

The Arctic: America's Oldest and Coldest New Frontier

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Abstract

The United States became an Arctic Nation in 1867 when it purchased the territory of Alaska and has demonstrated varying levels of interest, commitment, and concern for the region since that time. Rapidly changing climate conditions in the Arctic have resulted in melting ice and with it increased possibilities of commercial transit and an associated increase to security threats. These climatological realities, coupled with the increased attention the Arctic is garnering across the globe, has forced a relook at strategy. The United States has begun responding to the dynamic regional situation with an updated national policy and implementation plan, however, more should be done to lead change and in response to the actions of other Arctic nations. The current implementation of U.S. strategy falls short in forcing action in several key areas. The U.S. should ratify the United Nations Convention on the Law of the Sea, formally appoint the State Department's U.S. Special Representative for the Arctic to the rank of Ambassador, begin procuring icebreakers for the U.S. Coast Guard, incentivize civilian investments and partnerships, and explore future collaborative efforts with Russia to preserve the vision for a peaceful opening to the Arctic.

The Arctic: America's Oldest and Coldest New Frontier

In 1867, just two years after the Civil War ended, the United States purchased the territory of Alaska from Russia and officially became an Arctic Nation. Secretary of State William Seward accepted the Russian proposal and agreed to purchase Alaska for \$7.2 million. The treaty of purchase was approved by the Senate and signed by President Andrew Johnson in the Spring of 1867, enabling the formal transfer of the territory on October 18, 1867. This purchase ensured U.S. access to the Pacific Northern Rim and the strategic importance of this geographical area was nationally recognized when Alaska was granted statehood in 1959.¹ Since that time, the United States has displayed various levels of commitment, interest, and investment in the region, often ebbing and flowing depending on political climate. In May 2013, President Barack Obama released the long awaited *National Strategy for the Arctic Region*. This paper will explore that strategy and advocate to what extent the U.S. should adjust policy or actions to further address ever-changing Arctic climatological conditions and in response to external actor's strategies, policies, and actions in the region.

The United States, Russia, Canada, Norway, Denmark, Iceland, Finland, and Sweden are the eight nations with territory north of the Arctic Circle and make up the primary membership of the Arctic Council. The first six listed have coastlines inside the Arctic Ocean and the first five are the focus of this paper. The paper excludes Iceland because their coastline is on the circle and for the purposes of this discussion, not far enough north to be a key player in the region where ice is melting. According to scientific research and predictions, it is estimated the sea ice in the Arctic Ocean will be greatly reduced by the year 2020 and potentially non-existent in a few decades to follow, resulting in opening of transportation routes for extended periods and increasing

access to a multitude of natural resources. Up to 25% of the earth's undiscovered oil and natural gas resources are predicted to lie beneath the surface and Arctic nations are already vying for sovereignty assurances and expanding their claims to potentially resource rich continental shelves. The United Nations Convention on the Law of the Sea (UNCLOS III) will play a critical role in validating claims of sovereignty. This may present future problems for the United States as the only Arctic Council member who has not ratified the treaty.

Each of the five littoral Arctic nations have published Arctic strategies and conduct varied degrees of operations in the region. All have similar language, focusing policy on a peaceful and prosperous region, international cooperation, environmental protection, and scientific research. United States National Arctic strategy has developed substantially since 1994 and these regional issues are slowly finding their way into mainstream conversations. The U.S., as current chair of the Arctic Council, sits well positioned to shape future Arctic developments and international partnerships. Russia by far has taken the most aggressive steps with regard to potential militarization of the Arctic, having vastly expanded their northern infrastructure and with investments in icebreaking vessel technology. Canada, Norway, and Denmark have all published policies and demonstrated commitment to cooperation for a peaceful, prosperous opening but have limited resources when compared to the U.S. and Russia.

The United States must demonstrate strong leadership on Arctic issues to advance national interests, pursue responsible Arctic stewardship, and strengthen global cooperation. The administration's release of the *National Strategy for the Arctic Region* and its associated implementation plan is a good start but more should be done.

First, the administration should force a public narrative about the need to ratify UNCLOS III and make those who oppose it justify their opposition or break the deadlock. Second, the President should elevate the Department of State's Special Representative to the Arctic to the rank of Ambassador in order to demonstrate the U.S. is a serious partner committed to supporting the Arctic Council and fostering international cooperation. Third, the government needs to commit to a funded policy and begin investments in new icebreakers, which will take a decade and \$1 Billion each to procure. Fourth, the U.S. should promote civilian investment in Arctic exploitation and explore creative ways to incentivize investment. Finally, the U.S. should focus on leveraging the capabilities of Russia, the pre-eminent Arctic power, in efforts to facilitate maritime access and reduce costs through the sharing of financial burdens and technological resources. These additional actions will guarantee U.S. access to the strategic Arctic area and its resources, contribute to U.S. energy independence, and ensure peace in the region with partnerships favorable to U.S. national interests.

Background and Strategic Setting

The Arctic region is defined as the geographic area above 66.33° north latitude. This latitude line is also synonymous with the descriptor "Arctic circle". The circle encompasses approximately 6% of the Earth's surface, an area of more than 8.2 million square miles, of which almost 3.1 million square miles is onshore and more than 2.7 million square miles is on continental shelves under less than 500 meters of water.²

There are eight nations with territory inside the Arctic circle: the United States, Canada, the Kingdom of Denmark (Greenland), Norway, Russia, Finland, Sweden, and Iceland. The first five listed are also littoral Arctic Ocean states. These eight nations constitute the primary membership of the Arctic Council, "the leading intergovernmental

forum promoting cooperation, coordination and interaction among the Arctic states, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable development and environmental protection in the Arctic.”³ In addition to the eight member states, there are various member organizations permanently representing Arctic indigenous populations. Additionally, eleven non-governmental organizations (NGOs) and twelve non-arctic countries have been granted observer status to the council: France, Germany, The Netherlands, Poland, Spain, the United Kingdom, Italy, Japan, the Republic of Korea, the Republic of Singapore, the Republic of India, and the People’s Republic of China.⁴

One reason so many non-arctic nations have such keen interests in the region is because of climatological changes resulting in receding sea ice and the potential opening of the Arctic sea routes for longer periods during the year. According to NASA researchers and the National Snow and Ice Data Center, the area of the Arctic Ocean covered by sea ice in September 2009 was the third lowest since satellite measuring began in 1979.⁵ Over the past 30 years alone, Arctic sea-ice coverage has declined by more than 12 percent.⁶ Along with melting and receding ice in the Arctic comes the potential for increased traffic along commercial sea routes in the region. There are three primary routes: the Trans-Polar route, the Northwest Route (also referred to as the Northwest passage), and the Northern Sea Route. According to data from the National Snow and Ice Data Center, in 2025 the Northern Sea Route is expected to have six weeks of open water, the Trans-Polar Route two weeks, and the Northwest Passage is expected to have open water intermittently.⁷ Some scholars suggest these estimates are conservative and predict the potential for year-round navigability of the Arctic, which

could be ice-free by 2030, according to some recent sea-ice model simulations.⁸ In 2010, a 100,000-ton tanker sailed across the Arctic from Murmansk, Russia to China in ten days and a special ice-breaking ore carrier traveled alone from Siberia to Shanghai, China and back in only forty-one days, which is less than half the eighty-four days it takes using the Suez Canal.⁹

Other reasons for Arctic interests piquing across the globe are the vast resources lying unexploited beneath the ice. According to a 2008 U.S. Geological Survey report, the Arctic area is estimated to hold 25% of the earth's undiscovered petroleum resources, with 84% of these being offshore.¹⁰ In addition to deposits of oil, natural gas, and large quantities of valuable extractable minerals, access to fisheries is also a major draw to the commercial fishing industry. The report also indicates the Arctic continental shelves may represent the largest geographically unexplored prospective area for petroleum remaining on Earth.

Greater than 70% of the mean undiscovered oil resources are estimated to occur in five provinces: Arctic Alaska, Amerasia Basin, East Greenland Rift Basins, East Barents Basin, and West Greenland-East Canada.¹¹ Similarly, for undiscovered natural gas deposits, greater than 70% are estimated to reside in three provinces: the West Siberian Basin, the East Barents Basins, and Arctic Alaska. This data indicates why resources in the Arctic will be a major factor in the evolution of the strategies of global powers with the means to access the region and explains why so many non-arctic nations are vying for inclusion in the Arctic Council and other international fora. With more than 80% of these undiscovered resources confined to the continental shelves of Arctic nations, access to them will be crucial. Such access is not only dependent upon

being able to protect them, but about having a legitimate claim to these resources in terms of international law.

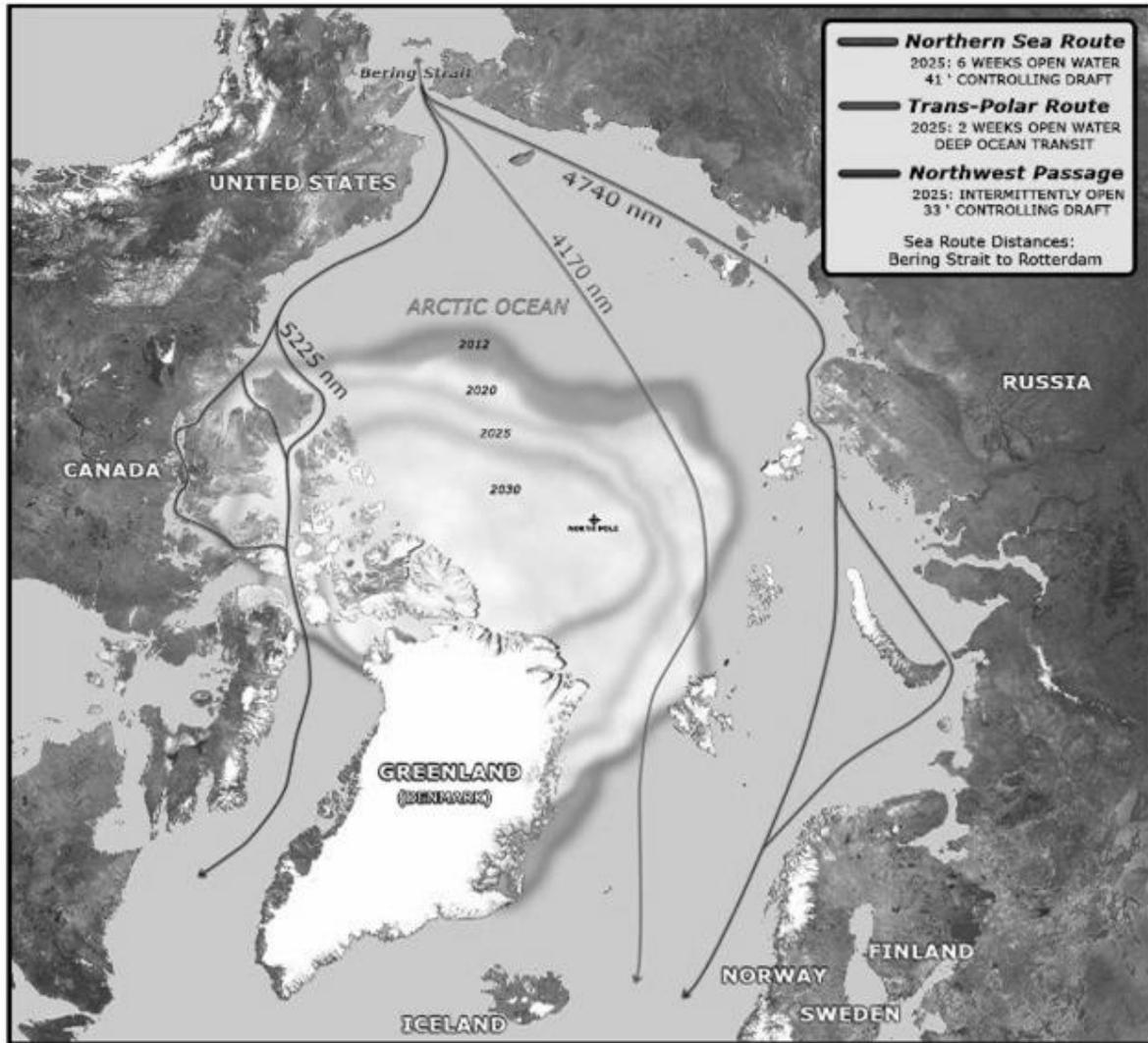


Figure 1. The Arctic Sea Routes with Sea Ice Extent Predictions (U.S. Navy Graphic)¹²

The United Nations Convention on the Law of the Sea “lays down a comprehensive regime of law and order in the world’s oceans and seas establishing rules governing all uses of the oceans and their resources. UNCLOS III enshrines the notion that all problems of ocean space are closely interrelated and need to be

addressed as a whole.”¹³ Furthermore, it is the global regime responsible for all matters related to the law of the sea. The convention allows coastal states to exercise sovereignty over their territorial seas, extended to 12 nautical miles beyond the coastline and defines exclusive economic zones (EEZ) with respect to natural resources and certain economic activities, allowing the states to exercise jurisdiction over marine science and environmental protection.¹⁴ Additionally, it gives coastal states the sovereign rights over their continental shelves for exploring and resource exploitation. This shelf typically extends out to 200 nautical miles but can be more under specified circumstances.¹⁵

The United States adheres to customary law of the sea and therefore UNCLOS III in all regards related to sovereignty, EEZs, and maritime boundary rules. The U.S. Senate however, has failed to formally ratify the treaty for various reasons. The issue is complex and there is no simple solution between the advocates for accession and those who oppose. Although 167 other states including Russia, China, and the European Union have joined the treaty since inception in 1982, the U.S. government has failed to consolidate enough internal support to do so. A powerful minority in congress opposed to ratification cites fears of ceding U.S. sovereignty to international organizations and tribunals as reasons for continuing to block accession.

Even though there have been no overt hostilities or violent actions between states in the Arctic, the region is not dispute free. Two well-known disagreements are between the United States and Canada and between Russia and Norway. The United States and Canada have a long-standing disagreement over boundary lines in the Beaufort Sea, causing overlapping claims on their EEZs. This largely overlooked

dispute between the two countries is one that has come into focus recently because “both are gathering geological data in a bid to gain undersea territorial extensions in the outer Beaufort—beyond each country’s 370-kilometre coastal economic zone—under a UN treaty on continental shelves.”¹⁶ Russia and Norway both claimed a 67,567 square mile zone in the Barents Sea for forty years, but in September 2015 the two signed a treaty agreeing to equally divide the area.¹⁷ As oil and gas exploration continues to develop in the Arctic and as Arctic nations stake out continental shelf claims, further disputes are likely to occur. UNCLOS III, the international law for defining maritime boundary and sovereignty claims, gives states the rights to make claims on extended continental shelves and if deemed valid, to gain exclusive rights to the sea bottom and resources beneath it.

Policies and Positions of the Five Arctic Ocean Nations

The United States, Canada, Denmark, Norway, and Russia all have varied interests, commitments, activities, access, and affinities for the Arctic region. In some form each have published formal policy to communicate their priorities, values, and goals even as some objectives and motivations are a little less transparent. Differences considered, it is clear each of these countries understand the implications of the potential for an ice-free Arctic and the value of the vast resources lying beneath the surface. All of the nations with the exception of the United States have ratified UNCLOS III. Additionally, ministers from all five countries agreed to a political declaration on the Arctic’s future known as the Ilulissat Declaration. This agreement was adopted in Ilulissat, Greenland in May 2008 as affirmation that all coastal states have a political commitment to resolving disputes through negotiation.¹⁸ This section will address some

of the actions, strategies, and policies for each of the five littoral countries in the Arctic, predominantly focusing on those of the two most powerful players, the U.S. and Russia.

The United States

The United States has made significant advancements in developing and articulating its Arctic policy and strategy over the past 20 years and has been forced to pay more attention to the region with the fundamentally changing conditions due to melting sea ice, resource development, globalization, and other geopolitical factors. The U.S. previously published an Arctic policy in 1994, but it was criticized as vague and failed to institute any tangible changes or force any outcomes. On January 9, 2009, on one of his last days in office, President George W. Bush released a long-overdue revised U.S. Arctic Policy which addressed only the Arctic, whereas previous versions had included Antarctica as well. The Obama administration accepted the policy, but due to an interest in taking a more proactive approach on certain issues, the President issued his own *National Strategy for the Arctic Region* in May 2013. Subsequent to the release, the Department of Defense (DoD) published a complementary DoD Arctic Strategy in November 2013. As a clear sign of commitment and resolve in January 2014, the administration published a first of its kind, comprehensive *Implementation Plan for the National Strategy for the Arctic Region* in order to “set forth the methodology, process, and approach for executing the Strategy.”¹⁹ The plan is intended to uphold national interests in safety, security, environmental protection and works with international partners to pursue global objectives of addressing climate changes while following the structure of the National Strategy’s three lines of efforts and guiding principles.²⁰

The National Strategy for the Arctic Region is built upon three major lines of effort: Advancing United States Security Interests, Pursuing Responsible Arctic Region Stewardship, and Strengthening International Cooperation.²¹ The strategy articulates that the national approach will be informed by guiding principles such as safeguarding peace and stability, pursuing innovative arrangements, and consulting and cooperating with Alaska natives.²² In order to advance United States Security Interests, the U.S. government will seek to evolve Arctic infrastructure and strategic capabilities, enhance Arctic domain awareness, preserve Arctic region freedom of the seas and provide for future U.S. energy security.²³ In efforts of responsible Arctic stewardship, the strategy specifies objectives such as protecting the environment, conserving natural resources, balancing economic development while protecting cultural values, increasing understanding through scientific research, and further charting of the region.²⁴ To strengthen international cooperation, the U.S. will pursue four primary objectives. It will pursue arrangements that promote shared prosperity while protecting the environment and enhancing security, work through the Arctic Council to advance U.S. interests in the region, Accede to the Law of the Sea Convention, and Cooperate with other Interested Parties.²⁵

Although the Defense Department hasn't restructured in any significant way such as Combatant Command re-alignment or Arctic infrastructure investments with regards to Arctic strategy, the DoD's Arctic Strategy does lay out specific objectives in order to support the President's National Strategy. The Department's desired end state for the region is "a secure and stable region where U.S. national interests are safeguarded, the U.S. homeland is protected, and nations work cooperatively to address challenges."²⁶ A

recurring theme in both strategies is one of partnership and cooperation with other nations. The DoD strategy specifically lists strategic partnerships as the “center of gravity” in ensuring a peaceful opening of the Arctic and for achieving the desired end state.²⁷ This common thread between both the National and DoD Strategies seems to reflect the administration’s confidence the Arctic will remain a peaceful area with very low threat of military conflict.

Russia

The official national interests of Russia are spelled out in the *Russian Federation Policy for the Arctic to 2020*.²⁸ The basic national interests are: use of their Arctic zone as a strategic resource base to provide solutions to economic and social problems, maintenance of the Arctic as a zone of peace and cooperation, preservation of unique ecological systems of the Arctic, and use of the Northern Sea Route as a national single transport communication of the Russian Federation in the Arctic.²⁹

Russia has “been the first to take advantage of the opening seas, escorting ever-larger vessels through the Northern Route across the top of Siberia with its powerful nuclear ice breakers”.³⁰ Russia is taking the lead on many fronts with regard to Arctic infrastructure, exploration, investment, navigation, and militarization. A very simple, yet effective measurement of a nation’s commitment to operating in the icy Arctic environment is the number of ice-breaking ships in their inventories. As of 2013, Russia operated an icebreaker fleet consisting of 25 polar icebreakers of at least 20,000 horsepower, with four in construction and at least eight more planned.³¹ The fleet of Russian icebreakers also includes six of the nuclear variant, with the biggest and most powerful new vessels currently under construction. This icebreaker is known as *LK-60*, is 173 meters long, 34 meters wide and able to sail in ice 3 meters thick. *LK-60* is the

world's most powerful icebreaking vessel and Russia has plans to construct at least two more of this class by the end of 2020.³²

In 2007, Russia planted a titanium flag on the sea floor directly beneath the North Pole and collected soil samples via a miniature submarine.³³ Subsequently, they submitted a claim to the UN in August 2015 in accordance with UNCLOS III stipulations to declare and provide evidence its continental shelf extends all the way to the North Pole from its land mass.³⁴ The claim is currently under review by the UN, but if approved would make the region part of Russia's EEZ and grant them all rights to fishing and natural resource extraction.

Russian civilian, military and defense actions related to and in the Arctic are robust, but at times send a mixed message of intentions and strategies. Russia has been making major investments in Arctic region infrastructure, a key to successful exploitation of natural resources. They have invested tens of billions of dollars in the region through state-owned firms to construct new ports of call and other infrastructure related items.³⁵ These business related ventures have been accompanied by increased military and security efforts as well. The Federal Security Service (FSB), not the military, is the organization responsible for the security of Russia's borders and in 2004 they created a new Arctic directorate. President Vladimir Putin stated the development of border infrastructure was a priority and the FSB would provide coastal defense and patrols of Arctic borders.³⁶ In 2014 however, Putin established the Arctic Joint Strategic Command, and since that time much has been done to support a plan of militarization of the region.³⁷ Some examples of these efforts include building and upgrading bases, construction of 10 search and rescue stations, 16 deep water ports, 13 airfields, 10 air-

defense radar stations³⁸, and renovation of the airstrip on the archipelago of Novaya Semlya to accommodate fighter aircraft and two motorized infantry brigades.³⁹ In March 2015, in just one of many examples, Russia's military exercised a five-day Arctic drill involving 38,000 troops, 110 aircraft, and more than 50 ships and submarines with the objective of testing their ability to deploy forces to the region from across the country.⁴⁰ Russia clearly is enhancing their military presence in the Arctic and it's also clear they expect their economic future to be inextricably tied to this region. This development does not necessarily signal intent to militarize the Arctic but could be more in line with their stated national interests of preparing the infrastructure and security which will be required for a profitable and peaceful opening of the region as shipping routes become more accessible.

Canada

Canadians inherently see themselves as a major Arctic Nation and are well positioned to be a large beneficiary of a peaceful opening of the region as sea ice continues to recede. Culturally, Canadians regard the "Far North", as they call it, along with the indigenous Inuit population living there with great affinity. Forty percent of Canada's geography is in the north and the arctic coastline spans 162,000 kilometers (100,662 miles).⁴¹ With such a large territory within the Arctic, having legal control of much of the Northwest Passage, and a blossoming energy industry, Canada is well positioned to be a key player as the Arctic develops. In terms of national strategy, Canada published a *Statement on Canada's Arctic Policy*⁴², in which the "Northern Strategy" is explained. The Northern Strategy is founded upon the following four pillars on which Canada is taking action to advance interests domestically as well as internationally: exercising sovereignty, promoting economic and social development,

protecting national heritage, and improving Northern governance.⁴³ According to their Arctic foreign policy, exercising sovereignty over the Far North is the first priority and they are making many investments as well as undertaking several overt actions to ensure success. Canada plans to launch a new polar icebreaker before the next decade expires and have increased cooperative exercises in the region.⁴⁴ The Canadian government further demonstrated commitment to the Arctic by hosting a meeting of the G-7 finance ministers in Nunavut, the farthest north territory in the country, in 2010.⁴⁵ Similar to Russia's claims of expanded continental shelf territory in the north, Canada announced it will try to extend its territorial claims all the way to the North Pole as well, although it hasn't fully mapped the area and doesn't have current evidence to back up the claim.⁴⁶

The biggest drawback for Canada will continue to be resource limitations. With a population of only 35 million, Canada lacks the economic and military capacity to fully exploit the opportunities at hand. Partnerships, specifically with the United States have been integral to all Canadian homeland defense strategies. For example, the *Canada First Defence Strategy*, Canada's equivalent to the *U.S National Military Strategy*, makes reference to NORAD, the bilateral Canada-U.S. command responsible for defense of the homeland in North America, and the importance of the bilateral defense relationship as well as a separate reference to the need to protect Arctic sovereignty.⁴⁷ The *U.S. National Strategy for the Arctic Region* interestingly makes no reference to NORAD with regard to the Arctic whatsoever.

Norway

The Norwegian Ministry of Foreign Affairs released their national strategy for the Arctic in November 2014 in a report titled *Norway's Arctic Policy: Creating Value*,

Managing Resources, Confronting Climate Change and Fostering Knowledge.

According to this report and Prime Minister Erna Solberg, the Arctic is Norway's most important foreign policy priority.⁴⁸ Very similarly to the other Arctic nations with published Arctic policies, the Norwegian policy gives priority to the following: international cooperation, business development, knowledge development, infrastructure, environmental protection, and emergency preparedness.⁴⁹ Although a relatively small nation, with a population of only just over 5 million, nearly 10% of this population lives north of the Arctic Circle, more than any other country.⁵⁰ Norway makes military contributions to activities and exercises in the north and participates in all available international fora for Arctic activities such as the Arctic Council and because of its geographic location is vital to the future success of the region. Due to their small size and limited resources, however, when compared to other global powers, their contributions to the overall infrastructure and cooperative capacity will be limited in scope and scale.

Denmark

Denmark is an Arctic Ocean nation by virtue of Greenland, an autonomous country within the Kingdom of Denmark. Having a population of only 5.6 million, Denmark is also a relatively small nation in the Arctic discussion. This does not mean Denmark is unimportant or passive in making claims to territory. Greenland, Denmark's access to the Arctic Ocean, only has a population of 57,000 and minimal infrastructure, but is well placed geographically to capitalize on increased traffic in the region. Like others, Denmark has made claims seeking expanded sovereignty. In fact, it submitted a claim to the UN "seeking economic control of activity of the North Pole and asserting that the area is part of the continental shelf jutting north from Greenland, not Russia."⁵¹

Denmark also published an Arctic strategy for the Kingdom to include Denmark, Greenland, and the Faroe Islands. In *Kingdom of Denmark, Strategy for the Arctic 2011-2020*, the stated goals for Arctic future are a peaceful, secure and safe Arctic with: self-sustaining growth and development, respect for the Arctic's fragile climate, environment and nature, and close cooperation with international partners.⁵² Denmark, like all other Arctic nations, espouses using international law and established forums for conflict resolution and the ensured, continued peaceful nature of the region.

Recommendations for U.S. Policy and Action

Strong U.S. leadership is needed throughout the world on many issues and the Arctic is no exception. Thoughtful policy with clear objectives is fundamental to strong leadership. The United States has provided three Arctic strategies since 1993, with each becoming more robust and focused. The current national strategy provides a foundation for securing national interests in the Arctic which include providing for U.S. security, the free flow of commerce, access to resources, protecting the environment, enabling scientific research, and addressing concerns of indigenous populations. The policy, coupled with the administration's implementation plan, addresses a multitude of approaches aimed at achieving the vision it lays out, but further actions and policy refinements will make it more comprehensive and explicitly demonstrate American resolve to ensuring a stable and conflict-free Arctic in the future.

According to *The National Strategy for the Arctic Region*, it protects the U.S. interests by drawing "from our long-standing policy and approach to the global maritime spaces in the 20th century, including freedom of navigation and overflight and other internationally lawful uses of the sea and airspace related to these freedoms."⁵³

Accordingly, the strategy also recommends pursuance of four objectives: seeking

arrangements that promote shared Arctic State Prosperity, working through the Arctic Council to advance U.S. interests, accede to the Law of the Sea Convention (UNCLOS III), and to cooperate with other interested parties.⁵⁴ Additional steps to support these objectives and others to complement them are required.

First, the U.S. needs to ratify UNCLOS III. Unless it ratifies and accedes, the U.S. will fail to have access to the international body created by the UN to delegate rights in Arctic waters. The national strategy points this out, but thus far the administration has done little to force the issue and has been unable to see the recommendation to fruition. The successive administrations of Presidents Nixon, Ford, and Carter supported development of the treaty as it was completed, but in 1981 President Reagan rejected it because he opposed part XI, which would have given the developing world a share of the ocean resources of the high sea beyond national control.⁵⁵ The Reagan White House felt this section would place an unfair burden on industry by making U.S. companies share a portion of their profits with the developing world.⁵⁶ In an effort to ensure the U.S. accepted the treaty, the convention removed the offending section and calmed the Reagan administration, however, the U.S. has still not accepted it. Even though both the current 2013 Arctic Strategy and the 2009 Arctic Policy signed by President George W. Bush recommended acceding, a small number of Republican Senators continue to block the treaty, claiming it is an affront to U.S. interests.⁵⁷ In order to get beyond the congressional impasse, the administration needs to undertake a public campaign, spark a national debate, and put pressure on opponents to justify their objections. Acceding to the convention should be a national priority and a public awareness campaign with national media attention is warranted to ensure

congressional accountability and to protect national interests from the potentially competing financial interests of lobbyists.

The Arctic Council is irrefutably the world's foremost venue for intergovernmental Arctic engagement and as previously mentioned, all eight Arctic nations have a seat on it. The *National Strategy for the Arctic Region* advocates working through the Arctic Council to advance U.S. interests in the region.⁵⁸ In April 2015, the United States assumed a two-year chairmanship of the Arctic Council that ends in 2017 and will not have another opportunity at the post until 2031. The time is now to seize the opportunity and assume responsibility for shaping international efforts, advancing national interests, and demonstrating U.S. leadership, commitment, and resolve. The Department of State holds principal responsibility for U.S. Arctic policy issues and is therefore the lead U.S. agency for representation on the council. In June 2014, Admiral Robert J. Papp Jr., USCG (Ret.) was appointed as the Department's Special Representative for the Arctic and leads U.S. representation on the council. Admiral Papp served as the 24th Commandant of the U.S Coast Guard and is therefore well-qualified to lead the effort advancing U.S. interests in the Arctic region. The President should elevate the rank of this critical position to Ambassador. Doing so would signal to the international community the United States is a serious Arctic partner and is fully committed to supporting the Council as the pre-imminent forum for furthering Arctic issues and fostering international cooperation.

If the United States is serious about being prepared for future Arctic realities, it must institutionalize a mindset with a focus on the long-term. This focus requires a commitment to more than just policy, it requires a commitment to a funded policy.

Establishing a long-term Arctic economic strategy is paramount and feasible steps should be taken now before the U.S. finds itself in a position unable to lead in the region. One such step should be to invest in new medium and heavy icebreakers. Adequate ice-breaking capabilities are crucial for Arctic access to ensure safety, scientific research, search and rescue operations, defense operations, and other necessary economic activities. Russia currently has 25 medium class to heavy class icebreakers and about 40 in total, with plans to increase the fleet by at least 14 additional ships before the end of 2020. Canada has two medium icebreakers while Norway and Denmark have none, although all three possess smaller fleets of lighter duty vessels incapable of serious Polar work.⁵⁹ The United States, via the U.S. Coast Guard, has one medium icebreaker named *Healy*, and one heavy variant named *Polar Star*.⁶⁰ *Healy* is operational, but due to age and usage has recurring mechanical and operational difficulties.⁶¹ The only heavy icebreaker, *Polar Star*, was built in 1976 and later retired but was reactivated in December 2012 for continued duty, mostly in the Antarctic.⁶² The USCG says it needs at least three heavy and three medium icebreakers to meet foreseeable demand around the poles.⁶³ For the U.S. to build a new heavy icebreaker, it will take 8-10 years to procure and cost \$1 Billion.⁶⁴ Senator Angus King of Maine, a member of the Senate Energy and Natural Resources Committee, has repeatedly called for an increase in U.S. icebreakers for the Coast Guard⁶⁵ and has applauded President Obama's call for a similar result.⁶⁶ Currently however, neither has taken action in terms of proposing legislation to do so or introduced icebreaker funding into the budget.

In addition to procuring government owned equipment, the U.S. should promote civilian investment in Arctic capabilities and find creative ways to incentivize investors to do so. In order to meet transportation and global mobility requirements of the U.S. military, the government has developed programs designed to use civilian airliners and merchant ships to augment DoD platforms. The Civil Reserve Air Fleet (CRAF) is made up of aircraft from U.S. airlines that are contractually committed to supporting the DoD when needed in emergencies. In order to incentivize the companies to participate, the U.S. government guarantees a certain portion of business during peacetime and uses them for troop movements to and from theaters, among other missions. Another example is the way in which USTRANSCOM executes sealift movements through Military Sealift Command (MSC) and the Surface Deployment and Distribution Command (SDDC). By policy, commercial shipping options must be considered before USTRANSCOM can use organic DoD assets. There are three main options: Liner Service, Charter, and Organic. Liners are commercial vessels with fixed schedules that charge on a by piece and measurement ton basis with no government control.⁶⁷ Charter is composed of ships contracted by Military Sealift Command and has a schedule based upon customer needs.⁶⁸ Organic vessels are government owned assets operated by contractors that can be used by DoD to move customer cargo.⁶⁹ Similar arrangements should be set up for commercial icebreakers and other Arctic infrastructure such as ports, refueling stations, floating platforms, and oil-spill type disaster response capabilities. A guaranteed contractual system, like the CRAF, coupled with a pay-per-use structure in certain situations would encourage civilian investment and guarantee progress in the region while reducing some of the burden to U.S. taxpayers.

In addition to garnering more access through increased partnerships with U.S. industry, the government should lead Arctic development by seeking advantageous opportunities for cooperation and partnerships across diplomatic, economic, and where appropriate, military lines. Specific focus should be placed upon on leveraging the capabilities of Russia. Russia is the pre-eminent Arctic power and is fully committed to remaining so. With all five littoral Arctic nations professing global cooperation and partnerships, and intentions to maintain the region as a zone of peace as part of their national strategies, it makes sense to focus on peaceful partnership with the largest and most resourced nation involved. *The National Strategy for the Arctic Region* seeks to strengthen international cooperation by pursuing arrangements that promote shared Arctic state prosperity and an active relationship with Russia is essential to preserving the vision of a peaceful opening. Such a relationship would also facilitate maritime access and reduce costs through the sharing of financial burdens and technological resources.

Conclusion

As climate change continues to melt sea ice and threatens to fundamentally change the nature of the Arctic, nations are racing to shore up sovereignty disputes, stake claims to continental shelves for resource exploitation, and are vying for access to international fora such as the Arctic Council. Strong U.S. Arctic policy and global leadership are paramount to ensure national security, economic prosperity, energy independence, and environmental considerations. Although U.S. Arctic policies have evolved in recent years, more should be done to address the initiatives of others and to exercise leadership in the rapidly evolving conditions to remain positioned to advance this new frontier. The recommendations herein provide a moderate, reasonable, and

entirely achievable approach to ensuring U.S. leadership in shaping the future of the Arctic. They are necessary to guarantee U.S. access to the strategic region and its resources, contribute to procuring U.S. energy independence, and interpose U.S. leadership to ensure security of the region and the development of policy favorable to U.S. interests.

The U.S. needs to ratify UNCLOS III immediately or risk losing credibility with claims to sovereignty, continental shelves, and the associated EEZs. The President should force those in Congress to publicly defend their opposition to the treaty and ensure transparency for their motivations. The U.S. is in a prestigious position as the current chair of the Arctic Council, an opportunity that will not come around again until 2031. The President should take advantage of this opportunity and demonstrate commitment to the council and the issues it faces by making the U.S. Special Representative for the Arctic an Ambassador position. Additionally, the policy needs to be funded and a crucial first step to ensuring U.S. leadership through access is to fund and procure new polar icebreakers. A new fleet is necessary to meet the Arctic operations strategy and ensure access to sovereign territory. Considering the funding limitations of these fiscally constrained times, the U.S. government should look for ways to partner with civilian industry and explore ways to incentivize investments in infrastructure and technology. Finally, the U.S. should also focus on opportunities to cooperate and partner with all Arctic nations and others with Arctic interests but should specifically focus on Russian partnerships. Russia is the largest and most powerful Arctic nation and an amiable partnership is essential to preserving the vision of a peaceful opening.

The Arctic is facing rapid and unprecedented climate changes and although the timing of forecasts for ice recession varies, failure to be prepared is not a viable option for the United States. The United States will realize its broad national interests in the region and ensure a peaceful, prosperous opening by leading through the change. *The National Strategy for the Arctic Region* complemented with the recommendations in this paper offer a solid foundation for ensuring that leadership.

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