

# TRUE NORTH

Ted Stevens Center for Arctic Security Studies Monthly Bulletin

AUGUST 2025



## TSC and NOAA sign agreement to strengthen defense readiness

The Ted Stevens Center for Arctic Security Studies and the National Oceanic and Atmospheric Administration formalized a strategic partnership Aug. 18 to enhance U.S. defense readiness, deterrence, and operational coordination in the Arctic.

Held at the TSC's headquarters, the signing ceremony marked the launch of a formal Memorandum of Agreement between the Department of Defense's Arctic-focused Regional Center and NOAA's Office of Marine and Aviation Operations. The agreement creates a framework for cooperation on data sharing, research, and operational foresight that directly supports homeland defense and U.S. force projection in the region.

"This is a very organic relationship," said Rear Adm. Chad Cary, director of

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## Bridging the gap: Capstone Research Workshop aligns Arctic Edge with operational needs

In a room recently used for high-level diplomacy, researchers and defense officials gathered to address a different kind of strategic engagement. The focus was not on summits or treaties but on solving complex operational and readiness challenges in one of the most unforgiving environments on Earth.

The Arctic Edge 2025 Capstone
Research Workshop, held Aug. 20 at
Joint Base Elmendorf-Richardson,
brought together more than 80
participants from across the
Department of Defense, the Canadian
Armed Forces, the U.S. Coast Guard,
and academic and research
institutions. The goal was to
accelerate mission-driven solutions
that enhance readiness and
deterrence across the Arctic region.

Hosted collaboratively by the Ted Stevens Center for Arctic Security Studies, the Homeland Defense Institute, and the Center for Arctic Study and Policy, the workshop served as the final event in a series of research workshops supporting Exercise Arctic Edge 2025. Arctic Edge is a joint and combined multi-domain field training exercise designed to improve readiness, demonstrate capabilities, and strengthen interoperability with allies and partners.

The workshop was preceded by a research poster showcase and an optional field program on Aug. 19 that introduced participants to the Port of Alaska and Ted Stevens International Airport, two critical nodes of Arctic infrastructure.

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### **Continued from Page 1 Research Workshop story**

These engagements helped ground the research conversations in real-world challenges faced by operational forces.

#### Research in the service of readiness

The Arctic remains one of the most demanding operating environments for U.S. and allied forces. Communications infrastructure is limited, equipment performance is unpredictable, and extreme operating conditions can compromise logistics and medical support. The workshop was created to ensure the Department of Defense is investing in the right research and innovation to meet these conditions head-on.

Panels focused on key operational challenges, including biodefense, cold weather medicine, domain awareness, resilient infrastructure, and communications in austere environments. Researchers and warfighters engaged directly to identify gaps and explore emerging solutions that support Arctic operations.

Randy "Church" Kee, director of the TSC, emphasized the importance of investing in research that prepares the force for real-world Arctic missions.

"Rigorous research is the foundation of sound strategy and operational success," Kee said. "Our commitment to advancing knowledge on the Arctic ensures that our warfighters have the insights they need to safeguard our nation's security and strengthen defense in this strategically vital region."

He also noted that strategic advantage in the Arctic depends on partnerships and shared understanding, particularly with allies who face the same environmental and geopolitical challenges.

"Collaboration in research directly strengthens deterrence," Kee said. "By combining insights across services and agencies, we build the knowledge and edge that keeps our forces ready."

#### **Embedded in operations**

Holding the workshop during Arctic Edge 2025 allowed researchers to engage with operational planning and experimentation. The timing created an opportunity to shape research efforts that directly support ongoing defense missions.

David Kang, North American Aerospace Defense Command and U.S. Northern Command director of Training, Exercises, and Wargames, explained that the Arctic must be viewed not just as a region of interest but as a critical part of the U.S. homeland defense posture.

"Defending the homeland starts here," Kang said. "The same things that attract people to Alaska—resources, access, and opportunity—are the same things that attract our adversaries. We have to be ready."

He emphasized that the coordination between research and exercises such as Arctic Edge enables the DoD to experiment with and integrate new capabilities under realistic conditions.

"These workshops make our experimentation more relevant," Kang

said. "They help us accelerate integration and demonstrate that we are committed to ensuring peace and stability in the region."

#### A model for the future

This workshop was the final in a series of research engagements that began earlier this year in Colorado Springs. Each event has contributed to the Department's broader goal of building a research ecosystem that supports Arctic security strategy.

Organizers from the TSC, HDI, and CASP believe the model used in Arctic Edge 2025 can be replicated and refined in future exercises.

By embedding research in a joint training environment, the DoD is signaling that innovation and readiness are inseparable. The problems facing Arctic warfighters cannot wait for long-term academic timelines. They require operational relevance and accelerated solutions.

What emerges from these conversations will not only inform future experiments and exercises but also shape how the DoD prepares for strategic competition and deters threats in the Arctic.





## TSC delivers Strategic Arctic Dialogue course for NORAD and USNORTHCOM

The Ted Stevens Center for Arctic Security Studies delivered the Strategic Arctic Dialogue: North America's Arctic Atlantic Approach (with a focus on Greenland) Special Topic Course virtually on Aug. 6, 2025, bringing together 124 mid- to senior-level Department of Defense officials and Arctic experts to examine the Arctic's evolving geopolitical and operational environment. The day-long course represented one of the largest single training events conducted simultaneously for North American Aerospace Defense Command and U.S. Northern Command personnel, reflecting the commands' commitment to advancing Arctic knowledge for homeland defense.

Key sessions included scene-setter presentations on the Arctic's operational environment and geopolitical dynamics, as well as North Atlantic Bridge panel discussions that covered the historical and strategic context of Greenland, Iceland, and the Kingdom of Denmark. They provided allied perspectives on Arctic

deterrence and defense cooperation. The course also featured updates on current Arctic campaigning activities and their implications for homeland defense and North American security.

Discussions on vulnerabilities, security cooperation, and dual-use infrastructure pathways generated active participation among attendees.

"The course reinforced the importance of understanding regional context and allied partnerships in developing effective Arctic strategies," said Dr. Matt Rhodes, professor of International Security at the TSC, who led the course development.

By connecting defense professionals with subject matter experts, the TSC continues to support NORAD and USNORTHCOM's mission to defend North America through education and strategic dialogue that addresses the unique challenges of the Arctic domain.



#### Save the date for the Anchorage Security and Defense Dialogue

Join us for the Anchorage Security and Defense Dialogue (ASDD), taking place Nov. 18-20, 2025, where military leaders, policymakers, and experts will gather to address the evolving strategic challenges in the Arctic region. With this year's theme, "Peace through Strength: Deterrence in the North." we aim to strengthen deterrence in the Arctic through enhanced strategy, policy, innovation, and operational readiness.

#### **Registration Details**

Registration for the event will open soon. Attendance is by invitation or approval. This event is not open to the media.

Contact Information
For further inquiries please contact
TSC-Engagements@us.af.mil.

#### **Continued from Page 1 MOA story**

the NOAA Commissioned Officer Corps and the Office of Marine and Aviation Operations. "We've been working in this region since the mid to late 1800s. Whether it's laying cables or flying, we've had a sustained presence here."

The MOA enables NOAA and TSC to combine their strengths in environmental data collection and strategic analysis to advance all-domain awareness, improve mission assurance, and support defense planning in the Arctic. It also establishes a process to create annexes for specific joint projects, including classified and unclassified research, operational exercises, and academic collaboration.

"The Ted Stevens Center and NOAA bring together distinct but complimentary missions, combining scientific expertise with strategic insight," said Randy "Church" Kee, director of the TSC. "This partnership allows us to leverage our strengths together, enhancing understanding and operational readiness across the Arctic."

### Advancing Arctic readiness through scientific integration

The agreement identifies priority areas that include enhanced observations of the air, land, and sea; forecasting and modeling of Arctic conditions; and assessments that inform defense infrastructure planning and logistics. These activities are directly tied to DoD priorities for warfighter preparedness and homeland security.

"NOAA absolutely wants to support the

Department of Defense," said Cary. "We want to continue giving decision advantage in the region."

NOAA's fleet of research ships and aircraft—including high-altitude and mid-altitude hurricane hunters—are being designed and deployed with Arctic missions in mind. Cary noted that several of NOAA's new platforms are intended to operate in northern regions during off-season periods, and roughly a third of their emerging technology projects are already based in the Arctic.

"We want to expand the conversation on data sharing and prioritize areas we don't know enough about," Cary said. "We're excited to move forward on some annexes and really support each other's missions."

#### Shared mission, shared impact

The MOA outlines a joint approach to strategic foresight and domain awareness that supports national security readiness and deterrence posture. Both organizations will coordinate efforts to assess risks to Arctic operations, secure key maritime routes, and integrate scientific support into disaster response and early warning systems.

"Our partnership with NOAA is just the beginning. Together, we will expand knowledge, drive innovation, and strengthen Arctic security for years to come." Kee said.

The agreement also calls for integration with combatant commands and allied partners to reinforce Arctic-Indo-Pacific security linkages. Coordination with the Daniel K. Inouye Asia-Pacific Center for

Security Studies, U.S. Indo-Pacific Command, and North American Aerospace Defense Command will help extend the reach and relevance of this interagency collaboration.

Designated Cooperation Oversight Liaisons from NOAA and TSC will manage the partnership's activities, identify new opportunities, and ensure long-term alignment. Current representatives include NOAA's liaison to NORAD and U.S. Northern Command and Dr. Sarah Aarons from TSC's School for Arctic Security Studies.

#### A path forward for homeland defense

The MOA will remain in effect for 10 years, with regular reviews and the flexibility to add annexes beyond its expiration. It allows for cooperation with other federal entities and establishes procedures for funding, data exchange, and joint research outputs.

The agreement aligns closely with current Executive Orders and DoD guidance by supporting efforts to strengthen domain awareness, increase resilience, and protect U.S. interests in contested and operationally complex regions.

"This is an auspicious occasion for formalizing the relationship," Cary said. "It's the right time and the right place."

By connecting science and strategy in the Arctic, the agreement represents a significant step in building enduring partnerships that support deterrence, mission readiness, and homeland defense in the northernmost region of the U.S.



#### New Understanding the Arctic Operating Environment Course prepares warfighters for high latitude operations

The Ted Stevens Center for Arctic Security Studies launched its newest executive education course this month to prepare security professionals for operations in the rapidly evolving Arctic operating environment.

The inaugural Understanding the Arctic Operating Environment Course, held virtually Aug. 19 to 21, brought together 56 participants from the United States, Canada, Norway, Portugal, the United Kingdom, and Bulgaria.

The course aimed to deepen understanding and develop strategies for addressing security challenges in the Arctic related to the dynamic operational environment. Participants identified strategies for resilient military operations in the changing Arctic and explored how to develop strategic policy that could be applied toward future scenarios.

"The Arctic theater is one of the

most dynamic and challenging operational domains in the world today," said Craig Fleener, deputy director of the TSC. "It has opened the region to increasing strategic competition."

Over three days, the course delivered 22 hours of targeted instruction through expert briefings, interactive exercises, scenario-based strategy sessions, and a final capstone presentation focused on military resilience. Participants included U.S. and international military members, planners, and civilian security professionals.

"You don't have to go far in today's news cycle to get a glimpse of the issues surrounding the Arctic," said Matthew Bell, dean of the School for Arctic Security Studies. "From shifting sea ice to expanding foreign presence, this region is a proving ground for strategic foresight."

Participants examined the risks of operating in a region defined by harsh conditions, degraded infrastructure, limited communications, and logistical unpredictability. Topics included ISR, cold weather operations, strategic deterrence, and coordination across NATO and allied networks. The course emphasized both physical and geopolitical realities such as permafrost degradation, extreme weather, and rising competition for resources and influence.

Throughout the course, students applied lessons learned in real time. Breakout groups developed

and briefed operational strategies tailored to Arctic-specific conditions with a focus on readiness, sustainment, and security cooperation during a final capstone presentation.

One U.S. military participant noted the relevance of the Risk Assessment session.

"The session on Risk Assessment for Arctic Military Operations was by far the most interesting and useful today," they said. "It felt the most practical, relevant and applicable to Arctic operations on the ground, and the real-world examples and relatable stories really aided in learning and remembering the new information."

As a professional military education program, UAOEC is part of the TSC's broader mission to cultivate Arctic literate leadership and align academic offerings with strategic priorities of the Department of Defense. The course reinforces U.S. efforts to deter adversaries, strengthen alliances, and prepare the joint force to compete and operate effectively in the North.

As the Arctic gains strategic importance, UAOEC ensures military leaders are prepared to operate, not just observe, in the region.



#### Ted Stevens Center hosts Arctic Missile Defense Field Workshop

The Ted Stevens Center for Arctic Security Studies recently brought together a select group of 20 ambassadors, government officials, civic leaders, and academics for a strategic-level dialogue on missile defense, Arctic security, and their implications for global affairs.

The event brought together experts from the United States, Canada, Denmark, Iceland, and Greenland. Participants gained a deeper appreciation of Alaska's enduring strategic importance—both during the Cold War and in today's complex security environment.

Through a series of historical briefings, facilitated roundtable discussion, and an on-site visit to the Nike Site Summit, participants assessed the systems developed during the Cold War, the strategic imperatives that shaped them, and the requirements for modern capabilities to counter evolving threats.

The Nike Site Summit, constructed in the 1950s, was one of several locations across Alaska designed to defend the U.S. against potential Soviet long-range bomber attacks. Positioned on the front lines of the Cold War, Alaska's geography made it a crucial early warning and defense outpost for North America.

Standing among the concrete bunkers and rusting launch pads, participants were reminded of the high-stakes tension that defined the era, and the immense responsibility placed on service members who maintain constant vigilance in defense of the homeland.

While the Cold War threat

environment has changed, the imperative to match capabilities to evolving threats remains central to deterrence and defense. Modern security challenges—including advanced cruise missiles, hypersonic glide vehicles, and autonomous systems—underscore the need for continued focus on the state's role in homeland defense.

The field workshop provided participants with historical context while also generating discussion on how Alaska's unique geography, infrastructure, and partnerships will shape deterrence and defense strategies in the decades ahead.

The Nike Site Summit now stands as both a historic landmark and a reminder that Alaska's strategic location makes it vital to U.S. national security. For the TSC, the field workshop was an opportunity to connect history with present-day realities, ensuring that the legacy of those who stood watch during the Cold War continues to inform modern defense planning.

### **UPCOMING COURSES**

NATO in the North Course (N2C)

**NEW COURSE** 

• Virtual, Sept. 16-18, 2025

**Arctic Regional Security Orientation Course (ARSOC)** 

• Virtual, Oct. 27-31, 2025

SCAN TO REGISTER FOR THESE COURSES





#### **NATO IN THE NORTH**

NAVIGATING A UNIQUELY CHALLENGING ENVIRONMENT



#### COURSE OVERVIEW

NATO in the North is jointly offered by the Ted Stevens Center and the NATO Center of Excellence for Cold Weather Operations as a bicontinental introduction to challenges and opportunities for NATO in and around the Arctic. The course prepares mid- to senior-level security practitioners for work on High North and Arctic security in a NATO context at the higher tactical, operational, and/or military-strategic levels. It enhances understanding of the security situation and operating environment across NATO's northern area of responsibility, including the unique demands of multinational deterrence and defense in a cold weather environment. It strengthens understanding of NATO practices and processes, builds strategic alignment and operational competence, and promotes innovative thinking on regional capabilities and readiness in a rebalancing Alliance.

#### **Course Objectives**

- Understand NATO structures, processes, and current issues.
- Analyze conventional and non-conventional threats to Allied security in the North.
- Asses efforts to advance Allied capabilities, interoperability, and readiness for Northern flank deterrence and defense.
- Consider operational impacts of similarities and differences between the North American and European Arctics.



#### Learning Experience

This virtual course features:

- Panel presentations by senior-level experts
- Interactive breakout group discussions
- · Scenario-based capstone exercise
- · Multinational networking opportunities



#### Who Should Attend?

- NATO and partner military and civilian personnel dealing with Arctic-related security issues.
- The course's initial iteration will be targeted for field grade officers and civilian equivalents.
- Registrations received by 8 August 2025 will receive first priority.

#### **WHY IT MATTERS**

NATO has been in the Arctic since its founding, and recent developments draw further attention to its Northern Flank.
Russia and China are increasing activity and collaboration across the area. Two more Arctic nations, Finland and Sweden, have joined the Alliance. The region has become more central for homeland and collective defense in both North America and Europe.

#### New NATO in the North Course now open for enrollment

The NATO in the North course is now open for registration. This virtual course is designed for mid- to senior-level security professionals and provides an in-depth look at NATO's High North and Arctic security challenges. It includes panel presentations by senior-level experts, interactive breakout discussions, a scenario-based capstone exercise, and multinational networking opportunities. Participants will gain valuable insights into NATO structures, current security issues, and Arctic deterrence.

SCAN TO REGISTER FOR THIS COURSE



INNOVATE • EXPERIMENT • EDUCATE • ANALYZE • ENGAGE

tedstevensarcticcenter.org/registration

<u>Innovate</u> Experiment Educate Analyze Engage <sub>7</sub>



## Ted Stevens Center explores Arctic-Pacific security linkages at 2025 Arctic Encounter Symposium

The Ted Stevens Center for Arctic Security Studies hosted a panel on strategic competition in the Arctic–Pacific during the 2025 Arctic Encounter Symposium, bringing together senior diplomats and Arctic experts from the United States, Japan, the Republic of Korea, and Canada to discuss the growing strategic ties between the two regions.

Moderated by Matthew Hickey, associate director for Strategic Engagement at the TSC, the panel featured Ambassador Katsuhiko Takahashi, Ambassador Extraordinary and Plenipotentiary for Arctic Affairs, Ministry of Foreign Affairs (Japan); H.E. Byung-ha Chung, Ambassador for Polar Affairs (Republic of Korea); Sara Cohen, Deputy Head of Mission, Foreign Policy & National Security,

Embassy of Canada in the United States (Canada); and Ambassador Mike Sfraga, PhD, Former U.S. Ambassador for Arctic Affairs and Interim Chancellor of the University of Alaska Fairbanks (United States).

In front of a packed room, panelists emphasized that the Arctic and Indo-Pacific are deeply interconnected strategic theaters. The Arctic serves not only as a vital transit corridor linking the Indo-Pacific, North America, and Europe, but also as the front line of homeland defense for the United States. Increased maritime access, expanding resource competition, and intensifying great power competition mean that actions in the Pacific increasingly reverberate across the Arctic, and vice versa.

Speakers discussed how

cooperation across North Pacific is essential to protecting the interests of the United States and our allies and partners.

Japan and the Republic of Korea stressed the importance of coordination with the United States and Canada to deter aggression and ensure freedom of navigation, while also highlighting opportunities for collaboration on advanced Arctic-capable technology and innovative research. Both countries share a strong commitment to maintaining stability in the Arctic while ensuring security in the wider Indo-Pacific.

The dialogue reinforced the Department of Defense's commitment to deterrence while strengthening cooperation with allies across the Indo-Pacific and the Arctic. By convening this discussion, the TSC continues to drive partnerships essential to a secure and prosperous, free, and open Indo-Pacific.

The Arctic Encounter Symposium, the largest annual Arctic policy forum in the United States, provided an ideal forum for this exchange, bringing together government leaders, international allies and partners, industry representatives, and Indigenous voices to address the challenges and opportunities at the nexus of Arctic and Indo-Pacific security.

### EU Ambassador meets with TSC leaders for talks on security and resilience in the Arctic

Ambassador Jovita Neliupšienė, the European Union's Ambassador to the United States, met with leaders from the Ted Stevens Center for Arctic Security Studies to explore opportunities for collaboration on Arctic and transatlantic security. The discussion centered on the EU's growing interest in Arctic defense and security, alongside increased military budgets. The discussion also examined opportunities for energy independence and critical infrastructure resilience in the High North. The meeting underscored the importance of the Arctic as a strategically vital region, both militarily and economically.









## Congressional Staff Delegations underscore Arctic's strategic importance

The Ted Stevens Center for Arctic Security Studies hosted three congressional staff delegation visits in August, underscoring growing interest on Capitol Hill in Arctic defense and policy. Erin Scanlon, military legislative assistant to Rep. Sam Graves, joined House Armed Services Committee staff to learn about the center's mission and emerging Arctic security issues. Jimmy Byrn, defense policy advisor to Sen. Dan Sullivan, met with TSC leaders to discuss the center's contributions to Department of Defense Arctic priorities, and the broader national defense strategy. John Keast, Republican staff director of the Senate Armed Services Committee, engaged with TSC leaders and a fellow on strengthening deterrence and advancing Arctic literacy across the force. These visits highlighted the center's role in shaping understanding of the Arctic as a strategically important region for homeland defense.

### **Check out these new Executive Briefs!**

# U.S.-Canadian security cooperation is critical to achieving a stable Arctic

Part one in a three-part series on the North American Arctic, this paper examines security issues in the North American Arctic from three regional perspectives: the Northern Pacific, the U.S.-Canada defense relationship, and the North Atlantic. Looking northward from the United States, these sub-regions are situated at roughly the 10, 12, and 2 o'clock positions, respectively. This conceptualization reflects the primary threat vectors to the North American homeland perceived by U.S. Northern Command) and

the North American Aerospace Defense Command (NORAD). We have thus adopted this framework for this series of Executive Briefs on potential sources of instability in the North American Arctic and strategies to mitigate them in





## A.I. for Arctic security cooperation

The July 2025 release of America's AI Acton Plan establishes a decisive posture toward global technological leadership by prioritizing rapid innovation, infrastructure expansion, and the strategic alignment of AI capabilities with U.S. diplomatic and security objectives. While the plan does not explicitly reference the Arctic, its strategic relevance to U.S. homeland defense and allied deterrence necessitates specific consideration. This paper explores these concepts and more.





Why the world comes to the Arctic

# Stay informed with our new Arctic Security Update

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### **ALUMNI NEWS AND UPDATES**



Greetings all. I am thrilled to serve the Ted Stevens Center for Arctic Security Studies and our alumni as the new Alumni Outreach Specialist. As a participant in many of the courses here, I've come to appreciate their value to those who operate in the Arctic. They served me well during my active-duty service.

Exciting changes are underway here at the TSC that might be noticed by our alumni and extended family as well. Our new group of fellows have joined the TSC and have begun their studies. Just this month Dr. Sarah Aarons debuted Understanding the Arctic Operating Environment, our latest course. In a few weeks, Dr. Matt Rhodes will soon execute our first NATO in the North course. We also expect to test the first asynchronous course at TSC, offering a first opportunity to our alumni community to try a two-week course.

The Alumni webinar series will continue to bring subject matter experts to you for a few hours to hear their perspectives and engage them in discussion. In our September session we will discuss Grey-Zone conflict in the Arctic. We

are planning others as well as opportunities to discuss what you have been reading and writing about.

In future issues, we hope to highlight some of your accomplishments and contributions. No success should go unheralded when so many others stand to benefit from what you have learned or achieved. To that end, in the weeks to come we will send out a survey giving you the opportunity to describe your accomplishments as well as bring to our attention how the courses and conferences have influenced your missions.

But, you don't have to wait for a survey. You can reach out at TSC-Alumni@groups.af.mil. We'd love to hear about what you and your respective organizations are working on and have contributed to the Arctic security enterprise. If you have published an article, pioneered a new tactic, or applied technology to the Arctic in novel ways, we want to get the word out here in our bulletin. If you have an idea or recommendation for an alumni event or services that could be valuable to you, we'd love to hear about it. We also know that many of our alumni change email domains as they move into various positions or retire from service. To keep you connected to the team here, we encourage you to reach out and let us know how to contact you and ensure you continue to benefit from our programs.

It's my goal to ensure that our alumni program benefits you and the broader arctic community. I'm grateful for the chance to serve you and to serve with you. Thank you all for your commitment to advancing the Arctic security enterprise and I look forward to getting to know our extended family.



**SCAN TO** LEARN MORE **ABOUT OUR** ALUMNI **PROGRAM** 

Very respectfully, Wesley Moerbe Alumni Relations Specialist Ted Stevens Center for Arctic Security Studies

Engage <sub>11</sub> Experiment Analyze Educate Innovate

# Journal of Arctic Security, Special STEM Edition 2025 Call for Papers



The Ted Stevens Center for Arctic Security Studies announces an article submission deadline of **October 1, 2025** for contributions to JAS Vol. 5, a special STEM edition for release in spring 2026.

Increasing focus on meeting the strategic, operational, and tactical challenges of the Arctic operating environment has led to new and promising research. Foundational scientific research improves understanding of the remote and rapidly changing region while development and testing of emerging technologies promises to provide near term solutions. Researchers are invited to submit papers on Science, Technology, Engineering, and Math (STEM) solutions to Arctic challenges:

- 1. The Arctic Operating Environment: We welcome submissions that explore the Arctic operating environment in all the warfighting domains. This includes, but is not limited to, studies on sea ice dynamics, meteorology, bathymetry, or permafrost thaw with implications for national security, defense, and military operations. Papers may also cover advancements in remote sensing and modeling that highlight their relevance to security strategies and policies.
- 2. Arctic Engineering: Submissions should focus on innovative engineering solutions tailored to the Arctic's extreme conditions with implications for national security. Topics of interest include the development of cold-resistant materials, ice-resistant structures, and the adaptation of infrastructure to the changing Arctic environment, which are critical for ensuring the safety and operational capabilities of national assets in the region.
- 3. Renewable Energy and Sustainability: This section seeks papers on the adaptation and implementation of renewable energy technologies in the Arctic, underscoring their strategic importance for energy security. Research on improving the efficiency, sustainability, and reliability of renewable sources such as wind, solar, and tidal energy in cold climates is particularly encouraged, with a focus on their role in reducing dependencies and enhancing the resilience of both military and civilian operations.
- 4. Marine Biology and Ecosystems: We invite research that addresses the shifting marine ecosystems within the Arctic Circle and their implications for national security. Studies may focus on changes in biodiversity, the effects of environmental stressors on marine organisms, and conservation strategies to protect Arctic marine life, considering their significance for sustaining fish stocks and maintaining ecological balance in strategic waters.
- 5. Telecommunications and Technology Development: We invite contributions that focus on enhancing communication technologies in the Arctic, emphasizing their strategic importance for national security. Papers may include the development of robust infrastructure, innovations in data transmission methods, and solutions for improving digital connectivity in remote and extreme environments, essential for secure and reliable communications for defense and emergency response.
- 6. Below Zero Medicine- Medical Research and Health Care in the Arctic: This section calls for papers on medical research, health care practices, and emergency response strategies specifically tailored to the harsh Arctic environment. Submissions should explore the unique medical challenges faced by inhabitants and transient populations in this region, such as issues related to hypothermia, frostbite, and vitamin D deficiencies. Papers could also discuss the development and adaptation of medical technologies and telemedicine solutions designed for remote and isolated communities, emphasizing their implications for national security by ensuring the health and readiness of military personnel and civilian populations in strategic Arctic areas.

Submissions of 4,000 – 6,500 words in APA Style with author's curriculum vitae will be accepted by the editorial staff at <u>TSC-JACSS@groups.af.mil</u>.

JAS is a peer-reviewed academic publication. Articles are unclassified, and readers can access articles from all over the world. Submissions will be accepted in English language, clearly written for an informed audience of defense and security affairs professionals and academics.

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#### **Director's Monthly Note**



Dear and Distinguished Colleagues,

August was a month of both milestones and symbolism for the Ted Stevens Center for Arctic Security Studies. The eyes of the world turned to Alaska for President Trump's Peace Summit, underscoring once again that the Arctic is not just a frontier of geography, but a stage for global diplomacy. Against this backdrop, the Ted Stevens Center continued to advance its mission to strengthen defense relationships, expertise,

and capability across the Arctic.
This month, we participated in the Arctic Encounter Symposium, contributing to strategic dialogue on the Arctic's role as a critical security crossroads for the Indo-Pacific. The Ted Stevens Center also signed a memorandum of agreement with the National Oceanic and Atmospheric Administration, strengthening whole-of-government cooperation in Arctic research and education.

Here at the center, we welcomed multiple congressional delegations and distinguished visitors, reflecting growing national attention to Arctic security and defense. On the education front, the center hosted the inaugural Understanding the Arctic Operational Environment course, as well as a special one-day program on Greenland for North American Aerospace Defense Command and U.S. Northern Command senior leaders—both designed to deepen regional understanding and enhance operational readiness.

Together, these efforts show the unique value of the Ted Stevens Center as a hub for education, research, and engagement at a moment when the Arctic is increasingly central to both national defense and international diplomacy. I am grateful for your continued partnership as we build on this momentum to ensure a secure and stable Arctic.

Very Respectfully, Maj. Gen. (ret.) Randy "Church" Kee Director, Ted Stevens Center for Arctic Security Studies

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# DIRECTOR'S MONTHLY READING RECOMMENDATION

The Last Viking, the Life of Roald Amundsen by Stephen R. Bown

The Last Viking unravels the life of the man who stands head and shoulders above all those who raced to map the last corners of the world. In 1900, the four great geographical mysteries—the Northwest Passage, the Northeast Passage, the South Pole, and the North Pole—remained blank spots on the globe. Within twenty years Roald Amundsen would claim all four prizes. Renowned for his determination and technical skills, both feared and beloved by his men, Amundsen is a legend of the heroic age of exploration, which shortly thereafter would be tamed by technology, commerce, and publicity. Féted in his lifetime as an international celebrity, he died in the Arctic on a rescue mission for an inept rival explorer.













