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TESTIMONY OF
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ON

"MARITIME TRANSPORTATION IN THE ARCTIC: THE U.S. ROLE"

BEFORE THE

HOUSE COAST GUARD AND MARITIME TRANSPORTATION SUBCOMMITTEE

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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 advance safe, secure, and environmentally responsible maritime activity, as well as the Service's efforts to safeguard national security interests in the Arctic Region.

The Coast Guard has been operating in the Arctic Ocean since 1867, when the United States purchased Alaska from Russia. As in all U.S. waters, our missions include enforcing laws and regulations, conducting search and rescue, advancing navigation safety and environmental stewardship, and assisting scientific exploration. As the Nation's visible maritime presence in the Arctic, the Coast Guard is also addressing the region's broader national security interests, including: economic security, environmental security, food security, geopolitical stability, human security, national defense, and sovereignty.

The state of affairs in the Arctic has significantly changed over the past 150 years. The Arctic is one of the world's most challenging operating environments due to the extreme weather, vast distances, and lack of infrastructure. As nations, industry, scientists, and the public explore and pursue emerging opportunities, the region is also experiencing unprecedented change, including rising geopolitical interest and expanding human activity. Additionally, Americans in the region are adapting to the rapid changes in the environment and activity impacting their ways of life.

Our Nation's need to protect its interests in the Arctic are both pressing and enduring. Doing so requires a whole-of-government approach, in which the Coast Guard plays a significant role in the implementation of national policy. The Coast Guard's vision for the Arctic is a cooperative environment that balances the needs and requirements of the region's diverse group of stakeholders.

With increasing human activity and international interest, our sovereignty, security, and prosperity in this dynamic region hinge on effective governance; effective governance can only be achieved through physical and diplomatic presence.

National Security Interests in the Arctic Region

The United States is an Arctic nation with extensive sovereign rights and responsibilities in this region. Moreover, national security interests in the Arctic are broader than anywhere else in the U.S. As access to the region evolves, many nations across the globe aspire to assert or expand their role in governing the region; the changing weather patterns and receding ice continue to present risks and opportunities across a broad spectrum of stakeholders. 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, other nations will outpace us in developing their competing interests in the Arctic.

Actions and intentions of Arctic and non-Arctic States shape the security environment and geopolitical stability of the region. In particular, our two nearest-peer competitors (Russia and China) have both declared the Arctic a strategic priority. 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 reached a new shipping record last year with 9.74 million tons of goods transported along the route, and Russia expects that number to reach 35 million tons by 2025. From a military perspective, Russia's long Arctic coastline, once stripped of sea ice, will be both newly vulnerable to attack, and newly able to support surface 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. Additionally, Russia has the world's largest number of icebreakers. With nearly 50 icebreakers that include four operational, nuclear-powered heavy icebreakers, and three new heavy, nuclear-powered icebreakers currently under construction, 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. They have purchased numerous resource deposits throughout the region, including uranium, energy, and rare-earth elements. With the release of their new Arctic Policy paper in January of this year, they have declared themselves 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. In 2019, China will launch its first home-built icebreaker, and has begun designing an even more powerful Polar icebreaker expected to have twice the icebreaking capability of its newest vessel now under construction. These efforts will give China greater access than the United States currently has to the Arctic, its ports, and its resources.

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 has 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 environmental integrity. 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, industry and other nations (China in particular) will likely continue to explore the possibility of seasonal trans-Arctic commercial shipping through the three Polar routes. These routes offer considerable savings between northern ports in Asia, Europe, and North America versus other more traditional routes, though the high variability of spring and fall conditions will pose a danger to even seasoned operators and undoubtedly increase the demand signal for our Coast Guard's services.

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 illicit activity and non-state actors are likely to increase. Communications are an important and emerging area of industry activity in the Arctic as well, and an area that is likely to draw significant attention given its strategic importance. The importance of securing communications cables and data centers against penetration by hostile state, state-affiliated, and non-state actors should be fully recognized. As an emerging maritime chokepoint for both commercial and military ships, the Bering Strait is a strategic waterway to which access must be assured. Additionally, our commitment to freedom of the seas must be demonstrated in the Arctic Ocean as it is demonstrated around the globe.

The Coast Guard in Alaska and the Arctic Region

The Coast Guard's Arctic policy and objectives are set forth in our 2013 Arctic Strategy. The objectives are to Modernize Governance, Broaden Partnerships, and Improve Domain Awareness. Achieving these objectives requires continued leadership, extensive presence, and effective collaboration. Our plan for implementing this strategy and improving national security in the Arctic includes integrated strategic and operational planning and initiatives. I would like to highlight some of the initiatives that have particular impacts on our national and international security.

Diplomatic Presence

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 primarily focused on environmental protection and sustainable development issues in the Arctic region. The Council is composed of the eight Arctic nations (United States, Canada, Denmark (Greenland), Iceland, Norway, Sweden, Finland, Russia), six Arctic indigenous groups, observer nations (including the U.K., China, South Korea, and various other European and Asian nations), and non-governmental organizations' observers. The Coast Guard plays a significant role in supporting our Nation's existing engagement in Arctic Council activities, as well as in the Federal role in governance of the U.S. Arctic. The Coast Guard is committed to working with its international and multilateral partner organizations, and supports U.S. involvement in Arctic Council efforts through its representation in 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 serves 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 guided Arctic security 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, the Coast Guard is finalizing the Port Access Route Study (PARS) for the Chukchi Sea, Bering Strait, and Bering Sea. The overarching goal of the PARS was to determine if ship routing measures could help reduce the risk of marine casualties and their impact on the environment, to increase the efficiency and predictability of vessel traffic, and to preserve the paramount right of navigation while continuing to allow for other reasonable waterway uses. Based on this PARS, in November 2017 the Coast Guard and the Russian Federation jointly submitted 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 IMO adopted these measures at the 99th session of its Maritime Safety Committee which concluded on May 25, 2018. We anticipate that the new routing measures will enter into force on January 1, 2019. The Polar Code and Bering Strait PARS are extraordinary examples of our 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 2017, the ACGF conducted its inaugural live search and rescue exercise, Arctic Guardian 2017. This exercise demonstrated the unique challenges of operating in the Arctic, and reinforced the need for international cooperation in this environmentally sensitive area. With the increase of commercial traffic, discussions between the Heads of Delegation and Ambassadors during Arctic Guardian highlighted the criticality of coordination in maritime environmental response and the responsibility to ensure search and rescue resources are prepared to respond.

Operational Presence

America's Arctic Shield is the Coast Guard's annual operation in the Arctic that employs a seasonal and mobile approach to execute our statutory missions in the region. In 2017, America's Arctic Shield operations advanced national and Coast Guard strategic goals by aligning operations to mitigate real-world threats, leveraged opportunities of strategic interest, and performed statutory missions. This involved the re-establishment of a temporary, forward operating location in Kotzebue, AK, as well as the deployment of major cutter forces, air assets, communication equipment, personnel, and logistics support to conduct Coast Guard missions. During 2017, the Coast Guard employed the icebreaker HEALY to conduct maritime patrols and support scientific operations. The high endurance cutter SHERMAN and medium endurance cutter ALEX HALEY also operated in the Bering, Chukchi, and Beaufort Seas, conducting maritime patrols and serving as forward deployed response assets. In July and August of 2017, the seagoing buoy tender MAPLE completed a historic voyage through the Northwest Passage, marking the first time a Coast Guard cutter not designated as a heavy or medium ice breaker, transited the passage since 1967. Additionally, the Coast Guard worked collaboratively with multiple agencies to enhance prevention and response plans at all levels of government. Our key highlights include: completion of 28 search and rescue cases (collectively saving 20 lives and assisting 27 others); Coast Guard and Navy divers completing the first Arctic ice dive operations from the HEALY since 2006; conducting multiple exercises such as Operation Arctic Guardian; hosting an oil spill seminar, and equipment deployment in Utqiagvik, AK; visits to 41 remote villages (educating more than 4,000 children in boating and water safety programs); exchanges and joint operations with the Royal Canadian Navy and Coast Guard; and ALEX HALEY's successful medical evacuation of a Chinese national from the Chinese ice breaker XUE LONG near Nome, AK.

This year, America's Arctic Shield 2018 shoreside operations commenced on March 1. Those operations include a focus on western Alaska and the Bering Strait. They will also include a three-pronged approach consisting of outreach, operations, and assessment of capabilities in order to support marine safety, search and rescue, law enforcement, and other Coast Guard statutory missions in the Arctic. Consistent with our Arctic Strategy, our goal is to further develop a comprehensive understanding of the capabilities required to operate in this austere environment, as well as to broaden partnerships in support of Arctic operations.

In 2018, operations will continue to be supported by the re-activation of a forward operating location in Kotzebue on July 1 to coincide with increased cutter, aircraft, and shoreside presence. Other activities include facility and vessel inspections, gold dredge fleet inspections, maritime safety compliance enforcement, ice rescue training, marine mammal protection enforcement flights, sovereignty patrols, and scientific research. Planned exercises include an oil spill exercise in Bethel in August, a preparedness and response exercise on the North Slope, and a joint marine pollution contingency exercise with Russia planned for November. Year round outreach efforts will continue to deliver education and awareness services to Arctic communities and outlying native villages.

In addition to America's Arctic Shield operations, the Coast Guard has a history of leading Arctic exercises to test and develop capabilities, experience, and international and intergovernmental partnerships. The Coast Guard was a major contributor to the October 2015 International Arctic Search and Rescue Exercise, Arctic Zephyr. The purpose of this exercise was to test and practice deployments in accordance with the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic. Its focus was on the coordination of response capabilities of the Arctic nations, local governments, the private sector, and indigenous communities in a mass search and rescue operation. Additionally, the Coast Guard was co-lead with Department of Defense (DoD) for Arctic Chinook, a full-scale exercise held in August 2016. This exercise focused on International Search and Rescue coordination and response in a remote Alaskan Arctic location. The exercise was comprised of more than 1,000 personnel from the Coast Guard, DoD, state and local agencies, tribal organizations, and the Royal Canadian Air Force, boosting Arctic mission coordination between Federal, local, and state responders and promoted interagency and industry support for search and rescue actions. International partners also participated as observers to the exercise.

Icebreaking Capacity and Acquisition Status

The ability for the United States to lead in the Arctic, both diplomatically and operationally, hinges on having the capabilities and capacities (presence) to exert national security and sovereignty. The foundation of this presence is U.S. icebreakers, whose purpose is to provide assured, year-round access to the polar regions. These are platforms that can deliver Coast Guard authorities anywhere, anytime. Under international law, Coast Guard icebreakers are considered U.S. warships. Accordingly, a heavy icebreaker must be fully interoperable with interagency and international stakeholders, including the DoD, to carry out national defense operations. 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 needs in the Arctic.

The 2010 High Latitude Mission Analysis Report (HL MAR) identified the need for six new polar icebreakers (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 mission year-round in the Arctic, and support all icebreaking needs to sustain our presence in Antarctica. 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.

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. A heavy icebreaker must also have a fully mission capable cutter endurance of 80 days without replenishment, be able to deploy helicopter detachments, and be able to perform the full suite of Coast Guard missions. Conversely, medium icebreakers are designed to operate seasonally in the Arctic. The Coast Guard has chartered an Integrated Product Team to define the Concept of Operations and requirements for a medium icebreaker. While medium icebreakers like the HEALY provide critical capability identified in the HL MAR, the age and condition of our Nation's only operational heavy icebreaker, POLAR STAR, makes recapitalizing this capability of the highest priority.

Due to the strong support of Congress, the FY 2017 and FY 2018 appropriations included a total of $300 million toward polar icebreaker acquisition. This investment reflects our interests as an Arctic Nation, and reaffirms the Coast Guard's role in assuring access to this region. Additionally, the FY 2019 President's Budget requests $750 million for the construction of an icebreaker, which is a strong message that the Nation is serious about recapitalizing our heavy icebreaker fleet. Key stakeholders participated in the identification of operational requirements, and the Coast Guard approved a cost-informed update to the heavy polar icebreaker Operational Requirements Document (ORD) earlier this year. Most recently on March 2, 2018, the joint Coast Guard and Navy polar icebreaker Integrated Program Office (IPO) released the request for proposals – nearly four weeks ahead of schedule – for the detail design and construction (DD&C) of up to three heavy polar icebreakers. The IPO anticipates receiving bidders' final proposals in September 2018. After proposals are received, the intent is to award the DD&C contract to a single shipbuilder in FY 2019. 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. Maintenance of POLAR STAR will be critical to sustaining U.S. heavy icebreaker capability until new heavy icebreakers are delivered. The results of last year's alternative analysis concluded that the most prudent option for maintaining heavy icebreaker capability, until new heavy polar icebreakers are delivered, is to conduct a Service Life Extension Project (SLEP) on POLAR STAR. Robust planning efforts are already underway, and pre-phase, industrial 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 heavy polar icebreaker.

Acknowledging that our only medium icebreaker is approaching 20 years of age, we are also taking initial steps to prepare for a mid-life maintenance availability on HEALY.

Developing new icebreaking capability at best possible speed remains among the Service's highest priorities.

Conclusion

The Coast Guard will continue to lead across the National and international landscape to help shape the Arctic domain as a cooperative environment while preserving our sovereign rights. Presence 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.