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Homeland Security

United States  
Coast Guard



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**TESTIMONY OF  
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**ON**

**“EXPANDING OPPORTUNITIES, CHALLENGES, AND THREATS IN THE ARCTIC:  
A FOCUS ON THE U.S. COAST GUARD ARCTIC STRATEGIC OUTLOOK”**

**BEFORE THE**

**SENATE COMMERCE, SCIENCE, & TRANSPORTATION SECURITY  
SUBCOMMITTEE**

**DECEMBER 12, 2019**

**Introduction**

Good morning Mr. Chairman and distinguished Members of the Subcommittee. It is my pleasure to be here to discuss the U.S. Coast Guard’s strategy and operations to safeguard national security interests and advance safe, secure, and environmentally responsible maritime activity in the Arctic Region.

The Coast Guard has been operating in the Arctic Ocean since 1867, when the United States purchased Alaska from Russia. Since that time, the state of affairs in the Arctic has evolved significantly. The environment is experiencing unprecedented levels of change. The ice is receding; storms are increasing in frequency and magnitude; the coast is eroding; and permafrost is thawing. Alaskan residents are striving to sustain their culture and way of life while residents and non-residents alike are pursuing emerging opportunities. For the Coast Guard, the demand signal for our services is expanding along with the operational environment, exacerbating the tyranny of distance of the region. The types of commercial activity are morphing, from oil and gas exploration a few years ago to the recent surge in cruise ship activity and expanding environmental tourism. These rapid changes in types and location of activity, along with the changes in the physical environment, magnify the challenges in executing the Service’s mission to advance safety, security, sovereign rights, and stewardship across the Arctic.

Simultaneously, the geopolitical environment is rapidly changing as state and non-state actors seek to advance their own interests in the Arctic. Allies, partners, and competitors alike increasingly compete for diplomatic, economic, and strategic advantage. The National Defense Strategy describes a world no longer at either peace or war but rather one of enduring great power competition.

Shaping and influencing this continuum requires a mixture of diplomatic, informational, military, economic, financial, intelligence, and law enforcement efforts to achieve and sustain national strategic objectives. As the only U.S. Armed Force with both military and law enforcement authorities, combined with membership in the intelligence community, the Coast Guard moves seamlessly to bridge the layers in this competition continuum. Specifically, the Coast Guard's constabulary function and broad authorities serve as a beneficial bridge between the hard-power lethality of the Defense Department and soft-power diplomacy of the State Department. This strategic versatility is well suited for operating in ambiguous environments requiring a flexible blend of diplomatic, information, military, economic, financial, intelligence, and law enforcement elements of statecraft. This makes the Coast Guard a unique agency to cultivate strong international relationships and better build a coalition of Arctic partners based on mutual interests and values that strengthen regional stability and enhance prosperity across the region. In collaboration with our Federal partners, the ultimate goal is for the Coast Guard to be the preferred, transparent partner in the Arctic.

Our recently published 2019 Arctic Strategic Outlook reaffirms the Service's commitment to American leadership in the region through partnership, unity of effort, and continuous innovation, and establishes three lines of effort to achieve long-term success. First, we will enhance capability to operate effectively in a dynamic Arctic domain; second, we will strengthen the rules-based order; and third, we will innovate and adapt to promote resilience and foster prosperity. Our strategy aligns with the Nation's needs and interests to secure the Arctic, which requires significant investment and a whole-of-government approach across multiple Departments, agencies, and Services. The Coast Guard's value in this whole of government approach is our experience, leadership, model behavior, and ability to compete below the level of armed conflict. Therefore, strengthening the Coast Guard empowers the Nation to secure the Arctic against threats and shape the region as a safe, cooperative, and prosperous domain.

### **National Security Interests in the Arctic Region**

The United States is an Arctic nation with extensive sovereign rights and responsibilities, and our national security interests in the Arctic are significant, in part due to the reemergence of great power competition in the region. As access to the region evolves, many Arctic and non-Arctic nations aspire to assert or expand their role in governing the region; the dynamic operational environment continues to present risks and opportunities for a broad spectrum of stakeholders. To safeguard our national interests, the United States must plan for a robust, year-round maritime presence commensurate with the expanding interest in the Arctic's strategic value, in its natural resources, and in its potential as a transportation corridor between Asia, Europe, and North America. If we are not vigilant and proactive, other non-Arctic nations will outpace us in assuring their strategic interests in the Arctic in ways that may adversely affect the United States' interests.

Actions and intentions of Arctic and non-Arctic states shape the security environment and geopolitical stability of the region. In particular, our two near-peer competitors, Russia and China, are demonstrably intent on exploiting the maritime domain to advance their interests. Twenty percent of Russia's landmass is north of the Arctic Circle, and both onshore and offshore resource (minerals, oil, and gas) development is crucial to the Russian economy. Russia is also advancing the growth of the Northern Sea Route (NSR) for trans-Arctic shipping and other commercial opportunities.

The NSR continues to set new shipping records, last year reaching 19.7 million tons of goods transported along the route. Natural resource extraction is the main contributor to these increases, predominantly oil and gas shipments from their Yamal facilities. If their energy projections come to fruition, then transport volumes on the NSR could reach 100 million tons per year by 2030.

From a military perspective, Russia's long Arctic coastline, once stripped of sea ice in the future, will be both vulnerable, and able to support naval fleets readily deployable between the Atlantic and Pacific. The Russian government is currently rebuilding and expanding military bases that had previously fallen into disuse. These renewed capabilities include air bases, ports, weapons systems, troop deployments, domain awareness tools, and search-and-rescue response. Additionally, Russia has the world's largest number of icebreakers. With over 50 icebreakers that include four operational, nuclear-powered heavy icebreakers, and plans to build an additional seven nuclear powered icebreakers, Russia maintains the capabilities, capacities, experienced crews, and infrastructure necessary to operate and surge into the Arctic year-round.

China has recently taken an active role in Arctic development, pursuing economic investments with every Arctic nation in key strategic areas, such as oil and gas development, ports, railways, and infrastructure. It has purchased numerous resource deposits throughout the region, including uranium, energy, and rare-earth elements. With the release of their Arctic Policy paper in January 2018, China declared itself a nation intrinsically tied to the Arctic, and signaled their intention to play a security and governance role in the region. China has directed Chinese companies and government agencies to become more involved in Arctic affairs, and is rapidly developing its ability to operate in the region. This year, China launched its first home-built icebreaker and has begun designing an even more powerful and potentially nuclear-powered Polar icebreaker expected to have twice the icebreaking capability of its newest vessel. With three icebreakers China will have greater access than the United States currently has to the Arctic, its ports, and its resources. The concern with Chinese activities in the Arctic is the potential to disrupt the cooperation and stability in the region. Around the globe, China uses coercion, influence operations, debt-trap diplomacy, and implied military threats to persuade other states to heed China's strategic agenda. China views the Arctic as a component of its One Belt, One Road initiative, recently dubbed the Polar Silk Road. China's ambitions and outreach are fraught with risk, often times diminishing the sovereignty of states and fracturing the rules-based governance currently employed in the region.

National security interests extend to the local level as well. For example, economic, environmental, and human security and stewardship are also linked to the changes and expanding activity in the Arctic. Significant increases in natural resource extraction in the U.S. Arctic have not yet materialized, but industries continue to explore opportunities so that they are positioned to leverage economic prospects as they emerge. Current industry growth in the Arctic includes a significant increase in cruise tourism and transpolar flights, which could potentially increase search and rescue missions and risk to the pristine environment. Additionally, we have observed steady but measured growth of shipping through the Bering Strait over the past ten years, across all sectors of industry. As the Arctic continues to experience longer and larger periods of reduced or ice-free conditions, commercial interest and exploitation will grow. A recent U.S. Committee on the Marine Transportation System report projects that by 2030, vessel traffic through the Bering Strait could increase to more than 370 transits, which is roughly three times the 2008 traffic levels. This potential rise will increase the demand for the Coast Guard to monitor, protect, and regulate increased maritime activity, such as de-conflicting shipping corridors in U.S. waters with subsistence hunting and fishing communities.

Food security is another significant issue for Arctic residents and our Nation as a whole. The Bering Sea provides more than half of the wild-caught fish and shellfish in the United States, and the wildlife for subsistence harvesting. Alaska is ranked seventh in the world in global fish exporters, and their seafood industry accounts for almost \$6 billion a year in total economic activity. Additionally, approximately 70% of the U.S. Arctic population relies on subsistence hunting and fishing for survival, the vast majority of which comes from the sea. Thus, changes occurring in the Arctic Ocean are increasing the risk to food security for the globe, from shipping that disrupts migration patterns, to increased risk of pollution incidents, to growth in illegal, unreported, and unregulated fishing as fish stocks migrate.

As human activity continues to increase in the Arctic region, challenges associated with legal and illicit activity plus state and non-state actors are likely to increase. In the face of this competition continuum, the Coast Guard's value proposition is even more critical in the Arctic and around the globe. The Service upholds freedom of the seas and the rules-based order by setting and enforcing standards of behavior in the maritime domain.

### **Balancing National Security Interests Across the Globe**

The Coast Guard possesses a broad suite of authorities and capabilities unique from the other armed services and traditional instruments of national defense. As previously noted, the Coast Guard's authorities expand beyond traditional military and intelligence roles, to include law enforcement and regulatory roles. This combination, along with a multitude of steady-state international bilateral agreements, offers a distinct compliment to conventional defense forces in the ongoing struggle to compete below the level of armed conflict.

Coast Guard international engagements complement more traditional U.S. military posturing. Regular and persistent Coast Guard presence and peaceful engagements support regional stability while positioning the United States as the global maritime security partner of choice. The Coast Guard operates around the world in accordance with over 60 international bilateral agreements, to include 11 with Oceania nations.

Furthermore, the Service is also party to and, in many cases, serves in a leading capacity within a variety of multilateral forums including the North Pacific Coast Guard Forum, Arctic Coast Guard Forum, South East Asia Maritime Law Enforcement Cooperation, and the Africa Maritime Law Enforcement Partnership. This combination of access, authorities, and international acceptance, offers an indispensable opportunity of regional support and stability in this new era of competing influence.

As the world's preeminent coast guard, the U.S. Coast Guard is logically the most suited to build partner capacity in maritime law enforcement, search and rescue, marine safety, fisheries management and conservation—all of which are traditional Coast Guard missions. These missions, incidentally, are in growing demand across the globe. Illegal, Unreported and Unregulated (IUU) fishing, in particular, is a priority issue impacting global stability, in the Atlantic, across the Pacific, and even in Antarctica, where many economies heavily depend on local fish stocks as a primary source of protein and personal income.

The Service, through its internationally recognized maritime law enforcement expertise and a multitude of bilateral and related ship rider agreements, offers viable options to augment partner nation law enforcement capacity to patrol their respective exclusive economic zones. These efforts are essential to preserving, protecting, and defending critical regional and migratory fish stock sustainability and economic vitality while simultaneously countering the malign influence and predatory practices of globally-spread powers such as China.

## **The Coast Guard in Alaska and the Arctic Region**

The Coast Guard has been an active leader in the Arctic for over 150 years. Our latest 2019 Arctic Strategic Outlook reaffirms our commitment to American leadership in the region and articulates the ends, ways, and means to promote and safeguard national security in the Arctic. This includes waging a campaign for safety, sovereign rights, and stewardship through cooperation, addressing competition below the level of conflict, and preparing for conflict should it arise. The following highlights some of the initiatives that have particular impacts on our national and international security, but these activities must be part of an integrated, whole-of-government approach to security in the Arctic.

### **Strategic Leadership**

As many nations and other stakeholders across the world aspire to expand their roles and activities in the Arctic, the Coast Guard is working collaboratively through international bodies to address the emerging challenges and opportunities in the region. One example is our support to the Arctic Council, which is a high-level international forum focused primarily on environmental protection and sustainable development issues in the Arctic region. The Council is composed of the eight Arctic nations, six Arctic indigenous groups, observer nations (including China), and non-governmental organizations that have observer status. The Coast Guard plays a significant role in supporting our Nation's existing engagement in Arctic Council activities through representation on two standing working groups – Emergency Prevention, Preparedness & Response (EPPR), and Protection of the Arctic Marine Environment (PAME).

Under the EPPR working group, the Coast Guard leads the U.S. Government delegation and serves as Chair of the Marine Environmental Response Experts Group. Within PAME, the Coast Guard participates in the Shipping Experts Group where we support projects such as mitigation of risks associated with the use and carriage of heavy fuel oil by vessels in the Arctic. The Coast Guard also served on the Council's Task Force on Arctic Marine Cooperation and has been active in other task forces that established the 2011 Arctic Search and Rescue Agreement, the 2013 Oil Spill Prevention and Response Agreement, and the 2015 Framework for Oil Pollution Prevention.

The Coast Guard has also supported Arctic safety through other international bodies such as the International Maritime Organization (IMO). The Coast Guard was instrumental in the IMO's development and adoption of the International Code for Ships Operating in Polar Waters (Polar Code) to cover the design, construction, equipment, operational, training, and environmental protection matters relevant to ships operating in the Polar regions. In 2017, the Coast Guard completed a rulemaking process to issue Polar Ship Certificates to U.S. vessels. We also developed and promulgated guidance to industry and our Captains-of-the-Port on how to ensure compliance with the Polar Code.

Additionally, in November 2017, the Coast Guard collaborated with the Russian Federation to jointly develop and submit a proposal to the IMO to establish a system of two-way routes in the Bering Strait and Bering Sea. The Coast Guard also submitted an associated proposal to establish "Areas to be Avoided" in three environmentally sensitive areas. The objective was to advance the maritime transportation system in the region; promote the safe, responsible flow of commerce; and de-conflict the commercial uses of the waterways with subsistence activities. The IMO adopted these measures at the 99th session of its Maritime Safety Committee, and the provisions entered into force in December 2018. These are but two examples of the Coast Guard being proactive in addressing emerging international and domestic maritime concerns in the Arctic.

Last, the Arctic Coast Guard Forum (ACGF) is a bridge between diplomacy and operations. Formally established in October 2015, the ACGF operationalizes all of the elements of our Arctic strategy as well as the objectives of the Arctic Council. It is a unique, action-oriented maritime governance forum where the Coast Guard and our peer agencies from the other seven Arctic nations strengthen relationships, identify lessons learned, share best practices, carry out exercises, conduct combined operations, and coordinate emergency response missions. In April 2019, the ACGF conducted its second live exercise, POLARIS, which incorporated six ships and five aircraft from the ACGF member nations to respond to a simulated cruise ship in distress near Finland. The exercise was a successful demonstration of combined operations with the eight ACGF nations and highlights the criticality of coordination in maritime environmental response and the responsibility to ensure search and rescue resources are prepared to respond.

### **Coast Guard Operations in the American Arctic**

Operation ARCTIC SHIELD is the Coast Guard's year-round planning and operational endeavor that provides a flexible, mobile, and scalable presence in the Arctic domain. In 2019, ARCTIC SHIELD (AS19) operations advanced national and Coast Guard strategic goals by aligning operations to mitigate real-world threats and leverage opportunities of strategic interest.

To promote regional resilience and strengthen the maritime transportation system, the Coast Guard spearheaded a Marine Safety Task Force (MSTF) to conduct missions in the remote regions of their Area of Responsibility (AOR). Employing active and reserve surge personnel, the MSTF deployed to and engaged with 102 local communities to perform marine safety and marine environmental protection missions in villages not on the road system in the Arctic and Western Alaska. In addition to the summer surge support, a major contributor to the MSTF success has been its partnerships: the Civil Air Patrol transportation saved valuable resources and allowed personnel to transit more seamlessly between remote villages.

The MSTF teams inspected over 60% of the region's 380 regulated bulk oil facilities – a massive improvement over the prior annual average of 12%. Frequent inspections and proactive communications between the Coast Guard and facility operators will reduce the environmental risk to remote communities, help remote villages build capacity to respond, and set baselines for resilience and awareness as their environment rapidly changes.

From July to October, MH-60 helicopters and crews deployed to Forward Operating Location Kotzebue and to Utqiagvik to conduct Coast Guard missions. This year, those helicopters completed 25 SAR cases, saved 13 lives, and assisted 28 others in an environment harsher than anywhere else the Coast Guard operates. Additionally these assets improved the Coast Guard's maritime domain awareness in the Arctic and provided critical support to federal and state personnel studying marine mammals. The Coast Guard partnered with DoD to leverage their strategic lift capabilities to deploy the assets to Kotzebue and the North Slope. Additionally, when the helicopters made the unplanned shift to Utqiagvik in September, the Coast Guard leveraged a longstanding positive partnership with the North Slope Borough to gain critical hanger space and logistical support on short notice. The Coast Guard would not have been able to complete its scheduled deployment to the Arctic and provide SAR coverage to North Slope mariners without the efforts and support from both. The Coast Guard departed Utqiagvik on October 31, 2019, but subsistence whale hunting is still ongoing today. This highlights the changing operational environment not only for the Coast Guard but also for Arctic residents. The lengthened "shoulder" seasons of open water are beyond the period in which the Coast Guard has the resources to be present. Without the Coast Guard's highly mobile expeditionary forces, risk to mariners and coastal residents will escalate as maritime activity and traffic expands throughout the vast Arctic.

AS19 exercised the Coast Guard's expeditionary capability by deploying a team from our Deployable Specialized Forces in California to conduct shore based law enforcement operations for the Kotzebue salmon state fishery that consists of nearly 100 small open skiffs. The enforcement operation reinforced several years of extensive marine prevention outreach, education, and training with these fishers. Planning and executing this mission highlighted the logistical and administrative challenges involved in supporting mission execution in the Arctic. This deployed law enforcement team provided 3 weeks of on-water presence and contacted 59 commercial fishing vessels and conducted 27 boardings with 5 voyage terminations. The operation bolstered community support from the mayor and local fishermen and rallied the community to improve their own safety and survivability at sea.

In the absence of a consistent law enforcement presence in the region, the Coast Guard must develop and exercise expeditionary capability to project surface forces into the Arctic as the weather patterns are less predictable and maritime activity continues to evolve. This team's employment points to the urgent need to modernize assets, infrastructure, and platforms to effectively operate and provide presence in the Arctic.

In 2020, operations will be supported with cutter, aircraft, and shoreside presence across Western and Northern Alaska. Specific activities include establishing a regional SAR response capability, conducting boardings to promote fishing vessel safety, facility and vessel inspections, gold dredge fleet inspections, maritime safety compliance enforcement, and ice rescue training.

Planned activities also include testing and improving oil spill preparedness and response capabilities, conducting a commercial aircraft crash-related mass rescue exercise, and completing a joint maritime pollution contingency exercise with international partners. Year-round outreach efforts will continue to deliver education and awareness services to Arctic communities and outlying native villages.

As presence equals influence, the Coast Guard must continue to evaluate options to advance our 2019 Arctic Strategic Outlook as well as national interests in the region. The resurgence of nation-state competition over the past 5-10 years has coincided with the dramatic changes in the physical environment of the Arctic. This reality has elevated the Arctic's prominence as a strategically competitive space. The Coast Guard, and the Nation, have limited means to respond to, intercept, or collect information on vessels operating in the Arctic region.

### **Icebreaking Capacity and Acquisition Status**

The ability for the United States to lead in the Arctic, both strategically and operationally, hinges on having the capabilities and capacity (presence) to protect our national sovereignty and safeguard our homeland security interests. The foundation of the Coast Guard's operational presence and influence is U.S. icebreakers, whose purpose is to provide assured, year-round access to the polar regions for executing national security missions within existing Coast Guard authorities. Our heavy icebreakers must be fully interoperable with DoD, international allies, and partners to optimally carry out national maritime homeland defense and homeland security missions. Thus, they will include sufficient space, weight, and power to conduct the full complement of multi-mission activities that support our Nation's current and future national security interests in the Arctic.

The 2010 High Latitude Mission Analysis Report (HL MAR) identified the need for six new polar icebreakers (at least three of which must be heavy) under the assumption that, in the future, the Coast Guard would be required to perform nine of its eleven statutory missions year-round in the Arctic, and meet all icebreaking needs in support of the United States Antarctic Program.

In 2017, the Coast Guard's Center for Arctic Study and Policy completed an addendum to the HL MAR. The objectives were to provide a broad overview of changes in the polar regions over the last seven years and to provide specific information for use in determining potential impacts on mission areas in the polar regions. This addendum provides confidence in the original findings and encourages the sustained reliance on its initial recommendations on the Nation's need for six icebreakers, three of which must be heavy icebreakers.

The current Coast Guard icebreaker capacity is one heavy polar icebreaker, CGC POLAR STAR – commissioned in 1976, and one medium icebreaker, CGC HEALY – commissioned in 2000. The primary differences between heavy and medium icebreakers are endurance and power. The Coast Guard considers a heavy icebreaker to be one that can break at least six feet of ice at a continuous speed of three knots and operate year-round in the Arctic, with the necessary systems and endurance to protect its crew in the event it has to “winter-over” in substantial ice conditions. Conversely, medium icebreakers are designed to operate seasonally in the Arctic.

Due to the strong support of the Administration and Congress, the FY 2019 appropriation included full funding for the acquisition of our first Polar Security Cutter (PSC), and some long lead time materials for the second. This investment sends a strong message that the Nation is serious about our interests in the Arctic. In April of this year, the joint Coast Guard and Navy Integrated Program Office (IPO) awarded VT Halter Marine Inc., of Pascagoula, Mississippi, a fixed price incentive (firm) contract for the detail design and construction of the lead PSC. We are as close as we have been in over 40 years to recapitalizing our icebreaking fleet, and continued investment will ensure we meet our Nation's growing needs in the rapidly evolving and dynamic polar regions.

The Coast Guard also understands that we must maintain our existing heavy and medium icebreaking capability while proceeding with recapitalization. Construction on the first PSC is planned to begin in 2021 with delivery planned for 2024; however, the contract includes financial incentives for earlier delivery. Maintenance of POLAR STAR will be critical to sustaining this capability until the new PSCs are delivered. Robust planning efforts for a service life extension project on POLAR STAR are already underway and initial work for this project will begin in 2020, with phased industrial work occurring annually from 2021 through 2023. The end goal of this process will be to extend the vessel's service life until delivery of at least the second new PSC.

## **Shore Infrastructure**

In addition to having the necessary platforms to maintain our presence in the Arctic, the Coast Guard maintains a robust shore infrastructure laydown in Alaska. Shore facilities support all Coast Guard operations and personnel, as well as provide required infrastructure to support the needs of the Service's operational communities. Investments in shore infrastructure are critical to modernizing the Coast Guard and equipping our workforce with the facilities required to meet mission.

With approximately 10% of the Coast Guard's real property inventory located in Alaska, the need for proper capital investments is all the more critical given the vast distances between shore facilities in that region. We are currently building waterfront facilities and shore infrastructure to support the delivery of six new Fast Response Cutters (FRC) and two Offshore Patrol Cutters (OPC) to Alaska, as well as the critical housing and family support facilities to accommodate the additional personnel and their families to operate and maintain these new assets. Additionally, over the last few years, we have built a new hangar to support forward deployed helicopters in Cold Bay, 20 new housing units in Kodiak, as well as new facilities in Kodiak to enable our transition from C-130H to C-130J aircraft.

## **Conclusion**

These efforts reaffirm our commitment to the region and our need for capabilities, capacity, and infrastructure to protect our national security and economic security interests in the region. Arctic operations must be balanced with competing demands for Coast Guard focus both at home and abroad. However, the Coast Guard must remain flexible and scalable to adapt to the rapidly evolving geopolitical and operational Arctic environments.

Regardless, the Coast Guard will continue to lead across the National and international landscape to build a coalition of like-minded partners in order to shape the Arctic domain as an area of low tension, high attention, and great cooperation while preserving our national interests and rights. This leadership and collaboration across the national and international spectrum will enable us to reinforce positive opportunities and mitigate negative consequences in the Arctic region. Failing to increase and focus our Nation's leadership in the Arctic will result in other powerful nations taking the lead in a region with critical geostrategic value.

We understand the significant investment required to secure the Arctic, and we appreciate and embrace the trust the Nation has placed in the Service. Thank you for the opportunity to testify before you today and for all you do for the men and women of the Coast Guard. I look forward to answering your questions.