

UNITED STATES COAST GUARD

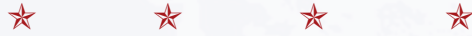


**ARCTIC STRATEGIC OUTLOOK
IMPLEMENTATION PLAN**



OCTOBER 2023
WASHINGTON, D.C.

ARCTIC STRATEGIC OUTLOOK IMPLEMENTATION PLAN



As one of eight Arctic nations, the United States seeks an Arctic that is peaceful, stable, prosperous, and cooperative. The U.S. Coast Guard is a key domestic and international Arctic leader for achieving this vision and promoting security in the region. Our security objectives include the safety, sovereignty, and stewardship of the Arctic, promoting economic prosperity, strengthening climate resiliency, expanding leadership, and asserting international law, rules, and standards across the Arctic. This Implementation Plan outlines the actions the U.S. Coast Guard will undertake to execute the strategic objectives in our 2019 Arctic Strategic Outlook, which also supports the 2022 National Strategy for the Arctic Region. In doing so, we will continue to prioritize actions that safeguard U.S. sovereignty and interests while promoting safe, secure, and environmentally responsible maritime activity in the Arctic.

A handwritten signature in blue ink, appearing to read "S. Poulin".

October 3, 2023

ADMIRAL STEVEN D. POULIN,
Vice Commandant, U.S. Coast Guard

DATE



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I.

Strategic Overview

While the U.S. Coast Guard's mission in the Arctic has endured for more than 150 years, the strategic landscape has changed. Global geopolitical trends combined with dramatic effects of climate change to the Arctic's physical environment are increasing the region's economic opportunities and strategic importance while hastening the impacts and risks to U.S. Arctic residents, commercial activity, and U.S. national security. As the region continues to become more accessible and consequential, the demand for U.S. Coast Guard leadership and presence will continue to grow.

The release of the 2022 National Strategy for the Arctic Region (NSAR)¹ further exemplifies the importance of the region. The NSAR articulates the U.S. vision of the Arctic as a region that is "peaceful, stable, prosperous, and cooperative." This implementation plan, the first for the 2019 U.S. Coast Guard Arctic Strategic Outlook, is intended to advance that vision.

In the Arctic, as in many competitive spaces around the world, homeland security is national security. As a member of the Department of Homeland Security (DHS), the U.S. Coast Guard has a unique role to protect U.S. citizens and promote safety, sovereignty, and stewardship across the globe, including throughout the U.S. Arctic. This includes defending the homeland, responding to the increasing frequency and severity of climate-driven emergencies, and safeguarding the safe and free flow of commerce throughout the Marine Transportation System (MTS).

The U.S. Coast Guard's actions will set the model of behavior for responsible governance and adherence to international laws, rules, norms, and standards. Through these actions, the U.S. Coast Guard will also lead by the power of our example to cultivate strong international relationships and a coalition of Arctic partners based on shared interests and values that build climate resiliency, enhance prosperity, and strengthen regional stability.

¹ <https://www.whitehouse.gov/wp-content/uploads/2022/10/National-Strategy-for-the-Arctic-Region.pdf>

U.S. COAST GUARD PERSPECTIVE ON HOLISTIC NATIONAL SECURITY IN THE ARCTIC:

A broad portfolio of interconnected governance mandates implemented through operational presence and strategic leadership.



Asserting sovereignty, safety and stewardship throughout the Arctic fortifies National Security.

II.

Methodology

Strategic Outlooks define the U.S. Coast Guard’s long-term strategic planning efforts for specific regions and domains and establish lines of effort to achieve the Service’s overarching objectives. The 2019 Arctic Strategic Outlook identifies the U.S. Coast Guard’s commitment to advancing our national interests across the Arctic. It directly supports the U.S. Coast Guard Strategy, complements the Maritime Commerce Strategic Outlook, and aligns with national, DHS, and Department of Defense (DoD) Arctic strategies and priorities.

Implementation Plans describe how the U.S. Coast Guard intends to accomplish its strategic objectives through specific initiatives. In executing the Arctic Strategic Outlook Implementation Plan, the U.S. Coast Guard will adhere to the same guiding principles and Lines of Effort (LoEs) outlined in the 2019 U.S. Coast Guard Arctic Strategic Outlook:

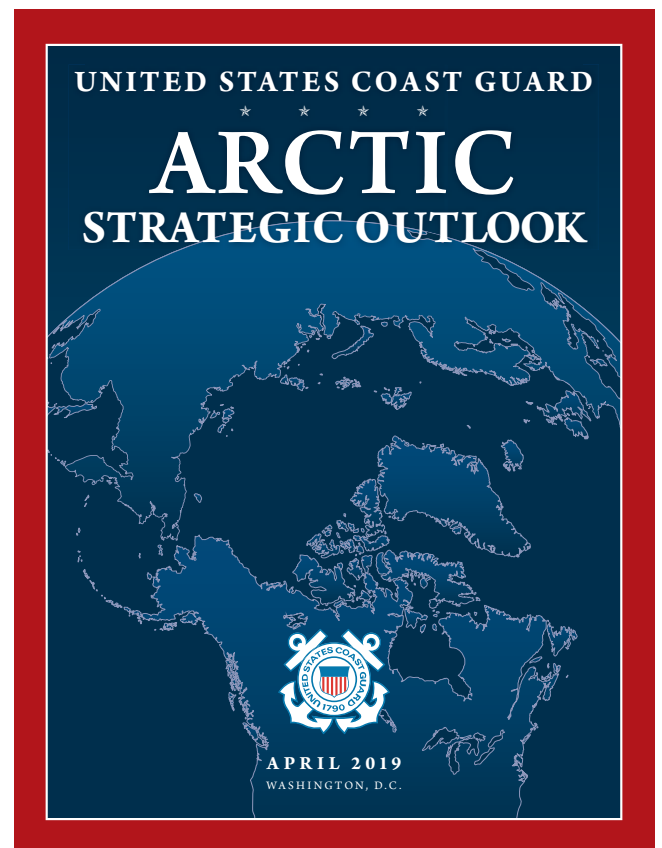
LoE 1: Enhance Capability to Operate Effectively in a Dynamic Arctic

LoE 2: Strengthen the Rules-Based Order

LoE 3: Innovate and Adapt to Promote Resilience and Prosperity

This Implementation Plan is comprised of 14 interconnected initiatives to execute the Arctic Strategic Outlook’s LoEs. This Plan provides a description of each initiative, the lead organizations/offices responsible for overseeing implementation, as well as action items that represent our most critical next steps to advance the Arctic Strategic Outlook LoEs. In line with the Arctic Strategic Outlook LoE 3, continuous evaluation and improvement is required for strategic success in the Arctic. Accordingly, this Implementation Plan is scalable to adapt to the dynamic nature of Arctic challenges and to the U.S. Coast Guard’s available resources.

The U.S. Coast Guard will continually evaluate the holistic national security needs in the Arctic and update this Implementation Plan and operations accordingly. Given the depth and breadth of the security challenges posed by the Arctic, full execution of this Implementation Plan is contingent upon additional Service-focused and whole-of-government investments in technologies, capabilities, resources, and personnel.



III.

Implementing the Arctic Strategic Outlook

Initiative 1: Enhance Arctic Operations and Exercises

LEADS: U.S. Coast Guard Atlantic Area (LANTAREA), U.S. Coast Guard Pacific Area (PACAREA)

The U.S. Coast Guard has long supported joint and combined Arctic operations and exercises, and our presence in the Arctic enables the Service to operationalize national strategies, strengthen partnerships, and protect regional interests. The U.S. Coast Guard asserts presence at these events by allocating a mixture of air and surface assets and mobilizing subject matter experts. In accordance with the 2022 U.S. Coast Guard Strategy, the Service will employ new operating concepts for assets in the Arctic.

In alignment with the U.S. Coast Guard's force posture, both U.S. Coast Guard Area commands will continue to prioritize regional operations and exercises in support of national objectives, maximizing integration with multinational allies and partners through activities such as Operation ARCTIC SHIELD, Operation CHUKCHI GUARDIAN, Operation NANOOK, Exercise ARGUS, and the Arctic Coast Guard Forum (ACGF).





ACTION ITEMS

1. Develop and implement a PACAREA and LANTAREA Arctic Campaign Plan that unifies effort towards achieving U.S. Coast Guard objectives, including increased operations, coordination, and exercises across the region. *(Supports LoE 1 and LoE 3)*
2. Engage in Arctic-related conferences, forums, and workshops to enhance operational awareness and readiness. *(Supports LoE 1 and LoE 2)*
3. Expand operational and exercise planning, subject matter expert exchange, and coordination with DHS and other government agencies to assess and test Arctic capabilities. *(Supports LoE 1 and LoE 2)*
4. Conduct operational and exercise planning, subject matter expert exchange, and coordination with international partners who share similar interests to improve interoperability and achieve mutually beneficial objectives. *(Supports LoE 1 and LoE 2)*
5. Plan and participate in ACGF exercises to foster safe, secure, and environmentally responsible maritime activity in the Arctic. *(Supports LoE 1, LoE 2, and LoE 3)*
6. Enhance U.S. Coast Guard engagement with federally recognized tribes and Alaska Native Claims Settlement Act corporations to build valuable relationships and gain critical knowledge with tribal entities. *(Supports LoE 3)*
7. Manage U.S. Coast Guard assets in accordance with leadership direction and national priorities to increase presence, awareness, and understanding within the Arctic and reinforce adherence to international laws and norms. *(Supports LoE 1 and LoE 2)*
8. Track domestic fishing activities and trends. Detect and respond to fisheries incursions in the U.S. exclusive economic zone (EEZ) and enforce U.S. law to maintain and preserve U.S. resources and subsistence fishing activities of Alaska Native communities, particularly as some fish stocks move north in the U.S. Arctic. *(Supports LoE 1, LoE 2, and LoE 3)*

Initiative 2: Expand Arctic Surface Capabilities and Associated Support Infrastructure

LEAD: U.S. Coast Guard Assistant Commandant for Capability (CG-7)

SUPPORT: U.S. Coast Guard Director of Acquisition Programs (CG-93), U.S. Coast Guard Assistant Commandant for Engineering and Logistics (CG-4)

To execute missions effectively in the Arctic, the U.S. Coast Guard requires a wide variety of assets and support infrastructure, including ice-capable cutters. Amidst increasing strategic competition, surface assets are critical national resources that contribute to the holistic security of both the U.S. Arctic and pan-Arctic.

The U.S. Coast Guard is responsible for operating and maintaining the Nation's fleet of icebreakers, which assert national security through presence in the polar regions. Polar icebreakers provide a variety of unique capabilities including: icebreaking in multiyear, ridged ice; extensive endurance; command and control interoperability; ability to carry additional operators, scientists, cargo, and organic boats; and facilities to embark and support helicopters.

Sufficient polar icebreaking capability is critical to enabling assured access to the Arctic Ocean and other ice-covered areas and to execute the U.S. Coast Guard's statutory responsibilities throughout the Arctic year-round.

Currently, U.S. Coast Guard Cutters *Polar Star* (heavy polar icebreaker) and *Healy* (medium polar icebreaker) are the Nation's only operational polar icebreakers. While acquisition efforts are currently underway to acquire new assets, an icebreaking capacity gap will remain and have to be mitigated until a sufficient number of new icebreakers are delivered.

Effective presence in the Arctic requires more than just polar icebreaking capabilities. The U.S. Coast Guard must also develop personnel who are proficient at high-latitude operations and build and maintain the shore-side infrastructure required to support increased operations and sustain U.S. presence, especially as new assets are fielded.



ACTION ITEMS

1. Develop a fleet mix and requirements documents for Arctic-capable assets to provide the optimal mix of surface assets to enable year-round assured Arctic access. These requirements will include associated capabilities such as deployable aircraft and sensors, diver support, and the ability to land a small boat ashore at remote locations. *(Supports LoE 1)*
2. Advance acquisition programs for Arctic-capable assets and seek to hasten their delivery. *(Supports LoE 1)*
3. Develop the appropriate personnel competencies and expeditionary logistical needs to execute missions and enable assured access in the Arctic. *(Supports LoE 1)*
4. Conduct detailed homeporting analyses, in coordination with interagency partners, to identify suitable locations with the necessary capabilities, capacities, and logistical support for the cutters and crews. *(Supports LoE 1)*
5. Develop a strategy to acquire a commercially-available icebreaker to complement existing polar icebreaking cutter capabilities and increase near-term Arctic presence prior to Polar Security Cutter delivery. *(Supports LoE 1 and LoE 3)*



Initiative 3: Expand Arctic Aviation Capabilities

LEAD: U.S. Coast Guard Assistant Commandant for Capability (CG-7)

SUPPORT: U.S. Coast Guard Director of Acquisition Programs (CG-93), U.S. Coast Guard Assistant Commandant for Engineering and Logistics (CG-4)

Arctic aviation capability, along with a properly resourced support infrastructure, is integral to operating effectively in a dynamic Arctic environment. To mitigate the heightened risk created by climate change, increased human activity, and strategic competition in the Arctic, the U.S. Coast Guard will pursue both short and long-term aviation programs that enhance the execution of statutory and national missions in the Arctic.

There are important opportunities to enhance rotary wing, fixed wing, and unmanned aerial capabilities in the Arctic region. These capabilities will play a key role in executing the U.S. Coast Guard's statutory missions while simultaneously increasing mission flexibility, improving logistical support, and enabling critical functions such as maritime domain awareness (MDA).

ACTION ITEMS

1. Incorporate Arctic aviation capabilities to support U.S. Coast Guard mission execution in the Arctic. *(Supports LoE 1 and LoE 3)*
 - a. Develop MH-60 shipboard capability (blade fold / tail fold).
 - b. Research and develop MH-60 flight deck securing and traversing systems.
 - c. As driven by operational needs, identify opportunities to increase the MH-60 fleet size to support Arctic aviation deployments.
 - d. Establish seasonal forward operating locations for fixed and rotary wing aircraft within the Arctic based on operational risk assessments. Partner with DHS and other government agencies to develop shared infrastructure requirements.
 - e. Implement a reliable Pole-to-Pole satellite communication voice solution on all aircraft stationed in District 17 to ensure an effective communications guard can be maintained across the Arctic.
2. Evaluate shore-based and ship-based unmanned aviation capabilities in the Arctic as a way to increase Arctic operational capabilities utilizing assets with greater endurance and efficiency. *(Supports LoE 1 and LoE 3)*
3. Increase the number of pilots and aircrew trained in cold weather survival to better equip personnel for the expected mission environments. *(Supports LoE 1)*



Initiative 4: Expand Arctic Communications Capabilities

LEAD: U.S. Coast Guard Assistant Commandant for Capability (CG-7)

SUPPORT: U.S. Coast Guard Director of Acquisition Programs (CG-93), U.S. Coast Guard Assistant Commandant for C4IT (CG-6)

Robust, reliable communications capabilities in the Arctic are vital to the success of U.S. Coast Guard operations. Long realized shortfalls in communications capabilities compound a persistent gap in MDA. The U.S. Coast Guard must leverage new communications technology and commercial services to improve connectivity in the harsh and remote Arctic environment. The Service will focus on enhancing existing communications capabilities while also considering a whole-of-government approach to develop Arctic communications capabilities that meet future mission needs.

ACTION ITEMS

1. Evaluate existing communications systems and work with other governmental agencies to identify common communications capability gaps through studies, exercises, and tests. *(Supports LoE 1 and LoE 3)*
2. Establish requirements for operational communications to support new and existing U.S. Coast Guard Arctic missions. *(Supports LoE 1 and LoE 3)*
3. Procure geostationary and non-geostationary satellite orbit (NGSO) connectivity services to enhance U.S. Coast Guard regional communications. *(Supports LoE 1)*
4. In conjunction with interagency partners, improve terrestrial based communications systems to support maritime public and tactical communications mission needs. *(Supports LoE 1 and LoE 3)*



Initiative 5: Improve Maritime Domain Awareness (MDA)

LEAD: U.S. Coast Guard Assistant Commandant for Intelligence (CG-2)

SUPPORT: U.S. Coast Guard Assistant Commandant for Capability (CG-7), U.S. Coast Guard Director of Marine Transportation Systems (CG-5PW), U.S. Coast Guard Director, Emergency Management (CG-5RI), U.S. Coast Guard Atlantic Area (LANTAREA), U.S. Coast Guard Pacific Area (PACAREA)

MDA is not a mission or a program, but the product of a diverse set of activities and capabilities that garner increased knowledge and understanding associated with the global maritime domain to inform the safety, security, economy, and environment of the U.S. MDA supports all levels of decision-making across U.S. Coast Guard, interagency, industry, and private partner missions and operations.

MDA requires gathering and synthesizing large amounts of information from disparate sources and disseminating that information in a timely and comprehensive manner to operational commanders and partners, including:

- Information for safe vessel operations, including positions and intentions of all vessels;
- Information on vessel crew, passengers, and cargo carried, if applicable;
- Pollution detection and tracking;
- Weather and environmental observations, including ice reconnaissance;
- Living Marine Resource observations; and
- Awareness of human activity and infrastructure.

The challenges to MDA in the Arctic are numerous, including the harsh operating environment, extreme distances between operating areas and support facilities, poor communications reliability, limited sensing capabilities, and lack of logistics infrastructure to support operations. These are all exacerbated by the physical and strategic impacts of climate change. Overcoming these challenges will require strong partnerships with interagency, tribal, state, local, and international stakeholders.



ACTION ITEMS

1. Improve asset connectivity and long-range communications to support future Arctic operations. *(Supports LoE 1 and LoE 3)*
2. Increase aircraft and cutter patrols to collect and disseminate intelligence that informs Arctic MDA. *(Supports LoE 1 and LoE 3)*
3. Enhance intelligence integration into all DHS, DoD, and U.S. Coast Guard operational planning to improve dissemination of information and situational awareness. *(Supports LoE 1 and LoE 3)*
4. Explore the feasibility of using unmanned systems, including space-based systems, to monitor weather and environmental conditions as well as detect and monitor maritime activity. *(Supports LoE 1 and LoE 3)*
5. Develop data and collection information requirements in coordination with the Office of the Federal Coordination for Meteorology, U.S. Navy, National Oceanic and Atmospheric Administration (NOAA), and other stakeholders to advance detection, identification, collection, and tracking of meteorological conditions. *(Supports LoE 1 and LoE 3)*
6. Develop a concept of operation that advances the International Ice Patrol's detection, identification, collection, tracking, and dissemination of ice hazard data. *(Supports LoE 1 and LoE 3)*
7. Evaluate the need for special Arctic carriage requirements for Long Range Identification and Tracking (LRIT), or similar tracking systems, for vessels not covered under the Polar Code. *(Supports LoE 1 and LoE 3)*
8. Expand use of commercial providers to obtain Automatic Information System (AIS) and other commercial satellite data that can expand awareness in the Arctic region. *(Supports LoE 1 and LoE 3)*
9. Strengthen interactions and channels of communication with tribal and local Alaskan and Arctic communities to broaden MDA. *(Supports LoE 1 and LoE 3)*
10. Increase MDA through information sharing with international Arctic communities and forums including Arctic Council, ACGF, and others. *(Supports LoE 1 and LoE 3)*
11. Leverage DHS Science and Technology directorate, the U.S. Coast Guard Research and Development Center, and DHS Centers of Excellence to identify new technological solutions, including space-based solutions that enhance Arctic MDA. *(Supports LoE 1 and LoE 3)*
12. Develop and evaluate prototype information sharing protocols that enhance the ability to create, display, share, and manage both static and dynamic data. *(Supports LoE 1 and LoE 3)*
13. Continue working with the Arctic Council member nations to expand the Arctic Shipping Traffic Database system, including use of environmental, ice movement, vessel, and port trends data. *(Supports LoE 1 and LoE 3)*

Initiative 6: Strengthen the Arctic Coast Guard Forum (ACGF)

LEAD: U.S. Coast Guard Office of International Affairs (CG-DCO-I)

Established in 2015, ACGF is an independent, informal, operationally-driven organization that promotes safe, secure, and environmentally responsible maritime activity in the Arctic. Modeled after the successful North Pacific Coast Guard Forum, the ACGF allows the U.S. Coast Guard and its peer agencies from other Arctic nations to strengthen relationships, identify lessons learned, share best practices, carry out exercises, conduct combined operations, and coordinate emergency response missions.

CG-DCO-I is the Commandant-designated U.S. Executive Agent of the ACGF. In this role, and in alignment with DHS and national direction, CG-DCO-I will continue to manage the administration of the ACGF and support senior U.S. Coast Guard leadership during their participation in ACGF Summit events. CG-DCO-I staff will similarly work in concert with appropriate Coast Guard Headquarters and area offices to represent U.S. interests at ACGF meetings and exercises and develop and circulate relevant reports to U.S. Coast Guard Arctic stakeholders.

While the ACGF is independent of, but complementary to, the Arctic Council, the host of the ACGF coincides with the Arctic Council chairmanship, which rotates every two years. The U.S. Coast Guard will assume Chair of the Combined Operations Working Group in April 2023, Deputy Chair of the ACGF in 2030, and Chair in 2031, and must prepare for these transitions.



ACTION ITEMS

1. Actively participate in ongoing dialogues on strategic direction for the ACGF. *(Supports LoE 2)*
2. Strengthen multilateral cooperation and coordination within the Arctic maritime domain. *(Supports LoE 2)*
3. Advance DHS and national direction and assert U.S. Coast Guard leadership through the planning and execution of ACGF exercises. *(Supports LoE 1 and LoE 2)*
4. Support and guide the smooth transition of the ACGF host in accordance with approved rotation, advance responsible chairmanship governance, and strengthen international law, rules, norms, and standards. *(Supports LoE 2)*
5. In alignment with DHS and national direction, lead by example to support the Chair of the ACGF Combined Operations Working Group and encourage ACGF member participation in exercises that enhance operational collaboration for responding to maritime incidents in the Arctic. *(Supports LoE 2)*
6. Align planning activities between the ACGF and Arctic Council's Emergency Preparedness, Prevention, and Response (EPPR) working group. *(Supports LoE 2)*
7. Increase U.S. interagency and international awareness of the ACGF to highlight its role and necessity in the region. *(Supports LoE 2)*



Initiative 7: Preserve U.S. Leadership in the Arctic Council

LEAD: U.S. Coast Guard Director, Emergency Management (CG-5RI)

The Arctic Council is an important organization enabling collaboration, international consensus, and U.S. leadership across the spectrum of critical Arctic governance issues. It is the leading intergovernmental forum for promoting cooperation, coordination, and interaction on common issues among the Arctic States, Arctic indigenous communities, and other Arctic inhabitants. Specifically, the Arctic Council focuses on issues of sustainable development, environmental protection and response, and other critical issues (search and rescue, safe navigation/shipping, etc.) in the Arctic, all of which apply to U.S. Coast Guard statutory responsibilities.

The U.S. Coast Guard holds several leadership roles within the Arctic Council, which demonstrates its commitment to international and multilateral partnerships and a collaborative approach to advancing security across the region. The U.S. Coast Guard plays a significant role within two of the six Arctic Council working groups: the working group on EPPR that focuses on search and rescue, maritime pollution preparedness and response, and other natural and man-made disasters in the Arctic; and the working group on Protection of the Arctic Marine Environment (PAME) that focuses on matters related to the reduction and prevention of pollution in the Arctic marine environment.



ACTION ITEMS

1. Provide policy and programmatic support to the Department of State (DOS) through leadership and active membership in several delegations and working groups that reinforce and advance the strategic mandates of the Arctic Council. *(Supports LoE 2 and LoE 3)*
2. Aligned with DHS and national strategic direction, continue active engagement in the EPPR and PAME Arctic Council Working and Expert Groups through virtual and live exercises to improve coordination, increase efficiency, and enhance alignment on search and rescue and marine environmental protection and response. *(Supports LoE 2 and LoE 3)*
3. Support U.S. interagency engagement on collaborative Arctic Council efforts approved at Arctic Council Ministerials including to develop technology that protects the sensitive Arctic environment. *(Supports LoE 2 and LoE 3)*
4. Support collaborative U.S. efforts to achieve all designated Arctic Council deliverables and milestones. *(Supports LoE 2 and LoE 3)*
5. Increase collaboration between Arctic Council working groups and the ACGF (under the 2021 Arctic Council/ACGF Joint Statement on Cooperation) to improve international safety, stewardship, and cooperation. *(Supports LoE 2 and LoE 3)*
6. In alignment with DHS and national direction, work with the U.S.'s international and multilateral partner organizations in support of U.S. involvement in Arctic Council efforts, including support for multi-lateral agreements for requesting and offering assistance through the Arctic Council and U.S. National Response Team. *(Supports LoE 2 and 3)*
7. In alignment with DHS and national direction, support the chair of the Arctic Council with logistical and budgetary exercise planning, maintaining the successful Arctic Council's ongoing exercise cycle, including support for the joint Arctic Council and ACGF Arctic exercises to improve policy, plans, and response capabilities/operations. *(Supports LoE 2 and 3)*
8. Partner with Arctic nations through the Arctic Council and other fora to develop and implement prevention, preparedness, and response strategies to potential marine pollution incidents through research and development, training, and exercises. *(Supports LoE 2 and LoE 3)*
9. Implement international agreements, including the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic ("SAR Agreement," signed in 2011), the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (MOSPA, signed in 2013), and the Agreement on Enhancing International Arctic Scientific Cooperation (Scientific Agreement, signed in 2017). *(Supports LoE 2 and LoE 3)*

Initiative 8: Modernize the U.S. Arctic Marine Transportation System (MTS)

LEAD: U.S. Coast Guard Director of Marine Transportation Systems (CG-5PW)

The U.S. Coast Guard facilitates more than \$5.4 trillion per year in economic activity and supports more than 30.8 million jobs through maintaining a safe, secure, and efficient nationwide MTS. Both the U.S. Coast Guard's 2018 Maritime Commerce Strategic Outlook and the 2019 Arctic Strategic Outlook identify the MTS as the lifeblood of the national economy. Similarly, this Implementation Plan, in conjunction with the Maritime Commerce Strategic Outlook Implementation Plan, provides the U.S. Coast Guard with an array of policy tools to address the full range of maritime activities within the Arctic.

Increasing maritime activity in the Arctic drives greater demand for the full spectrum of U.S. Coast Guard authorities, services, and capabilities. In particular, the increasingly accessible Arctic is poised to provide valuable alternatives to traditional shipping routes between North America, Europe, and Asia. Consequently, a safe and efficient Arctic MTS that expands U.S. trade is vital to the Nation's security, resiliency, and prosperity.

However, replicating the MTS in the Arctic as it exists in the contiguous U.S. is not a viable option. Bolstering the substantial economic potential of the region requires tailored solutions that address the increasing impacts of climate change. This work is further complicated by the Arctic's vast distances, sparse support infrastructure, and dynamic operating environment. Arctic MTS solutions must also balance the needs of the Arctic waterways' diverse user community, including the subsistence activities and cultural heritage of Alaska Native communities. Developing responsible solutions to improve the flow of commerce through the U.S. Arctic will improve the local, national, and global economies.

ACTION ITEMS

1. Finalize the Alaskan Arctic Coast Port Access Route Study to provide safe access routes for the movement of vessel traffic along the Arctic Coast of the U.S. *(Supports LoE 1, LoE 2, and LoE 3)*
2. Support to the U.S. Committee on the Marine Transportation System (CMTS) Arctic Marine Transportation Integrated Action Team to ensure maritime transportation in the U.S. Arctic will be better managed and made more safe and secure. *(Supports LoE 1 and LoE 3)*
3. Develop prioritized recommendations and courses of action through focused and inclusive engagements with Arctic and MTS subject matter experts from government, industry, and academia to advance the Arctic MTS based on a range of possible geostrategic and climatologic outcomes. *(Supports LoE 1 and LoE 3)*



Initiative 9: Continue Implementation of IMO Polar Code

LEAD: U.S. Coast Guard Director of Marine Transportation Systems (CG-5PW)

The International Maritime Organization (IMO) developed an International Code for Ships Operating in Polar Waters (Polar Code) to cover the full range of design, construction, equipment, operations, training, and environmental protection. Consistent with other IMO instruments, the Polar Code contains both mandatory and non-mandatory provisions. The safety and environmental provisions of the Polar Code entered into force in January 2017, and the U.S. Coast Guard has the authority and inspection regimes in place to enforce Polar Code compliance for all vessels operating in U.S. waters to which the provisions are applicable.

The U.S. Coast Guard must continue to promote responsible governance across the Arctic. The 2019 CMTS Arctic Shipping Assessment projects that by 2030, the most plausible traffic activity scenario will result in a 300% increase in activity when compared to 2008. As shipping and vessel activity in the Arctic continues to grow, the U.S. Coast Guard must support continued development and implementation of the Polar Code.

ACTION ITEMS

1. Represent the U.S. Government during IMO negotiations related to the Polar Code to advance the safety of the environment vessels and mariners operating in Arctic waters. *(Supports LoE 2)*
2. Engage with international partners and stakeholders to support the implementation of the Polar Code and identify opportunities to advance periodic amendments as Arctic environmental and operating conditions evolve. *(Supports LoE 2)*
3. Continue to support work on relevant industry technical standards to supplement and/or support the Polar Code's provisions. *(Supports LoE 2)*
4. Amend existing regulations to properly implement the Standards of Training Certification and Watchkeeping (STCW) Amendments in support of the Polar Code. *(Supports LoE 2)*
5. Issue and track mariner credentials, as well as evaluate, update, and approve training courses in compliance with the amended STCW convention and code. *(Supports LoE 2)*



Initiative 10: Strengthen Marine Environmental Preparedness and Response

LEAD: U.S. Coast Guard Director, Emergency Management (CG-5RI)

The Arctic marine environment has profound significance for the U.S. and the ecosystems and populations that depend upon its health and sustainability. As maritime economic activity increases, the risk of maritime accidents similarly increases, as well as the need for enhanced Arctic oil spill prevention and response planning and preparedness. Spill response in the Arctic presents major operational challenges due to vast distances, limited infrastructure, harsh operating environment, and the inherent difficulty of recovering oil from ice-impacted waterways.

The U.S. Coast Guard, as the lead organization for oil and hazardous substance incident responses in the Nation's waters, and with partners, industry, and stakeholders drives preparedness and response efforts to mitigate environmental threats under the National Oil and Hazardous Substances Pollution Contingency Plan. For U.S. Arctic waters specifically, the U.S. Coast Guard must leverage novel tactics, techniques, and technologies to address spills in the unique operating environment.

In addition to the Service's significant involvement with the Arctic Council and the Service's role in U.S. Arctic governance, the U.S. Coast Guard implements international agreements consistent with domestic priorities. The Service also tests environmental response protocols, through international exercises and preparedness activities, to establish marine oil pollution impact mitigation best practices. These efforts increase global preparedness capabilities and create the blueprint for coordinated oil spill response in the Arctic marine environment.



ACTION ITEMS

1. Increase Arctic spill prevention, preparedness, and response training and exercises. *(Supports LoE 1 and LoE 3)*
2. Serve as Vice-Chair of the National Response Team and Co-Chair the Alaska Regional Response Team to enhance coordination with state, local, and indigenous populations to improve preparedness and response capabilities for oil spills and hazardous substance releases. *(Supports LoE 1 and LoE 3)*
3. Coordinate with interagency partners, indigenous communities, and the commercial maritime sector to address and apply statutory and regulatory responsibilities for marine environmental preparedness and response. *(Supports LoE 1 and LoE 3)*
4. Coordinate with Arctic communities of interest to plan for pollution threats, identify areas and resources at risk, and build response strategies for oil spills and hazardous substance releases, including Spills of National Significance. *(Supports LoE 1 and LoE 3)*
5. Close oil spill response resource challenges through an established, active, and effective Arctic and Western Alaska area committee and area contingency planning process. *(Supports LoEs 1, LoE 2, and LoE 3)*
6. Coordinate with DHS and DOS to implement, strengthen, exercise, and update Arctic-specific Joint Contingency Plans (JCPs) and Arctic Letters of Intent. Conduct bi-lateral/regional exercises and annual communication drills as necessary and in alignment with national direction. *(Supports LoE 2 and LoE 3)*
7. Leverage opportunities to incorporate and execute our national response capabilities, techniques, and protocols; as well as the evaluation of the current Arctic response logistic/framework needs. Continue support for marine environmental response initiatives under Arctic Shield including the Marine Safety Task Force. *(Supports LoE 2 and LoE 3)*
8. Enhance the U.S. Coast Guard's relationship with the Bureau of Safety and Environmental Enforcement (BSEE) by supporting joint directives and initiatives and participating in a joint response workgroup. This relationship improves national oil spill planning, preparedness, and response for facilities seaward of the coastline through improved alignment of BSEE and U.S. Coast Guard regulatory authorities and preparedness oversight activities. *(Supports LoE 1 and LoE 3)*
9. Evaluate and enhance the required operational capabilities and current training curriculum to increase organic U.S. Coast Guard subject matter expertise on cold weather and oil-in-ice pollution response. *(Supports LoE 1 and LoE 3)*
10. In collaboration with the Federal On-Scene Coordinator and District 17, support CG-MER's efforts to develop strategies, including through U.S. Coast Guard accepted Alternative Planning Criteria within District 17, for decreasing the gap between oil spill response capabilities and capacities via the National Planning Criteria. *(Supports LoE 1 and LoE 3)*
11. Leverage participation in the Interagency Coordinating Committee for Oil Pollution Research and partnership with university programs to promote new technologies to address Arctic pollution response challenges. *(Supports LoE 1 and LoE 3)*
12. Collaborate with other Arctic nations to identify best available technologies and advancements in oil response equipment and practices. In accordance with the BSEE/U.S. Coast Guard Memorandum of Understanding, District 17 and Sector Anchorage will continue to participate in quarterly planning meetings with BSEE Oil Spill Preparedness Division and BSEE Alaska regional office to stay aligned with priorities and shared projects. *(Supports LoE 2 and LoE 3)*

Initiative 11: Strengthen the Center for Arctic Study and Policy

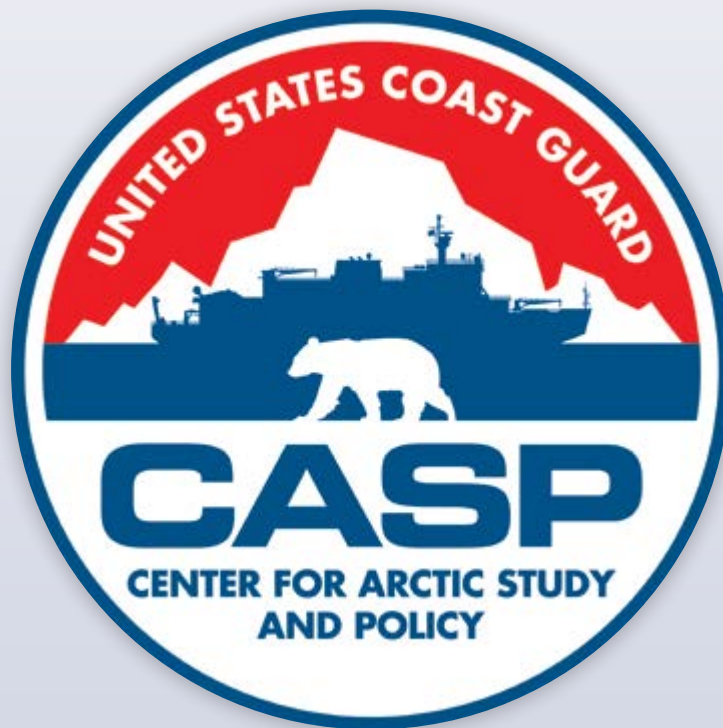
LEAD: U.S. Coast Guard Academy Center for Arctic Study and Policy

SUPPORT: Office of Emerging Policy (CG-DCO-X); U.S. Coast Guard Director, Marine Transportation Systems (CG-5PW)

The Center for Arctic Study and Policy (CASP) develops and executes research and analysis to support U.S. Coast Guard missions in the Arctic, sub-Arctic, and Antarctic. CASP's mission is threefold: Educate Cadets, Conduct Research and Analysis, and Broaden Partnerships. Through the delivery of courses, academic research, and other academic programming, CASP provides cadets and service leaders with an understanding of the U.S. Coast Guard's growing role in the Arctic, the unique history of the region and its people, and the domestic and geopolitical trends associated with the region and its global impacts, all toward the goal of preparing them to serve and lead in the region.

Through original research and forward-thinking analysis, CASP contributes to the modernization of Arctic governance by supporting and informing U.S. Coast Guard decision-making and innovation to advance the U.S. Coast Guard objective of advancing holistic security across the Arctic region. In addition to supporting science, policy, and engineering research initiatives at the U.S. Coast Guard Academy, CASP pursues grants and other research opportunities that assert leadership and influence across Arctic policy, academic, and research communities.

CASP aims to be the synchronizing entity for a formalized network of career-spanning U.S. Coast Guard Cadets, Officer Candidates, Officers, and other staff with specialized interest and experience in polar affairs to enable continuous scholarship, critical thinking, and collaboration on issues related to polar operations, infrastructure, policy, and strategy. Through outreach to maritime operators, academic institutions, Arctic communities, international partners, and other key stakeholders, CASP builds robust interdisciplinary collaborations to achieve U.S. Coast Guard, DHS, and national Arctic objectives.



ACTION ITEMS

1. Develop and execute an annual CASP academic study and engagement plan with input from U.S. Coast Guard stakeholders that strengthens U.S. Coast Guard policy, governance, and operations in the Arctic. *(Supports LoE 1)*
2. Increase Arctic related knowledge among future and current U.S. Coast Guard leaders by *(Supports LoE 1, LoE2, and LoE3)*:
 - a. Establishing a physical center and appropriate staffing and resources.
 - b. Expanding available course offerings, both academic and training, to increase cadet and U.S. Coast Guard staff exposure and inputs to Arctic studies and policy and the Service's role in the region.
 - c. Providing professional development opportunities that build regional cultural competence and strategic awareness of Arctic responsibilities and equities.
 - d. Coordinating U.S. Coast Guard alignment and partnership with the Ted Stevens Center for Arctic Security Studies.
3. Foster new, mutually beneficial relationships with industry, academia, indigenous peoples, and international partners on matters pertaining to emergency preparedness and response, human security and resilience, regional geopolitical challenges, and other relevant topics. *(Supports LoE 1, LoE 2, and LoE 3)*
4. Pursue research opportunities through grants, collaborations, and consistent outreach to Arctic operators to proactively identify and analyze emerging challenges and opportunities and inform the U.S. Coast Guard's adaptation to the same. *(Supports LoE 1, LoE2, and LoE 3)*
5. Produce an annual report on scholarship, partnership-building, organizational leadership, and CASP's analytical and educational contributions. *(Supports LoE 1 and LoE 3)*



Initiative 12: Enhance the U.S. Coast Guard’s Culture of Arctic Innovation

LEAD: U.S. Coast Guard Research, Development and Innovation Governance Council (co-chaired by CG-9D and CG-7D)

Through the Service’s Research, Development and Innovation Governance Council (RDIGC) and supporting Research, Development and Innovation Integrated Product Team (RDI IPT), the U.S. Coast Guard will identify emerging technologies, missions, gaps, challenges, and requirements to inform Arctic-focused innovation, research, development, test, and evaluation efforts to improve operational outcomes in the challenging and unforgiving Arctic environment.

ACTION ITEMS

1. Create an Arctic research plan to identify and prioritize U.S. Coast Guard research and development needs. The Arctic research plan will be dynamic enough to account for the evolving challenges in the region. *(Supports LoE 1 and LoE 3)*
2. Advance and execute U.S. Coast Guard led and supported polar research and innovation that addresses U.S. Coast Guard research plan priorities as well as emerging needs to support U.S. Coast Guard operations and national priorities in the changing Arctic region. *(Supports LoE 1 and LoE 3)*
3. Collaborate with the Coast Guard Blue Technology Center of Expertise, CASP, DHS Science and Technology Directorate, Defense Innovation Unit, other federal, international, academic research elements, and industry as appropriate to identify and leverage Arctic research and development opportunities. *(Supports LoE 1 and LoE 3)*



Initiative 13: Communicate Strategically

LEAD: U.S. Coast Guard Director of Governmental and Public Affairs (CG-092)

SUPPORT: U.S. Coast Guard Director of Marine Transportation Systems (CG-5PW), U.S. Coast Guard Atlantic Area (LANTAREA), U.S. Coast Guard Pacific Area (PACAREA)

The U.S. Coast Guard will communicate the efforts and successes contained in this Implementation Plan, including the Service's unique polar operational capabilities, regulatory authorities, and international maritime governance and leadership.

ACTION ITEMS

1. Communicate the U.S. Coast Guard's role, operations, and missions in the Arctic to help demonstrate and strengthen the rules-based order in the region. *(Supports LoE 2)*
2. Lead the development and execution of a U.S. Coast Guard Arctic Communication Action Plan with input from domestic partner agencies – specifically NOAA, DoD, DOS, National Science Foundation, and the U.S. Arctic Research Commission – to promote consistent, impactful communications that support U.S. Arctic strategic priorities. *(Supports LoE 1)*
3. In alignment with national direction, collaborate with Arctic nations and other like-minded indigenous organizations, tribal nations and agencies to release targeted and unified messaging on Arctic activity and results including: *(Supports LoE 1, LoE 2, and LoE 3)*
 - a. Coordinate with DOS to highlight Arctic content in social media, collaboration with other Arctic Nations, and public engagements.
 - b. Advocate for continued investment in U.S. Arctic assets, capabilities, and infrastructure through Congressional visits, forums, and targeted partner conversations.
4. Leverage cross-platform information sharing. Collaborate with partners to create written, social, and multimedia products for sharing on U.S. Coast Guard information platforms. *(Supports LoE 2)*
5. Identify inorganic messaging channels (media outlets, governments, private organizations, think tanks, academic institutions, and non-governmental organizations) to amplify U.S. strategic messaging and engage in communication opportunities that further highlight U.S. Coast Guard, DHS, and national Arctic strategy objectives. *(Supports LoE 3)*

Initiative 14: Formalize the U.S. Coast Guard Polar Enterprise

LEAD: U.S. Coast Guard Director of Marine Transportation Systems (CG-SPW)

SUPPORT: U.S. Coast Guard Atlantic Area (LANTAREA), U.S. Coast Guard Pacific Area (PACAREA)

The Arctic region is vast, spanning thousands of miles and multiple U.S. Coast Guard areas of responsibility. In anticipation of the growing demand for Arctic operations and cross-service collaboration, the U.S. Coast Guard is establishing a fixed point for strategic coordination amongst Coast Guard Headquarters, Coast Guard operational commands, DHS, and intergovernmental partners. The Polar Coordination Office will serve as the lead office for coordinating efforts among the U.S. Coast Guard Polar Enterprise and evaluating progress towards strategic objectives.

In addition to continuous qualitative analysis, responsible Arctic governance requires quantitative assessments. An integral part of this Implementation Plan is to develop and apply appropriate quantitative metrics for each initiative, wherever practicable. These metrics will assist the U.S. Coast Guard in evaluating their impact and assessing whether the initiatives and their associated action items are properly tailored and resourced for the operational and strategic environments faced by the U.S. Coast Guard and the Nation.

ACTION ITEMS

1. Mature the Polar Coordination Office at Coast Guard Headquarters for intra-service coordination of strategy, messaging, resourcing, and policy. *(Supports LoE 3)*
2. Formalize roles and responsibilities of the Polar Enterprise Coordination Team to improve coordination for internal, inter-service, and international Arctic engagements. *(Supports LoE 3)*
3. Develop a framework to inform U.S. Coast Guard leadership on progress in advancing the 2019 Arctic Strategic Outlook and this Implementation Plan. *(Supports LoE 3)*
4. Conduct annual assessments of the initiatives and brief U.S. Coast Guard leadership on progress and future goals. *(Supports LoE 3)*



IV.

Conclusion

The U.S. Coast Guard is uniquely positioned to fortify national security in the Arctic through our diverse statutory authorities, mission responsibilities, and collaborative operations across the region. The Service's versatile authorities and capabilities enable seamless contributions across the diplomatic, information, military, economic, financial, intelligence, and law enforcement spectrums.

Today's paradigms must evolve to meet the complex challenges of tomorrow. Addressing our national interests in the Arctic requires a collaborative approach across the joint service as well as other federal, tribal, state, local, and international partners to protect U.S. sovereign territory and rights, improve human safety, and enhance stewardship of the physical environment. If the Nation is not vigilant, strategic competitors will outpace us in asserting influence that does not align with the national security interests of the U.S. and our partners. The 2019 Arctic Strategic Outlook, actioned by this Arctic Strategic Outlook Implementation Plan, reaffirms the U.S. Coast Guard's commitment to work collaboratively in advancing safe, secure, and responsible activity across the Arctic. Now, more than ever, our operational and strategic presence equals security for the U.S. and our allies and partners who share similar interests.





U.S. COAST GUARD HEADQUARTERS
WASHINGTON, D.C.

MARINE TRANSPORTATION SYSTEMS

CG-5PW
www.uscg.mil/Arctic