is the hardest challenge in anti-submarine warfare. When Moscow concentrated its SSBNs in clearly defined geographic zones, NATO found this task to be much simpler. Additional hints regarding the whereabouts of the Soviet submarines back then and the Russian boats today were offered by the protective surface, submarine, and air forces. In essence, the Soviets basically exchanged their sensitivity to detection

59. James Lacey, "Battle of the Bastions", *War on the Rocks*, January 9, 2020, at https://warontherocks.com/2020/01/battle-of-the-bastions/
60. William D O'Neil. *Technology and Naval War* (US Department of Defence, November 1981), p. 30.

for their vulnerability to assault out of fear of the Western anti-submarine forces. During a conflict, the operator of a bastion strategy will find this trade-off to be quite expensive. As a function of time, the ability of the navy to protect its SSBNs within the bastion waters will degrade due to constant efforts by enemy intelligence sources to marshal their assets for SSBN detection. A coordinated effort to attack the SSBNs could be made once the bastions have been located. How long would such surface forces likely last in a nuclear sea battle? After all, this is the contingency that the bastions of the concealed reserve suggest. The "pro-bastion" forces would face heavy demands during a protracted conventional conflict.

The risk of detectability-at-launch is another potential issue specific to the bastion tactic in a combat scenario.[61] After a single SLBM volley, there is a possibility of adversary counter-detection that can become quite significant for at least two reasons. First, the SSBN may reveal its location, triggering a counter-attack. Unfortunately, the SSBN cannot move very far before giving up its bastion cover, unlike open ocean operations, so its survivability becomes difficult to sustain. On the other side, in an open ocean setting, the SSBN could be able to escape the deadly consequences of a counter-battery firing.[62] Second, by launching just one missile, the SSBN has provided any adversary ASW assets that are reasonably close with precise targeting information, increasing the likelihood that they will launch an immediate counter-attack. A Western SSN lurking outside a Russian bastion, for example, might notice the SLBM launch and be able to launch a tactical nuclear (or even conventional) attack afterward.

Another factor that countries practising the bastion strategy must consider is missile defences in the region. SLBMs launched from a bastion water become a little easier for adversaries with superior Anti-Ballistic Missiles (ABMs) to intercept than missiles launched from the vast oceans. In the event of SSBNs stationed in coastal waters, an enemy would be aware of the approximate region from where an SLBM could be launched and

61. Kreitler, n. 39, p. 92.
62. Ibid., p. 93.

thereby focus radars and other sensors along its projected flight path to ensure prompt detection and precise tracking.

In addition, because the bastion strategy lacks flexibility in terms of patrol areas and launch positions, SSBNs operating in bastions also lose their ability to greatly surprise an enemy by operating from unpredictable launch locations. Furthermore, if the distance between adversaries is great, SLBMs launched from bastions would have longer flight times and more predictable attack trajectories, compared to missiles launched from patrol areas closer to the adversary's mainland. SLBMs with a shorter flight trajectory would enjoy an enhanced ability to penetrate enemy missile defence systems, thereby increasing deterrence effect.

Another inherent problem of bastions is that unlike a hidden, always on station SSBN, the bastion strategy requires additional forces to remain viable. A bastion strategy necessitates not only a vast number of naval forces, which are frequently in high demand during a crisis, but also extensive coordination between them. "During the Cold War, the Soviet Union felt compelled to dedicate considerable effort to construct a large surface fleet that would protect the 'SSBN bastions' against NATO naval task forces", Victor Mizin and Michael Jasinski, researchers at the Centre for Nonproliferation Studies (CNS), Monterey Institute of International Studies, explain.[63]

The bastion strategy is also inherently escalatory in nature. Samuel D. Bell describes this in the context of China, although his arguments apply to all bastion aspirants:

> If Beijing is in a crisis with another country, and it deploys its SSBNs (even for a routine or training mission), it is likely that the competing country will see this as an escalatory act. China, with its ingrained no-first-use policy, has refrained from using nuclear weapons in an escalatory or threatening manner, since the successive tests in 1969. Other countries may perceive

63. Victor Mizin and Michael Jasinski, "The Future of the Russian Sea-Based Deterrent," *The Journal of Slavic Military Studies*, 16, no. 1, July/September 2003, p. 82.

the deployment of weapons as a signal that Beijing is departing from its policy of no-first-use, something that the Chinese leadership will likely not risk.[64]

## LESSONS FOR INDIA

### *Bastion has its Limitations*

Both doctrinally and operationally, the bastion strategy has its limitations. Supporters of the bastion strategy will claim that it will solve the problem of Indian SSBNs having to make the arduous journey through the Straits of Sunda and Lombok in order to target the Chinese mainland. These narrow transit waters would be patrolled by Chinese ASW forces, which although not as sophisticated as their anti-ship capabilities, are still a potent force due to rapid improvements in effectiveness. As a result, the survivability of an Arihant-class submarine may not be guaranteed, thereby, effectively creating a scenario where the boats on 'forward patrol' in war-time would be forced to choose between 'using or losing' their K-series missiles.

The shortcomings of bastions are many. As previously mentioned, placing the SSBNs in a confined area addresses the most challenging ASW problem, i.e., initial locating information. Given India's massive coastline, it may not be able to allocate much of its general-purpose forces for the defence of highly vulnerable bastions.

The risk of vertical escalation is another main concern with the bastion strategy. In other words, SSBNs in a bastion posture would be somewhat constrained in their capacity to escalate rapidly, forfeiting the brief warning time afforded to SSBNs deployed in forward patrols. Bastion deployment would force New Delhi to give up its edge over forward-deployed SSBNs and their capacity to launch quick retaliatory attacks. This is particularly worrisome in the case of ensuring deterrence vis-à-vis China because of its

64. Samuel D. Bell, *The Impact of the Type 094 Ballistic Missile Submarine on China's Nuclear Policy* (Monterey CA: Naval Postgraduate School June 2009), p. 48.

**If Indian SLBMs are launched from the South China Sea, they would have shorter flight times and more unpredictable attack trajectories, compared to SLBMs launched from Indian coastal waters which will give a few minutes more to the Chinese ABMs to intercept the incoming missiles.**

distance from the Bay of Bengal. If Indian SLBMs are launched from the South China Sea, they would have shorter flight times and more unpredictable attack trajectories, compared to SLBMs launched from Indian coastal waters which will give a few minutes more to the Chinese ABMs to intercept the incoming missiles.

Unpredictability of a missile's attack trajectory does not depend on distance alone. It also depends on the flight path location. In the future, when Indian SLBMs will gain the characteristics of Intercontinental Ballistic Missiles (ICBMs), Indian SSBNs can exploit the vastness of the Southern Indian Ocean to create unpredictability of its launch locations in the minds of adversaries. On the other hand, if the Indian Navy exploits long range SLBMs only in the capacity of bastion defence, it will essentially be giving away the flight path information of its SLBMs to the adversaries. China could concentrate radars and other sensors along the flight path of Indian SLBMs to ensure timely detection and accurate tracking. However, if an Indian SSBN could loiter in the deep waters of the Indian Ocean, the Indian SLBMs would enjoy an enhanced ability to penetrate the Chinese missile defence systems.

### *Bastions are Resource 'Black Holes'*

The bastion strategy may also burden the Indian Navy with its high resource intensity, as highly reliable SSBN safe zones are considered resource 'black-holes'. New Delhi will be forced to expend a great deal of its surface force effort to meet the modern anti-Chinese SSN challenge in the Indian Ocean. Meanwhile, open patrols will relieve the Indian Navy of the burden of maintaining additional forces and their coordination for the protection of its SSBNs.

### *Strategic 'Fleet-in-Being' has Merits*

Though, the bastion strategy has its flaws, the idea of a strategic reserve force or 'fleet-in-being' has its merit. While a massive withholding fleet is more of a burden than an asset, a certain level of strategic 'fleet-in-being' is necessary for 'insurance' deterrence. However, as noted earlier, a strategic reserve force requires added protection, a price the Russians are paying in the form of engaging much of their general purpose forces in the defence of bastions. If New Delhi adopts the idea of a strategic 'fleet-in-being', it must reconcile the demand for defensive forces for bastion protection, on the one hand, and the Indian Navy's need for assets to execute 'traditional' naval missions, on the other. A possible solution for such a balancing act is establishing bastions within the claimed territorial waters of India, where minimal force will be required to maintain the necessary combat stability for SSBNs. The defence of such exclusively territorial bastions will require only a minimal force comprising mining vessels, coastal ASW patrol craft to deter hostile fast attack nuclear powered submarines (SSNs) and local land-based air cover for a variety of threats.

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Many experts from the West have criticised Russia's acquisition of expansive and large nuclear-powered boats for its strategic reserve force. They argue that it doesn't make much sense to invest in speed, long range, and endurance if Russian submarines are going to be confined to conducting localised deterrent patrols.[65] Moscow would have benefitted more from having more smaller submarines, even conventional diesel-powered submarines (SSKs), as opposed to fewer larger and nuclear-powered ones, they claim.[66]

65. Breemer, n. 5, p. 23.
66. Ibid.

After all, nuclear power facilities are more expensive, and diesel-electric power plants are quieter—except when snorkelling.[67]

Although good for cost-cutting, is this a viable solution in the context of India? Starting with the size of the boat, a small submarine, with the ability to fire ballistic missiles that can target China is out of the question for India as the distance between Indian coastal waters and China is humongous. So, only a long-range missile can do the job. Essentially, to attain a long range, the size of the missile has to be larger. This is so because staging has to be introduced. Staging means that certain parts of the missile which carry either solid fuel or liquid fuel, will get discarded subsequent to their being empty and no longer being able to provide thrust to the missile. So as this dead weight of each part is eliminated, the missile gains more speed, such that it reaches its long-range target quickly. In a nutshell, a strategic fleet-in-being cannot be composed of small submarines as bastions demand long-range, large SLBMs.

On the other hand, it is not impossible to build a strategic fleet-in-being with conventional submarines. SSKs are required to surface periodically to use air to run their diesel engines. This makes the submarine vulnerable to detection and attack. In recent times though, submarine propulsion technology is increasingly looking at lithium-ion batteries to lead-acid batteries for underwater propulsion for greater underwater endurance. Yet, such advantages in propulsion technology are unsuitable for a strategic fleet-in-being because the fundamental problem of power consumption will persist. Large missiles require vertical fitting that requires construction of a boat larger in diameter, which will lead to more consumption of power, eventually forcing the submarine to undergo frequent refuelling, compromising deterrence in the process.

Therefore, Russia's decision to build its strategic fleet-in-being with large nuclear-powered submarines is sound and New Delhi could learn some lessons from here.

67. Ibid.

### *Long Range SLBMs Key*

One very basic, important lesson that could be drawn from Russia's experience with sea-based deterrence is that longer-range SLBMs are the key. Longer range SLBMs not only give a larger patrol area but even allow the flexibility to fire missiles from one's own territory in order to operationalise a strategic fleet-in-being.

## CONCLUSION

The most unique thing noticed in Russia's SSBN programme has been its bastion strategy. The fact that it has continued for so long amply suggests that the Kremlin is fairly satisfied with how bastions have served Russia's sea-based nuclear deterrence in Moscow's great power competition. After all, whatever the technical difficulties that Soviet submarines faced in acoustic vulnerabilities were significantly reduced with the introduction of Typhoon-class SSBNs. Yet Russia has persisted with its bastion strategy. With the renewed investments in medium and smaller classes of ships, boats, and craft, it is certain that Russia will continue to deploy its general purpose forces in bastion defence in the future as well.