

Polar Command: The Evolution of Arctic Policy in the United States Coast Guard

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1. Introduction

The Arctic region, with its rich natural resources and geopolitical and cultural significance, has become an increasingly vital area for the international community. Despite the presence of the United States and Russia, two major powers with complex relationships of competition and cooperation, the Arctic has historically been a region of relative peace and low tension in terms of security.

However, global warming and the resultant decrease in sea ice are making the Arctic Sea routes more economically viable.¹ Simultaneously, security concerns, exemplified by Russia's invasion of Ukraine, are dramatically altering the region's traditionally tranquil atmosphere. These changing dynamics are affecting not only the Arctic coastal nations but also countries like Japan and China in East Asia, which are finding interests in the Arctic.²

The Arctic coast is home to the United States, Russia, Canada, Denmark, and Norway. Additionally, the region defined as the Arctic Circle, north of 66 degrees 33 minutes 39 seconds, includes Finland, Iceland, and Sweden, bringing the total number of Arctic nations to eight. In this diverse region, issues of security, environmental protection, economic development, and international cooperation are intrinsically intertwined.

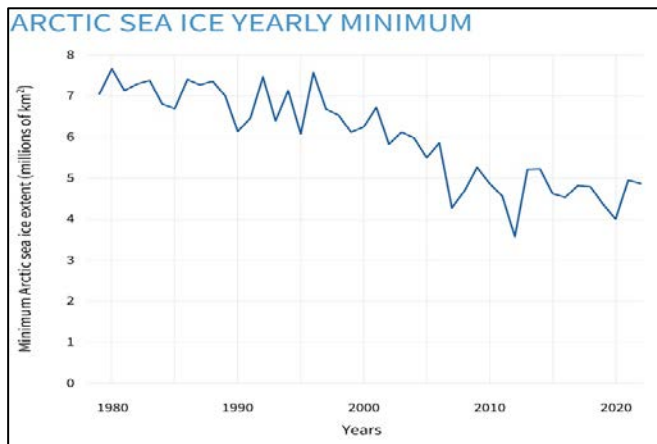


Figure 1: Changes in Arctic Sea Ice Coverage³



Figure 2: Arctic Circle Nations⁴

Arctic governance has been primarily under the purview of the Arctic Council (AC), established in 1996 following the 1987 call for international cooperation in environmental

protection by Soviet Secretary General Gorbachev.⁵ The AC comprises the eight Arctic states – Norway, Sweden, Finland, Russia, the United States, Canada, Greenland, and Iceland – along with observers, including six indigenous groups, 13 non-Arctic countries including Japan, and international organizations such as the International Maritime Organization (IMO).

In maritime safety and environmental conservation, the Arctic Coast Guard Forum (ACGF), led by the U.S. Coast Guard, plays a crucial role. This forum involves all Arctic nations' coast guards, enhancing collaboration in emergencies and supporting effective and smooth operations.⁶

The U.S. Coast Guard, in September 2014, established the Center for Arctic Study and Policy (CASP) at the United States Coast Guard Academy (USCGA) as part of its strategic goals to raise awareness, modernize governance, and expand partnerships in the Arctic. The CASP serves as a think tank, addressing new challenges in the Arctic in collaboration with the Department of Homeland Security's Science and Technology Directorate's network of Centers of Expertise, promoting safe and environmentally responsible maritime activities in the Arctic.⁷

In June 2022, the U.S. Coast Guard welcomed its first female Commandant, Linda Fagan, ahead of other U.S. military organizations. With her extensive experience, including as an ensign on the heavy icebreaker *Polar Star*, Commandant Fagan is among the most knowledgeable on the importance of Arctic strategy and has consistently advocated for the necessity of icebreaker replacement since her appointment.^{8, 9} Her assumption of command symbolizes a new era in U.S. influence and responsibility in the Arctic and marks the beginning of a new chapter in this harsh region. This shift is evident in the U.S. Coast Guard's transition from the "Arctic Strategic Outlook" in April 2019 to a more detailed "Arctic Strategic Outlook Implementation Plan" in October 2023.¹⁰

The U.S. Arctic policy has evolved, balancing relations with Arctic nations while aiming for regional stability and prosperity. Similarly, the U.S. Coast Guard's Arctic policy has evolved in tandem, particularly in response to recent

environmental changes due to global warming, necessitating a new strategic approach.

This paper analyzes the evolution of the U.S. Coast Guard's Arctic policy, based on two key policy documents, providing an overview of the historical context and current state of U.S. Arctic policy. Furthermore, it elaborates on the specifics and consistency of the U.S. Coast Guard's Arctic policy implementation plan and insights into future directions. Through this analysis, we aim to deepen understanding of the strategic challenges faced by the U.S. Coast Guard in the Arctic and its role in ensuring a sustainable future for the region.



Figure 3: Linda Fagan, Commandant of the U.S. Coast Guard¹¹

2. The Evolution of Arctic Policy in the United States Coast Guard

The United States Coast Guard's engagement in the Arctic began in 1867, following America's purchase of Alaska from Russia. For over 150 years, the Coast Guard has strategically evolved under its inherent duties of

coastal security and navigation safety in Alaska, adapting to geopolitical shifts and the dramatic climate changes in the Arctic.

Initially, the Coast Guard's Arctic missions were focused on environmental protection, scientific research, and enhancing understanding of climate change impacts. The strategic approach of this era aimed at preserving the unique Arctic ecosystem and understanding its significance in the global climate system. Notably, Arctic research, critical not only for the Coast Guard but also for shaping U.S. Arctic maritime policy, laid the foundation for addressing environmental issues related to the Arctic.¹²



Figure 4: U.S. Coast Guard Missions in the Arctic¹³

However, recent transformations in international politics concerning the Arctic have necessitated a shift in strategy. Russia has reactivated Cold War-era military bases and showcased its military prowess, including nuclear submarines surfacing through ice, while dramatic climate change has opened new commercial opportunities via Arctic sea routes. This has increased the region's strategic and economic significance, requiring an approach that goes

beyond scientific knowledge to adapt to the evolving situation.¹⁴

Acknowledging these changes, in April 2019, the Coast Guard developed the "Arctic Strategic Outlook."¹⁵ This document outlines a multifaceted approach combining the Coast Guard's operational capabilities, regulatory authorities, and international leadership to secure U.S. interests in the Arctic through¹⁶:

1. Enhancing Capability to Operate Effectively in a Dynamic Arctic.
2. Strengthening the Rule-Based Order.
3. Innovating and Adapting to Promote Resilience and Prosperity.

The "Arctic Strategic Outlook Implementation Plan," formulated in October 2023, further incorporated aspects of national security, economic benefits, and international cooperation. Specifically, it emphasized the Arctic's economic potential, especially in natural resource exploitation and new shipping routes, and highlighted the growing importance of coordination with other nations and the protection of U.S. security and sovereignty amidst rising geopolitical tensions.¹⁷

Under this new policy, the Coast Guard aims for sustainable development and management in the Arctic, enhancing partnerships with other Arctic nations and indigenous communities. This strategic approach seeks to balance environmental protection, economic development, and regional stability while maintaining a peaceful and cooperative Arctic environment based on international law and rules.

Supporting this policy, the Coast Guard currently relies on just two icebreakers: the heavy icebreaker *Polar Star* (13,842 tons full load) and the medium icebreaker *Healy* (16,256 tons full load).¹⁸ Addressing the physically expanding Arctic with only these two vessels is challenging. Additionally, the *Polar Star*, commissioned in 1976,¹⁹ is an aging vessel, not ideally suited for the Coast Guard's evolving policy despite being maintained for extended service life.²⁰

In the midst of growing concerns about the adequacy of the United States Coast Guard's polar mission capabilities,

the advocacy of Commandant Fagan bore fruit. On July 24, 2023, a significant milestone was reached: the construction of three Polar Security Cutters (PSCs) commenced. This marked the first time in 50 years that the United States embarked on building such large icebreakers, signifying a major enhancement in the USCG's ability to operate in polar regions. This pivotal moment began with the initiation of construction on the first prototype module of these cutters.²¹ The PSCs, each with a full load displacement of 23,000 tons, are expected to be a game-changer in the Coast Guard's Arctic policy, though they do not match the capabilities of Russia's nuclear submarines.



Figure 5: Construction Image of the New Heavy Icebreaker PSC²²

However, the completion of the first PSC, initially scheduled for 2025, may face delays due to recommendations from the U.S. Government Accountability Office for design improvements suitable for harsher conditions.²³

Meanwhile, Russia has already operationalized two Arktika-class nuclear icebreakers (33,530 tons full load) in 2021 and 2022 and is continuing to build two more.²⁴ Should U.S.-Russia Arctic rivalry become more pronounced, the disparity in icebreaker size and number could significantly impact their strategic competition in the Arctic.

In response, the Congressional Research Service updated the "Coast Guard Polar Security Cutter (Polar Icebreaker) Program: Background and Issues for Congress" document on January 17. This document summarized three congressional testimonies by the Coast Guard in 2023,

concluding that 8 to 9 PSCs are necessary to fulfill the Coast Guard's missions in the Arctic and Antarctic.²⁵ The author hopes this analysis will lead to resolving the operational capacity limitations faced by the Coast Guard in the Arctic.



Figure 6: Russia's Nuclear Icebreaker, Arktika²⁶

3. Specificity of the Implementation Plan

The Implementation Plan articulates the United States Coast Guard's long-term strategic vision and concrete action guidelines for its missions in the Arctic. Characterized by its dynamic approach, the plan includes periodic assessments and flexible responses to the evolving security threats in the Arctic. It incorporates detailed policies for enhancing technology, capabilities, resources, and personnel, alongside a budgetary outline, reflecting an adaptable and agile approach to the Arctic's ever-changing challenges.²⁷

Furthermore, the Plan positions the Arctic as a "peaceful, stable, prosperous, and cooperative region," charting a course for the U.S. Coast Guard to achieve a wide range of objectives, including national security.

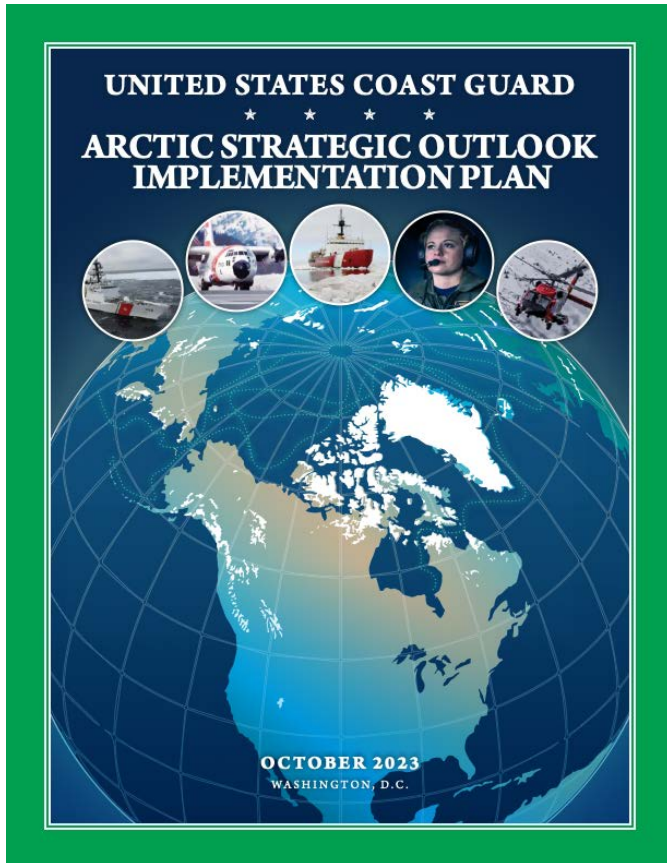


Figure 7: Implementation Plan

More specifically, it comprises the following 14 interconnected initiatives aimed at enhancing effective operational capabilities in the Arctic, strengthening rule-based order, and promoting resilience and prosperity:

1. Intensifying missions and exercises in the Arctic
2. Expanding maritime capabilities and related support infrastructure in the Arctic
3. Enhancing aviation capabilities in the Arctic
4. Broadening communication capacities in the Arctic
5. Improving Maritime Domain Awareness (MDA) in the Arctic
6. Strengthening the Arctic Coast Guard Forum (ACGF)
7. Maintaining U.S. leadership in the Arctic Council (AC)
8. Modernizing the U.S. Arctic maritime transportation system
9. Continuously implementing the International Maritime Organization's Polar Code

10. Enhancing marine environmental preparedness and response
11. Strengthening the Comprehensive Arctic Science Plan (CASP)
12. Introducing technological innovations in the Arctic
13. Enhancing strategic communication
14. Establishing a U.S. Coast Guard mission coordination office in the Arctic

These initiatives represent a comprehensive approach supporting the U.S. Coast Guard's long-term objectives and strategic success in the Arctic, encompassing the introduction of new technologies, expansion of capabilities, and securing of resources and personnel.

Additionally, the Implementation Plan emphasizes the strengthening of international cooperation and collaboration with Arctic nations. This includes fostering partnerships based on shared interests and values, aiming to promote regional prosperity and stability while adapting to climate change, reflecting the evolving geopolitics of the Arctic rather than merely executing policies outlined in the 2019 Outlook.

4. Consistency and Evolution of Policy

In this section, we endeavor to clarify the positioning of the United States Coast Guard's Arctic policy within the broader framework of U.S. policies towards the Arctic. The overarching U.S. Arctic policy has, for over 150 years, steadfastly focused on maintaining sovereignty, ensuring national security, and fostering economic prosperity. Yet, with the Arctic region's growing geopolitical significance and environmental shifts, there has been a pivot towards a more dynamic approach that transcends singular national interests. In essence, the U.S. has adapted to the region's emerging challenges while upholding its role as an Arctic nation.

The Arctic Policy Act of 1984, passed by Congress, serves as a pivotal document in comprehensive U.S. Arctic policy, emphasizing climate change research funding, sustainable development of fisheries, and safeguarding security along

the Alaskan coast, underscoring primarily U.S.-centric interests.

The narrative began to change with initiatives such as Finland's 1991 Arctic Environmental Protection Strategy (AEPS) and the 1996 Ottawa Declaration, which culminated in the formation of the Arctic Council. These initiatives signaled a transition from solely nationalistic policies to a focus on environmental protection and sustainable development through a cooperative framework among Arctic states.

Entering the late 2000s, the noticeable decline in Arctic sea ice and the consequent interest in the Arctic sea routes and seabed resources transformed the Arctic into a stage for international rivalry. Competitors like Russia and China began prioritizing the Arctic, engaging in significant investments such as the Yamal project off Russia's Yamal Peninsula, which includes large-scale icebreaker construction and LNG vessel operation.²⁸

U.S. policy, as articulated in the 2009 National Security Presidential Directive 66 (NSPD-66), expanded to encompass national security, economic opportunities, and international cooperation, while also addressing the expanding influence of nations like Russia.

By 2013, under the Obama administration, the National Strategy for the Arctic Region was formulated, prioritizing climate change, maritime management, multilateral cooperation including international law, sustainable development, and collaboration with Alaska Natives in response to the Arctic's dramatic changes.

This policy was revisited and updated in 2022 under the Biden administration, reflecting the Arctic's new role in international competition and the imperative for the U.S. to effectively project influence and manage rising tensions, especially considering Russia's aggression in Ukraine and its impact on the Arctic Council's stability.

Thus, U.S. Arctic policy has evolved alongside geopolitical and environmental shifts, maintaining a consistent commitment to sovereignty, security, and prosperity while adapting to ensure peace and prosperity through cooperation with a diverse array of stakeholders.

In this evolving context, the U.S. Coast Guard continues to align with these policy shifts through environmental protection, scientific research, and promoting understanding of climate change impacts. It spearheads international cooperation through initiatives like the Arctic Coast Guard Forum (ACGF) and enhances policy research within the Council on Arctic Security Policy (CASP).

As a key enforcer of maritime law and order in the Arctic, reducing the risk of armed conflict, the Coast Guard not only embodies the driving force behind U.S. Arctic policy but also evolves its approach, as demonstrated by the development of its Implementation Plan.²⁹

5. Insights into Future Direction

The Arctic Council (AC), despite being established in the post-Cold War era where the United States and Russia stand at security polar opposites, has maintained the Arctic as a region of peace and low tension. However, as discussed, the Arctic is experiencing heightened tensions due to the expanded accessibility of Arctic Sea routes driven by climate change and the intensification of Russian military activities in the region.

Furthermore, the onset of Russia's invasion of Ukraine in February 2022 led to the remaining seven member countries announcing a temporary suspension of activities within the AC the following month, and with Sweden and Finland applying for NATO membership, all AC member countries, except Russia, have become NATO members.³⁰

³¹ This shift heralds an extension of the Russia-NATO dichotomy into the Arctic from a security standpoint. Moreover, a tight-knit relationship exists between security and economic development in the Arctic. From a security perspective, regional stability and respect for international law are paramount, while economic development hinges on resource extraction, development of shipping routes, and the creation of new commercial opportunities. These objectives, while interdependent, occasionally find themselves in tension, especially in newly accessible routes and resource development areas where environmental risks and security challenges are

escalating, necessitating enhanced capacity to address accidents, disasters, and illicit activities.

The future of the Arctic hinges on how well the balance between security, environmental protection, economic development, and international cooperation is struck. Specifically, this balance heavily relies on the possibility of building peaceful relations with Russia, international cooperation with indigenous groups, and Arctic and non-Arctic countries alike.

Therefore, U.S. Arctic policy must carefully navigate these objectives to aim for the region's sustainable development. The United States needs to collaborate with other Arctic nations, indigenous groups, and international organizations to address joint management of the Arctic, sustainable use of resources, and environmental protection. Through multilateral institutions like the AC, formulating and promoting actions based on shared interests and goals through an international approach to regional challenges is crucial.

Even amidst national conflicts, maritime law enforcement agencies have numerous cooperative tasks, such as search and rescue and marine environmental protection.

Particularly, ensuring maritime safety and environmental protection, indispensable for a sustainable and promising future of the Arctic, falls within the purview of maritime law enforcement. In the AC, where an adversarial structure between Russia and NATO has emerged, the significance of the Arctic Coast Guard Forum (ACGF) is likely to increase.

Thus, the trajectory of U.S. Arctic policy, which holds significant influence in the AC and ACGF, will continue to be of paramount importance. The United States is called upon to adopt innovative strategies to adapt to Arctic environmental changes and address regional challenges through international cooperation. Navigational safety, environmental protection, and sustainable resource use will become central to U.S. Arctic policy as the region changes.

Enhancing Arctic scientific research is crucial for understanding and adapting to regional environmental changes. The United States must support research on

climate change impacts and devise strategies to protect the Arctic's fragile ecosystems. This requires cooperation with the international scientific community and international efforts to mitigate the impacts of climate change and support local communities, with the U.S. Coast Guard's Council on Arctic Security Policy (CASP) and lead roles by U.S. Arctic research institutions serving as effective means.

Finally, the Arctic calls for innovative and flexible approaches to change. The United States must continue to find effective and sustainable solutions to the Arctic's complex and dynamic environment, addressing not only technological but also political and financial challenges. Key to this endeavor is the U.S. Coast Guard, whose enhanced icebreaking capabilities and strengthened voice and influence within the ACGF support a leading role in realizing a sustainable future for the U.S. in the Arctic.

6. Conclusion

Through this paper, insights into the future direction of Arctic policy have been provided, intertwining the United States Coast Guard's development of the Outlook and Implementation Plan with the evolution of U.S. Arctic policy. The Arctic region is in a constant state of flux, with diminishing sea ice due to global warming, geopolitical shifts, and increasing economic opportunities. Adapting to these changes and securing regional peace and prosperity necessitate those Arctic nations, including the United States, adopt sustainable approaches and bolster international cooperation.

The role of the United States in the future of the Arctic involves balancing security, environmental protection, and economic development while continuing to support an order based on international law and rules. This requires international cooperation and dialogue, advancement of scientific research, and engagement with local communities. Addressing the challenges in the Arctic demands innovative thinking and flexibility, and it goes without saying that the United States Coast Guard is a

pivotal organization in realizing a sustainable and secure future for the Arctic.

The evolution of the United States Coast Guard's Arctic policy, reflected through the development of the Outlook and Implementation Plan, is apt, showcasing its influence as a responsible actor and proponent of the rule of law in the international community. However, the augmentation of forces supporting the policy is transitory, and enhancing operational capabilities in the Arctic could very well be considered the lifeline of U.S. Arctic policy.

In the current context, where Russia's invasion of Ukraine casts a shadow over the activities of the Arctic Council (AC), the United States must assert strong leadership and continue to play a leading and cooperative role towards sustainable development and protection of the Arctic. The United States Coast Guard is expected to continue contributing to the security of Arctic maritime operations as the implementing force in this endeavor.

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