



**TESTIMONY OF  
ADMIRAL CHARLES W. RAY  
COAST GUARD VICE COMMANDANT**

**ON**

**“ARCTIC / ALASKA INFRASTRUCTURE”**

**BEFORE THE**

**HOUSE COAST GUARD AND MARITIME TRANSPORTATION SUBCOMMITTEE**

**MAY 8, 2019**

**Introduction**

Good afternoon 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 and secure maritime activity, including the opportunities and challenges of Arctic infrastructure.

The Coast Guard has been operating in the Arctic 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, and advancing navigation safety and environmental stewardship. 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, national defense, and sovereignty.

Our Nation’s security demands on the Coast Guard in the Arctic are both pressing and enduring. The Arctic is one of the world’s most challenging operating environments due to the extreme weather, vast distances, and lack of infrastructure. Additionally, as nations, industry, scientists, and the public explore and pursue emerging opportunities, the region is experiencing rising geopolitical interest and expanding human activity. Ensuring safety and security in this dynamic region requires a whole-of-government approach, in which the Coast Guard stands ready to play a significant role. 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.

Our recently published Arctic Strategic Outlook reaffirms our 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.

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

The United States is an Arctic nation with extensive sovereign rights and responsibilities in this region. As access to the Arctic evolves, many nations across the globe aspire to assert or expand their role in governing the region. The United States must be vigilant in protecting its national interests to ensure other nations do not develop their competing interests in the Arctic at our expense.

Actions and intentions of Arctic and non-Arctic States are shaping 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 advertises that number could increase ten-fold by 2030. 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 assets. 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 into the Arctic year-round and surge as required.

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. With the release of their Arctic Policy in January 2018, 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. China is also launching its first home-built icebreaker, XUE LONG II, and has begun designing a nuclear icebreaker expected to have twice the icebreaking capability of its conventional icebreakers.

The United States also has economic and environmental interests in the Arctic, which are linked to the changing and expanding Arctic activity. Significant increases in natural resource extraction in the American Arctic have not yet materialized, but industries continue to explore opportunities to leverage emergent economic prospects. Tourism and transpolar flights are also increasing, both of which could potentially increase search and rescue demands and environmental risks. Additionally, we have observed steady but measured growth of shipping through the Bering Strait over the past ten years.

As the Arctic continues to experience longer and larger periods of reduced or ice-free conditions, industry and other nations will likely continue to explore the possibility of seasonal trans-Arctic commercial shipping through the three Polar routes: the Northern Sea Route through the Russian Arctic, the Northwest Passage through the Canadian Arctic Archipelago, and the Transpolar Route through the central Arctic ocean. These routes could offer considerable savings between northern ports in Asia, Europe, and North America over traditional routes. However, the high variability of environmental conditions and limited shore infrastructure in the North American Arctic will pose a danger to even seasoned operators and likely increase the demand for Coast Guard services.

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

Operation ARCTIC SHIELD is the Coast Guard's year-round planning and operational endeavor which provides mobile and scalable presence in the Arctic domain. In 2018, ARCTIC SHIELD operations advanced national and Coast Guard strategic goals by aligning operations to mitigate real-world threats and leveraged opportunities of strategic interest. This involved staging helicopters at a forward operating location in Kotzebue, AK, and deployment of major cutters, air assets, communication equipment, personnel, and logistics to support Coast Guard operations. The Coast Guard also deployed the medium icebreaker HEALY to conduct maritime patrols and support scientific operations. A high endurance cutter and a medium endurance cutter operated in the Bering, Chukchi, and Beaufort Seas, conducting maritime patrols and serving as forward deployed response assets. Additionally, the Coast Guard worked collaboratively with multiple agencies to enhance prevention and response plans at all levels of government.

Our 2018 operational highlights include: completion of two dozen search and rescue cases (saving or assisting over 50 lives); conducting multiple exercises and training evolutions; hosting oil spill response drills; visits to numerous remote villages (educating more than 4,000 children in boating and water safety programs); as well as exchanges and joint operations with the Royal Canadian Navy and Coast Guard.

This year, ARCTIC SHIELD 2019 shoreside operations are currently underway, with a focus on western Alaska and the Bering Strait. A three-pronged approach of outreach, operations, and assessment of capabilities will support marine safety, search and rescue, law enforcement, and other Coast Guard statutory missions in the Arctic. Consistent with our recently updated Arctic Strategic Outlook, 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 2019, operations will continue to be supported with increased cutter, aircraft, and shoreside presence across Alaska. Specific 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 activities include an oil spill preparedness and response exercise on the North Slope and a joint marine 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.

## **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 to ensure national security and uphold sovereignty. Purpose-built U.S. icebreakers enable American influence through assured access to the polar regions, safeguarding our national interests. These platforms deliver Coast Guard authorities anytime, anywhere, and without these capabilities, we risk significant gaps in our ability to respond to regional contingencies.

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 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. Just two weeks ago, 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.

In order to conduct the full range of Coast Guard missions, Coast Guard icebreakers must be fully interoperable with interagency and international stakeholders, including the Department of Defense (DoD), to carry out national defense operations. Thus, the new PSC 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 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. These efforts reaffirm our commitment to the region and our need for infrastructure to support Arctic operations.

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