NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

DEFENSE ANALYSIS CAPSTONE REPORT

USSF CAPABILITY GAP IN THE ARCTIC

by

William B. Martin, Michael K. Tovo,
and Devin L. Kirkwood

December 2022

Thesis Advisor:	Kalev I. Sepp
Second Reader:	Michael Locklear (USASOC)

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REPORT DOCUMENTATION PAGE	Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC, 20503.

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE December 2022	3. REPORT TYPE AND DATES COVERED Defense Analysis Capstone Report

4. TITLE AND SUBTITLE USSF CAPABILITY GAP IN THE ARCTIC	5. FUNDING NUMBERS
6. AUTHOR(S) William B. Martin, Michael K. Tovo, and Devin L. Kirkwood	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A	10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.

12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.	12b. DISTRIBUTION CODE A

13. ABSTRACT (maximum 200 words)

How can the United States Army Special Operations Command (USASOC) influence Arctic policy, improve Arctic strategy, and optimize Arctic readiness in support of the 2022 National Defense Strategy and National Security Strategy, 2019 DOD Arctic Strategy, and the 2022 Army Arctic Strategy? As we shift focus from Global War on Terror to Strategic Competition, we find ourselves unprepared to compete in critical areas across a range of emerging competition zones, especially in the Arctic. SOF is often ahead of the larger military apparatus in innovation and development and as such must take an active role in defining its role and strategy in the Arctic. This recommended guidance would help address some of our primary findings:

- Arctic security and readiness require Special Operations support.
- Strategic leaders lack a clear understanding of SOF capabilities in the Arctic.
- USASOC units lack the manning, training, and equipping to campaign effectively in the Arctic and to successfully partner with our High North allies and our own indigenous Alaskans.

Our findings underpin the recommendation for SOCOM and USASOC to publish Arctic strategies and guidance to ensure our units are better prepared to operate in Arctic environments.

14. SUBJECT TERMS arctic, Special Forces, winter, cold weather, special operations, High North, Alaska	15. NUMBER OF PAGES 79
	16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UU

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. 239-18

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USSF CAPABILITY GAP IN THE ARCTIC

William B. Martin
Major, United States Army
BS, Missouri State University, 2011

Michael K. Tovo
Major, United States Army
BS, United States Military Academy, 2011

Devin L. Kirkwood
Major, United States Army
BA, Columbia College, 2010

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN APPLIED DESIGN FOR INNOVATION

from the

NAVAL POSTGRADUATE SCHOOL
December 2022

Approved by: Kalev I. Sepp
Advisor

Michael Locklear
Second Reader

Carter Malkasian
Chair, Department of Defense Analysis

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Our findings underpin the recommendation for SOCOM and USASOC to publish Arctic strategies and guidance to ensure our units are better prepared to operate in Arctic environments.

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LIST OF ACRONYMS AND ABBREVIATIONS

ALCOM	Alaska Command
ARSOF	Army special operations forces
ASDF	Alaska State Defense Force
CRTC	US Army Cold Regions Testing Center
DOD	Department of Defense
ECW	extreme cold weather
GWOT	Global War on Terror
HQDA	Headquarters Department of the Army
ISR	intelligence, surveillance, reconnaissance
JPMRC	Joint Pacific Multinational Readiness Center
METL	mission essential task list
NDAA	National Defense Authorization Act
NDS	National Defense Strategy
NRO	National Reconnaissance Office
NSS	National Security Strategy
NWTC	Northern Warfare Training Center
USARAK	US Army Alaska (11th Infantry Division)
USASOC	United States Army Special Operations Command
USEUCOM	United States European Command
UENORTHCOM	United States Northern Command
USINDOPACOM	United States Indo-Pacific Command
SF	special forces
SOF	special operations forces
SOP	standard operating procedures
SWTC	Subarctic Warfare Training Center
TTP	tactics, techniques, and procedures
WWD	Winter Warfare Detachment in 10th Special Forces Group

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EXECUTIVE SUMMARY

Research question: *How can the United States Army Special Operations Command influence Arctic policy, improve Arctic strategy, and optimize Arctic readiness in support of the 2022 National Defense Strategy and National Security Strategy, 2019 DOD Arctic Strategy, and the 2022 Army Arctic Strategy?*

This question and capstone project was predicated on the experiences of three 10th Special Forces Group officers who saw the struggle Special Forces is facing in transitioning focus from the Global War on Terror to strategic competition, often in grey zones or peripheral theaters. As we experienced this challenging transition through the lens of the Arctic, our research question started at the tactical level. It addressed how U.S. Army Special Forces units should train, validate, and equip themselves to provide SOF specific capabilities in the Arctic region in an operational environment defined by strategic competition. However, after several months of research and observation, we realized this is not a tactical level issue, nor is it even SOF or Army specific. At the strategic level, both in the DOD and legislative government, there is a lack of clear guidance and funding for Arctic security and military capability. Because of this, the operational and tactical levels are not prioritizing Arctic readiness and do not possess adequate Arctic capability or understanding of the desired end state.

Findings:

It is important to note that these findings and recommendations are not specific to the winter. The Arctic is a four-season region that often presents more challenges in the summer than in the winter.

- Arctic capability and readiness are not clearly defined by the DOD and Army.
- DOD Arctic readiness requires Special Operations support.
- Strategic level leaders do not have a clear understanding of U.S. SOF (lack of) capabilities in the Arctic.

- USASOC units lack the manning, training, and equipping to campaign effectively in the Arctic.
- USASOC units lack adequate capabilities to successfully partner with our High North allies in Arctic and sub-arctic environments.
- The indigenous approach used by the military in WWII to deter adversaries in defense of the homeland in Alaska was effective.[1]
- The Alaska National Guard and Alaska State Defense Force currently lack adequate composition and disposition to support defense of the homeland.
- Indigenous communities of northern and western Alaska are vulnerable to adversarial influence and lack U.S. Government support.

Recommendations:

- DOD and HQDA should more clearly define Arctic readiness and capability to provide a clear understanding of what is expected of units to operate in the Arctic region.
- SOCOM and USASOC should publish Arctic guidance to ensure tactical units clearly understand the desired end state for Arctic readiness.
- Strategic level commands should allocate Arctic-specific funding to enhance the ability for units to prioritize Arctic readiness.
- USASOC units should train and validate Arctic skills in the U.S. prior to partnering with Nordic forces in the High North.
- The indigenous approach to homeland defense previously used in Alaska should be implemented by Arctic capable SOF forces today.

[1] ARSOF's indigenous approach is understood to mean working by, with, and through local partners and is not solely focused on a narrower definition of 'indigenous' focused on native communities (native Alaskan communities in the NORTHCOM and homeland defense context and the Sami peoples of Northern Europe in the EUCOM context).

- USASOC should increase its footprint, training, and multi-domain operations in Alaska to improve readiness and increase homeland defense. This should include requisite permissions and authorities to be effective in Alaska.
- SOCNORTH should continue working to develop clear C2 capabilities to alleviate confusion of working with PACOM soldiers in a NORTHCOM area with effects in the EUCOM area of responsibility.

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I. INTRODUCTION

This chapter is mostly derived from the authors' previously published capstone work: Barrett Martin, Michael Tovo, and Devin Kirkwood, "The Unconventional Approach to Arctic Security: Increasing Domain Awareness through the U.S. Army Special Operations Forces' Indigenous Approach," *Journal of Indo-Pacific Affairs*, Air University Press 5, no. 5 (October 3, 2022): 124–36, https://www.airuniversity.af.edu/JIPA/Display/Article/3171599/the-unconventional-approach-to-arctic-security-increasing-domain-awareness-thro/.

It is no secret that the Arctic is heating up in the wake of climate change—figuratively and literally. Despite a history characterized more by cooperation than competition, the shrinking ice shelves and rising temperatures are fueling a race to secure economic benefits.[1] The Russian Federation is pursuing monetizing a commercially viable Northern Sea Route and has also voiced extensive claims to the vast deposits of oil and natural gas as well as base, precious, and rare earth metals. Paranoid about the deleterious security effects threatening Russia's economic future posed by the opening of the Arctic, Moscow has invested billions into refurbishing Soviet-era infrastructure and maintaining large Arctic-capable formations and capabilities, though its Arctic capabilities are likely being degraded to some extent by Russia's ongoing invasion of Ukraine.[2] Equally alarming, Beijing has forced the People's Republic of China's way into the Arctic through legal frameworks (Arctic Council and international treaties such as the UN Convention on the Law of the Sea) and aggressive investment projects under China's Polar Silk Road campaign.[3]

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[1] Henrik Breitenbauch, Kristian Soby Kristensen, and Jonas Groesmeyer, "Military and Environmental Challenges in the Arctic," *Carnegie Europe*, New Perspectives on Shared Security: NATO's Next 70 Years, November 28, 2019, 45–50, https://carnegieendowment.org/files/NATO_int_final1.pdf.

[2] Eugene Rumer, Richard Sokolsky, and Paul Stronski, *Russia in the Arctic - A Critical Examination* (Washington, DC: Carnegie Endowment for International Peace, 2021), https://carnegieendowment.org/2021/03/29/russia-in-arctic-critical-examination-pub-84181.

[3] Anu Sharma, "China's Polar Silk Road: Implications for the Arctic Region," *Journal of Indo-Pacific Affairs* 4, no. 7, Special Issue (October 2021), 67–86, https://www.airuniversity.af.edu/.

Over the past few years, the Department of Defense (DOD) has recognized the threat posed by U.S. strategic competitors in this region and crafted Arctic strategies to address U.S. current shortfalls.[4] Yet, in an era defined by increased fiscal constraints and potentially emerging crises with Russia and China, the question for U.S. leaders has become: What level of investment is necessary to effectively compete in the Arctic? Further, what are the specific requirements of each of the services in what is primarily a maritime domain, characterized by remote communities and scant infrastructure? The services' published strategies are not widely inclusive of special operations forces (SOF) despite the challenges of the Arctic being ripe for SOF's unique traits and increased return on investment in austere environments.[5] The Army SOF (ARSOF) enterprise provides unique capabilities to the joint force to buy down risk by leveraging indigenous populations to provide domain awareness, strengthen relationships, and build logistical networks. This value proposition is especially relevant in a theater of operations that will always be peripheral to U.S. strategy, strains logistical systems, and has a high barrier to entry in terms of specialized supplies, equipment, and training.

[4] "Report to Congress Department of Defense Arctic Strategy" (Office of the Under Secretary of Defense for Policy, June 2019).

[5] United States Army, "Regaining Arctic Dominance: The U.S. Army in the Arctic" (Chief of Staff Paper #3, Headquarters, Department of the Army, 19 January 2021), https://www.army.mil/.

II. LITERATURE REVIEW

In evaluating numerous DOD strategic guidance and policy documents, including the National Defense Strategy, National Security Strategy, National Defense Authorization Act, as well as the Arctic strategy for the DOD, Army, NORTHCOM, and INDOPACOM, there are many obvious commonalities and focuses, such as an emphasis on multi domain operations (MDO) and domain awareness to compete in the arctic. However, there is also a commonality in the lack of emphasis and specificity on the integration of SOF into the various arctic strategies and guidance. Based on this, there is a strong demand signal for SOCOM and USASOC to subsequently create their own Arctic strategy. Without further specificity, not only does it leave SOF leaders to make their own interpretations and guidance at the unit level for Arctic strategy, but it also makes it easy for SOF to do little in integrating into the Army and DOD's Arctic strategy.

Although the NDS and NSS do not provide prescriptive guidance, the most recent versions of each do emphasize the importance of increasing Arctic readiness, domain awareness, and improving our relationships with our Arctic partners and indigenous communities.[6] These highest levels of national strategy identify the Arctic as an area of increased competition and stress the importance of not escalating tensions.[7] SOF fits perfectly in such geopolitically sensitive environments and could be used to meet this intent. Additionally, the FY23 NDAA recommends creating an Arctic specific validation pathway for Army units and specifically highlights the need to increase SOF capability in the Arctic and ensure SOF is included in the Arctic Security Initiative.[8]

The White House's October 2022 National Strategy for the Arctic Region highlights the relevance of this capstone by providing an overall vision for the US's

[6] White House, *National Security Strategy* (Washington, DC: White House, 2022), 44–45, https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf.

[7] National Defense Authorization Act for Fiscal Year 2023, Pub. L. No. H.R. 7900 (2022), 16, https://www.congress.gov/bill/117th-congress/house-bill/7900.

[8] National Defense Authorization Act for Fiscal Year 2023, 260–61.

interests and priorities in the Arctic region over the next 10 years. Moreover, SOF can incorporate two of the four pillars (security and international cooperation) outlined in this strategic guidance into our own guidance and strategy in the region. This document is also one of the few that mentions the value of consulting and coordinating with the indigenous populations of the Arctic, specifically in Alaska. The native tribes and communities in the Arctic should be a focal point for SOF's value in the region, specifically in Alaska.[9]

The 2019 DOD Arctic Strategy provides the strategic guidance needed for our capstone to tie SOF's value proposition in the region directly to overarching Arctic guidance. The document states that SOF must be a ready capability to compete below the level of armed conflict in the Arctic. Our capstone relied on such guidance and specificity to leverage SOF's need to improve Arctic readiness. Although there was not substantial substance in this strategy for SOF, it opens the opportunity for SOF to create its own strategy nested with these broader standards.[10]

The 2021 Army Arctic Strategy, Regaining Arctic Dominance, lacks clear understanding of what Arctic capable and Arctic ready means in terms of unit preparedness. Furthermore, it fails to adequately define the Arctic as a region rather than the five separate environments it includes in the strategy. This document also lacks specificity for SOF employment in the Arctic and does not mention USASOC at all.[11]

The USNORTHCOM Commander, GEN VanHerck's testimony to the Senate Armed Services Committee in March 2022 included statements on Arctic readiness. This capstone incorporated many highlights from the testimony to show the Geographic Combatant Commander's priority and need on accelerating the implementation of Arctic

[9] White House, *National Strategy for the Arctic Region* (Washington, DC: The White House, 2022), https://www.whitehouse.gov/wp-content/uploads/2022/10/National-Strategy-for-the-Arctic-Region.pdf.

[10] Office of the Under Secretary of Defense for Policy, *DOD Arctic-Strategy* (Washington, D.C.: Office of the Under Secretary of Defense for Policy, 2019), https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF.

[11] Headquarters, Department of the Army, *Regaining Arctic Dominance* (Washington, DC: Headquarters, Department of the Army, 2021), https://www.army.mil/e2/downloads/rv7/about/2021_army_arctic_strategy.pdf.

strategies and initiatives. These points can provide credibility for SOF in the Arctic since NORTHCOM is responsible for the Arctic region.[12]

This capstone also relied heavily upon background information and knowledge gained from the Congressional report on Arctic changes. The changes over the past several years and decades in the region are what makes it such a ripe environment for strategic competition and geopolitical sensitivities. This March 2022 report highlights many of these factors that are important for a comprehensive understanding of the Arctic and why it is important from a military capability standpoint. Anyone studying Arctic matters should start by reviewing this comprehensive document to ensure a baseline shared understanding of the region and why it is significant for the military to increase capability and disposition in the Arctic.

In addition to the lack of inclusion of SOF in many of the guiding documents, there also seems to be a lack of SOF representation in organizations that are becoming focal points for Arctic security. Organizations such as the newly established Ted Stevens Center for Arctic Security and the newly formed position of Deputy Assistant Secretary of Defense for Arctic and Global Resilience are ripe for SOF integration and should be sought after for future relationships and influence. It is also likely that these new Arctic focused entities will eventually bring an increase of focused updates and improvements to many of the DOD's Arctic strategies.

[12] NORAD & USNORTHCOM, *NORAD and USNORTHCOM Strategy Executive Summary* (Colorado Springs, CO: NORAD & USNORTHCOM, 2021).

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III. DEFINING ARCTIC CAPABILITY

This chapter is mostly derived from the authors' previously published capstone work: Martin, Tovo, and Kirkwood, "The Unconventional Approach to Arctic Security: Increasing Domain Awareness through the U.S. Army Special Operations Forces' Indigenous Approach," *Journal of Indo-Pacific Affairs* 5, no. 5 (October 3, 2022), 124–36. https://www.airuniversity.af.edu/JIPA/Display/Article/3171599/the-unconventional-approach-to-arctic-security-increasing-domain-awareness-thro/.

One of the underlying issues of the Arctic problem set is the lack of understanding of the environment and the capabilities required to survive, thrive, and operate in harsh Arctic conditions. If you ask five military leaders what *Arctic capable* means, you will likely get five different answers. In the Army's 2021 Arctic strategy, *Regaining Arctic Dominance*, the term *Arctic* in Arctic-capable/ready was defined as five distinct environments: Arctic (all-season), subarctic, extreme cold weather (ECW), high altitude, and mountainous.[13] While some similarities exist between these harsh environments, they are not analogous. It is vital to understand the differences between these five environments and their requirements. Combining these environments under one term and expecting soldiers and units to achieve or maintain a state of readiness at each echelon is unfeasible.

It is too much to ask of one unit to maintain a validation pathway that includes all five of these environments. For example, in Army Special Forces (SF), each SF company has a team designated as a "mountain team" and is required to maintain a "level-1 qualification" for military mountaineering. Even the most qualified mountain team in the Special Forces Regiment would not be considered Arctic-capable. Becoming Arctic-capable requires immersion in the actual conditions throughout the entire training and validation pathway, as our Scandinavian partners do. This requirement has severe implications for the length of time a unit can maintain a required state of readiness, particularly if that unit is not stationed in an environment that allows for constant immersion.

[13] United States Army, "Regaining Arctic Dominance."

Furthermore, when most military leaders hear the term *Arctic*, they usually think of the words: cold, frozen, and winter. However, the Arctic is an all-season environment, where summer and winter present equally complex, but distinct, operational challenges. Additionally, the Arctic region includes different types of terrain depending on the area of operations—Alaska, European High North, and so forth. Being Arctic-capable in one region does not mean a unit is fully prepared for others. For example, units that train in the High North of Scandinavia will need to adapt their TTPs for operations in northern Alaska or Canada due to vast differences in the environment and conditions, even during the same seasons. When examining the training opportunities for units in an Arctic environment, nearly all training venues are below the Arctic Circle and, therefore, are considered subarctic. In other words, most Arctic training does not occur in an Arctic environment. This includes the Northern Warfare Training Center in Alaska and the Subarctic Warfare Center in Arvidsjaur, Sweden.[14] Furthermore, most U.S. units only train at these subarctic venues in the winter, when mobility is much easier and conditions are more favorable in many ways.

ARSOF requires more training, equipping, and Arctic experience than existing courses currently provide. The Winter Warfare Detachment at 10th Special Forces Group (Airborne) implements a Winter Warfare Course to expand team-level winter operational capabilities. The course trains individuals on how to shoot, move, communicate, and survive in a winter operating environment and is used as a training and validation exercise for SF teams deploying to the High North or Arctic regions.[15] Yet, while winter warfare and Arctic warfare have some similarities, they are not analogous. The skills required to survive in the Arctic cannot be truly trained or exercised in Colorado or Montana. For Naval Special Warfare, SEAL Qualification Training students are sent to the Special Operations Forces Cold Weather Maritime Detachment at Kodiak, Alaska, to learn how to

[14] "Northern Warfare Training Center," U.S. *Army*, 13 November 2018, https://www.army.mil/; and "U.S. Marines Participate in the Swedish Basic Winter Warfare Course," *Defense Visual Information Distribution Service*, 22 January 2018), https://www.dvidshub.net/.

[15] Public Affairs Office, 10th Special Forces Group (Airborne), "WWD Introduces New Winter Training," *Fort Carson Mountaineer*, 16 April 2021, https://www.fortcarsonmountaineer.com/; and "Ted Stevens Center for Arctic Security Studies: DOD's Newest Regional Center" (information paper, U.S. Department of Defense, 10 March 2022).

operate in moderately cold maritime environments. None of these training locations are in the Arctic, and they only provide minimal Arctic proficiency to units.

One of the hurdles to changing our Arctic training posture is the misperception that cold weather and the Arctic are the same. The Arctic as an environment is not confined to the extreme cold and snow, which the collective consciousness defaults to, but is characterized by extremes—near-constant darkness and cold in the winter juxtaposed with near-constant light and impassable terrain in the summer months. Leaders must understand that to have a functional capability in the Arctic, operators must be prepared for year-round operations and will find that in certain aspects, especially from a mobility standpoint, the summer may be more challenging than the winter.

Senior leaders must consider the difficulties inherent in requiring a unit to maintain proficiency in multiple related yet distinctly different capabilities. Furthermore, distinct, Arctic-capable/Arctic-ready definitions must be understood across the joint force. Each service should have a standardized validation pathway for units expected to be Arctic-capable. This standard should include Arctic-specific tasks at individual and unit (collective) levels and eventually be institutionalized in doctrine and recognized by partner nations to qualify U.S. units for participation in joint exercises in other Arctic nations. Currently, most U.S. units must attend a Nordic nation's Arctic/winter warfare course as a prerequisite to any Arctic joint exercises in the High North.[16] As an Arctic nation, the United States can leverage Alaska's strategic location not only as a power-projection location but also as a world-class training ground to prepare for expeditionary deployments.

[16] "Exercise Cold Response 2022—NATO," *North Atlantic Treaty Organization*, 7 March 2022, https://www.nato.int/.

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IV. THE UNCONVENTIONAL APPROACH TO ARCTIC SECURITY

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A. VIGNETTE

The year is 2025, and the Arctic remains an arena of increasing strategic competition over economic and territorial gains. Along the western slope of Alaska, a small indigenous tribe is located in the remote village of Teller, which is less than 50 miles from the Russian coastline and is home to approximately 250 residents. Not far from Teller, a Chinese-funded drilling company has agreed to help develop Alaska's liquefied natural gas sector through a private deal with an Alaskan Native corporation. Over the years, the village infrastructure has slowly deteriorated due to global warming and the lack of government funding to correct the many problems caused by thawing permafrost and soil erosion.[17] *The attitude of the population toward the U.S. government is neutral due to their limited engagement with state and federal entities over the past few years and their increasing feeling of isolation. The continued effects of climate change in degrading their already inadequate infrastructure has exacerbated such ambivalence.*

Last week, the Chinese drilling company sent a small delegation to the village to build a relationship and ensure the company's work would not negatively affect the village. During the meeting with the village elders, an agreement was made to allow some Chinese employees to live among the population of Teller. In return, the company would provide

[17] Ming Xiao, "Infrastructure and Community Resilience in the Changing Arctic: Status, Challenges, and Research Needs," *Arctic Institute Center for Circumpolar Security Studies*, 23 March 2021, https://www.thearcticinstitute.org/.

funding to upgrade the village infrastructure. The deal is a 10-year contract that will allow the Chinese-backed company to maintain and expand Chinese influence throughout the region. While it may seem benign, this relationship could be the beginning of a malign actor presence that will fester throughout Alaska and further isolate the many indigenous villages in the region from the U.S. government if left unchecked.

Although this story is fictional, it could become a reality if the DOD does not start engaging more effectively with the many vulnerable indigenous populations throughout the Alaskan coastline before our adversaries do. Countering malign influence would benefit from reexamining and leveraging a crucial piece of American history—the DOD's use and reliance on the indigenous approach. In the Arctic, this was done with the Alaskan Scouts during the Second World War. The Alaskan Scouts were a volunteer military organization that employed more than 6,000 Native Alaskans to conduct surveillance-and-support activities along the remote coastlines. There are a multitude of opportunities in Alaska that would not only increase U.S. national security posture but also allow ARSOF soldiers to refine their Arctic tactics, techniques, and procedures (TTP). These refined skills would also help build ARSOF credibility and capability for combat operations in Europe while training and exercising in the High North.

B. CAPABILITY GAPS

Over the past few years, U.S. policy makers and military leaders have released Arctic-specific strategies to address the unique environmental challenges in the strategic nexus between three geographic combatant commands: U.S. Northern Command (USNORTHCOM), U.S. Indo-Pacific Command (USINDOPACOM), and U.S. European Command (USEUCOM).[18] Yet, there is still a massive gap between the U.S. military's current capabilities and its aspirations to compete in the Arctic. This is equally true across conventional and special-operations formations, as the past 20 years of focus on the Global War on Terrorism led to nearly complete atrophy in the military's ability to operate in the Arctic. Many of the skills and lessons learned during the Cold War have been lost; for

[18] Hall, "2019-DOD-Arctic-Strategy."

example, the regular use of Nordic-style skis for winter training by the 10th Special Forces Group and the consistent practice of high-frequency waveform communications by most ground force units.

Despite increasingly high-profile rhetoric about the region's strategic importance, the military's recent execution of training and operations—such as Arctic Edge, Vigilant Shield, and Arctic Warrior—in the Arctic might best be classified as *Arctic tourism*. Military units deploy for a few weeks to train but do not really build true Arctic capabilities. In an environment with as many demands and challenges in the summer as in there are in the winter, military Arctic tourism does little to build the capabilities needed for military forces to survive, thrive, and effectively operate in the harsh Arctic environment, especially for prolonged durations. The increased mentions of Arctic security issues, challenges, and opportunities in the various defense policy, planning, and strategy documents have yielded some progress; for example, the 10th Special Forces Group in Colorado now has a winter warfare training course, the 11th Airborne Division has been reactivated in Alaska, and the Ted Stevens Center for Arctic Security Studies is standing up in Anchorage.[19] Yet, there is still more effort needed to develop a true operational capability in the Arctic.

To effectively compete in the Arctic, leaders, and units across the conventional forces and ARSOF must prioritize manning, training, and equipping their Arctic-focused formations to achieve true, all-season Arctic capability. As the United States is one of eight Arctic nations, this current capability gap represents a gap in the country's ability to properly support the 2022 *National Defense Strategy*'s (*NDS*) top priority: defense of the homeland, particularly for Alaska. Furthermore, the Arctic capability gap must be bridged to fully comply with all four *NDS* priorities.[20]

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[19] Public Affairs Office, "WWD Introduces New Winter Training"; and "Ted Stevens Center for Arctic Security Studies: DOD's Newest Regional Center."

[20] *NDS* Priorities:

1. Defending the homeland paced to the growing multi-domain threat posed by the PRC.
2. Deterring strategic attacks against the United States, allies, and partners.
3. Deterring aggression while being prepared to prevail in conflict when necessary.
4. Building a resilient joint force and defense ecosystem.

It is also worth noting that these priorities apply not only to the homeland and the Alaskan Arctic but also to the Canadian Arctic and the European High North—our Scandinavian and Baltic partners—from whom we can learn a great deal. Our partners enjoy a benefit that most of our military does not: their service members grew up in an Arctic or subarctic environment and have lived there for most of their lives. They possess an inherent capability that perhaps only our Alaskan Natives have in the United States. Many partner-nation units consciously designed their manning, training, and equipping structures to meet the needs of the environments in which they operate. Their lifestyles reinforce baseline skills essential to operating in that environment. To illustrate the different mind-sets, it is helpful to note the difference between the United States and our Arctic partners. When it snows six inches in Ft. Carson, Colorado, the commanding general will close the post to mitigate safety risks, and soldiers stay home and enjoy family time. When it snows two feet on bases in Norway, Sweden, and Finland, the soldiers ski to the ranges and ride snowmobiles to training events. The Arctic conditions are simply part of their training, not a barrier to it.

Although most other Arctic nations have a much higher baseline for Arctic capabilities in their conventional and special operations forces, they also have designated units that are mission-aligned to the Arctic and subarctic environments and specifically manned, trained, and equipped to operate there and provide domain awareness. The Canadian Rangers and Danish Sirius Patrol are examples of Arctic-focused small military units for which the U.S. DOD simply does not have an equivalent. However, the operational utility of these units is well known and illuminates a potential gap in the current U.S. force structure. Although vastly different, the two example units are focused on conducting surveillance and sovereignty patrols in the most remote parts of their Arctic territories and serve as their nations' eyes and ears in sparsely inhabited lands.[21] Additionally, European High North countries work closely with their Home Guard units to

[21] Office of the National Defence and Canadian Armed Forces Ombudsman, Government of Canada, "Canadian Rangers," January 2022, https://www.canada.ca/; and Denver David Robinson, "The World's Most Unusual Unit," *Christian Science Monitor*, June 2016, https://www.csmonitor.com/.

facilitate domain awareness and readiness in remote regions and have numerous units that maintain a high level of Arctic capabilities year-round.[22]

The current deficit of capabilities between U.S. forces and those of our Arctic partners is not only a detriment to our credibility and rapport, but also to the numerous opportunities for training and building domain awareness through bilateral and multilateral training events in the High North. Although the European High North is very different from the North American Arctic, many parallels still make our partners' understanding of the environment relevant to the USNORTHCOM and USEUCOM areas of responsibility. Uniquely, the U.S. Army can train in an environment on home soil that is in many ways more challenging than what it might experience in expeditionary deployments to the European High North.

C. ARSOF'S VALUE PROPOSITION

ARSOF's first and most important value proposition is its inherently small footprint, which is ideal for operating in remote, harsh, and geopolitically sensitive areas. The Arctic has traditionally been defined more by cooperation than by competition. Avoiding the misperception of U.S. militarization of the Arctic is essential to international credibility in the rules-based Arctic.[23] SOF have traditionally been used in peripheral theaters or to support conventional operations that focus on the primary war-fighting objectives. Second, ARSOF has been the force of choice to address the strategic opportunities resident in the indigenous communities and through combined operations with international partners. Engagement and integration with the indigenous communities in Alaska and with our partners in Northern Europe not only provide significant benefits in a defensive posture, but might also be leveraged to put additional pressure on the Russian Federation as these tribal communities usually have close cross-border relationships with communities on both sides of the Bering Strait or across the High North into Russian

[22] Forsvaret, Norwegian Armed Forces, "The Norwegian Home Guard," n.d., https://www.forsvaret.no/.

[23] Hall, "2019-DOD-Arctic-Strategy."

territory.[24] With a population so vulnerable to influence, Arctic Natives must see the United States as a more legitimate influence than they do its adversaries in the region. Third, the inherently expeditionary nature of ARSOF units allows for smaller logistical requirements, which can be fully supported by air movement and is therefore ideal in an environment that makes sustained logistics for large formations extremely difficult. In comparison, most conventional land forces in the Arctic are constrained to the limited road networks year-round, especially in the summer, as the Arctic terrain turns to swamp-like conditions that make land-based mobility and logistics extremely restrictive. Finally, due to the small size of ARSOF units, training and equipping these formations for Arctic operations will be inherently less expensive than for large-scale conventional forces.

While ARSOF plays a critical role across the spectrum and phases of conflict, the preconflict competition phase is essential to its utility throughout the remaining phases. It is a SOF truth that, "Competent special operations forces cannot be created after emergencies occur."[25] This axiom is equally applicable to the relationships and skill sets that underpin ARSOF effectiveness across the range of special warfare tasks and highlights the need to increase U.S. readiness in the Arctic before a crisis occurs in that region. In the event of large-scale combat operations against a near-peer competitor, SOF is unlikely to be the main effort; however, the Arctic is also unlikely to feature as a primary zone of future conflict. Yet SOF can and should be used as a hedge to mitigate strategic and operational risk in the region and to achieve national security objectives in what will likely be a peripheral theater. The way to ensure success is to operate in the Arctic alongside indigenous populations and international partner forces. This unconventional approach, however, will require different investments and shifting ARSOF priorities from the current practice of Arctic tourism into a more persistent presence by designated forces to build a true Arctic capability within U.S. Special Operations Command.

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[24] Fen Montaigne, "Tracing Alaska's Russian Heritage," *Smithsonian Magazine*, 7 July 2016, https://www.smithsonianmag.com/.

[25] U.S. Special Operations Command, "SOF Truths," n.d., https://www.socom.mil/.

D. RECIPROCAL OPPORTUNITIES

Native Alaskans represent approximately 15 percent of the total population of Alaska, with more than 110,000 people.[26] This population is distributed across more than 225 communities, speaking more than 20 languages, and classified into five ethnic groups. Many of these communities exist along the western and northern coasts of Alaska, along the Bering Strait and the Arctic Ocean, and comprise the largest percentage of military veterans per capita among all U.S. demographics.[27] Numerous indigenous communities have poor or failing infrastructure, are isolated from the rest of the state, and are a prime target for malign actors seeking to undermine the United States. The severe lack of infrastructure represents an opportunity for adverse influence by our strategic competitors and a reciprocal opportunity for the U.S. DOD. Investing in indigenous Alaskan communities is a chance to deny competitor influence, rebuild trust with Native Alaskan communities while establishing multiuse infrastructure with multi-domain effects, and increase our military's Arctic readiness. As U.S. Senator Lisa Murkowski (R–AK) recently stated,

> Infrastructure is one of the foundations of modern society, impacting everything from food security, health care, education, commerce, and our ability to operate militarily. It is no different in the High North. However, in many parts of the Arctic, infrastructure is often poor or simply non-existent, which is detrimental and unfair to its residents, and should be unacceptable to us as an Arctic nation.[28]

These communities, accessible almost exclusively by air or sea, fit squarely into Senator Murkowski's diagnosis and are precisely the environments in which ARSOF units thrive. The U.S. government's force of choice for operating through or with indigenous populations is Army Special Forces, more commonly known as Green Berets. Working with indigenous populations is the cornerstone of Special Forces. Since their inception in

[26] U.S. Census Bureau, QuickFacts: Alaska," n.d., https://www.census.gov/.

[27] National Congress of American Indians, "Veterans," n.d., https://www.ncai.org/.

[28] Lisa Murkowski, "U.S. Engagement in the Arctic, Present and Future," Wilson Quarterly, 18 February 2022, https://www.wilsonquarterly.com/.

1952, Green Berets have conducted these types of missions worldwide to achieve U.S. national security objectives.

ARSOF can engage with Alaskan Natives to leverage their ability to act as local eyes and ears in support of U.S. national security, while simultaneously learning how to survive and operate in some of the harshest conditions in the world. This role could be the beginning of a potential redux of the Alaskan Scout program, focused on increasing domain awareness, deterring malign actors in the homeland, and strengthening the relationship between the government and these populations. This reciprocal relationship of an indigenous approach would not only strengthen U.S. national security and assist in rebuilding military Arctic capability but could also help address critical infrastructure issues in these communities.

At its least ambitious level, the indigenous approach would leverage the environmental and survival knowledge that is resident in Native Alaskan communities. This basic survival knowledge would go a long way toward rebuilding the foundational skills that ARSOF operators will need to operate in an Arctic environment. Today, ARSOF forces are not manned, trained, or equipped to survive, compete, and dominate in this or similar environments. Things as simple as how to conduct route planning, types of equipment to bring, movement over terrain, and medical care in the Arctic are things that indigenous communities have developed and mastered over centuries; yet, outside of individual efforts, that experience has not been translated into military TTPs or standard operating procedures (SOP). Nor has it been widely integrated into the Alaskan National Guard, whose footprint has been reduced to a presence mostly concentrated around Anchorage and Juneau.

An effective method would be to create training lanes prior to large-scale exercises, like Arctic Edge or Arctic Warrior, to learn the foundational skills needed for the operational environment, as opposed to the current approach of training Arctic skills in strictly alpine environments in Colorado or Montana. This could be further developed in the exercises themselves, by creating lanes in partnership with the indigenous communities that provided the foundational training, and then adding supplemental training to reinforce those foundational skills. At Arctic Edge 2022, no SF soldier spent more than seven

consecutive hours outdoors. With guidance and mentorship from communities that have thrived in this landscape for millennia, trainers can certainly increase the capabilities of our formations, while addressing commanders' risk considerations which, while not out of place, have degraded Arctic training opportunities in the past. The incorporation of tactical level elements with a diverse set of indigenous communities would also increase the command's understanding of the operational environment to better prioritize the small-scale construction funds that usually accompany large exercises. These projects could and should be dual use to provide value within the exercise and to the Natives afterward.

In a slightly more ambitious scenario, the lanes within exercises would prepare indigenous communities that participate to perform the domain-awareness tasks, critical infrastructure defense, and logistical and mission support activities they would be well suited to perform in a real-world confrontation with strategic competitors. This could either be an overt goal of the exercise or an inadvertent consequence of hiring Alaskan Natives as role-players within the exercise. In the most ambitious scenario, there would be continuous SF presence in Alaska, either in the form of an Arctic warfare training center run by the Special Warfare Training Center and School or by operational SF units (either active or National Guard) permanently stationed within the state.

In all these scenarios it is important to remember that relationship building, and more importantly sustainment, requires long-term investments of time, effort, and resources. It is hard to maintain effective relationships in a place as remote as Alaska in general, and its coastal communities in particular, when there is no permanent presence or habitual unit affiliation. Building these habitual relationships would help decrease the vulnerability of the Native populations and further prevent malign influence, like the example mentioned in the above vignette, from festering in the homeland.

E. STRATEGIC STANDPOINT

With the recent releases of Arctic strategies and legislative initiatives from Congress, interest in the Arctic is increasing within the defense community. Senators from four states outside of Alaska have expressed interest and concern in the DOD's military

readiness in the Arctic in the past few years.[29] Yet, during a time when the Russian invasion of Ukraine is ongoing and tensions over Chinese saber-rattling over Taiwan continue, the Arctic has seemingly taken a backseat as a genuine priority within the DOD. This is reflected in the lack of prescriptive guidance in Arctic strategy, as well as the lack of funding.[30] As the combatant command responsible overall for the Arctic line of effort in the DOD, USNORTHCOM recently submitted a classified Arctic capabilities assessment that highlights specific gaps and areas for development within the DOD's capabilities in the Arctic. However, with so many competing priorities across the services, urgency supersedes importance, and the ability to prepare for future challenges rarely gets the attention it deserves. This is not meant to disparage the efforts of the Arctic Domain Awareness Center under the Department of Homeland Security or the recently established Ted Stevens Center for Arctic Security Studies.[31] The Ted Stevens Center has been allocated more than USD 10 million in funding this fiscal year based on the 2021 National Defense Authorization Act to meet the three defense objectives outlined in the 2019 DOD *Arctic Strategy*: defend the homeland, compete when necessary for the balance of power, and ensure common domains remain free and open.[32] Nevertheless, the units of action for the Arctic remain mostly unaffected in the near term.

Aside from the importance of the Ted Stevens Center, numerous leaders among the Joint Staff agree on two additional aspects of the military in the Arctic. First, we must not discount a land-based force's significance in the Arctic. Although most domain awareness in that environment will come from the sea and the air, the indigenous approach can only be accomplished through the land. The center of gravity in the Arctic remains the population and infrastructure, both of which are vulnerable. Second, as in many cases

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[29] Rick Larsen, "U.S. Talk on Arctic Must Be Matched with Investment," *Huffington Post*, 3 September 2016, https://www.huffpost.com/.

[30] Hall, "2019-DOD-Arctic-Strategy."

[31] "Arctic Domain Awareness Center Overview to U.S. Coast Guard D17" (presentation, University of Alaska, 15 February 2019), https://arcticdomainawarenesscenter.org/.

[32] "William M. Thornberry National Defense Authorization Act for Fiscal Year 2021" (Star Print, 1 January 2021), https://www.congress.gov/; and "Ted Stevens Center for Arctic Security Studies: A U.S. Department of Defense Regional Center; Approved Center Implementation Plans, Objective and Milestones (POAM)," 9 February 2022.

throughout history, ARSOF leads the way in military innovation. As demonstrated in Arctic Edge 2022, ARSOF forces experimented with numerous specialized skills and equipment in the Arctic to understand what works and what must be modified or changed to increase survivability and lethality.[33] Yet ARSOF is doing so as Arctic tourists with limited amounts of funding, authorities, and time spent in the environment.

[33] Daisy Bueno, "SOCNORTH Increases Arctic Capabilities During Arctic Edge 2022," *Defense Visual Information Distribution Service*, 7 April 2022, https://www.dvidshub.net/.

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V. CONCLUSION

This chapter is mostly derived from the authors' previously published capstone work: Martin, Tovo, and Kirkwood, "The Unconventional Approach to Arctic Security: Increasing Domain Awareness through the U.S. Army Special Operations Forces' Indigenous Approach," *Journal of Indo-Pacific Affairs* 5, no. 5 (October 3, 2022), 124–36. https://www.airuniversity.af.edu/JIPA/Display/Article/3171599/the-unconventional-approach-to-arctic-security-increasing-domain-awareness-thro/.

In an environment as challenging as the Arctic, it takes years to build military capabilities to a level that can effectively compete with and deter our adversaries. To truly increase domain awareness, rather than just survive, the DOD must pursue a policy of persistent presence by designated forces. Although the Arctic is not a uniquely SOF problem set, strategic leaders often consider SOF the force of choice in gray-zone competition.[34] As an enterprise, SOF must be better trained and equipped to operate in the Arctic to support national security objectives. The importance of the indigenous approach in building domain awareness and competing with our adversaries in the rules-based Arctic requires an immediate increase in ARSOF capabilities and the priorities placed upon them.

[34] Joseph L. Votel et al., "Unconventional Warfare in the Gray Zone," *Joint Force Quarterly* 80 (January 2016), https://ndupress.ndu.edu/.

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APPENDIX A. ARCTIC ECOSYSTEM POINTS OF CONTACT

See Appendix A Excel spreadsheet.

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

This is a sanitized version of the Arctic Ecosystem POC spreadsheet that was passed on to the next cohort of students taking this SOF Arctic capstone into its second year with AD4I. This version is sanitized to exclude names and contact information.

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APPENDIX B. AD4I SOF ARCTIC CAPSTONE POWERPOINT

See Appendix B PowerPoint presentation.

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

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APPENDIX C. CAPSTONE EVENT EXSUMS

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

A. HQDA ARCTIC WARGAME (10-16 FEB, 2022)

10th SFG(A) officers influence Army Arctic Strategy at the inaugural HQDA Arctic Wargame

MAJs Devin Kirkwood, Barrett Martin, and Mike Tovo, current 10th SFG(A) officers serving at the Naval Postgraduate School (NPS), represented USASOC during Arctic Dominance 2028 at the Army War College in Carlisle, PA from 10–16FEB22. During the HQDA G-35 led wargame, they planned and briefed USASOC's role throughout future competition, crisis, and conflict in the Arctic. They focused on SOF integration in Army Multi-Domain Operations (MDO) while generating options for senior leaders to implement SOF across multiple OPLANS and nested with the Army's "Regaining Arctic Dominance" strategy. During the Wargame, they worked alongside and briefed nine General Officers and numerous senior leaders from FORSCOM, TRADOC, USARAK, USARNORTH, USARPAC, USAREUR-AF, USASOC, AFC, AMC, AWC, USACE, HQDA G-5, CIA, MDTF, NGIC, AKNG, USASMDC, and ERDC, to ensure USASOC capabilities were integrated into future Army strategy and policy. The SOF integration capabilities with MDO in the Arctic will be part of a brief on 03MAR22 to inform SecArmy and CoSArmy of the results of the wargame and recommendations for updating the Army's Arctic strategy.

B. EXERCISE ARCTIC EDGE 22 (7-18 MAR, 2022)

MAJs Barrett Martin and Michael Tovo, observed exercises ARCTIC EDGE and ARCTIC WARRIOR across Alaska from 07–13 MAR 22 in support of our USASOC Force Modernization Cell-sponsored capstone project. We observed SOTF command and control operations headquartered in Ft. Wainwright Alaska as ODAs operated across Northern Alaska, conducting a wide range of SOF operational tasks. In Anchorage, our group observed SOCNORTH's JFSOC operations center as it conducted liaison with Alaska command (ALCOM) and exercised operational control of all SOF elements across Alaska. Separate discussions were also held with select members of the SOCNORTH staff to better understand SOCNORTH exercising, campaigning, and operational goals in the North American Arctic and high north. We also observed elements participating in ARCTIC WARRIOR, the conventional Army exercise at the Joint Pacific Multinational Readiness Center (JPMRC). During our time at the exercises, we also conducted a wide range of engagements with entities from the Northern Warfare Training Center (NWTC), Cold Regions Testing Center (CRTC), and a key leader engagement with MG Eifler, the commanding general of U.S. Army Alaska (USARAK). Additionally, we had the opportunity to meet with BG Brown, the commanding general of the Alaska State Defense Force (ASDF), as well as leadership from the Alaska National Guard. Both commands gave us capabilities briefs and highlighted vulnerabilities and shortfalls and discussed how they envisioned SOF could best be employed in Alaska to conduct training and support defense of the homeland priorities. Highlights of these engagements included a deep dive into the NWTC courses and their programs of instruction both current and historical. This provided good insight into critical Arctic warfare skills as well as converging interests and collaboration opportunities between conventional and SOF winter warfare and arctic warfare instructors.

C. UNIVERSITY OF ALASKA, FAIRBANKS (14-15 MAR, 2022)

MAJs Barrett Martin and Michael Tovo, conducted engagements with professors from the University of Alaska, Fairbanks (UAF) from 14–15 MAR 22 in support of our USASOC Force Modernization Cell-sponsored capstone project. Our team met with three professors at UAF: Dr. James Morton (prior service Special Forces officer and reserve LTC serving in ALCOM), Troy Bouffard (reserve MSG serving in ALCOM), and Sam Watkins (prior SF officer). These three individuals currently run the Center for Arctic Security and Resilience (CASR) and are in the midst of a Canadian-sponsored SOF Arctic project focused on research into future SOF requirements in the Arctic. They briefed their experiences in Alaska and the North American Arctic, provided an overview of Native Alaskan-related topics, and discussed their current research project. Our team presented our current research scope and discussed our proposed way ahead and potential collaboration points with the UAF team.

D. WINTER WARFARE SYMPOSIUM (9-12 MAY, 2022)

MAJs Barrett Martin, Michael Tovo, and Devin Kirkwood, participated in the 10th Special Forces Group Winter Warfare Detachment (WWD) symposium on Winter Warfare from 09–12 MAY 22 in support of our USASOC Force Modernization Cell-sponsored capstone project. The symposium consisted of international representatives of the Danish Army Winter Schoolhouse, the Swedish Sub-Arctic Warfare Training Center, and the Norwegian Army. The stated goal of the symposium was to share knowledge across the different counties to address specific logistical, organizational, and equipment issues currently being faced by 10th Special Forces group and to help validate and revise the current 10th SFG(A) WWD training approach. Each nation briefed its current Arctic/Winter Warfare training courses and the general programs of instruction. The 10th Group WWD then presented current USSF training progressions and then provided an in-depth walkthrough of all current US-issued winter and arctic equipment. The final day of the conference concluded with round-table discussions of different focus areas for further collaboration and improvement (medical, logistics, unit of action organization, communication, etc).

E. SOCNORTH COMMANDING GENERAL ENGAGEMENT (13 MAY, 2022)

MAJs Barrett Martin, Michael Tovo, and Devin Kirkwood, conducted a key leader engagement with the SOCNORTH CG, BG Satterfield on 13 May 22 in support of our USASOC Force Modernization Cell sponsored capstone project. We briefed BG Satterfield on our Arctic capstone project and outlined our projected deliverables, as well as provided a description of our observations at exercise ARCTIC EDGE. BG Satterfield described the overall perspective of SOCRNOTH on SOF in the Arctic from a homeland defense perspective as well as current SOCNORTH operations and exercises related to the Arctic. We also had a lengthy discussion of the SOF value proposition in the Arctic and the current capability gap faced by SOF in general and ARSOF in particular.

F. NATIONAL CAPITOL REGION ENGAGEMENTS (10-16 FEB, 2022)

MAJs Michael Tovo, Barrett Martin, and Devin Kirkwood conducted several key leader engagements throughout the National Capitol Region from 10–16 FEB 22 in support of our USASOC Force Modernization Cell-sponsored capstone project. During the visit to the Pentagon, we met with several entities from the Joint Staff with equity in the Arctic region, to include the Deputy Directorate for Special Operations, JS J23 Ms. Amanda Miller, Framework Secretariat JS J5 CDR Joachim Roed (NOR), LTC Matt McCloskey (CAN), Special Operations Low Intensity Conflict COL Keith Snook, Information Operations JS J39 Lt Col Jeff Nunez, Arctic Policy JS J5 DR John Goodin, Air Force Arctic Strategy AF J7 Ms. Kelly Reese and MAJ Josh Martin, Army Arctic Strategy Ms. Elizabeth Felling USA G5, and LTC Mark Lee USA G3 Special Operations Division. These engagements provided an opportunity to gain insight as to the prioritization of the Arctic at the strategic and policy level. In addition, we were able to inform other services not familiar with Special Operations and discuss the value of collaboration with SOF operations in the Arctic. It is important to note that the Coastguard was the only service at the time that had allocated funds towards the Arctic problem set.

Following the visit to the Pentagon we traveled to visit with Senator Dan Sullivan and Congressman Jimmy Panetta's office to help inform their offices of current Arctic operations, exercises, activities, and the value proposition of ARSOF in the Arctic. In addition to providing information, we were able to gain a better appreciation of their respective Arctic priorities, to include power generation, infrastructure development, and indigenous population engagements.

Additionally, we had a meeting at the CIA in Langley where we received numerous briefings from Arctic focused analysts to better understand the operational environment in each geographic region of the Arctic. We then traveled to the National Reconnaissance Office (NRO) to receive capability briefings on satellite ISR in the Arctic region.

G. KINGSTON CONSORTIUM INTERNATIONAL SECURITY (10-14 OCT, 2022)

MAJs Michael Tovo and Devin Kirkwood served as panelists at the Kingston Consortium on International Security (KCIS) Conference on International Competition in the High North from 10–14 OCT 22 in support of their USASOC Force Modernization Cell-sponsored capstone project. We presented our recently published article in the Journal of Indo-Pacific Affairs titled *The Unconventional Approach to Arctic Security: Increasing Domain Awareness through the U.S. Army Special Operations Forces' Indigenous Approach* as well as providing a brief presentation on the SOCOM enterprise in general and the ARSOF core pillars of value in particular. Over the course of the conference, we conducted a myriad of engagements and networking opportunities with presenters from Canada, the U.S., Norway, and representatives of indigenous communities in the North American Arctic.

H. SOCNORTH ARCTIC SYMPOSIUM (17-21 OCT, 2022)

MAJs Michael Tovo and Devin Kirkwood, participated in the inaugural SOCNORTH Arctic Security Symposium from 17–21 OCT 22 in support of their USASOC Force Modernization Cell-sponsored capstone project. The conference was attended by over two hundred personnel representing over one hundred organizations and six different nations. The event was also attended by multiple GO/FOs and SES leaders including the NORTHCOM Commander, NORTHCOM J3, and SOCNORTH Commander. Over the course of the week, there were a myriad of presentations from tactical level issues experienced by the individual operators through operational and strategic concerns, to presentations on better understanding the human terrain of both the North American and European Arctics. Throughout the week we conducted multiple informal engagements with allied SOF entities from Canada, Finland, Norway, Sweden, and Denmark in order to identify potential collaboration points as well as identify national strengths, weaknesses, requirements, and operational approaches to Arctic Warfare. The final day of the conference focused on working groups each focused on a different component of the SOCNORTH approach to conflict in the Arctic. Both members of our group played key roles within our respective working groups to help educate and shape the working groups based on our research into the SOF in the Arctic problem set.

APPENDIX D. HQDA WHITE PAPER

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

INFORMATION PAPER

Major Wm 'Barrett' Martin

Major Michael K. Tovo

Major Devin Kirkwood

25 Feb 22

SUBJECT: Nuance in Defining Arctic Capability

Purpose: This paper aims to help inform Army decision-makers on critical aspects of the implementation of the Army Arctic Strategy: *Regaining Arctic Dominance (2021)*. This paper is specifically about defining 'Arctic-Capable,' 'Arctic-Ready,' and the term 'Arctic' itself meaning Arctic, sub-arctic, high-altitude, mountainous, and extreme cold weather (ECW) as outlined in *Regaining Arctic Dominance.*

Background:

One of the outputs of the Arctic Dominance 2028 Wargame was to develop a recommendation on the size and scope of Arctic-capable forces. Throughout the wargame, multiple friction points were identified, two of which were particularly applicable to the above-stated output; both related to a shared understanding of terminology. The first was the confusion between 'Arctic-capable' and 'Arctic-ready' forces. The second was the appropriateness of the concept of Arctic capabilities and skills as outlined by *Regaining Arctic Dominance*.

Discussion:

In the Arctic Dominance 2028 Wargame, two classifications of readiness were discussed in Arctic operations: Arctic-capable and Arctic-ready. While similar in name, these terms represent significant differences in operational capability. Arctic-capable referred to units of action that are fully equipped with Arctic-specific equipment, are fully trained, and capable of sustained combat operations in an Arctic environment. Arctic-ready referred to units of action equipped for operating in the Arctic environment for short-duration missions; however, due to limited or episodic training, they cannot conduct sustained operations. Even with these definitions, there was some confusion, primarily stemming from the widely held understanding that 'ready' seemed to be the higher level of capability as it implied the ability for immediate employment. In comparison, 'capable' appeared to suggest the ability to conduct operations without the connotation of immediate readiness.

The second issue stemmed from the broad definition of Arctic skills outlined in *Regaining Arctic Dominance*. Throughout the document, the "Arctic" in Arctic-capable / ready was defined as five different environments: Arctic (all season), sub-arctic, extreme cold weather (ECW), high altitude, and mountainous. While some similarities exist between these harsh environments, they are not analogous. It is vital to understand the differences between these five environments and the requirements of each. Combining these environments under one term and expecting to achieve or maintain a state of readiness at each echelon is not feasible for any single unit.[35]

When most military leaders hear the term 'Arctic,' they usually think of the words: cold, frozen, and winter. However, the term 'Arctic' is an all-season environment where both summer and winter present equally complex but distinct operational challenges. Additionally, the Arctic region includes different types of terrain depending on the area of operations (Alaska, European High North, etc.). Being Arctic-capable in one region does

[35] Barrett Martin, Michael Tovo, and Devin Kirkwood, "The Unconventional Approach to Arctic Security: Increasing Domain Awareness through the U.S. Army Special Operations Forces' Indigenous Approach," *Journal of Indo-Pacific Affairs, Air University Press* 5, no. 5 (October 3, 2022): 124–36, https://www.airuniversity.af.edu/JIPA/Display/Article/3171599/the-unconventional-approach-to-arctic-security-increasing-domain-awareness-thro/.

not necessarily mean a unit is prepared for others. For example, units that train in the High North of Scandinavia will not be able to use the same Arctic TTPs in northern Alaska due to vast differences in the environment and conditions, even during the same season.[36]

It is too much to ask of one unit to maintain a validation pathway that includes mountaineering, ECW, high altitude, sub-arctic, and Arctic. Some units may retain the capability to conduct operations in two of the five environments but requiring more than that is not feasible. For example, in Army Special Forces, each SF Company has a team designated as a "mountain team" and is required to maintain a 'level 1 qualification' for military mountaineering. However, even the most qualified mountain team in the Special Forces Regiment would not be considered 'Arctic-ready.' Becoming Arctic-capable requires immersion in the actual conditions throughout the entire training and validation pathway. This requirement has severe implications for the length of time that a unit can maintain a required state of readiness, especially if that unit is not stationed in the environment to allow for constant immersion. Our Nordic partners are more proficient than the U.S. because they are constantly immersed in the environment and incorporate it into every phase of training. During the wargame, there was discussion of investing in indoor range facilities; this concept is entirely foreign to our Nordic partners as they ski to their training sites in the winter (a TTP used by 10th Group Soldiers prior to GWOT as well).[37]

When examining the training opportunities for units in an Arctic environment, nearly all training venues are below the Arctic Circle and, therefore, are considered sub-Arctic. In other words, most Arctic training does not occur in an Arctic environment. This includes the Northern Warfare Training Center (NWTC) in Alaska and the Swedish Sub-arctic Warfare Training Center (SWTC) in Arvidsjuar, SWE. If a unit trains and validates in one environment, they will not necessarily be well prepared for operations in the other. Major Barrett Martin experienced this firsthand after validating in the SWTC in Sweden and participating in exercise COLD RESPONSE in Norway in the winter of 2020 as a Detachment Commander. Later that same year, he participated in exercise VIGILANT

[36] Martin, Tovo, and Kirkwood.

[37] Martin, Tovo, and Kirkwood.

SHIELD in Deadhorse, Alaska. Despite having three months of Arctic training in the High North, MAJ Martin found his Detachment unprepared for the harsher environment of the Northern slope in Alaska. The terrain and environmental conditions on the Northern slope were drastically different and presented different operational challenges and limitations than the European High North, such as mobility and survival on ice instead of snow, lack of terrain and vegetation, high winds, etc.[38]

Senior leaders must consider the difficulties inherent in requiring a unit to maintain proficiency in multiple related yet distinctly different capabilities. Furthermore, there must be very clear, distinct, Arctic-capable / Arctic-ready definitions understood across the Army and Joint Force. The training and resources required to be 'Arctic-capable' as currently defined across the five environments described above are not feasible. The Army should have a standardized validation pathway for units expected to be Arctic-capable. This standard should include Arctic-specific METL tasks at individual and unit (collective) levels and eventually be institutionalized in the Army and recognized by our partner nations to qualify U.S. units for participation in joint exercises in other Arctic nations. Currently, most U.S. units must attend a Norwegian or Swedish Arctic / Winter Warfare course as a prerequisite to any Arctic joint exercises in the High North. As the greatest Army in the world, we should not depend on other nations to validate us in military training. Furthermore, we should not be seen as a liability in combined training in an Arctic environment. If the Arctic is truly a priority, the Army must adapt to properly man, train, and equip our Soldiers and units. Currently, no U.S. unit has proper summer and winter OCIE for each Soldier. Our Nordic partners are successful in the High North partly because each Soldier is issued both summer and winter OCIE and can train with their equipment on a regular basis and during all training events and seasons.[39]

Recommendations:

Redefine the readiness levels outlined at the Arctic Dominance 2028 Wargame to ensure that there is a clear delineation and easily understood difference between the two

[38] Martin, Tovo, and Kirkwood.

[39] Martin, Tovo, and Kirkwood.

terms. Use doctrinal terms for Arctic readiness levels, such as 'Trained' and 'Proficient' rather than 'Ready' and 'Capable,' to help build shared understanding and avoid confusion. Therefore, troops and units could be referred to as 'Arctic-Trained' or 'Arctic-Proficient.' These terms will then nest with collective METL assessments.

Re-scope the requirement of Arctic readiness from the five environments outlined in *Regaining Arctic Dominance* (Arctic-all season, sub-arctic, ECW, high altitude, and mountainous). This recommendation is based on the understanding that no unit can reasonably maintain proficiency to conduct sustained combat operations across all five environments effectively. If all five skills need to be maintained, then assign them to different units. For example, one unit can maintain readiness in high altitude and mountainous environments while a separate unit can maintain readiness in Arctic and ECW.

Clearly define Arctic-specific METL tasks and develop standardized training and validation guidance to achieve readiness status concerning Arctic capabilities. This might also be further refined into area orientation (European High North vs. Alaska) and should provide some focus based off the projected mission requirements (defense of infrastructure, combined-arms maneuver, reconnaissance, etc.).

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APPENDIX E. NATIONAL STRATEGY FOR THE ARCTIC REGION

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

The White House's October 2022 National Strategy for the Arctic Region highlights the relevance of this capstone by providing an overall vision for the US's interests and priorities in the Arctic region over the next 10 years. Moreover, SOF can incorporate two of the four pillars outlined in this strategic guidance into our own guidance and strategy in the region. https://www.whitehouse.gov/wp-content/uploads/2022/10/National-Strategy-for-the-Arctic-Region.pdf.

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APPENDIX F. 2019 DOD ARCTIC STRATEGY

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

The 2019 DOD Arctic Strategy provides the strategic guidance needed for our capstone to tie SOF's value proposition in the region directly to overarching Arctic guidance. Page 17 of the document linked below, states that SOF must be a ready capability to compete below the level of armed conflict in the Arctic. Our capstone relied on such guidance to leverage SOF's need to improve Arctic readiness at https://media.defense.gov/2019/Jun/06/2002141657/-1/-1/1/2019-DOD-ARCTIC-STRATEGY.PDF.

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APPENDIX G. 2022 ARMY ARCTIC STRATEGY

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

This capstone's white paper "The Nuance of Defining Arctic Capabilities" was in response to the 2022 HQDA Arctic Wargame as well as the 2021 Army Arctic Strategy. The full strategy is at https://www.army.mil/e2/downloads/rv7/about/2021_army_arctic_strategy.pdf.

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APPENDIX H. NORTHCOM CG TESTIMONY TO SENATE ARMED SERVICES COMMITTEE

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

The USNORTHCOM Commander, GEN VanHerck's testimony to the Senate Armed Services Committee in March 2022 included statements on Arctic readiness. This capstone incorporated the testimony to show the Geographic Combatant Commander's priority and need on accelerating the implementation of Arctic strategies and initiatives. These points can be found on pages 18–20 of this testimony: https://www.armed-services.senate.gov/download/vanherck-statement-03/24/2022.

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APPENDIX I. CONGRESSIONAL BACKGROUND ON ARCTIC CHANGES

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

This capstone relied heavily upon background information and knowledge gained from the Congressional report on Arctic changes. The changes over the past several years and decades in the region are what makes it such a ripe environment for strategic competition and geopolitical sensitivities. This March 2022 report highlights many of these factors that are important for a comprehensive understanding of the Arctic and why it is important from a military capability standpoint. See this link for the full report: https://fas.org/sgp/crs/misc/R41153.pdf.

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APPENDIX J. FY 2023 NATIONAL DEFENSE AUTHORIZATION ACT ARCTIC REQUIREMENTS

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

This capstone helped to inform the House Armed Services Committee's requirements to the Secretary of Defense and the Army in the FY23 NDAA. The below sections are from pages 260–261 in this PDF of the 2023 NDAA: https://www.govinfo.gov/content/pkg/CRPT-117hrpt397/pdf/CRPT-117hrpt397.pdf.

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APPENDIX K. MODERN WAR INSTITUTE PODCAST

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

This capstone idea and subsequent work was sparked by a podcast that one of the Capstone students did in April 2021 to highlight the tactical level challenges that Special Forces units faced in the Scandinavian Arctic and sub-Arctic. The podcast, titled Special Operations Forces in the High North, helps build awareness for the environmental conditions that make training and equipping challenging for Special Forces in the Arctic: https://mwi.usma.edu/mwi-podcast-special-operations-forces-in-the-high-north/.

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APPENDIX L. 2022 NATIONAL SECURITY STRATEGY

This appendix is included with this thesis as a separate file. It can also be obtained by contacting the Naval Postgraduate School library.

Pages 44–45 of the recently published NSS specifically mention the need to deepen our cooperation with our Arctic allies and have regular and robust collaboration with the indigenous communities of Alaska. These two requirements are the foundational reasons why SOF must increase Arctic readiness and is the force of choice in the human terrain of the Arctic: https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf.

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