



**Chief of Naval Operations**

**The United States Navy**

**Strategic Outlook for the Arctic**

**JANUARY 2019**

## Foreword

This Arctic Strategic Outlook describes the United States Navy's strategic approach to protect U.S. national interests and promote stability in the Arctic. As an Arctic and maritime nation, U.S. economic and security interests require the Navy to work closely with U.S. interagency and foreign maritime partners to safeguard access and exploitation of Arctic resources. The Arctic currently is assessed to be at low risk of conflict and nations have demonstrated their intent to resolve differences peacefully. However, the *National Defense Strategy* acknowledges the re-emergence of long-term, strategic competition between nations and the U.S. Navy must remain ready to safeguard our Arctic interests. Navy employment in the Arctic aligns with objectives identified in the *National Defense Strategy* and the *Department of Defense Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region*.



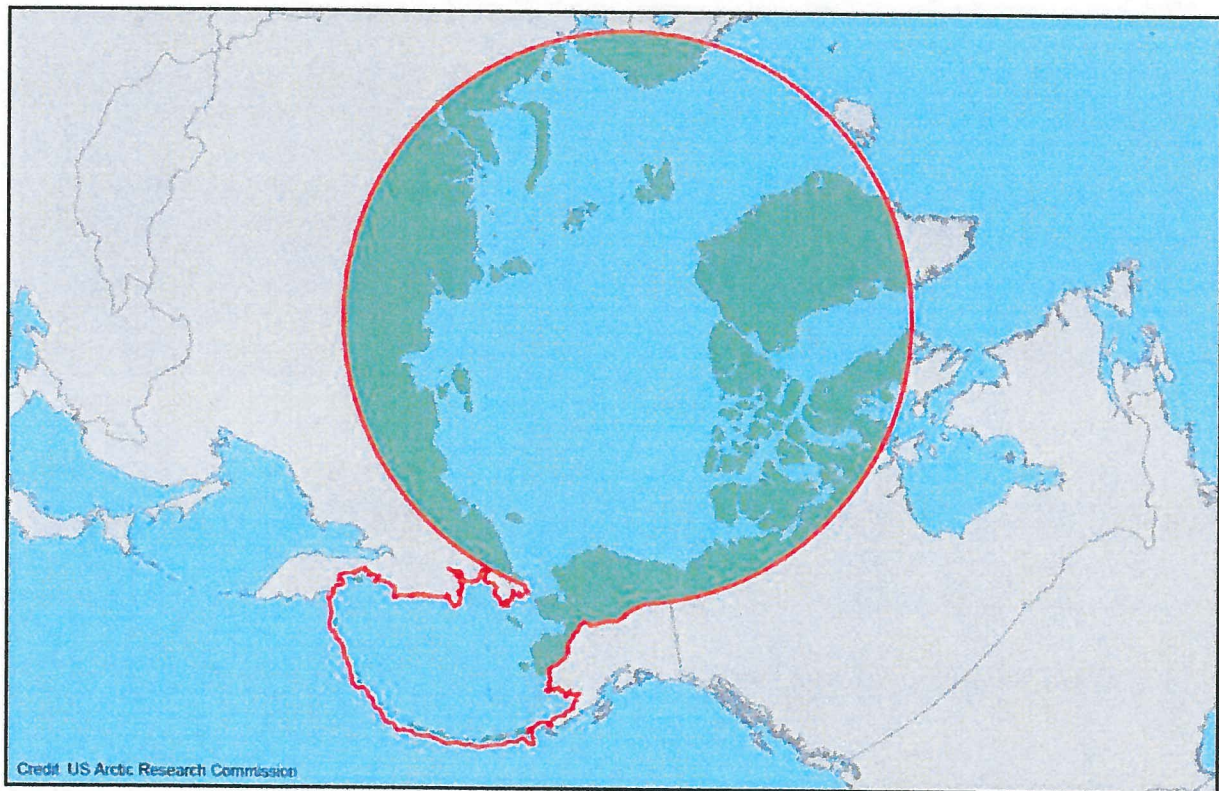
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## 1. Arctic Definition

This Navy Strategic Outlook uses a definition of Arctic, codified at 15 U.S.C. 4111: all U.S and foreign territory north of the Arctic Circle and all U.S. territory north and west of the boundary formed by the Porcupine, Yukon, and Kuskokwim Rivers; all contiguous seas, including the Arctic Ocean and the Beaufort, Bering, and Chukchi Seas; and the Aleutian Islands chain. This description is depicted in Figure 1.



**Figure 1: Arctic as defined by 15 U.S.C. 4111 in the Arctic Research and Policy Act of 1984**

## 2. Mission

The Navy will defend the United States from attack and preserve the Nation's strategic influence in the Arctic. Naval forces will operate to deter aggression and enable peaceful resolution of crises on terms acceptable to the U.S. and its allies and partners.

## 3. Strategic Context

This strategic outlook reflects the evolving strategic environment in terms of overarching strategies, geopolitics, cooperation, and geographic areas.

### a. Strategic Drivers

As an element of the 2018 *Navy Strategy*, this document supports the January 2018 *National Defense Strategy*, the 2013 *National Strategy for the Arctic Region*, and the November 2016 *Department of Defense Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region* hereafter referred to as the *DoD Arctic Strategy*. It supersedes the February 2014 *U.S. Navy's Arctic Roadmap 2014-2030*.

The *DoD Arctic Strategy* refined DoD's desired end state for the Arctic as: "a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is defended, and Arctic states work cooperatively to address challenges." It highlighted two supporting objectives for the Arctic Region:

- Ensure security, support safety, and promote defense cooperation; and
- Prepare for a wide range of challenges and contingencies.

In support of National and Department of Defense objectives for the Arctic, the Navy will pursue the following strategic objectives:

- *Defend U.S. sovereignty and the homeland from attack;*
- *Ensure the Arctic remains a stable, conflict-free region;*
- *Preserve Freedom of the Seas; and*
- *Promote partnerships within the U.S. Government and with allies and partners to achieve the above objectives.*

Consistent with scientific assessments that informed the 2014 *Navy Arctic Roadmap* and the 2016 *DoD Arctic Strategy*, current scientific evidence indicates the character of Arctic sea ice continues to change. The composition of sea ice is trending thinner and younger and sea ice coverage is still decreasing. Though sea ice extent has declined at a rate of 13% per decade in the summer and 3% per decade in the winter, understanding and accurately predicting both the

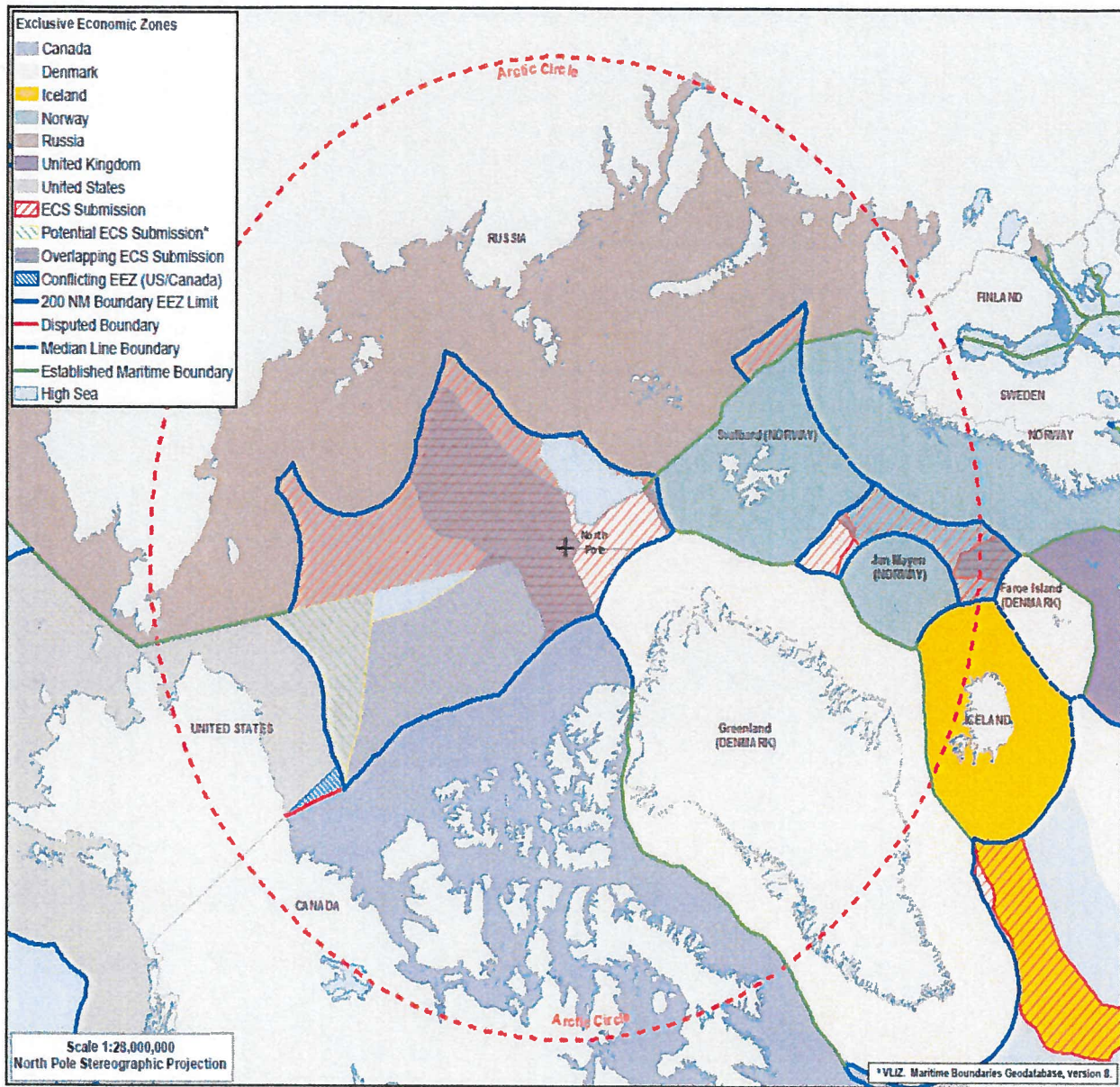
inter-annual variability and regional ice coverage remains challenging. As the Navy prepares for current and future operations, understanding and predicting the environment is critical for meeting mission and ensuring the safety of its personnel and equipment.

In view of Arctic environmental change, Arctic and non-Arctic states are considering opportunities for development – many of which are reflected in national policy statements and strategies. Most of the water and seabed of the Arctic are either already within the Exclusive Economic Zones (EEZs) of bordering coastal states, or are within the extended continental shelf claims of such states, as illustrated in Figure 2. These coastal Arctic states may seek economic benefit through partnering with non-Arctic states for the development of these opportunities. The growing economic viability and anticipated increase in international development activity may require updated international regulations.

### **b. Geopolitical Situation**

While there are recognized threats, opportunities, and risks in our return to an era of Great Power Competition, the Arctic is assessed to be low risk for conflict because nations have demonstrated the ability to resolve differences peacefully. Within the Arctic Ocean, nations exercise rights and freedoms consistent with international law, such as navigation and overflight, marine scientific research, the laying and maintenance of undersea pipelines and cables, and fishing. Nations respect the exclusive rights and jurisdiction of Arctic coastal states for exploitation of resources in the EEZ and continental shelf. It remains unlikely that any of the eight Arctic states would risk a large-scale conflict; however, the Navy will be prepared to deter conflict and protect our national interests.

The Arctic Council is the leading intergovernmental forum promoting cooperation, coordination, and interaction among the Arctic states, Arctic indigenous communities, and other Arctic inhabitants. The eight State members are the United States, Canada, Denmark, Finland, Iceland, Norway, Sweden, and the Russian Federation. The Arctic Council has provided a forum for the negotiation of three important legally binding agreements among the eight Arctic states: Agreement on Enhancing International Arctic Scientific Cooperation (signed 2017); Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (signed 2013); and Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (signed 2011). Arctic states have a strong incentive to preserve this historically stable region for continued responsible development in the context of their national goals.



**Figure 2: Maritime Jurisdiction and Boundaries in the Arctic Region**

Though the United States has not acceded to the United Nations Convention on the Law of the Sea (UNCLOS), the U.S. Navy has long treated its provisions related to traditional ocean uses as customary international law. The customary international law principles reflected in UNCLOS serve as the legal framework for rights and obligations in the Arctic Ocean including the delineation of the outer limits of the continental shelf, protection of the marine environment, freedom of navigation, military survey, and marine scientific research.

### **c. Interagency and International Cooperation**

The Navy and U.S. Coast Guard (USCG) collaborate in close partnership during times of war and peace to protect our nation's ports and waterways and to promote U.S. maritime security interests overseas. The combined efforts of the Navy and the Coast Guard in the Arctic Ocean demonstrate a cooperative relationship that acknowledges the distinctive authorities, missions, competencies, and cultures of each service. The Coast Guard has statutory responsibilities, and fulfills most U.S. maritime missions in the Arctic. The Coast Guard accomplishes these missions through a mobile and seasonal approach, allowing flexibility to respond to changing conditions and activity levels.

The National Fleet Plan, first published in March 2014, charged the Navy and the Coast Guard with identifying opportunities to increase interoperability of their forces. The National Fleet Board, through established working groups, implements actions collaboratively to support national and Service strategies, and generates initiatives to further inter-service cooperation. The USN-USCG Arctic Working Group, established in April 2014, facilitates dialogue on topics to include: strategy and policy; external engagement; intelligence; maritime domain awareness; requirements; capabilities; logistics and infrastructure; and training and exercises. The working groups make recommendations to the National Fleet Board for consideration by the Chief of Naval Operations and Coast Guard Commandant.

Independently, the Navy and Coast Guard also work with their respective international partners through various forums and working groups, such as the Arctic Coast Guard Forum and Combatant Command engagement. Through these partnerships, the Navy and Coast Guard are committed to ensuring safe, secure and environmentally responsible maritime activity in Arctic Ocean waters and to promoting U.S. interests in the Arctic.

The Navy will work with the Royal Canadian Navy to ensure common Arctic Region interests are addressed in a complementary manner. For decades, Canada and the United States have been partners in the defense of North America, cooperating within the framework of the North Atlantic Treaty Organization (NATO) and the North American Aerospace Defense Command (NORAD). Homeland defense and homeland security are shared priorities for the governments of Canada and the United States. The Navy will continue to support NORAD's missions for aerospace warning and control, and maritime warning for threats against the United States and



Canada. This unique and enduring defense partnership between the United States and Canada will remain important to our mutual security interests.

The Navy collaborates with the National Oceanic and Atmospheric Administration (NOAA), Department of Energy (DOE), National Aeronautics and Space Administration (NASA), National Science Foundation (NSF), and U.S. Air Force to improve Arctic modeling and forecasting capabilities for operational support. The National Ice Center (USNIC) is an interagency organization led by the U.S. Navy in partnership with NOAA and USCG. USNIC provides global to tactical scale ice and snow products, ice forecasting, and other environmental intelligence services for the U.S. government. USNIC also leads a multitude of international engagements. Through a partnership with the University of Washington, it manages and coordinates the U.S Interagency Arctic Buoy Program (USIABP). This effort includes NASA, the NSF, the Naval Oceanographic Office and the Office of Naval Research. The USIABP contributes to the International Arctic Buoy Program, an international group that maintain a network of drifting buoys in the Arctic Ocean. These buoys collect sustained weather and oceanographic observations for 3-5 years and provide operational and scientific communities access to in-situ data. Availability of this data improves forecasting capability, thereby reducing operational risk in the Arctic. The Navy also regularly collaborates with the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM) to conduct marine acoustic research and assess energy development capability in the Arctic.

#### **d. Geographic Areas for the Arctic Region**

The Unified Command Plan (UCP) identifies geographic Areas of Responsibility that provide a basis for Combatant Commanders to coordinate and synchronize activities. Combatant Commanders plan and regularly train for routine and contingency operations, Theater Security Cooperation, and multinational exercises in their respective regions, including those areas that fall within the Arctic. U.S. Northern Command, U.S. European Command, U.S. Indo-Pacific Command, as well as the functional combatant commands U.S. Transportation Command, U.S. Special Operations Command, and U.S. Strategic Command each have equities and interests in the Arctic.

As the Arctic Ocean continues to become more accessible, the importance of the Bering Strait as a strategic chokepoint will increase. This 51-mile wide strait between Russia and the U.S., with a depth varying between 98 to 160 feet, represents an important chokepoint for surface and subsurface vessels entering or departing the Arctic Ocean. As maritime nations pursue economic activity north of the Bering Strait, U.S. partnership opportunities will expand. The Strait has strategic significance since it enables Russia to connect its Asian and European naval forces. As the Pacific gateway for the Northern Sea Route and the Trans-Polar Route, the Bering Strait may become more important for seaborne trade between Europe and Asia. While there has been a moderate increase in traffic through the Strait, in comparison to other international straits the total amount is low.

The Greenland, Iceland, United Kingdom - Norwegian (GIUK-N) Gap is a strategic corridor for naval operations in the high north. This area provides access for the Russian Northern Fleet to the U.S. East Coast and the Mediterranean Sea, enabling Russian naval presence. The GIUK-N Gap also serves as the Atlantic terminus for the Trans-Polar Route, which may become a viable economic option to ship goods from the Pacific to the Atlantic markets.

The Northern Sea Route and the Northwest Passage are two recognized Arctic Ocean routes for connecting the Pacific to the Atlantic, and are ice covered the majority of the year. Seasonal ice cover varies along the length of the transit, though the exact location and duration remains difficult to predict. The Navy will consider implications of increasing maritime traffic in future security planning.

#### **4. Challenges**

The Navy faces unique challenges in the Arctic Ocean that complicate operational and strategic planning. Characterizing the operational environment in the Arctic is compounded by several factors including sea ice, ocean currents, wind, water and air temperature, sea spray and icing conditions, and daylight duration. Changes in these variables affect capability such as acoustic modeling, breaking through ice, mitigating navigation hazards and recovery from chemical spills. Operations are further compounded by the lack of accurate navigational charts for many areas of the Arctic and limited satellite and terrestrial communications north of the Arctic Circle.

The Navy runs environmental models to provide forecasts for operational use. Navy continues to invest in improved predictive capabilities for the Arctic region that will enable more skillful forecasts from weeks to months. A key initiative to advance predictions beyond current capability will involve the development of fully coupled models that incorporate the ocean, waves, sea ice, and the Arctic atmosphere. This development is done in collaboration with other federal partners, for both the research and the operational prediction. A key challenge to modeling in the Arctic is the lack of meteorological and oceanographic observational data. Improvements in environmental characterization and predictive capabilities will depend on increasing measurements of the region.

Based on Combatant Commander requirements, and in coordination with the National Geospatial-Intelligence Agency (NGA), the Navy prioritizes allocation of resources to execute its Title 10 role to collect, process, and provide global hydrographic information. NGA uses this information in the preparation of maps, charts, books, and geodetic products in response to the Combatant Commander.

Navy prioritization of leadership and resources on core functions in regions of likely conflict will continue to override competing interests to develop capabilities in peaceful regions such as the

Arctic. In accordance with the direction in the *National Defense Strategy*, the Navy is prioritizing sustained investment in the face of long-term strategic competition to field a Joint Force that can compete, deter, and win in an increasingly complex security environment.

The Commander of U.S. Northern Command is responsible for advocating for the capabilities required to operate in the Arctic environment. Navy operational priorities in the Arctic are currently met primarily using undersea and air assets. The Navy will continue to evaluate its capabilities, posture, and priorities as the strategic context changes.

## **5. How We Accomplish the Mission**

In alignment with higher-level guidance, and considering the context described above, the Navy strategic objectives for the Arctic are:

*Defend U.S. sovereignty and the homeland from attack.* A primary Navy responsibility is to defend the homeland, its citizens, and critical infrastructure. New opportunities and security challenges in the Arctic may emerge as conditions in the region change. The Navy will protect American sovereign rights and seaborne approaches to our Nation through flexible, periodic presence, and contribute to homeland defense in conjunction with the Joint Force. The Navy will ensure it remains prepared to operate in the Arctic to counter any threats to the homeland that may arise.

*Ensure the Arctic remains a stable, conflict-free region.* The Arctic is a unique and complex region of the world. While Arctic and non-Arctic states have thus far demonstrated a commitment to a stable and conflict-free region, Navy presence in cooperation with international partners will encourage all nations to act responsibly and in accordance with the rights and freedoms provided in international law.

*Preserve Freedom of the Seas.* Access to the global commons and freedom of the seas are national priorities. U.S. policy since 1983 provides that the U.S. will exercise and assert its navigation and overflight rights and freedoms on a worldwide basis in a manner consistent with the balance of U.S. interests as reflected in UNCLOS. The Freedom of Navigation (FON) Program operates on a triple track, involving diplomatic representations, operational assertions by U.S. military units, and bilateral and multilateral consultations with other governments. These seek to promote maritime stability, consistency with international law and an obligation of all States to adhere to customary UNCLOS rules and practices.

DoD uses “freedom of the seas” to mean all of the rights, freedoms, and lawful uses of the sea and airspace, including for military ships and aircraft, guaranteed to all nations under international law. DoD ensures freedom of the seas by preserving the global mobility of U.S. forces and unimpeded commerce through comprehensive, regular, and routine FON Operations

(FONOPS) worldwide. DoD's FON Program employs every branch of military service, including the U.S. Coast Guard. In the Arctic, Navy submarines can conduct FONOPS, either undersea or by surfacing, and Navy surface combatants could conduct FONOPS in open water conditions during the summer melt season. As nations seek economic opportunities in the region, the Navy will contribute to stability and security.

*Promote partnerships within the U.S. Government and with allies and partners to achieve the above objectives.* Today's great power competition requires both a renewed focus on the Navy's role as part of the Joint Force and a rededication to engagement. The Navy will engage with allies and partners, in order to protect the American homeland, maintain maritime superiority in key maritime regions, and promote U.S. interests globally.

The Navy will collaborate with interagency and international partners and allies to improve all-domain awareness, information sharing, and communications through participation in training, operations, and exercises. The Navy's submarine fleet has decades of experience performing missions and exercises under the sea ice. The Navy's premier exercise for research, development, test and evaluation, operational readiness, and combined forces interoperability in the Arctic is the biennial submarine ICe EXercise (ICEX). ICEX provides an opportunity for U.S. and regional partners to validate Arctic specific tactics, techniques, and procedures to ensure mission readiness for Arctic operations.

The Navy continues to make investments in its global operational modeling capability to improve the ability to protect operational forces, installations, and equipment from hazardous conditions of the physical environment. The Navy collaborates with NOAA, DOE, NASA, NSF, and the U.S. Air Force to improve Arctic modeling and forecasting capabilities. As part of a National effort, the Navy's Earth System Prediction Capability program will provide a more accurate, longer range, global ocean, atmosphere, and sea ice forecast system for decision support to safety of flight, safety of navigation, and mission planning.

### **Navy Leadership Roles**

The Navy will continue to play a significant leadership role in the Arctic. Through its global reach capability and worldwide command and control, Navy leadership will support joint and interagency efforts, enhance information sharing, and promote interoperability.

The Navy executes the following core functions in support of the National Defense Strategy:

**Deterrence:** The Navy achieves deterrence by convincing potential enemies that they cannot win or that the cost of aggression would be unacceptable. Nuclear and conventional deterrence remain relevant and the Navy's ability to deter provides our national leadership with options for

controlling escalation. The Arctic provides additional maneuver room for distributed nuclear and conventional forces to operate in support of deterrence.

**Sea control:** Sea control allows the Navy to establish local maritime superiority while denying an adversary that same ability. The essential elements of sea control are surface warfare, undersea warfare, strike warfare, mine warfare, air and missile defense, intelligence, surveillance and reconnaissance. The Navy has a global responsibility to protect vital sea lanes and operating areas, including defending the Nation's maritime borders and EEZ. The geostrategic importance of the Arctic Ocean will change in response to the dynamics of resource extraction, shipping, fishing, and tourism. The Navy will be ready to exercise Sea Control in order to defend United States' maritime access and interests in the Arctic.

**Power projection:** The Navy projects power from the sea with lethal precision fires from ships, submarines, carrier-based aircraft, and with operations from the sea utilizing the United States Marine Corps. Power projection includes conventional strikes against targets ashore, integrated kinetic strikes and non-kinetic fires against enemy forces, advance force operations, raids, and amphibious operations. Power projection depends upon the Navy's ability globally to sea-base capabilities, strategic sealift and logistics support, Joint Force aerial refueling, and the global strategic laydown of bases and facilities. The Arctic enables power projection from vectors in addition to traditional operating areas.

**Maritime security:** Naval forces provide maritime security in the maritime commons and the seaborne approaches to our Nation to include from our northern maritime and land borders. Maritime security safeguards U.S. sovereignty and maritime resources, supports free and open seaborne commerce, and counters weapons proliferation, terrorism, transnational crime, piracy, illegal exploitation of the maritime environment, and unlawful seaborne immigration. Maritime security in the Arctic includes defending sea lines of communication and the homeland from seaborne attacks, maritime domain awareness, and supporting Coast Guard operations as required.

**Logistics:** Sealift operations sustain power across the globe in support of the U.S. national interests and are a critical enabler to the U.S. National Defense and National Military Strategies. The Navy will continue to evaluate the requirements and priorities associated with the rapid movement of personnel, materiel, and forces to and from or within the Arctic by sea to provide timely movement, positioning, and sustainment of the Joint Force across the range of military operations.

The Navy will support other U.S. agency-led functions in concert with joint forces, interagency stakeholders, and allies and partners:

**Search and Rescue (SAR):** The extreme distances, operational environment, limited infrastructure and asset availability make search and rescue challenging in the Arctic. The Navy will provide support as required to search and rescue missions conducted and led by the Coast Guard and as directed in support of international partners. The U.S. is a signatory, among the eight Arctic states, of the legally binding Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (signed 2011).

**Defense Support of Civil Authorities (DSCA) and Humanitarian Assistance/Disaster Relief (HA/DR):** The Navy will remain ready to support missions such as pollution response or natural disaster recovery; integrated planning efforts with local, state, federal, and native communities; and interoperability with the Coast Guard and international partners. Mitigating navigation hazards and chemical spills in the Arctic operational environment requires specialized equipment and tactics, techniques and procedures. The U.S. is a signatory of the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (signed 2013), which is a legally binding agreement among the eight Arctic states.

## 6. Conclusion

The Navy supports DoD's desired end state for the Arctic: a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is defended, and nations work cooperatively to address challenges. Navy operations will deter aggression and enable peaceful resolution of crises on terms acceptable to the United States and our allies and partners. This strategic outlook highlights the importance of monitoring the changing environment, continuously evaluating Navy Arctic capabilities, and developing strong partnerships with interagency and international Arctic stakeholders. The Navy will continually assess its preparedness and make informed decisions on Arctic operations and planning in response to changes in the Arctic operational environment or changes in its strategic context. As changes to threats, opportunities, and risks in the Arctic security environment may occur, they will be viewed in balance with the global nature of Great Power Competition.