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The Intelligence Community Must Evolve To Meet the Reality of Arctic Change

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INTRODUCTION

Climate change is accelerating and significant changes are occurring at relatively low levels of warming.¹ The Arctic is warming faster than anywhere on Earth, with tremendous implications for U.S. homeland and national security, as well as U.S. security interests abroad.² Future conditions are not well-represented by past experiences so it is important for the U.S. intelligence community (IC) to evolve to meet the demands of this new reality.³ This includes creating an holistic approach towards the Arctic region, as well as several other targeted, structural interventions

pertaining to Arctic engagement and equities. This natural evolution will allow the IC to provide more robust, agile, and comprehensive support to policy-makers and the military; properly reflecting the period of unprecedented complexity and consequence we are now within.

Three priority threats face the United States and its allies in the Arctic region: accelerating climate change, Russia, and China. The contemporary environment in which actorless and actor-based threats interact with each other in novel ways requires a fundamental re-think of the U.S. intelligence community's approach

to a significantly altered Arctic region, so as to provide accurate and timely insights and analysis. The 2022 National Security Strategy asserts that climate threats are “at the center of shaping U.S. security in the decades to come.”⁴

Three key questions emerge from these priority threats: How will Arctic change impact U.S. security interests at home and abroad? What are the key threats posed by Russia and how are they best addressed? How do China’s Arctic interests play into their larger intentions and ambitions? This paper briefly explains these critical threats and questions, and then offers six targeted recommendations to better address their intersections in the evolving, contemporary environment.

THREAT #1: ACCELERATING CLIMATE CHANGE

A warming climate is the key driving force behind changes in the Arctic that have facilitated new opportunities and risks, piquing the strategic commercial, scientific, and security interests of public and private sector actors around the globe. In recent decades the Arctic has been warming around four times faster than the global average⁵ with direct impacts identified for geographies as far-ranging as the eastern seaboard of the United States⁶ to the Sahel region of Africa⁷ and beyond. Reduced Arctic sea ice also expands the maritime domain, and “the general trend of increased traffic will drive up demand for Coast Guard resources to manage risks to maritime safety and security.”⁸

Direct climate impacts are only one dimension of risk posed by accelerating warming. China may be the “pacing threat” of the U.S., but climate change is the “shaping threat.”⁹ Climate change has immense

consequences for low lying nations, global coastlines, extreme weather events, critical infrastructure, and human and economic security. Research demonstrates the potential for triggering global climate tipping points—“critical threshold beyond which a system reorganizes, often abruptly and/or irreversibly”¹⁰—is more likely at lower levels of warming than had previously been expected, adding urgency to the need to dramatically reduce emissions and actively sequester carbon.¹¹ Extraordinary changes will create second and third order dimensions of risk as climate change factors into the evolution of security and geopolitical strategy development of all nations.

The complex, systemic nature of climate change-linked disruptions—and the suite of risks it presents if insufficiently mitigated—may contribute to challenging the legitimacy of states. “Contestation” is one of the key themes appearing throughout the intelligence community’s Global Trends 2040 report.¹² As it states, “Relationships between societies and governments will be under persistent strain as states struggle to meet rising demands from populations.”¹³ Governments will likely struggle to keep up with the increasing magnitude and scope of disruptions—including the ways bad actors exploit or leverage those disruptions—to meet the basic needs of their people. This agreement between states and their citizens is the social contract by which states attain legitimacy. Information operations by malign actors have already demonstrated a tendency to exploit grievances so as to exacerbate tensions and decrease trust in government, in ways that specifically connect to issues of socioeconomic and racial inequality and unresolved historical traumas.¹⁴ A holistic approach that incorporates non-traditional expertise is necessary for democracies to best position themselves for the challenges to come.

THREAT #2: RUSSIA

Within the post-February 2022 context—with Russia waging a genocidal¹⁵ war against Ukraine—Russia’s ongoing military buildup in the Arctic region takes on new meaning and contributes to heightened global tensions not seen since the Cold War. In the year following their full-scale invasion of Ukraine, Russia has doubled down on its Arctic ambitions and elevated the Arctic from strategic priority number three to priority number one in its updated Maritime Doctrine.¹⁶ At the same time, NATO is poised to strengthen its northern flank with the addition of Finland and Sweden, who pivoted from Enhanced Opportunity Partners to seeking full accession to NATO following Russia’s extreme violation of Ukraine’s sovereignty.

In addition to conventional military threats posed by Russia, there are increased concerns about risks from nuclear weapons. In February 2023, Russia announced it was suspending participation in New START, the last remaining nuclear arms control agreement between the United States and Russia.¹⁷ There are additional transboundary environmental security

threats developing in the Arctic as a result of the combined threats from radioactive materials from Russia’s Cold War legacy,¹⁸ their desire to unleash industry by extending a moratorium on commercial inspections¹⁹ and waiving environmental impact assessments, plus a demonstrated track record of poor transparency and purposeful obfuscation of detection.²⁰

THREAT #3: CHINA

China asserts itself as a “near Arctic state” in order to gain strategic access and influence, though this is not a recognized status.²¹ Among the risks posed by climate change is the way it can be leveraged to legitimize access to geo-strategic regions like the Arctic. Part of China’s justification is the relevance of Arctic change to their interests, including sea level rise impacts to the Chinese homeland. By this logic, every state in the world could consider themselves to be “near-Arctic states” because of the global impacts of changes in the Arctic. China seeks to strengthen Arctic scientific cooperation which has strong dual-use potential for China’s military and intelligence



March 22, 2021, Sabetta, Tyumen region, Russia, The Yamal icebreaker moves into ices. Image source: Shutterstock.com

apparatuses.²² China also seeks to gain presence and build equities in the Arctic through data and space. For instance, in November 2022 China's satellite navigation system BeiDou became the such system approved for ship tracking and for use in the Global Maritime Distress and Safety System (GMDSS) by the International Maritime Organization.²³ The Chinese Community Party has also linked their ambitious polar orbiting satellite plans to their ability to increase persistent observation and consolidate power at home.²⁴

The relationship between China and Russia has in recent years strengthened, particularly as relations with the U.S. have deteriorated. This relationship is fraught, however, and the history is complex. Prior to February 2022, Russia had been interested in China's financing of key projects such as LNG from Yamal, but was careful to not give China too much leverage in their relationship and to avoid sensitivities such as engaging with China's military in the Russian Arctic. In the post-February 2022 environment, however, that dynamic has shifted due to Russia becoming isolated from many international governments, organizations, and commercial partners. China's initial caution towards engaging with Russia in the early months following the war soon shifted to a more opportunistic approach of heightened and strengthened engagement, though still exhibiting a degree of caution. This engagement includes public efforts such as Xi and Putin's high profile Moscow meeting in March 2023 where Putin announced Russia and China are "ready to create a joint working body for the development of the Northern Sea Route."²⁵ Additional cooperative engagements of note include a joint naval maneuver in Alaska's exclusive economic zone²⁶ and an agreement to develop Russia's Pizhenskoye titanium field.²⁷ Non-public forms of engagement have also developed, notably including China's interest in providing lethal aid to Russia for use in Ukraine, which the U.S. intelligence community exposed to

the public in February 2023.²⁸ A senior U.S. defense official noted in March 2023 that it is not in China's interest for Russia to be too weak, which opens up a host of potential avenues for engagement between the two nations to advance.²⁹

RECOMMENDATIONS

The U.S. and allied nations face heightened tensions with Russia and China which under ordinary circumstances would be complex. The reality is that accelerating climate change is a game changer, creating dynamic conditions of relevance to all security stakeholders. Due to this unusual combination, the U.S. intelligence community would benefit from a re-think of its approach to the Arctic, so as to improve and increase regional intelligence collection, analysis, and production. Our six targeted recommendations involve investments in strategy, leadership, people, and partnerships. They are calibrated to the Arctic region and offer cost-effective and measurable outcomes.

Recommendation #1

Create a U.S. Arctic Intelligence Strategy

The U.S. intelligence community and its customers would benefit from a pan-Arctic approach that views the region as a whole instead of through the current, fragmented lens split across three different combatant commands (European Command, Northern Command, and Indo-Pacific Command). The creation of an Arctic Intelligence Strategy to guide resources and priorities throughout the 18 U.S. intelligence agencies would help develop a more complete picture, and result in more efficient and effective use of resources. This strategy could identify practical steps for strengthening actionable and timely intelligence, including how collection and analysis can be integrated holistically across the Arctic region, instead of the current piecemeal approach.



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Intelligence strategies are important for integrating the vast intelligence community with key partners within the larger interagency, with state, local, and tribal entities, the private sector, and U.S. allies to encourage cooperation, coordination, and mutual support. A U.S. Arctic Intelligence Strategy would fully align with the foundational pillars of the 2019 National Intelligence Strategy³⁰ and the 2022 National Security Strategy³¹, and would directly support the 2022 National Strategy for the Arctic Region³². It would also strengthen the ability of key agencies to develop coordinated annual budget priorities, as well as conduct ongoing assessments of future trends, challenges, and opportunities.

According to the IC's 2023 Annual Threat Assessment, "as temperatures rise and more extreme climate effects manifest, there is a growing risk of conflict over resources associated with water, arable land, and the Arctic. Contested economic and military activities in the Arctic have the potential to increase the risk of miscalculation, particularly while there are military tensions between Russia and the other seven Arctic countries following Russia's invasion of Ukraine in

early 2022."³³ Creating a pan-Arctic intelligence strategy will allow the U.S. to assess these threats in a more comprehensive way.

As the Arctic is changing faster than anywhere on earth, it is crucial for this strategy to be developed in a timely manner to keep pace with the implications of environmental change for U.S. security interests. Research demonstrates the threat of crossing tipping points is no longer low probability³⁴, so must be accounted for through mechanisms such as bulking up anticipatory intelligence, streamlining incorporation of Western and Indigenous knowledge systems,³⁵ and engaging with allies and industry partners.

Recommendation #2

Create a National Intelligence Manager (NIM) for the Arctic within the Office of the Director of National Intelligence (ODNI)

The Arctic has emerged as a key strategic geographic location, and its relevance will only grow as climate change accelerates. The Arctic is a crucial link to U.S. interests in the Indo-Pacific, as demonstrated by the decision to base the greatest concentration

of fifth generation fighter jets out of Alaska’s Eielson Air Force Base. Fighter jets can deploy from this geostrategic location to anywhere in the Northern hemisphere—including the Indo-Pacific—in one sortie, and is a key re-fueling location.³⁶

The most comprehensive description of ODNI’s mission for National Intelligence Managers states that, “NIMs serve as the single focal point within the ODNI for all activities related to their portfolios. They are the Director of National Intelligence’s principal advisors for community oversight and coordination of their respective mission area. NIMs integrate the Intelligence Community’s collection and analytic efforts for their designated region, country, functional issue, or topic.”³⁷

The combination of factors that have elevated the Arctic’s strategic significance in recent years argues for an elevation of the region within the intelligence community, so as to give it persistent senior leadership attention and focused linkages to the policy community. This particular initiative—creating an Arctic NIM—would eliminate the need for different NIMs (Maritime, Air, Western Hemisphere) to tackle Arctic related taskings in an ad hoc way, as is currently the case. Creating an Arctic NIM would send an important message to all U.S. intelligence agencies about the region’s elevated significance, as well as that of climate change, and further strengthen a whole of region understanding of the Arctic.

Recommendation #3

Hire environmental security and climate-specific expertise into the IC in order to mainstream climate analysis into its production cycle

Key IC agencies like the Central Intelligence Agency, the Defense Intelligence Agency, and the National Geospatial-Intelligence Agency need

significant numbers of in-house experts who provide crucial insights for managing the complex implications of accelerating climate change and environmental disruption to U.S. security interests around the globe. A dearth of necessary expertise hinders the IC’s ability to meet the reality of the complex implications of Arctic change. The opening up of the Arctic is allowing greater maritime access, creating new vulnerabilities and public health risks, and weakening decades worth of assumptions about Arctic security matters, as well as contributing to extreme weather events that enhance the vulnerability of fragile populations across the globe.

With an influx of valuable in-house expertise, the IC will be better positioned to mainstream climate analysis into its production cycle to better support collection planning, development of anticipatory intelligence, and policy support. The climate lens of analysis must be normalized across every regional IC product.

Recommendation #4

Prioritize Top Secret with Special Access clearances for non-IC Federal Interagency Arctic and climate experts

Arctic and climate experts within key federal agencies like the Department of the Interior, the Department of Transportation, and the Department of State need necessary classified access to engage with IC counterparts most effectively on Arctic issues, as well as the myriad of climate security matters. Recent history is replete with examples (most of them classified) that have proven that whole of government interagency cooperation leads to success in combatting threats against the U.S. and our allies. Better integration, including allowing broad interagency experts access to highly classified intelligence, would enable a more robust

and successful policy support apparatus. Larger numbers of non-IC experts with appropriate clearances will also enable a more routine and streamlined IC production cycle of whole-of-government policy support on the Arctic. The aforementioned mainstreaming of climate analysis into IC production would be much easier given the broader inter-agency framework we recommend be created to support the IC's policy work.

Recommendation #5

Implement a long-term program of Intelligence Community civilian training and integration with Arctic allies and partners

This initiative would better develop and strengthen long-term and meaningful collaboration with U.S. Arctic allies and partners. This effort would be accomplished by a combination of assigning IC analysts within U.S. embassy country teams, as well as rotational opportunities to embed IC analysts within allied intelligence agencies. Such an effort has already been successfully developed among Five Eyes members, but could be extended to U.S. allies and partners in the Arctic as well. This initiative would not only deepen allied intelligence relationships but also strengthen area expertise within the IC, including greater understanding of pertinent languages, cultures and histories, regional dynamics, and lessons-learned from centuries of operating in the harsh Arctic environment.

The U.S. intelligence and defense communities have a long track record of successful programs in other regions that develop foreign area officer expertise, as well as assigning analyst experts to support U.S. defense attachés abroad, and embedding analysts into allied partner organizations. Therefore, it is not difficult to conceptualize how this new initiative could successfully develop a cadre of experts immersed in the region, providing long-term mutual benefits.

Recommendation #6

Create a NATO Center of Excellence (COE) on High Latitude Intelligence, Surveillance and Reconnaissance (ISR)

There are currently numerous NATO accredited COEs which provide specific expertise and experience, allowing NATO members to pool distinctive multi-national expertise under one entity to tackle specific aspects of warfare within its area of focus.³⁸ Drawing upon past successful NATO Centers of Excellence, this initiative seeks to create a new COE focused on High Latitude ISR which could better integrate and improve NATO ISR interoperability within conditions specific to the high latitudes.

This effort would also assist in strengthening the seams of the three U.S. combatant commands with Arctic equities, and enable NATO allies and partners to better coordinate limited sensors, collectors, and analysts. These efforts could address the dual need for greater sensing of changes in the Arctic throughout the year and heightened all-domain awareness.

There is no greater force multiplier within the IC than joint, collaborative, and integrated partnerships. This effort would enhance NATO's Arctic early warning and situational awareness capabilities by providing concept development, experimentation, doctrine development, standardization, exercises, education, training, and lessons learned. All of these enhanced capabilities would provide the analysis and conceptual underpinning to better leverage existing nation-level multi-domain observation sites and assets. This would lead to an increase in burden sharing arrangements and diminish national tendencies to stove-pipe intelligence collection and analysis to certain tactical regions (Bering Strait/Alaska vs. Northwest Passage/Canada vs. Greenland-Iceland-United Kingdom-Norway/Europe), enabling a more pan-Arctic ISR

approach to better support Arctic policymaking and NATO collective defense.

CONCLUSION

More focused and integrated IC collection and analysis on the Arctic region would provide greater support to objectives of the new U.S. National Strategy for the Arctic Region, the National Defense Strategy, and the National Security Strategy. A region-wide approach to the Arctic would provide more comprehensive intelligence products to inform the cross-cutting work of entities such as the office of the Deputy Assistant Secretary of Defense for Arctic and Global Resilience, the Ted Stevens Center for Arctic Security Studies, and programs like the International Cooperative Engagement Program for Polar Research (ICE-PPR).

U.S. strategies for the Arctic consistently reflect the desire for the region to be stable, peaceful, and

governed by international law. The 2022 National Defense Strategy reflects an understanding of the region's strategic importance but also that "U.S. activities and posture in the Arctic should be calibrated, as the Department preserves its focus on the Indo-Pacific region."³⁹ The targeted interventions recommended in this publication seek to enhance intelligence support to policy and military interests in the region, in such a calibrated way. By enhancing coordination and collaboration, tweaking bureaucratic structures, and strengthening engagement with allies, the U.S. will be able to grow intelligence community efficiency and effectiveness, thereby alleviating unnecessary effort or redundancy while better positioning our country for the complex challenges to come.

The opinions expressed in this article are those solely of the authors.

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