

**NOT FOR PUBLICATION
UNTIL RELEASED
BY THE COMMITTEE**

Department of the Navy and the Arctic

Statement By

**Rear Admiral Timothy C. Gallaudet
Oceanographer and Navigator of the Navy,
Commander, Naval Meteorology and Oceanography Command
Director, Navy's Task Force Climate Change**

on

CHARTING THE ARCTIC: SECURITY, ECONOMIC, AND RESOURCE OPPORTUNITIES

Submitted To The

**JOINT SUBCOMITTEE HEARING
COMMITTEE ON FOREIGN AFFAIRS,
U.S. HOUSE OF REPRESENTATIVES
Subcommittee on Europe, Eurasia, and Emerging Threats and
Subcommittee on the Western Hemisphere**

November 17, 2015

**NOT FOR PUBLICATION
UNTIL RELEASED
BY THE COMMITTEE**

Good afternoon Chairman Rohrabacher, Chairman Duncan, Ranking Member Meeks, Ranking Member Sires, and other members of the Subcommittees. Thank you for the opportunity to discuss the Navy's ongoing and future activities in the Arctic.

As a global force, the U.S. Navy must be ready to operate in all the world's oceans, including the Arctic, as we have done for many decades. The risk of conflict in the Arctic region is currently low. As such, the Navy's current posture in the region is appropriate to address existing defense requirements, primarily through the use of undersea and air assets. However, in the event that the requirements change, we must be ready to operate in this challenging and changing environment.

In support of the *U.S. National Strategy for the Arctic Region* and the *Department of Defense Arctic Strategy*, the Navy has identified four strategic objectives:

- Ensure U.S Arctic Sovereignty;
- Provide ready naval forces;
- Preserve freedom of the seas; and
- Promote partnerships

The recently revised *Cooperative Strategy for 21st Century Seapower* builds on the heritage and complementary capabilities of the Navy-Marine Corps-Coast Guard team to advance the prosperity and guarantee the security of our Nation. The Sea Services will continually evaluate Arctic access and presence requirements, improve maritime domain awareness, and pursue cooperation with Arctic partners to enhance the maritime safety and security of the region.

The Arctic is a major driver of global climate and weather. This region is experiencing climate change at an accelerated rate compared to the rest of the world. The diminishing sea ice is gradually opening the region to the potential for increased economic activity including commercial shipping, fishing, oil and mineral extraction, and tourism. These changes will necessitate more accurate, long range forecasts to ensure safe transit in the region.

The *U.S. Navy Arctic Roadmap 2014-2030*, which aligns with the *National Arctic Strategy*, includes a plan that directs the development of Arctic capabilities and capacity in step with changing environmental conditions. The Navy will continue to develop our strong, cooperative partnerships with the Coast Guard, in addition to other interagency and international Arctic

Region stakeholders, to address the emerging opportunities and challenges caused by the seasonal opening of the Arctic Ocean waters.

The Navy will continue to take deliberate steps to develop Arctic expertise through exercises, scientific missions, and personnel exchanges that provide sailors with opportunities to learn best practices. The Navy will limit surface ship operations to periods of projected peak activity associated with open water conditions. Even during open water operations, weather and ocean factors, including sea ice, must be considered when conducting operational risk assessments. The Navy will emphasize low-cost, long-lead time activities to match capability and capacity to future demands and will continue to study and make informed decisions on operating requirements and procedures for personnel, ships, and aircraft with interagency partners and allies. Through ongoing exercises, such as the Navy's biennial Ice Exercise, or ICEX, and associated Scientific Ice Expeditions, as well as research and transits through the region by Navy submarines, aircraft and surface vessels, the Navy will continue to learn more about the evolving operating environment.

The Office of the Oceanographer of the Navy and Office of Naval Research are leading efforts to better understand the complex polar environment, and more accurately predict its operational environment in support of safe navigation, including research on: sea ice dynamics, acoustic propagation, Arctic waves and swell, and ocean stratification. Our Marginal Ice Zone Research Initiative is an example of the types of programs designed to develop new observing technologies and gather observations using a mix of autonomous sensors and platforms, allowing Navy-funded scientists to investigate ice-ocean-atmosphere dynamics and characterize the physical processes that govern season evolution in ice cover. These observations are critical to enabling improvements in numerical predictions of polar operational environments. Understanding the importance of partnerships and addressing common concerns, the Navy is partnering with the Defence Research and Development Canada on an acoustic propagation project to better understand surface losses due to interactions with ice cover, acoustic fluctuations, and ambient noise in open water during summer in the marginal ice zone. The Navy will continue working to solve the difficult problems that arise from Arctic operations to ensure our force can operate safely in the Arctic when needed.

The Navy will likely be called upon to support the U.S. Coast Guard and other U.S. Government agencies by providing marine data collection, sea ice forecasting and predictions, and the forecasting of hazardous weather and ocean conditions. The Navy may also be called upon to support the Coast Guard in search and rescue or disaster response missions, or to ensure freedom of navigation in Arctic waters. Through the implementation of the *National Fleet Plan* and our respective Arctic strategies, Navy and Coast Guard are identifying opportunities to increase commonality and interoperability to better enable the two components to operate together in support of mutual homeland security and national defense missions.

While balancing all of our global defense responsibilities, the Navy will continually assess our preparedness in response to changes in the Arctic environment or changes in the security environment. Based on informed requirements, the Navy may transition its periodic presence in the Arctic Ocean to operating deliberately in the region for longer sustained periods in order to meet national security priorities, as we do in other parts of the world.

Maritime security and international naval cooperation have always been critical components of U.S. Arctic policy. With indigenous populations spread over a vast expanse, the severe climate and rich natural resources of the Arctic are both a challenge and opportunity. The Navy's approach underscores the need to strengthen our cooperative partnerships with interagency partners, especially the U.S. Coast Guard and international Arctic stakeholders. It acknowledges that changes in the environment must be continuously examined and taken into account. The key will be to balance potential investments with other Service priorities and leverage interagency and international partnerships. By taking a proactive, flexible approach the Navy can keep pace with an evolving Arctic Region while continuing to safeguard our global national security interests.

Again, thank you Chairman Rohrabacher, Chairman Duncan, Ranking Member Meeks, Ranking Member Sires, and other members of the Subcommittees for the opportunity to appear before you today. I look forward to answering your questions.