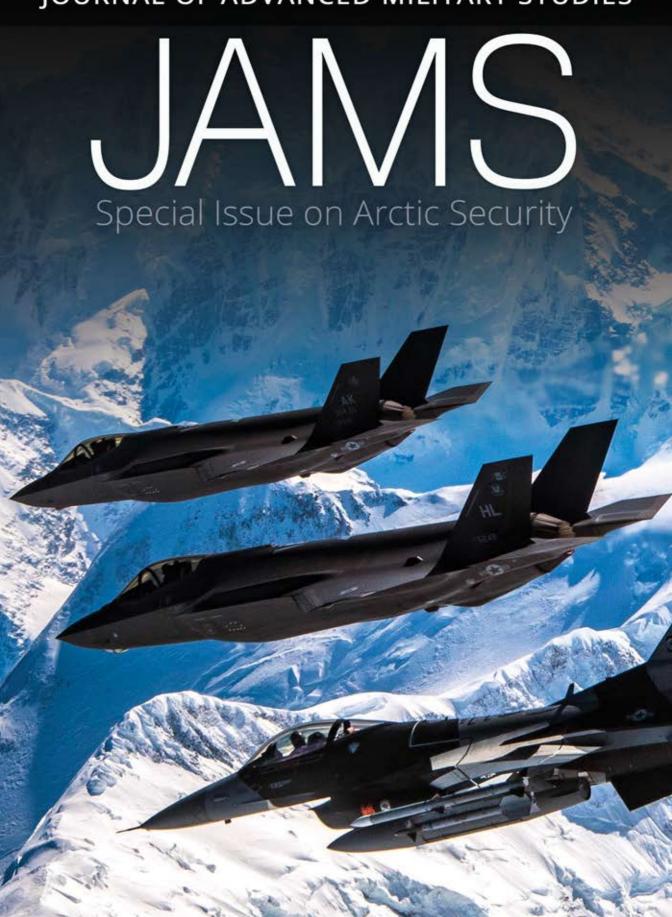
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NATO's Long Cold Front

Why NATO Must Reorganize Its Approach to Defending the European High North

Major Ryan R. Duffy, USA (Ret); Lieutenant Colonel Jahara Matisek, USAF, PhD; Lieutenant Commander Jeremy M. McKenzie, USCG (Ret); and Colonel Chad M. Pillai

Abstract: The North Atlantic Treaty Organization (NATO) faces strategic vulnerabilities in the European high north due to growing Russian and Chinese collaboration. Leveraging scenario planning and enhanced integration of Nordic capabilities into Joint Force Command Norfolk is recommended to bolster Arctic deterrence. Clarified command structures, specialized polarwarfare units, targeted infrastructure investments, and expanded Joint exercises are essential. This would strengthen NATO's Arctic posture, ensuring regional stability and enabling the U.S. strategic pivot toward countering China's growing global influence in the Indo-Pacific.

Keywords: strategic competition, China, Russia, polar warfare, Arctic, cold weather operations, NATO, combined Joint forces

he 2022 Russian invasion of Ukraine reshaped NATO's strategic calculus in the European high north. Finland and Sweden abandoned neutrality to join NATO, extending a NATO border with Russia. At the

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same time, Vladimir Putin and Xi Jinping's "no limits" partnership has demonstrated remarkable "resiliency" despite obvious stressors. Additionally, China, Iran, and North Korea are increasingly supporting military actions in Europe. The altered strategic environment in NATO's European high north demands reorganization and integration with broader geopolitical trends. The full-scale invasion of Ukraine shattered long-held assumptions about European stability and reminded NATO that hard power coercion can still redraw borders. The vulnerability of NATO's eastern flank demonstrated that the alliance cannot afford strategic blind spots, especially in the Arctic, where Russian and Chinese activities could similarly exploit NATO's reactive posture.

Russia has sustained and even increased its military investments in the Arctic despite military operations in Ukraine.⁴ Russia's resurgence and ambition is to reclaim a historical sphere of Arctic hegemony, which included the symbolic 2007 planting of a Russian flag at the North Pole seabed. Russia demonstrates its Arctic militarization through deployments of advanced antiaccess/areadenial (A2/AD) missiles, airborne operations, an expanded icebreaker fleet, and refurbishment of Soviet-era dual-use bases.⁵ Additionally, Finnish military intelligence believes "the Northern Fleet's 14th army corps will be expanded into a full army."

The European high north does not exist in a geopolitical vacuum—the United States and its allies must give it greater consideration. One report emphasizes that for Russia, "the Arctic represents a strategic continuum stretching from the North Atlantic to the North Pacific, with the North Pole approaches in the middle. Thus, Moscow understands the Arctic in circumpolar terms," meaning Russian thinking is beyond the European high north.⁷ Likewise, U.S. interests in the Arctic span three geographic combatant commands: U.S. Indo-Pacific Command, U.S. Northern Command, and U.S. European Command.

A 2025 U.S. Naval War College report asserts that rising Chinese interest in the Arctic should concern the West.⁸ China's disregard for international laws and norms in the South China Sea raises legitimate concerns about China's growing collaboration with Russia in the Arctic under the guise of its self-proclaimed "near-Arctic state" status.⁹ Recent Chinese military activities demonstrate increased capability to operate in the Arctic and include joint naval and air patrols with Russia into the Alaskan Air Defense Identification Zone (ADIZ) and U.S. exclusive economic zones (EEZs).¹⁰ While relatively minor moves, growing Sino-Russian cooperation requires a NATO response. The former U.S. deputy assistant secretary of defense, Iris A. Ferguson, characterized Chinese and Russian moves as "unprecedented."¹¹ Likewise, no one expected North Korean troops intervening in a European conflict with their Russian allies before November 2024.

China and Russia are expanding Arctic cooperation in space-based infrastructure to enhance multidomain operations and command-and-control capabilities. The development of parallel yet cooperative navigation networks (Russian GLONASS or global navigation satellite system and the Chinese Bei-Dou system) through the hosting of mutual infrastructure, hardware, and networks indicates shared interests in sustaining communications, capability, and resilience across the Arctic and in the space domain.¹²

Some scholars highlight increasing competition in the Arctic and urge policymakers to pivot resources and policies to address growing Russian and Chinese threats, while others see stability but acknowledge risks. ¹³ Sigbjørn Halsne asserts that potential risks merit study. ¹⁴ NATO's European high north faces strategic vulnerabilities, notably including the absence of an integrated strategy and defense presence. ¹⁵ Additional debate remains on the idea of Arctic exceptionalism—the idea that the Arctic is insulated from war and competition in the lower latitudes. ¹⁶ Others argue that Arctic exceptionalism is dead since Russia's 2022 invasion of Ukraine. ¹⁷

The changing environment is most evident in the 2024 *Department of Defense Arctic Strategy*, which acknowledges the growing geopolitical problem: "activities in the Arctic will be calibrated to reflect a 'monitor-and-respond' approach" allowing the U.S. military to "deploy the Joint Force globally at the time and place of our choosing." The new U.S. strategy makes clear that NATO allies will be critical for maintaining Arctic security and defense in light of growing Sino-Russian activities in the Arctic. This strategy represents both continuity and change—emphasizing cooperation with allies while highlighting increased competition with Russia and China. The U.S. strategy provides a crucial window into how NATO might be steered in the coming years.

NATO has consistently recognized the strategic importance of the Arctic, including an emphasis on defending Norway, monitoring the Greenland, Iceland, United Kingdom, and Norway (GIUK-N) gap, and protecting the North American homeland. However, there is a pronounced disparity between NATO rhetoric and actionable policies. Despite possessing the largest military within NATO, the United States has a limited number of polar-capable forces.²¹ Additionally, being capable of countering Arctic aggression means NATO needs to specialize in niche forces "capable of enduring prolonged engagements in harsh polar conditions."²² NATO also "faces specific challenges in Arctic naval readiness, particularly in ice-capable vessels and icebreakers," with NATO having no more than 35 icebreakers combined, whereas China and Russia have 49 total icebreakers collectively.²³ Thus, what can Arctic NATO powers (and Arctic-minded members such as the United Kingdom) do to address the multiple vulnerabilities the alliance faces in the Arctic, especially northern Europe?

Becoming proficient in conducting Arctic warfare requires special train-

ing, equipment, and dedicated forces.²⁴ Moreover, even when Arctic proficiency is achieved, maintaining year-round polar combat readiness is difficult due to the unique Arctic challenges associated with winter, spring, summer, and fall.²⁵ With all Nordic countries formally allied under the umbrella of NATO, there is an opportunity for NATO to address the strategic needs of the European high north. Given that Nordic countries specialize and excel in cold weather warfighting abilities, their qualitative advantage in polar combat translates into a critical node of Arctic capabilities and expertise. 26 However, even with Nordic countries possessing this key warfighting advantage, there are capability gaps across NATO. Countering potential Russian aggression (and growing Chinese collaboration) in the Arctic region means NATO must be able to capably conduct these types of polar operations: long-range fires, multidomain awareness, air defense, attack aviation, amphibious operations, sustainment, and follow-on resilient forces capable of enduring prolonged engagements.²⁷ Such NATO forces should be placed under resilient command-and-control (C2) nodes and operated by fully manned staffs, employing modern, redundant C2 systems, resistant to point attacks, and capable of dispersed operations.

To address such gaps, the authors theorize various solutions to the NATO Arctic problem through the gedankenexperiment (thought experiment) approach. By assessing and thinking through three different concepts that address Arctic challenges for NATO, this analysis helps establish the best organizational course of action for NATO:

- 1. Enhance NATO Joint Force Command (JFC) Norfolk with Nordic Nations for Arctic Defense. This preferred option capitalizes on existing Nordic capabilities and collaboration, such as their proficiency in cold-weather operations and knowledge of the Arctic terrain. The inclusion of Finland, Norway, Sweden, and Denmark would ensure rapid deployment and effective response to threats, bolstered by NATO's logistical and technical support.
- 2. Whole-of-NATO effort with U.S. leadership. Such an approach would bring substantial resources to bear. However, this option requires the United States to develop and maintain additional specialized Arctic units, which is a resource-intensive process. It would also require a major revision to the global force management process. A U.S.-led NATO Arctic rebalance would mean the United States would be unable to meet current challenges and threats in the Indo-Pacific, European theater, and Middle East.²⁸
- 3. European Union (EU)-led Combined Joint Expeditionary Force. As the least preferred option, this possibility lacks the cohesive command structure and established Arctic expertise present within NATO. While Brussels has an EU military headquarters, known as the Military Plan-

ning and Conduct Capability (MPCC), recent interviews with MPCC personnel indicate little political willpower or interest to defend the Arctic, especially given preoccupation with training and equipping the Ukrainian military against Russia and other EU-led naval operations in the Mediterranean, Red Sea, and Indo-Pacific.²⁹

Common to all these options, a preplanned deescalation playbook, coupled with secure communication to Russian and Chinese headquarters (military and political), could help defuse inadvertent escalation and preserve beneficial aspects of peacetime operations in close proximity (e.g., Arctic search and rescue, undersea mapping and exploration, etc.). The establishment of a dedicated multinational NATO European high north military force, inclusive of specialized marine, naval, air, and special operations components, would strategically counterbalance Russia's expanding military footprint in the Arctic—and any future aggression in the region. Thus, an enhanced JFC Norfolk responsible for the defense of NATO's European high north would not only reinforce the alliance's capacity for mutual defense under Article 5 but also signal collective unity and resolve against Russia and China. In addition, NATO needs an integrated Arctic strategy for both the European high north as well as the North American Arctic.³⁰ At the same time, NATO members need to scale up force generation and capabilities including A2/AD, anti-A2/AD, attack aviation, ice capable ships, long-range fires, multidomain awareness, Arctic trained troops, and specialized Arctic mobility.³¹

By using the gedankenexperiment approach to the organizational challenge of addressing Arctic security, this article proceeds as follows. First, the authors contextualize the rationale for NATO having to refocus its strategy and resources toward polar warfighting capabilities. Second, the authors emphasize the need for NATO to establish Arctic deterrence by dedicating enough forces and resources to ensure an adversary does not attempt to forcefully dominate the region. Third, the authors utilize an established futurist research method to generate three Schwartz future Arctic scenarios via ChatGPT that are used as a framework for analyzing the best organizational approach for NATO to address growing Arctic security concerns.³² From these three scenarios, the following section identifies the current NATO Arctic structure and then considers the best option for defending northern Europe. The final section concludes with how an enhanced JFC Norfolk would be best organized along ground, maritime, and air components of NATO forces.

A Contextualization of NATO's European High North as an Area of Interest

NATO's European high north now extends from Finland to the GIUK-Norway

gap. Finland's ascension to NATO increased NATO's direct land border with Russia from 1,213 to 2,549 kilometers. The Greenland, Norwegian, and Barents Seas all border NATO's European high north and are strategically important to both NATO and Russia with generally navigable waters due the Gulf Stream currents. Additionally, the Baltic and North Seas are strategically vital for Russian movement of forces and trade due to their proximity to the GIUK-N gap and Russia's naval bases in both Kaliningrad and St. Petersburg. Thus, the area of interest (AOI) for this article is the land border between Russia and new NATO lands and waters that extend from Finland to Norway and the Baltic, North, Greenland, Norwegian, and Barents Seas to the north.³³

NATO's European high north AOI is an environment of harsh extremes. Much of it lies above the Arctic Circle and its erratic weather makes military operations difficult, especially as climate change accelerates.³⁴ The Arctic is "a challenging environment for military forces. Some of these Arctic challenges include remoteness, lack of infrastructure (e.g., domain awareness, transportation, ports, communications, weather forecasting, etc.), and ionospheric effects impeding communications.³⁵ Thus, NATO's European high north AOI requires special preparation and planning to ensure NATO can deter adversaries, respond to crises, and fight and win in this unique environment.

NATO's European high north AOI is an area with historic strategic importance from the Russian Civil War through the Cold War.³⁶ Today, the vast majority (7 of 12) of Russia's ballistic missile submarines (SSBNs) are stationed on the Kola Peninsula.³⁷ This is in addition to investments made prior to the 2022 invasion of Ukraine, which included the reopening of multiple Soviet-era bases, testing and fielding of hypersonic missiles, and undersea drones that are nuclear powered.³⁸

Although Russia is economically and militarily weakened in 2025, it remains a credible threat in the Arctic. Per Colin Wall and Njord Wegge, "Russia's military interests in the Arctic are ostensibly defensive," nevertheless Russia remains committed to potential offensive operations in the European high north.³⁹ The Arctic remains essential to Russia's ability to project power.⁴⁰ During any conflict with NATO, Russia's Northern Fleet would aim to disrupt NATO's sea lines of communication in the GIUK-N gap.⁴¹ Additionally, Russian forces could attack and attempt control or deny access to key territory on land and at sea in support of its bastion concept.⁴² Russian bastion concept goals are to establish a secure "perimeter around the Kola Peninsula, which hosts the Northern Fleet" and ensure "unhampered access to the Northern Atlantic."⁴³ A recent NATO wargame involving a hypothetical Russian incursion into Finnmark—the Norwegian territory that borders Russia—demonstrated that Russia has numerous short-term advantages in such a scenario due to the United States and the rest of NATO lacking sufficient numbers of Arctic

capable forces relative to Russia.⁴⁴ For instance, it has been documented that American and British aircraft carriers and other naval vessels have struggled to operate in the Arctic Circle in winter due to the buildup of ice on flight decks and damage caused by sea ice.⁴⁵

Any incursion into NATO territories around the Arctic Circle would frustrate U.S. and NATO planners and policymakers due to limited deployment capabilities in a highly contested environment due to advanced Russian A2/AD systems. A2 Additionally, NATO lacks Arctic-ready forces, meaning it would be caught flat-footed in a crisis and would have to rapidly establish a calibrated defensive force while likely addressing other threats in Central and Southern Europe, along with matching global Russian threats (e.g., Russian capabilities in Kamchatka and the Kuriles). This would be initially difficult to generate because the U.S. and NATO members are using their forces and resources to sustain Ukraine's military, while also trying to strategically pivot to the growing threat of China in the Indo-Pacific.

Deterrence and the Future of NATO's European High North Area of Interest

Given the stated strategic "end" of NATO to "deter" Russian (and potentially Chinese) forces in the Arctic and to protect the sovereignty and EEZ of each Arctic NATO member, the United States and the rest of the alliance must have dedicated polar capable forces. This means enhancing NATO's JFC Norfolk with highly capable combined Joint forces that can conduct missions in the Arctic Circle year-round. An Arctic focused component of JFC Norfolk's strategic mission would give Arctic-minded members, especially Nordic countries, an opportunity to lead NATO in the defense of the Arctic region. Relying on Nordic expertise, other NATO countries could contribute properly funded and resourced forces to JFC Norfolk to become proficient and capable in Arctic warfighting. Finally, an Arctic rebalance of NATO forces would bring equilibrium to the region as Russia would be less likely to escalate, knowing that cold weather capable NATO forces could match and counter Russian aggression.

To understand the future operational environment, the authors use an "alternate futures" method via discrete scenarios to provide context for future force planning. ⁴⁸

Future Scenarios Generated for the NATO Planner

The Art of the Long View by Peter Schwartz provides planners with a standardized process to prepare for contingencies by developing three likely scenarios to guide decision-making for "plausible futures."⁴⁹ The authors queried ChatGPT, "Can you outline a speculative future for a NATO planner looking at the Arctic security environment in 2030, focusing on Chinese and Russian threats, using Peter

Schwartz's scenario planning methodology?" This method leveraged emerging research supporting artificial intelligence (AI) as an effective tool for generating unique insights when guided by well-crafted prompts. ⁵⁰ ChatGPT generated three scenarios that we have condensed and edited for clarity and emphasis. ⁵¹

Potential Arctic Security Scenarios in 2030: Chinese and Russian Threats

Through the Schwartz futurist lens, there are three likely Arctic scenarios that can be each uniquely described as: "strategic cooperation," "cold competition," and "escalating conflict." Each scenario is listed below:

- Strategic cooperation—Russia and China solidify a strategic partnership
 driven by geopolitical alignment, resource exploitation joint ventures,
 and the shared military objective to challenge NATO and the West.
 They collaborate on major dual-use infrastructure projects while becoming a united front against NATO.
- Cold competition—Russia and China independently compete for Arctic dominance. Each aggressively pursues natural resources and asserts economic influence while expanding military capabilities. The resulting rivalry results in strategic posturing, diplomatic tensions, and hybrid warfare, thus complicating NATO's need to secure the European high north.
- 3. Escalating conflict—Tensions driven by territorial disputes, resource competition, and strategic calculations escalate between Russia, China, and NATO, leading to frequent confrontations between Russia, China, and NATO. Russia and China, driven by resource needs and strategic ambitions, frequently clash with NATO forces over territorial waters, shipping lanes, airspace, and land, with each side taking casualties and risking a broader conflict.

Implications of 2030 Future Scenarios

Schwartz's scenario planning methodology means that NATO planners must prepare for a range of potential future scenarios in the Arctic, given the range of specific threats posed by Russia and China. While each scenario requires different strategic priorities and operational preparations, NATO can take the following actions to defend the European high north, including investments in C2, intelligence, military presence, alliance building, and Arctic-specific capabilities. NATO must adopt a new European high north outlook, increasing Joint cold-weather exercises, developing a comprehensive Arctic warfare doctrine and strategy, and expanding Arctic-capable forces while continuing to establish and refine rapid de-escalation protocols to counter threats, manage crises, and deter provocations.

Militaries without the proper training and weapons systems will face numerous issues and failures if deployed to the harsh Arctic environment. If these unprepared military forces survive an initial conflict, they might develop and refine ad hoc polar warfighting abilities "in contact." Flexible force planning that can address these multiple scenarios can set the proverbial "chessboard" ahead of time to provide the maximum number of forces available, given resource and infrastructural limitations in the region. Regardless, each of these futuristic scenarios illustrates why NATO must formulate a strategic plan now to ensure there are enough Arctic capable forces to deter and fight credibly.

NATO's Current Focus on the European High North

Given the three Arctic security scenarios in 2030 generated in this analysis, U.S. and allied planners must develop force generation and employment plans that can meet the strategic ends (and the operational goals) to counter Russia (and Chinese collaboration), while minimizing risks to NATO. Given the challenges facing NATO in the European high north, planners must consider how best to organize a resource-constrained region (e.g., population, equipment, budget, etc.) as well as the global commitments of some allies (e.g., the United States) to develop an effective set of headquarters, units, and Joint capabilities.⁵³

NATO's Supreme Allied Commander-Europe (SACEUR) and the Supreme Headquarters Allied Powers-Europe (SHAPE) area of responsibility (AOR) extends from the northern waters of Norway to the Canadian Arctic region and the vast maritime space in between. Subordinate to SHAPE are functional theater component commands and three regional Joint Force commands (JFCs). With Finland and Sweden joining NATO, the Arctic region is now divided between JFC Norfolk (Atlantic, GIUK-N gap, Norway) and JFC Brunssum (Sweden and Finland). NATO's Allied Maritime Command acts in a supporting relationship with the JFCs and provides naval forces that operate in the Atlantic Ocean region, North Sea, and Baltic Sea regions. Likewise, NATO's Allied Air Command is in a supporting relationship and provides land-based aircraft in support of the JFCs. NATO's Allied Land Command (LANDCOM) ensures the readiness of land forces that are then transferred to the operational control of the JFCs. In this regard, LANDCOM in coordination with the nations must provide separate force elements to support both JFC Norfolk and Brunssum in the Arctic region. NATO's current command and force structure provide the analytical foundation for the proposed recommendations discussed next.

Options to Address the Arctic Threat

The potential options to address the potential future scenarios for strategic cooperation, cold competition, and escalating conflict are two NATO solutions and one EU solution. The most preferred option is a Nordic-led Combined Joint Expeditionary Force (CJEF) under NATO, empowering them to lead Arctic defense efforts with NATO support.

NATO has more than seven decades of experience deterring Russia (or the Soviet Union). A Nordic-led CJEF ensures NATO readiness against Russia's threats and China's rise. An enhanced JFC Norfolk that is grounded in European military power and logistically backed by America ensures European leadership in European defense. As Sten Rynning asserts, NATO's European powers must lead due to political pressures from isolationists in the United States that contend the Europeans are free riders that need to spend more on defense.⁵⁴

Option One: Enhanced JFC Norfolk

An enhanced JFC Norfolk is the best option to secure NATO's European high north AOI. As the Department of Defense's recent 2024 Arctic Strategy notes about Arctic NATO members: they "possess highly capable militaries, and thanks to longstanding cooperation, are all highly interoperable. NATO's enlargement, in addition to increasing Nordic defense cooperation, will create new opportunities for combined planning, information sharing, and exercises that will expand regional collaboration." In Europe, only NATO can lead a large military force for great power competition. Additionally, in an era of the United States being increasingly overextended—attempting to meet the long-term pacing challenge with China—NATO allies must take the lead. This enables the United States to execute its "monitor-and-respond" strategy. Recent Chinese and Russian incursions into the U.S. and allied EEZs and ADIZs demonstrate the need for strategic flexibility. The structure for a Nordic-led CJEF under NATO will be discussed in detail in the next section.

Option Two: Whole-of-NATO Effort with U.S. Lead

A U.S.-led NATO Arctic force would be the traditional answer to a European security problem. However, this is no longer politically or strategically feasible for the United States. ⁵⁸ The latest U.S. national defense strategy and the Department of Defense's Arctic strategy do not support this course of action. ⁵⁹ With dwindling resources, weapon systems, and personnel, the United States cannot fight more than a one-front war. ⁶⁰ The growing threat of China and Russia (and Iran and North Korea) means the United States needs flexibility when committing forces. Hence, a European-led option is the most preferred choice since the United States cannot commit any more resources to the European high North AOI.

Option Three: European Union (EU)-led CJEF

Finally, the least preferred option would be an EU-led CJEF. Since 2003, the

EU has led more than 30 military missions (e.g., peacekeeping, foreign military training, and naval operations), but it lacks experience leading and executing large-scale combat operations. Worse, the EU lacks "mature command and control structures" outside of NATO, and these structures would be critical to lead a CJEF in the northern European front.⁶¹ Additionally, as Katrina Engberg asserts, "Where the US and NATO intervened to terminate the Balkan wars, EU-led forces have constituted follow-on forces."62 The EU lacks experience running high-intensity combat operations, but as their training mandate for Ukraine grows each year and as other expeditionary EU-led military operations expand in scope and scale, the EU might eventually—through its MPCC—be capable of leading bigger military operations to achieve their desired "strategic autonomy." While growing EU ambitions for strategic autonomy reflect positive burden-sharing trends, current capabilities remain limited without NATO's robust command architecture, operational scale, and integration with U.S. strategic planning. A future EU-led force may emerge, but in the near term, European defense still hinges on NATO's institutional muscle. Additionally, the complications of the UK "Brexit" from the EU produce political difficulties for one of the most experienced and capable Arctic-minded militaries. Similarly, with Norway lacking EU membership, both militaries would have difficulties participating in EU-led military missions, though both symbolically contribute some soldiers to the EU-led mission to train Ukrainian troops.

Proposed Structure of Enhanced JFC Norfolk

Currently, the Nordic region of Norway, Sweden, and Finland is divided between NATO's Joint Force Command Norfolk and Joint Force Command Brunssum, which prevents unity of command in the high north. To address the changes, Richard Hooker of the Atlantic Council recommended that NATO establish a Joint Force Command North (JFC North) that will include Finland, Norway, Sweden, and possibly Denmark to provide unity of command among the Nordic nations. 63 Enhancing JFC Norfolk with fully functional land, air, maritime, and special operations components, with allied formations such as the UK Joint Expeditionary Force (JEF), is preferable. JFC Norfolk would have two strategic missions: Securing the transatlantic lines of communications (LOCs) and securing NATO's high north. Therefore, JFC Norfolk's expanded mission can be built on the Nordic Defense Cooperation (NORDEFCO) foundation, which consists of Denmark, Finland, Iceland, Norway and Sweden with the objective of strengthening "participants' national defence." 64 JFC Norfolk would be the reporting headquarters for assigned land, maritime, and air component commands.

JFC Norfolk's Land Component Command (LCC)

JFC Norfolk, like its counterparts in Brunssum and Naples, has LCCs supported by NATO LANDCOM, headquartered in Izmir, Turkey. JFC Norfolk's LCC coordinate land operations across the high north consisting of the land forces from Finland, Norway, Sweden, and Denmark.⁶⁵

Finland: Recently, the Finnish minister of defense announced that Finland will host a new NATO Land Component Command that will lay the foundation for the Nordic region and provide substance for the recommendation to enhance JFC Norfolk.⁶⁶ This proposal makes the most sense since Finland has an extensive land border with Russia in the high north, with Norway owning the extreme northern portion adjacent to the Barents Sea. Additionally, Finland maintains a comprehensive national defense plan that mobilizes its entire society and uses conscription and reservists to rapidly expand its armed forces in a time of crisis.⁶⁷ According to the International Institute for Strategic Studies Military Balance 2024, Finland maintains approximately 285,000 active and reserve army personnel.⁶⁸ While impressive, Finland has set out to invest more than \$6.48 billion or 2.3 percent of GDP in defense spending to enhance its capability and capacity to serve as the LCC to provide sufficient forces to blunt a Russian incursion along NATO's eastern flank.⁶⁹ Finland has made recent commitments to increase its air defense capabilities to foster NATO interoperability by replacing Soviet equipment with Western systems.⁷⁰

Norway: Norway is the primary land-based region under JFC Norfolk command and control. Norway's current land forces consist of 8,300 active soldiers, 800 Home Guard personnel, and 40,000 Home Guard reserve forces.⁷¹ In 2024, Norway announced an increase of \$60 billion over 12 years as part of its long-term defense plan to bolster its military capabilities to include significant investment in air defense.⁷² Norway's increased military investment includes expanding its army from one to three brigades and increasing its Home Guard to 45,000 personnel.⁷³ The additional brigades will reinforce Norway's Finmark region that borders Russia and represents the most likely avenue of approach for a Russian incursion to secure the SLOCs for its northern fleet to move through the GUIK gap into the North Atlantic. Norway is both defended by (and hampered by) narrow ground LOCs that would be a challenge for both Russia and NATO in a ground war, especially in the isolated Finnmark region, as only one major road connects to the rest of Norway.74

Sweden: Sweden is currently part of JFC Brunssum AOR and has an active land force of 6,850 personnel organized in two brigade-size task forces.⁷⁵ Sweden recently announced an increase of \$1.3 billion in defense spending to enhance its capabilities.⁷⁶ Additionally, Sweden intends to create two additional brigades along with the Gotland Island battlegroup that will fall under the command of a new Swedish division by 2030.⁷⁷ Sweden is positioned favorably with sizeable numbers of Finnish ground forces to its east and provides additional routes of reinforcement (land, sea, and air) for NATO forces operating in a potential crisis against Russia in the region.⁷⁸

Denmark: Having been part of the JFC Brunssum AOR, Denmark provides the nucleus for NATO's Multi-National Division-North (MND-N), which operates in Poland and the Baltic states. Denmark's land forces consist of 8,000 active personnel organized in one mechanized brigade and 34,400 reserve personnel. Denmark has pledged to increase its defense spending to meet the 2 percent Madrid Summit NATO goal.⁷⁹ The Danish Straits are a critical maritime choke point between the Baltic Sea and the North Sea and provides both L/SLOCs between Central and Northern Europe that can help expedite the movement of forces and material. Denmark's ports, ferries, and bridges to Sweden also increase the ability of NATO forces to deploy rapidly from Central Europe or the continental United States. Denmark also maintains a small but significant Arctic security force (Sirius patrol) in Greenland, a potential source of trainers and best practices for other Arctic forces.⁸⁰

Non-Nordic Partnerships: The two primary land-centric partners for LCC-North are the UK and the United States. The UK's Joint Expeditionary Force (JEF), founded in 2014, partners with Denmark, Estonia, Finland, Iceland, Latvia, Lithuania, the Netherlands, Norway, and Sweden. The UK JEF initially focused on defense and security in the Baltic Sea region but has increased its focus on security in the high north.⁸¹ U.S. European Command and two subordinate components, U.S. Marine Forces Europe and Africa (MARFOREUR-AF) and U.S. Army Europe and Africa (USAREUR-AF) have managed the U.S. relationship with the Nordic nations. MARFOREUR-AF has a long-standing relationship with Norway through exercises and the maintenance of its prepositioned stocks.⁸² USAREUR-AF has been expanding its ties with the Nordic nations with rotational elements of the 10th Mountain Division, 11th Airborne Division (Arctic), and the

21st Theater Sustainment Command.⁸³ Such rotations have brought episodic competencies in cold weather warfighting, but without sustained commitments to maintain Arctic military readiness, such units will struggle to operate in a future Arctic crisis.

JFC Norfolk Air Component Command (ACC)

In March 2023, the Joint Declaration of Intent (JDI) was signed by Denmark, Finland, Norway, and Sweden. This cooperative JDI airpower agreement was built on the foundations of the 2009 NORDEFCO framework. With the JDI expected to move forward to operationalization, this would unify almost 250 Nordic combat aircraft under one regional command to defend the northern flank of NATO.⁸⁴ Interoperability and integration will become even more seamless as Denmark buys 27 Lockheed Martin F-35 Lightning IIs, Finland buys 65 F-35s, and Norway, with 34 F-35s already, will grow up to its goal of 52. This amount of fifth-generation stealth fighters will outnumber Russia, as Russia only has 15 Su-57s and is only expected to build up to 76 of them, giving NATO forces a sizeable stealthy advantage even without accounting for the United States and its 183 Lockheed Martin F-22 Raptors and 630 F-35s.

The Combined Air Operations Center (CAOC) at Uedem, Germany, is responsible for NATO air policing missions for all airspace north of the Alps. However, JDI members, including British and U.S. Air Force personnel—have established a temporary CAOC at Camp Bodin at Bodø Air Base to support northern flank military exercises, and a Nordic air operations facility in Reitan, Norway, to support peacetime air operations. The NATO North CJFACC would consolidate these agreements by ensuring that airspace around the northern flank and Nordic countries would fall within their AOI.

Russia for its part has two fighter airbases in Kaliningrad Oblast and another fighter airbase east of St. Petersburg, allowing Russian airpower projection into the Baltic Sea. Near the northern flank of Europe, Russia has a fighter and bomber airbase around Murmansk and at least 12 additional airbases inside the Arctic Circle. Such Russian airpower across the region poses a threat to most NATO bases and assets, but as Nordic countries grow their F-35 fleets and air defenses, this will give NATO a major upper hand. JFC Norfolk's CJFACC would need to be properly designed to conduct suppression of enemy air defenses to ensure Russia's current antiaccess/area-denial areas become permissive for NATO air operations in case of a future crisis.

JFC Norfolk's Maritime Component Command (MCC)

The primary naval threat in the NATO North AOI is the Russian Navy's Northern and Baltic Fleets. NATO North CJFMCC's primary mission would be to secure its SLOCs, ensuring the ability to support the land and air battle against

Russia in the NATO North AOI. Per the Department of Defense's 2024 Arctic Strategy, "The Arctic serves as an avenue for power projection to Europe and is vital to the defense of Atlantic SLOCs between North America and Europe."85 There are essential tasks for JFC Norfolk's MCC. First, the MCC must deny, degrade, and/or destroy the combat effectiveness of the Russian Northern Fleet. Likewise, during a NATO-Russia conflict, it is critical to ensure that the Baltic Fleet is unable to depart its ports in St. Petersburg, Kaliningrad, and Kronstadt. Second, JFC Norfolk's MCC must ensure open SLOCs in the North, Greenland, Norwegian, and Barents Seas to prevent Russia from implementing its bastion concept. Third, the MCC must have the ability to surveil and track the Russian SSBN fleet based on the Kola Peninsula to reduce the risk of strategic surprise while ensuring NATO's ability to operate freely in the European high north. Any engagement with Russian SSBNs carries significant escalation risks. Therefore, the MCC must carefully calibrate any engagements with the Russian SSBN fleet within the broader framework of NATO's deterrence and defense objectives.

NATO North CJFMCC should consist of the combined naval forces of the United Kingdom, France, Belgium, Netherlands, Germany, Denmark, Poland, Lithuania, Latvia, Estonia, Finland, Sweden, and Norway along with the Icelandic Coast Guard. This force mix leaves NATO with the formidable combined naval forces of Portugal, Spain, Greece, Italy, and Turkey to contain Russia's Black Sea Fleet.

The combined forces of JFC Norfolk's MCC would be a capable blue-water force, including 3 aircraft carriers, 16 destroyers, up to 41 frigates, 23 corvettes, 8 SSBNs, 12 nuclear-powered attack submarines (SSNs), 19 non-nuclear attack submarines, more than 50 mine countermeasures ships, and 11 amphibious ships. While a formidable force, CFMCC would benefit from U.S. support to increase air defense, antisubmarine warfare, logistics/replenishment, and cyber and electronic warfare support. Additionally, currently available forces lack ice-capable ships and icebreakers—both would be crucial for successful operations in the NATO North AOI.

Potential Russian and Chinese Reactions to an Enhanced JFC Norfolk

Strategically, Russia and China would view a new NATO Arctic emphasis as hostile to their respective national interests in line with the three 2030 futurist scenarios. Russia has already proclaimed the development of a new military district, "Leningrad," near Finland, but may struggle to generate new Arctic capable forces given substantial losses in Ukraine. Russia will face increasing economic and industrial strains competing with NATO modernization. However, if China continues with its growing economic and securitized approach,

such as its current Polar Silk Road plans and military ambitions, it has the organizational flexibility and resources to grow and modernize polar forces.⁸⁸ In fact, it would not be surprising if China were to create Arctic-dedicated land, maritime, and air forces as a way of balancing NATO and to create strategic ambiguity regarding its relationship with Russia in the region. China, through its Polar Silk Road and military ambitions, can design new polar-capable forces quicker than NATO.⁸⁹

Conclusion

With the accession of Finland and Sweden into NATO, the Arctic region has grown in importance. Schwartz's scenarios provide a novel framework to anticipate future Arctic issues. To address the myriad of security challenges from these scenarios, NATO must develop and maintain specialized Arctic forces, enhance its situational awareness, and establish a credible deterrent. Leveraging capabilities and expertise of Nordic countries, as well as Arctic-minded allies, NATO can ensure the security and stability of the northern flank of Europe and the Arctic region. The establishment of a dedicated NATO Arctic military force would be a strategic counterweight to Russia's Arctic military dominance and China's growing interest, signaling collective NATO unity in the Arctic Circle. A strengthened NATO presence in the high north also supports the United States' broader global posture by allowing a more focused allocation of U.S. resources to the Indo-Pacific. By ensuring European-led Arctic security, NATO enables Washington to meet growing challenges posed by China without overextension, making Arctic readiness a cornerstone of global strategic flexibility.

By leveraging and enhancing the capabilities and expertise of its Arctic-minded member states, NATO can develop cold-weather forces capable of protecting northern Europe and projecting combat power into the Arctic Circle. Showing collective military strength in the Arctic is the only way of deterring adversaries from breaking international law and norms in the region. The enhancement of JFC Norfolk is the most viable solution to protect NATO's new front lines with Russia, enabling NATO militaries with niche polar warfare capabilities to become a key node of NATO defense in the European high north. Taking such steps will ensure NATO is postured to deter, fight, and win in the Arctic if necessary.

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