

ARCTIC SECURITY BRIEFING PAPERS

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May 19, 2023

Strategic Nuclear Patrols and an Arctic Military Code of Conduct

While rising northern tensions clearly challenge notions of the Arctic as a durable zone of peace, current tensions are rooted in fears of a European conflict spilling northward, not in conflict endemic to the Arctic. Two decades of high north military expansion have certainly added to the region's strategic uncertainty, but even more consequential are the currently increasing levels and pace of competing strategic patrols in the Arctic and North Atlantic, especially those that undermine basic nuclear deterrence.¹

Still Low Tension in the High North?

In the years immediately following the end of the Cold War, with the sharp decline in East-West tensions accompanied by significant declines in Russia's economic and military capacity in the north, the Arctic had essentially achieved Mikhail Gorbachev's vision of a high north zone of peace.¹

It was a geopolitical calm that lingered for a decade and more, but by the early 2000s relations between Russia and the West had begun to fray. However, even after Russia's 2014 annexation of Crimea it was still possible to see the Arctic as a region of low-tension, owing largely to shared economic, scientific, and basic public safety and regional stability interests.

Then came February 24, 2022 and the West vs Russia dynamic came to dominate all Arctic security questions. And yet, the spectre of the region falling into overt military conflict remains low. As recently as October 2022, eight months into Russia's escalated war on Ukraine, London's International Institute for Strategic Studies (IISS) still considered Arctic military conflict unlikely, though it did warn that "any clash between Russia and NATO [in Europe] would quickly spread northwards."²

The key point to acknowledge is that current Arctic tensions are a spillover from conflicts elsewhere, they are not the product of Arctic-specific issues or concerns. But in mid-2023, the world is dangerously close to that spillover point. A direct NATO-Russia armed conflict in Europe is still unlikely, or at least avoidable, but it is clearly possible.

And in that dangerous, tragic event, NATO would have powerful incentives to spread its attacks into the Arctic and Russia's Barents Sea bastion to try to inhibit the movement south of Russian forces from the Kola Peninsula into the North Atlantic to join the fight. At the same time, Russia could be expected to be bent on denying NATO forces access to Russia's traditional Arctic operational zones and to try to drive into the North Atlantic to disrupt NATO in its traditional operational zone.

¹Based on a panel presentation to the seminar on "Regional Security in the North, Nuclear Risks and Possible Solutions," by the Åland Islands Peace Institute, Finland and the Pugwash Conferences on Science and World Affairs (January 26, 2023). A version of this paper is scheduled for publication, along with other seminar papers, in a forthcoming issue of the *Finland Journal of Autonomy and Security Studies*.

But absent an all-out NATO/Russia war, Arctic security cooperation remains an aspirational ideal. The prevailing assumption is certainly that “Arctic harmony is falling apart,” as a recent analysis in *Foreign Policy* characterized it,³ but there remains a broad sense that current efforts towards the political isolation of Russia in the Arctic will at some point have to give way and allow for all eight Arctic states to again convene around the Arctic Council table and for the region’s military forces to once again be in dialogue and operationalize some measure of consultation and cooperation. Reaching that point is obviously not imminent, but the US Arctic Coordinator James DeHart has made the essential point that the Arctic Council “holds its greatest value as a circumpolar forum including all the eight Arctic states.”⁴ And the post-invasion analysis by the IISS also remains encouraging: “...while cooperation may give way to greater competition, the overall strategic stability of the Arctic is likely to remain.”⁵

While the Arctic is not now a zone of peace, neither is it a zone of endemic conflict.

Military Infrastructure and Regional Tensions

The tensions that have bled into the Arctic are obviously not eased by Russia’s decades-long revival of military facilities along the full length of its extensive Arctic coast and on its Arctic Ocean archipelagos. Figure 1 shows 18 such Russian staffed military facilities outside the Kola Peninsula. Attitudes towards those installations have been heavily influenced by the global strategic climate. In a stable, low tension strategic environment, new Russian installations were broadly accepted as the expected expansion of military capacity commensurate with the region’s rising commercial activity, population, accessibility, and Russia’s recognized interest in demonstrating an intention to reclaim its role as a significant global player, not least in the Arctic. Figure 1 identifies nine designated emergency response centres oriented toward supporting civilian authorities in their sovereignty protection and public safety missions. Now that global tensions have dramatically risen, perceptions of Russia’s Arctic militarization as relatively benign have shifted to seeing them as suspicious and threatening. Of course, there is a welcome corollary to those shifting perceptions – when tensions in the rest of the world ease, so too will they in the Arctic. In other words, the Arctic is not burdened by the kinds of deep political, economic, or military conflicts that would sustain Cold War-style dynamics after the rest of the world returned to a saner equilibrium.

Russia’s Arctic remilitarization outside the Kola Peninsula is prominently a response to domestic requirements and focused on sovereignty protection and frontier patrols, emergency responses and public safety, managing expanding local and intercontinental transportation through its Arctic Ocean exclusive economic zone, and improved domain awareness. Such facilities, as the IISS notes, are “primarily designed to protect military and economic infrastructure, provide search and rescue and establish control and presence along the increasingly ice-free Northern sea route.”⁶

It is the kind of aid to civilian authorities that is a key feature of all northern military forces. As the Arctic Yearbook puts it, “...the logistical difficulty and expense of operating in the Arctic is such that there is an even greater need for armed forces to provide ‘soft’ security services in the region than elsewhere.”⁷

Figure 2 shows some 70 continually staffed military facilities throughout the Arctic region. While there are some variations in the number of facilities acknowledged, most reporting and analysis arrives at similar numbers. There are hundreds more unstaffed sites (radars, storage sites, communication nodes, etc.), but existing staffed facilities include: Canada 9, Greenland 3, Norway 15, Russia 32, US 10, Iceland 1. These are all northern sites, though some, like most Alaska sites, are below the Arctic Circle.

Russian and American strategic forces are clearly capable of projecting power into international waters and air space in the region, and for Russia there is a particular interest in asserting its access to the North Atlantic. The Kola Peninsula-based Northern Fleet and air bases are joined by the non-Kola bases of Nagurskoye, Rogachevo, and Sredny with air defence and anti-ship systems intended, as noted above, to support operations southward

into the North Atlantic and beyond and to intercept NATO advances northward in the event of a Russia/NATO war in Europe.

The non-Russian Arctic is also on a militarization trajectory that both responds to and feeds growing perceptions of threat and insecurity in Russia – the classic security dilemma by which military reinforcements to enhance one side’s defences lead to an increased sense of threat in the other, which in turn leads to further military build up. The *Foreign Policy* analysis referred to above notes that “by locking Russia out [of the Arctic Coast Guard Forum], Western Governments are inadvertently enticing Moscow to open the door to China.”⁸ It’s a cycle of reciprocal security moves that fuels a mutually reinforced sense of vulnerability. As a Chatham House analysis concludes, “the military activity of the US and its allies is feeding Russia’s sense of encirclement, ‘justifying’ the expansion of the Kremlin’s own militarization efforts, which in turn informs Western policy decisions to further toughen posture, increase numbers, and grow presence.”⁹

Military Conduct and Strategic Tensions

While expanding military installations can and do escalate tensions, actual military operations send more immediate and, in the present circumstances, threatening signals. UK analysts Mathieu Boulègue and Duncan Depledge, call for an Arctic code of military conduct and point out the kind of Russian conduct that should be regarded as “unacceptable” in peacetime, including, “simulated airstrike formation against Norwegian military assets, and GPS jamming in northern Finland and Norway.”¹⁰ At the same time Russia has reacted strongly to US patrols into the Barents Sea close to its Kola Peninsula stronghold.¹¹ In their proposal, included in the 2019 Arctic Yearbook, Boulègue and Depledge elaborate two main elements of a code of conduct – defining “the red lines of military activities in the northern high latitudes,” and creating “a dialogue mechanism that would promote greater transparency and lay the ground for a less conflict-prone relationship between NATO and Russia in the region”¹² – the broad objective being to preserve the Arctic as a low-tension security environment.

Military conduct code proposals necessarily address day-to-day operations that can create irritants and lead to mishaps and perceived provocations that risk igniting clashes when competing or hostile forces operate in close proximity in climates of high tension. Strategic patrols are focused less on the regional environment and more on strategic impacts well beyond the region, and thus have major implications for geopolitical stability and should be similarly guided by normative operational rules. Naval freedom of navigation operations, competing operations regarding the North Atlantic, and threats to second strike deterrent forces are three kinds of strategic operations to be reined in.

Freedom of Navigation Patrols

Arctic “Freedom of navigation” (FON) patrols are actually an important example of one kind of conflict spillover into the Arctic from disputes and insecurities faced elsewhere. Worried about attempts to claim international straits as territorial waters in places like the South China Sea and the Strait of Hormuz, the US is bent on having the Northwest Passage and the Northern Sea Route recognized as international waterways, not because of any direct threat to US vital interest, but in an attempt to prevent any precedent that could restrict operations elsewhere. The US National Defense Authorization Act for Fiscal Year 2023 requires a report to Congress that “describes the ability and timeline to conduct a transit of the Northern Sea Route and periodic transits of the Northwest Passage.”¹³ An *Arctic Today* report indicates it is unclear whether an NSR voyage would be under Russia’s rules or would be a FON operation. If the latter, it would be politically provocative and a challenge to a new Russian law that seeks to prevent FON exercises along the Northern Sea Route. The Russian law would require advance notice of trips and prohibit more than one state-owned vessel at a time.¹⁴

The US Navy’s January 2021 “strategic blueprint” for the Arctic¹⁵ proposed that the Navy “operate more assertively across the Arctic Region to prevail in day-to-day competition” and to “keep Arctic seas free and open.”

Earlier, the Navy explained that as an Arctic nation, the US “has enduring security interests” there, and that includes a perceived need “to ensure an open Arctic by continuing freedom of navigation and overflight through the region.”¹⁶ But in fact, the American interest is more in pressing the “principle of freedom of navigation in all areas of the oceans”¹⁷ than it is in any practical access to the Northern Sea Route waters, which are now used primarily for shipments from Russia’s northern gas and oil fields, and not in any urgent sense vital to US commerce or security.¹⁸

Furthermore, not all are convinced that FON patrols are the appropriate means by which the principle can be upheld. Such operations could trigger more assertive Russian behavior in the region generally. Sending warships is excessive inasmuch as they signal a willingness on the part of the US to tolerate higher risk.¹⁹

In any event, neither the US Navy nor the Coast Guard now have the icebreakers for such FON voyages along the NSR through large sections of Russia’s exclusive economic zone. In the event of an emergency, the American vessels would probably find themselves facing the embarrassing irony of having to turn to Russia for help.²⁰ Any American ship trying to sail the Northern Sea Route would find it “a long voyage through hazardous conditions,” says Rebecca Pinkus, director of the Wilson Center’s Polar Institute, “especially on the eastern part of the route — with unpredictable ice conditions, bad weather, and close proximity to Russian forces during a time of extremely high tensions.”²¹

The prominent American foreign policy academic and analyst Stephen Walt has observed that the US can’t stop doing “stupid” things even if it wants to²² because its bloated military establishment always gives it the capacity to get involved in one way or another, making imprudent actions inevitable. But in the case of its temptation to conduct freedom of navigation voyages along the Northern Sea Route, the dearth of American icebreaking capacity may well protect it from itself for some time to come – perhaps even enough time to pursue other solutions, like the Canada/US agree-to-disagree arrangement for the Northwest Passage.

North Atlantic Operations

Competing operations in the North Atlantic were dramatized in 2019 when a fleet of 10 Russian submarines headed from their Kola bases into the North Atlantic on an exercise described by *The War Zone*²³ as including the testing of new weapons, demonstrating the capabilities of the various submarines involved, and testing the abilities of U.S. and NATO to track the Russian forces in the GIUK Gap—the strategic bottleneck between Greenland, Iceland, and the United Kingdom. The extent to which Russian subs can break through that gap undetected is the degree to which they can operate in the Atlantic against Europe/North American shipping routes and directly threaten land targets on both sides of the Atlantic.²⁴

In 2022, the Russian frigate Admiral Gorshkov patrolled along the Norwegian coast from the Barents Sea to the North Sea, the Russian missile cruiser Marshal Ustinov along with a frigate and helicopter conducted anti-submarine warfare training in the Norwegian Sea, and Russian forces test-launched Tsirkon hypersonic cruise missiles from within the Norwegian exclusive economic zone and the White Sea.²⁵

Arctic approaches to the North Atlantic are a key focus for NATO navies, once again raising “the potential for miscalculation, accident, and confrontation”²⁶ in what has once more become one of the more hotly contested of maritime regions. NATO countries with relevant capabilities thus carry out anti-submarine warfare operations in the region. In mid-2021 the US and four allied navies sent surface combatants, submarines, and amphibious vessels on North Atlantic anti-submarine warfare patrols and practiced amphibious landings. In November 2022 the US tested long-range cruise missiles in Norway and the North Atlantic, in August the UK flew electronic surveillance aircraft over the Barents, and in March a UK aircraft carrier conducted cold weather tests in the Norwegian Sea.²⁷

Threats to second-strike deterrent forces

Threats to second strike deterrent forces are a third and particularly egregious way in which strategic operations in the Arctic are destabilizing. The Barents Sea is broadly seen by Russia as a bastion (Figure 3), its core stretching into the Kara and Norwegian Seas, within which its forces operate under the protection of heightened perimeter and internal defences. Russian naval forces based at the Kola Peninsula also rely on the Barents Sea for mustering naval forces assigned to press southward into the North Atlantic, seeing the waters of the Barents and Norwegian seas as a forward defence zone against NATO, and most importantly as the primary operational zone for Russian SSBNs. The key mission of the latter is to steer clear of the West's attack submarines and provide Russia with a guaranteed second-strike or retaliatory nuclear capability in the event of a nuclear attack on Russia.

Russia's strategic objectives for the Barents thus include a significant interest in building up defence capabilities linked to the Barents Sea as a bastion defence zone – meaning that in a crisis, Russia could be expected to “quickly seek to dominate its immediate vicinity, including the Barents and Norwegian seas, and establish a protective perimeter through sea and air denial,”²⁸ with the ambition of extending that perimeter all the way to the GIUK gap.

Since the end of the Cold War the US and its allies had not operated into the Barents Sea, by implication respecting the Russian bastion. David Larter, a former US submarine officer who is now a senior fellow with the Hudson Institute in Washington, says the Americans had stayed away long enough for the Russians to consider that the Barents, Kara, and White Seas had become a kind of “free zone for Russian submarine operations.”²⁹ Now expecting incursions, Russia maintains a primary strategic interest in preserving a defensible zone or bastion in those seas where its second-strike retaliatory forces will not be threatened – just as the US has an interest in sheltering its SSBNs from attack by Russian/Chinese attack subs and uses both the vastness of the Atlantic and Pacific Oceans, as well as some heavily protected areas closer to home bases, to that end.

So, when in May 2020 US and UK ships entered the Barents Sea, it was taken by Russia as a Western incursion into “Russia's backyard,”³⁰ and a signal that Barents Sea incursions would now “become a habit.”³¹ Also in 2020, NATO hosted the major Cold Response exercise with a maritime force presence off the coast of Norway, and Iceland hosted a US-planned multilateral exercise in the North Atlantic (Northern Viking).³² The US Navy carries out submarine patrols into the Arctic through the biannual ICEX operation, and in March 2022 the attack submarine, the USS Pasadena, surfaced in the Beaufort Sea, far from the Russian bastion, but still sending a message.³³

Then there is China. In the late summer of 2021 four Chinese military vessels ventured to within less than 50 miles of the Aleutian Islands. The Chinese ships, while observing international law and norms, were identified as a guided missile cruiser, a guided missile destroyer, a general intelligence vessel, and an auxiliary vessel.³⁴ Waters off the Aleutians are not a bastion, but they are regarded as familiar and basically secure waters by the US that should be navigable and free from military harassment. Making them a contested zone does not advance strategic stability.

A Military Code of Conduct for Strategic Patrols

Proposals for an Arctic Military Code pre-date February 24/22, and while the idea is now obviously a much harder sell, it is hardly less relevant or urgent.

The basic principle of developing rules of conduct for military patrols has relevance for freedom of navigation voyages, patrols to penetrate naval bastions and air defence identification zones and sea lanes, and strategic anti-submarine patrols targeting Russian SSBNs. The latter missions are particularly reckless efforts to undermine

nuclear deterrence. Nuclear deterrence is obviously a high stakes strategy of threatening devastating nuclear attacks on an adversary to deter it from resorting to devastating nuclear attack in the first place. For nuclear abolitionists that is hardly a compelling foundation for global security, but as long as it is the system that prevails, it is in no one's interest to destabilize it.

Stable deterrence depends on nuclear adversaries having the capacity to retaliate after suffering an initial nuclear attack. No matter the extent of the destruction that could be inflicted, the potential attacker has to expect an equally devastating retaliatory attack. That familiar deterrence formula is of course mutually assured destruction that is intended to remove any incentive to initiate nuclear attack. But if either side's capacity to launch a devastating retaliatory attack, or a second strike, is threatened or undermined, then instead of being deterred, it may conclude that if it cannot deter through its own assured counter-attack, it would have to seek advantage in either building up its nuclear arsenal of second strike forces or by adopting a strategy for using its nuclear forces first, before they could be attacked and taken out (the use 'em or lose 'em logic).

The United States and its Western allies should thus see that the logic of deterrence stability from which they benefit is for Russia to have an assured second-strike capability, and that it is not in the West's interests to challenge Russia's second-strike forces. Nevertheless, and inexplicably so, the Pentagon is now committed, as it reiterated in a 2018 Navy report, to deploying attack submarines, including to the Arctic, so as to "hold the adversary's strategic assets at risk from the undersea,"³⁵ explicitly including SSBN forces. That, in combination with the nascent US strategic missile defence deployments, leads Russia to increased worries about the vulnerability and effectiveness of its sea-based second-strike forces.

One way to preserve deterrence stability would thus be to establish ASW-free zones as a means to limiting threats to second-strike forces. While such proposals have never been a prominent focus of arms control talks, the idea nevertheless emerges from time to time.

Canadian analyst Ron Purver's 1983 essay³⁶ reviewed four possible types of limits on ASW operations or capabilities. The options included prohibitions on active trailing and continuous tracking of SSBNs, establishing SSBN sanctuaries, inventory limits on the number and capabilities of ASW vehicles (particularly nuclear-powered attack submarines), and limitations on detection devices. He concluded, after investigating the details of each option, that "pessimism about the prospects of negotiated restraints in this field" was warranted, but he did consider that, of the four options, ASW-free zones did have the most promise.

He considered verification of ASW-free zones to be broadly feasible. In ASW-free zone discussions, proposed locations tended to focus on the Barents Sea and the Sea of Okhotsk for the then USSR, and the Gulf of Alaska one such zone for the United States. Locations in coastal zones made defence more practical. While the USSR was more oriented toward and dependent on such SSBN sanctuaries, Purver concluded that "mutual sanctuaries might be envisioned in conjunction with a drastically revised United States strategy of concentrating its own SSBNs closer to home waters."

A similar proposal to limit strategic offence against sea-based second strike deterrent forces was a feature of the well-known Murmansk Initiative put forward by Mikhail Gorbachev in 1987.³⁷ He proposed that NATO and the Warsaw Pact pursue a general posture of "scaling down naval and air activities in the Baltic, Northern, Norwegian and Greenland Seas," and he particularly advocated mutual "arrangements on the limitation of rivalry in anti-submarine weapons."³⁸

A 1992 paper for the Norwegian Institute for Defence Studies explored mutual US/Russia reductions in attack submarine inventories as a way of reducing US/NATO threats against Russian SSBNs and Russian threats to North Atlantic sea lanes.³⁹ The authors emphasized the complication particular to the Barents bastion, since agreeing to a sanctuary for SSBNs would give the same sanctuary to Russian SSNs and related naval forces deployed to

threaten the North Atlantic. Then in 2009 a joint paper by two well-known Russian and American academic arms control experts, Anatoli Diakov and Frank Von Hippel, proposed but did not elaborate on an arrangement whereby Russia would confine its northern SSBN fleet to the Barents Sea and the US would not operate attack submarines on the Russian side of the Arctic.⁴⁰

In 2020 Hans M. Kristensen and Matt Korda of the Federation of American Scientists considered the possibility of “drawing up operational norms” through which adversaries could agree “not to harass or trail SSBNs.” They pointed to the Incident at Sea Agreement between the Soviet Union and the United States that sets limits on dangerous operations. An agreement not to trail SSBNs would involve essentially the same principle taken further.⁴¹

Bradford Dismukes, a retired U.S. Naval Reserve officer, wrote in *Naval War College Review* that “the United States should avoid threatening Russian SSBNs in almost all conceivable circumstances.” He called on the Navy to set out a strategy regarding adversary SSBNs that would “paradoxically” seek to minimize, not maximize, “the threat that U.S. forces may pose.”⁴² The Australian scholar on Indo-Pacific affairs, Benjamin Zala, has also explored “restraint in the deployment of ASW capabilities” as one way to increase strategic stability.⁴³

Limiting ASW operations has been a persistent, though not prominent, nuclear arms control and disarmament theme – suggesting it is time to explore the idea further. One inevitable response to proposals to place geographic or other limits on strategic anti-submarine warfare operations or capabilities is that superpowers simply aren’t inclined to accept limits on their capacities – they go where they want to go and don’t put arbitrary limits on their actions. But of course, they do accept limits on their actions and capacities. That’s the point of any arms control agreement. As well, the US has to date notably limited the number of ballistic missile defence interceptors it deploys in its homeland ground-based mid-course interception missile defence system (GMD). The 2022 Missile Defense Review⁴⁴ repeats earlier explanations that the GMD system is there to provide protection only from North Korean and Iranian missile threats. The point is to assure Russia and China that the US is not trying to develop the capacity to intercept Russian or Chinese second strike retaliatory or deterrent forces – and that the US response to those forces/threats relies on established deterrence arrangements.

That of course begs the question as to why it should be regarded as ideologically or strategically unacceptable to forego a capacity for pre-emptive strikes against submarine borne nuclear deterrent forces when the US voluntarily limits missile defence forces aimed at strategic missile attacks?

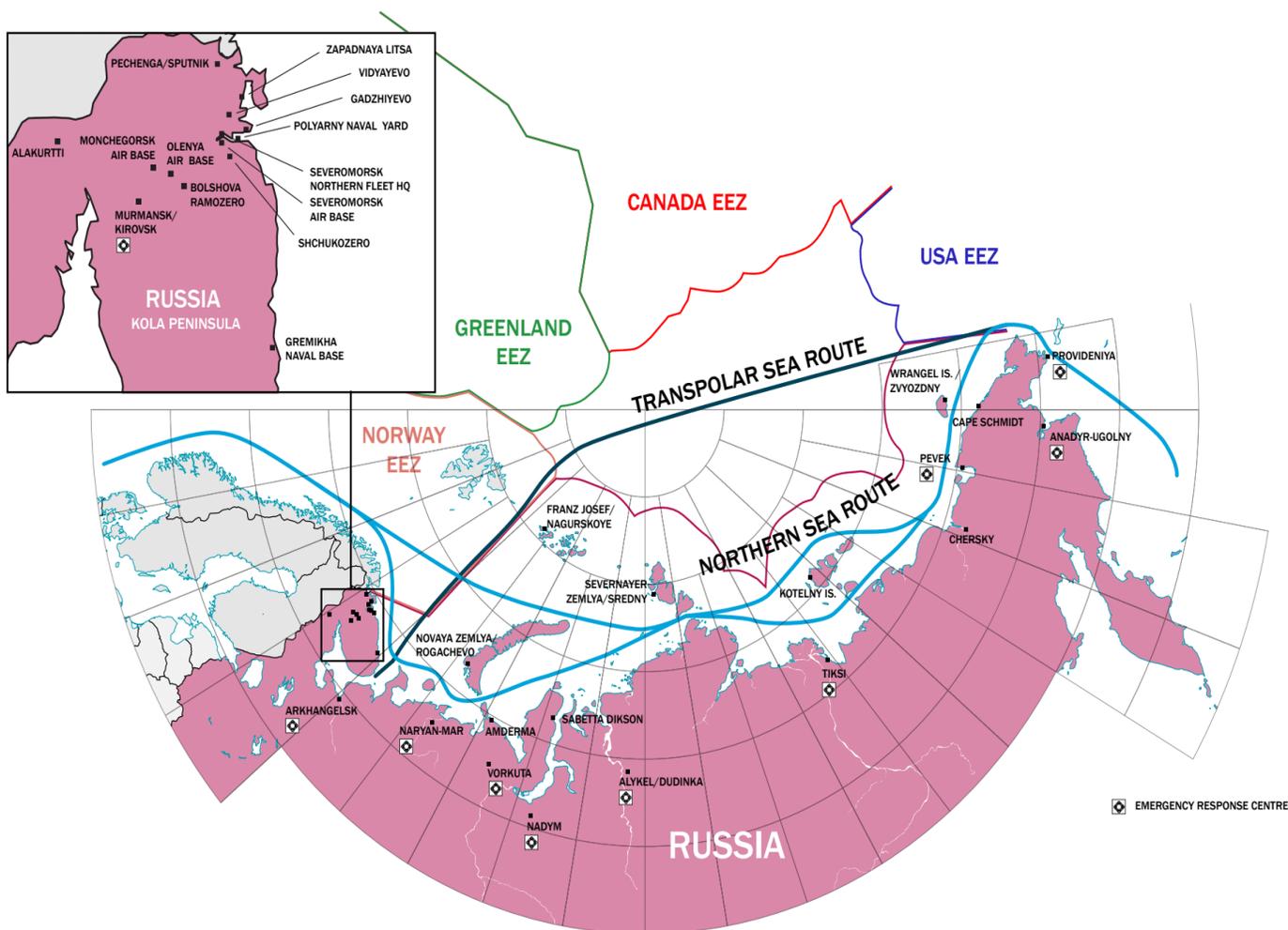
It obviously has to be acknowledged that the mid-2023 context of rising tensions is unlikely to be conducive to an outbreak of the level of strategic sanity that ASW limits require. But it is those very tensions and the logic of their own respective deterrence requirements that should move the US and Russia to explore alternatives to their dangerous military maneuvering in the North Atlantic and Barents Sea. Furthermore, and importantly so, their respective friends and allies should, as a matter of some urgency, be prodding them to rethink and shift course.

In a climate that is not currently conducive to official progress, Benjamin Zala proposes “both Track II and eventually Track 1.5 talks on practical confidence-building measures in this area.” Such engagements, he adds, should include “discussions around ASW, SSBNs, and strategic stability.”⁴⁵ While his focus is the Indo-Pacific, the point applies as readily to the Arctic and North Atlantic.

More than 50 years ago, in the context of Cold War arms racing and the search for restraint, the venerable Canadian historian James Eayrs insisted that while the major powers may have a monopoly on sheer force and destructive power, they “enjoy no monopoly over ideas.” And, he concluded, though “the foreign minister of a small state may not be able to summon a gunboat in aid of ...diplomacy, to carry a big stick let alone to brandish it, [he/she] can carry a briefcase well enough, and stock it with proposals.”⁴⁶

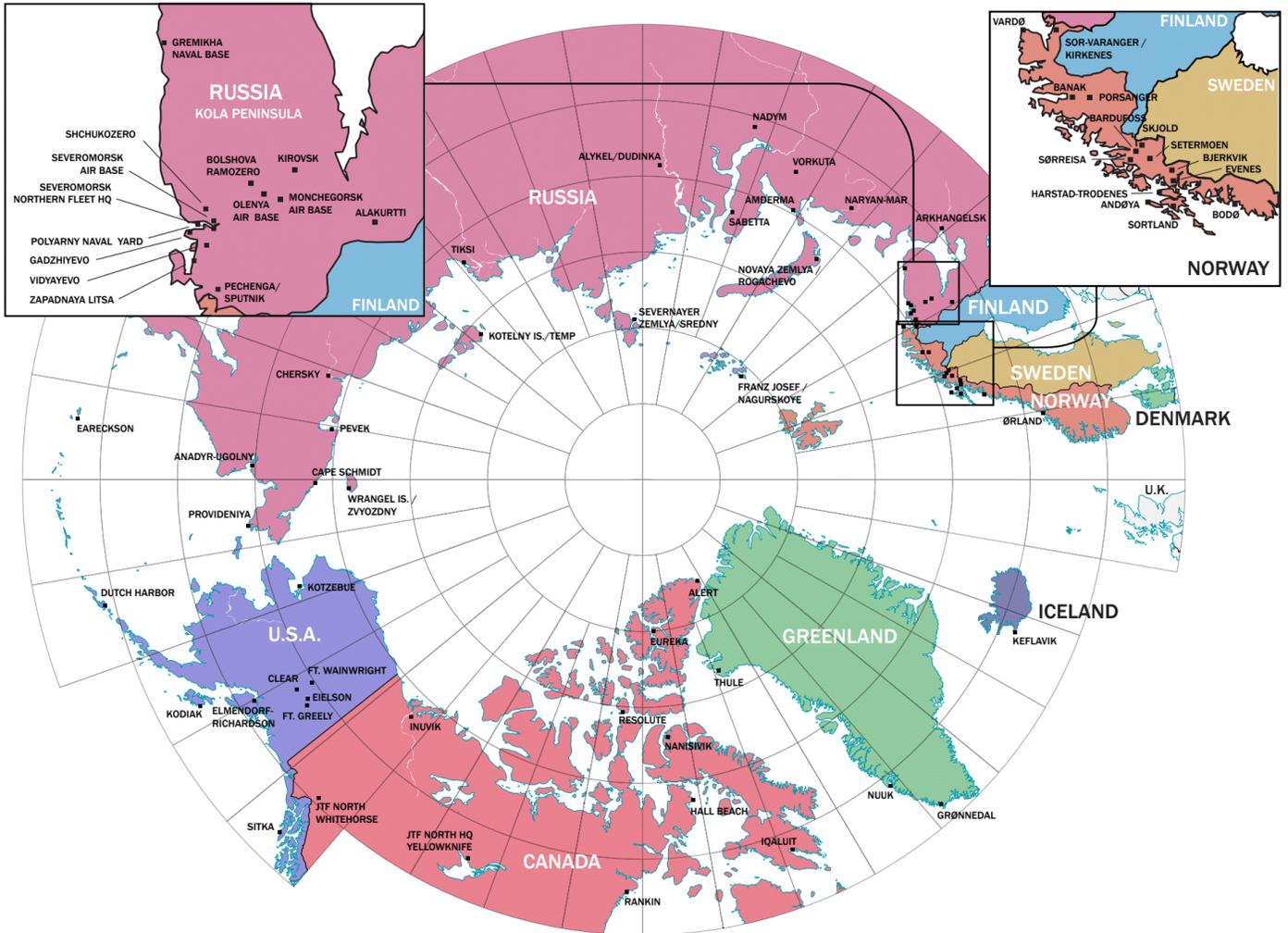
A perilous international security environment impacts the Arctic, but that doesn't mean the Arctic is the source of that peril. Indeed, the Arctic could yet be a positive force for stepping back from the current divides. "Given the shared interests in the area," says the 2022 IISS analysis, "if there is to be any thawing in relations with Russia – albeit probably not for quite some time – the Arctic may be a space to watch"⁴⁷ – and a place to act.

Figure 1 (Russian Military Facilities)



ARTWORK BY DRAIMAXIO

Figure 2 (Military Facilities throughout the Arctic)



ARTWORK BY DRAIMAXION

Figure 3 (Russia's Arctic Bastion)



ARTWORK BY DRAIMAXIO

¹ Duncan Depledge, Mathieu Boulègue, Andrew Foxall, and Dmitriy Tulupov, “Why we need to talk about military activity in the Arctic: Towards an Arctic Military Code of Conduct,” *Arctic Yearbook*, 2019. <https://arcticyearbook.com/arctic-yearbook/2019/2019-briefing-notes/328-why-we-need-to-talk-about-military-activity-in-the-arctic-towards-an-arctic-military-code-of-conduct>

² “Arctic cooperation after Russia’s break with the West,” International Institute for Strategic Studies (IISS), *Strategic Comments*, Volume 28, 20 October 2022. <https://www.iiss.org/publications/strategic-comments/2022/arctic-cooperation-after-russias-break-with-the-west#:~:text=Arctic%20cooperation%20after%20Russia%E2%80%99s%20break%20with%20the%20West,since%20the%20invasion%20of%20Ukraine%20in%20February%202022.>

³ Elisabeth Braw, “Arctic Harmony Is Falling Apart,” *Foreign Policy*, 15 May 2023. <https://foreignpolicy.com/>

⁴ “USA’s Arctic Coordinator: ‘We Do Not Want to Change the Structure or Membership of the Arctic Council’,” *High North News*, 18 May 2022. <https://www.highnorthnews.com/en/usas-arctic-coordinator-we-do-not-want-change-structure-or-membership-arctic-council>

⁵ “Arctic cooperation after Russia’s break with the West,” *IISS*. October 2022.

⁶ “Arctic cooperation after Russia’s break with the West,” *IISS*. October 2022.

⁷ Depledge, et al, 2019.

⁸ Braw, 15 May 2023.

⁹ Mathieu Boulègue and Duncan Depledge, “New military security architecture needed in the Arctic,” International Affairs Think Tank. *Chatham House*, 4 May 2021. <https://www.chathamhouse.org/2021/05/new-military-security-architecture-needed-arctic>

¹⁰ Boulègue and Depledge, 04 May 2021.

¹¹ David B. Larter, “The US Navy returns to an increasingly militarized Arctic,” *Defense News*, 12 May 2020. <https://www.defensenews.com/naval/2020/05/11/the-us-navy-returns-to-an-increasingly-militarized-arctic/>

¹² Depledge, et al, 2019.

¹³ Us Congress, H.R. 7776, Section 11219, “Arctic Activities.” <https://www.congress.gov/bill/117th-congress/house-bill/7776/text>

¹⁴ Melody Schreiber, “Latest US defense bill considers a Northern Sea Route transit,” *Arctic Today*, 22 December 2022. <https://www.arctictoday.com/latest-us-defense-bill-considers-a-northern-sea-route-transit-more-icebreakers/>

¹⁵ A Strategic Blueprint for the Navy. <https://media.defense.gov/2021/Jan/05/2002560338/-1/-1/0/ARCTIC%20BLUEPRINT%202021%20FINAL.PDF/ARCTIC%20BLUEPRINT%202021%20FINAL.PDF>

¹⁶ Harry Lye, “US Navy returns to the Barents Sea,” *Naval Technology*, 05 May 2020. <https://www.naval-technology.com/features/us-navy-returns-to-the-barents-sea/>

¹⁷ Pavel Gudev, “China, USA, Russia and the Code of Conduct in the Arctic,” *Valdai Club*. 11 June 2020. <https://valdaiclub.com/a/highlights/china-usa-russia-and-the-code-of-conduct/>

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- ¹⁸ Arild Moe, "A new Russian policy for the Northern sea route? State interests, key stakeholders and economic opportunities in changing times," *The Polar Journal*, 2020, Vol. 10, No. 2, 209–227.
<https://www.tandfonline.com/doi/epdf/10.1080/2154896X.2020.1799611?needAccess=true&role=button>
- ¹⁹ Joshua Tallis, "The future of US Arctic interests will be written in its naval movements," *Arctic Today*, 26 May 2022.
<https://www.arctictoday.com/the-future-of-us-arctic-interests-will-be-written-in-its-naval-movements/#:~:text=The%20future%20of%20US%20Arctic%20interests%20will%20be,future%20U.S.%20security%20policy%20in%20the%20Arctic.%20By>
- ²⁰ Pavel Gudev, 11 June 2020.
- ²¹ David B. Larter, "The US Navy returns to an increasingly militarized Arctic," *Defense News*, 12 May 2020.
<https://www.defensenews.com/naval/2020/05/11/the-us-navy-returns-to-an-increasingly-militarized-arctic/>
- ²² Stephen M. Walt, "The United States Couldn't Stop Being Stupid if It Wanted To," *Foreign Policy*, 13 December 2022.
<https://foreignpolicy.com/2022/12/13/the-united-states-couldnt-stop-being-stupid-if-it-wanted-to/>
- ²³ Tyler Rogoway, "Russia Sends Ten Subs Into North Atlantic In Drill Unprecedented In Size Since Cold War," *The War Zone*, 29 October 2019. <https://www.thedrive.com/the-war-zone/30728/russia-sends-ten-subs-into-north-atlantic-in-drill-unprecedented-in-size-since-cold-war>
- ²⁴ PO. Peter Ong, "US Navy Reports on Arctic and North Atlantic," *Naval News*, 20 February 2021.
<https://www.navalnews.com/naval-news/2021/02/u-s-navy-reports-on-arctic-and-north-atlantic/>
- ²⁵ Operations listed in the CSIS *Arctic Military Tracker*. <https://arcticmilitarytracker.csis.org>
- ²⁶ Boulègue and Depledge, 04 May 2021.
- ²⁷ Operations listed in the CSIs *Arctic Military Tracker*. <https://arcticmilitarytracker.csis.org>
- ²⁸ "Arctic cooperation after Russia's break with the West," *IJSS*. October 2022.
- ²⁹ David B. Larter, 12 May 2020.
- ³⁰ Harry Lye, 05 May 2020.
- ³¹ David B. Larter, 12 May 2020.
- ³² Joshua Tallis, 26 May 2022.
- ³³ "Navy launches Ice Exercise 2022 in the Arctic Ocean," US Navy Press Office, 06 March 2022.
<https://www.navy.mil/Press-Office/News-Stories/Article/2956507/navy-launches-ice-exercise-2022-in-the-arctic-ocean/>
- ³⁴ Melody Schreiber, "A US Coast Guard patrol unexpectedly encountered Chinese warships near Alaska's Aleutian Islands," *Arctic Today*, 16 September 2021. <https://www.arctictoday.com/a-us-coast-guard-patrol-unexpectedly-encountered-chinese-warships-near-alaskas-aleutian-islands/>
- ³⁵ "Commander's Intent for the United States Submarine Force and Supporting Organizations," Commander, US Submarine Forces, March 2018. <https://www.csp.navy.mil/Portals/2/documents/about/Commanders-Intent-201803.pdf#:~:text=This%20Commander%E2%80%99s%20Intent%20is%20addressed%20to%20submarine%20crews,and%20direction%2C%20and%20their%20role%20in%20achieving%20them.>
- ³⁶ Ron Purver, "The Control of Strategic Anti-Submarine Warfare," *International Journal*, Vol. 38, No. 3 (Summer 1983).
<https://www-jstor-org.proxy.lib.uwaterloo.ca/stable/40202159?seq=23>

³⁷ Kristian Åtland, "Mikhail Gorbachev, the Murmansk Initiative, and the Desecuritization of Interstate Relations in the Arctic," *Cooperation and Conflict*, September 2008 43: 289-311. <https://www.jstor.org/stable/45084526>

³⁸ Text of Gorbachev's 1987 speech in Murmansk. <https://vdocuments.mx/mikhail-gorbachevs-speech-in-murmansk-at-the-html?page=1>

³⁹ Tonne Huistfeldt, Tomas Ries, Gunvald Øyna, "Strategic Interests in the Arctic," *Institut for Forsvasstudies* (Norwegian Institute for Defence Studies), 4/1992. <https://fhs.brage.unit.no/fhs-xmlui/bitstream/handle/11250/99709/FS0492.pdf>

⁴⁰ Anatoli Diakov and Frank Von Hippel, "Challenges and Opportunities for Russia-U.S. Nuclear Arms Control, A Century Foundation Report," *The Century Foundation* (New York, Washington, 2009), pp. 15-16.

⁴¹ Hans M. Kristensen and Matt Korda, "Arms Control and Sea-Launched Nuclear Weapons," *The Future of the Undersea Deterrent: A Global Survey*, February 2020. Edited by Rory Medcalf, Katherine Mansted, Stephan Frühling and James Goldric (National Security College, The Australian National University). https://nsc.crawford.anu.edu.au/sites/default/files/publication/nsc_crawford_anu_edu_au/2020-02/the_future_of_the_undersea_deterrent.pdf

⁴² Bradford Dismukes (U.S. Naval Reserve Ret.), "The Return of Great-Power Competition—Cold War Lessons about Strategic Antisubmarine Warfare and Defense of Sea Lines of Communication" (Naval War College Review, Volume 73, Number 3, Summer 2020). <https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=8127&context=nwc-review>

⁴³ Benjamin Zala, "Strategic Non-Nuclear Weapons, SSBNs, and the New Search for Strategic Stability," *The Future of the Undersea Deterrent: A Global Survey*, February 2020. Edited by Rory Medcalf, Katherine Mansted, Stephan Frühling and James Goldric (National Security College, The Australian National University). https://nsc.crawford.anu.edu.au/sites/default/files/publication/nsc_crawford_anu_edu_au/2020-02/the_future_of_the_undersea_deterrent.pdf

⁴⁴ The National Defense Strategy, Nuclear Posture Review, and Missile Defense Review are combined into a single publication in 2022. <https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF>

⁴⁵ Benjamin Zala, February 2020.

⁴⁶ James Eayrs, *Fate and Will in Foreign Policy* (Toronto: Seven Talks for the Canadian Broadcasting Corporation, 1967), p. 84. <https://www.semanticscholar.org/paper/Fate-and-will-in-foreign-policy-Eayrs/37bf273c462a7265fca3a43b364ce8396b4cf4f0>

⁴⁷ "Arctic cooperation after Russia's break with the West," *IJSS*. October 2022.