Department of Defense Arctic Strategy: Building Resiliency on Thin Ice

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Class of 2016

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## Abstract
Congress has deemed the U.S. Department of Defense (DOD) Arctic Strategy inadequate to address the national security significance of the region. Diminishing Arctic ice has increased human access for trade routes and natural resources, including an estimated twenty-five percent of the world’s untapped oil and gas reserves. The geopolitical and environmental impacts, particularly with Russia’s aggressive economic and military posture, threaten the relative stability of the Arctic region and challenge U.S. interests. Budget cuts and a proposed drawdown of U.S. troops in Alaska may have created the perception of a U.S. retreat from the region at a time when the U.S. holds the chairmanship of the Arctic Council and has no better time to lead internationally. As it revises its Arctic Strategy in the next year to comply with Congressional mandate, DOD has the opportunity to develop and articulate a more comprehensive and collaborative approach. This paper proposes recommendations by which DOD can address threats in an uncertain future to help achieve U.S. Arctic policy objectives.

## Subject Terms
Climate Change, UNCLOS, Northern Sea Route, Alaska
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(7,287 words)

Abstract

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Right now we have an Arctic Strategy—you may have seen it. It’s about 13 pages and six of the pages are pictures.

—Senator Dan Sullivan¹

The U.S. Department of Defense (DOD) recently got a “do over” from Congress on its Arctic strategy. One might say every aspect of the Arctic environment—natural, security, and political—is heating up and may put the DOD on thin ice. The receding Arctic ice cap is opening the region for increased human activity, including the development of as much as twenty-five percent of the world’s oil and gas reserves, worth an estimated $17 trillion.² Russia, the world’s dominant Arctic nation, has significantly increased its military presence in the Arctic as it seeks to develop the region’s resources and trade routes.³ Faced with significant budget cuts, the U.S. military announced in July 2015 a proposed drawdown of Army troops in Alaska by one third, to which the Alaska Congressional Delegation accused it of making a “strategic blunder.”⁴ Together, these actions may have created the perception of a U.S. retreat while it concurrently holds the chairmanship of the Arctic Council, the world’s foremost governing body for the region, and perhaps has no better opportunity to lead. Subsequently, Congress legislated in the National Defense Appropriation Act (NDAA) for Fiscal Year (FY) 2016 that the DOD update its Arctic strategy and report to Congress by November 25, 2016.⁵

This issue brings to the foreground a strategic problem for the DOD: how to achieve national security interests in the Arctic given increased access and human activity with declining DOD financial resources. The U.S. national interests include securing the homeland; maintaining a strong economy; and promoting international
The DOD’s legal requirement to update its strategy provides an opportunity to coordinate and document a collaborative implementation plan with increased stakeholder buy-in. Correspondingly, the key issue examined in this paper is: “How can the DOD best revise its strategy to accomplish the U.S. national policy and the related strategic objectives in the Arctic?” This paper describes the Arctic environment and its significance, assesses current DOD strategy through a holistic view, and proposes recommendations to consider when revising the DOD Arctic strategy as mandated by Congress.

The Arctic’s Significance to DOD

Geopolitical Impacts

Melting Arctic ice is providing new access to natural resources and increased economic development opportunities and the related international competition presents a clear risk to Arctic regional stability. Arctic ice is disappearing at an unprecedented rate—at least unprecedented in modern history. Since satellite measurement began in 1979, summer ice coverage in the Arctic (which is often up to fifty percent less than in the winter) has decreased an estimated forty percent by area and seventy percent by volume. The U.S. Geologic Survey estimates that thirteen percent of the world’s undeveloped oil, thirty percent of the undeveloped gas and significant quantities of mineral resources lie within the Arctic Circle.

Human activity in the Arctic has increased over one hundred fold in recent years compared to historical averages. The increasingly available sea routes, even if only open for a few weeks or months each year and for a limited number of shippers, can alter international trade dynamics. For example, the Northern Sea Route (NSR), which traverses the Arctic along Russia’s Siberian coast, has the potential to reduce transit
time between Europe and the Far East by up to thirty percent while also avoiding the piracy-plagued waters in the Strait of Malacca and off the Horn of Africa. Figure 1 shows a polar view of the increasing accessibility to Arctic sea routes, each of which passes through the 53-mile wide Bering Strait between Russia and the U.S.

![Figure 1: Receding Summer Ice, Sea Routes, and Potential Oil and Gas Reserves](image)

Increased Arctic access and competition for resources has elevated sovereignty issues in this emerging “global commons.” Significantly, traditionally non-Arctic countries such as China, India, and South Korea seek a share of the region’s natural resources, including its fisheries, while at the same time Arctic countries are bolstering their claims. For example, while the Presidents of South Korea and Iceland agreed to develop an Arctic shipping route, Russia and Canada have claimed that the Northern Sea Route and the Northwest Passage, respectively, are essentially “inland waterways.”
The 1982 United Nations (UN) Convention on the Law of the Sea (UNCLOS) sets the framework for sovereignty in the world’s oceans by defining territorial waters and economic exclusion zones (EEZ) for exploiting natural resources.\textsuperscript{14} Though an estimated ninety-five percent of Arctic mineral resources lie within agreed upon boundaries, there are five territorial disputes among Arctic states under the UNCLOS “continental shelf provision.”\textsuperscript{15} Under this provision, if respective states can prove that the sea floor is an extension of their continental shelf, then they may exploit resources beyond the 200 nautical mile EEZ specified under UNCLOS.\textsuperscript{16} Russia has made the most significant of these, and in August 2015, reasserted its claim per UNCLOS for an area known as the Lomonosov Ridge.\textsuperscript{17} If approved by the UN, this would give Russia development rights to nearly one-half of the Arctic Ocean.\textsuperscript{18} Previously, in 2007, a Russian submarine had placed a Russian flag on the bottom of the ocean near the North Pole as a symbolic claim.\textsuperscript{19}

The Russian Threat

Geopolitically positioned as the dominant Arctic power, Russia is aggressively developing the natural resources upon which its economy relies. Russian territory encompasses sixty percent of all Arctic land and eighty percent of the cumulative Arctic population.\textsuperscript{20} Approximately twenty percent of Russia’s gross domestic product and twenty-two percent of its exports come from the Arctic region.\textsuperscript{21} Russia is the world’s leading producer of crude oil and the second leading producer of natural gas (behind the U.S.). Oil and gas exports account for fifty percent of Russia’s federal budget revenue, and in 2013, accounted for sixty-eight percent of total exports. The majority of Russia’s energy exports go to Europe: seventy percent of its crude and ninety percent of its natural gas. However, economic sanctions, imposed by the U.S. and European
Union in response to Russian aggression in the Ukraine, appear to have influenced Russia to seek a greater stake in Asian energy markets. This may explain Russia’s increased interest in developing Arctic shipping routes.\(^{22}\) Some strategists also believe that international sanctions applied against Russia in other areas of the world have pressured Russia to develop its resources in the uncontested Arctic.\(^{23}\) Notwithstanding these important interests, the manner in which Russia is proceeding threatens Arctic stability.

Russia is securing its interests with increased militarization of the Arctic. At the onset of the buildup in late 2013, Russian President Vladimir Putin stated the purpose was to support and secure the sea-lanes and natural resources development that was vital to Russia’s economy and national security.\(^{24}\) The Russian economic development plan included exploitation of mineral resources on its mainland as well as the construction of 10 search-and-rescue stations, 16 deep-water ports, 13 airfields, and 10 air defense radar stations along the NSR.\(^{25}\) Russian militarization reached a crescendo in March 2015 with the conduct of an unannounced military exercise in the Arctic involving over 40,000 troops, 200 aircraft, 41 warships, and 15 submarines. Russia also recently established an Arctic Command that will include its strongest naval force: the Northern Fleet.\(^{26}\)

The widely assumed purpose of this Russian show of force is to deter other countries and actors from pursuing Arctic interests and effectively create a northern buffer for the Russian homeland.\(^{27}\) Russia is also wary of increasing international presence in the Arctic, particularly by China, because Russia cannot collect NSR transit fees if vessels do not use Russian icebreakers or if they sail beyond the EEZ.\(^{28}\) Figure 2
shows the known and projected military bases in the Arctic, highlighting Russia’s aggressive plan to expand its Arctic military presence.

![Russia's Militarization of the Arctic](image)

Figure 2. Russia’s Militarization of the Arctic

**Environmental Impacts**

Though some may warn of Russian escalation in the Arctic, a majority of experts assess that the probability of energy-related Arctic conflict is low because the majority of resources are clearly within the EEZ of respective littoral Arctic states. The more probable threat, they argue, is environmental and related to the increased maritime traffic and exploitation of natural resources. Among the risks are human safety from increased exposure to harsh conditions, environmental hazards from oil spills and pollution, and increased global warming caused by both an increase in commercial traffic and the exploitation and eventual combustion of the additional fossil fuels
extracted from the Arctic. The Arctic is an environmentally sensitive region and increased human activity threatens all aspects of the ecosystem including fish, wildlife, and indigenous human populations.

In the Arctic, oil spills may cause greater environmental damage to inherently fragile ecosystems, response to oil spills is more difficult, and search and rescue takes longer than other climes. In 2014, there were 55 ship casualties (100 gross tons or more) in the Arctic. The U.S. Coast Guard reports that it could take days or weeks for it to respond to oil spills or for search and rescue. Russia's notable indifference to environmental concerns makes it even more of a threat. From 2010-2011, both Greenpeace and Russia's own natural resource agency estimated that Russia spilled at least five million tons of oil into the Arctic. By comparison, the Exxon Valdez spill on Alaska's shores in 1989 spilled approximately 250 thousand tons, or five percent of the Russian total.

Harsh Conditions

The Arctic region presents physical challenges affecting military capabilities in all domains. Effective land and maritime operations require the ability to routinely conduct operations in minus 60 degree Fahrenheit temperatures. The proximity to the magnetic pole affects instruments using magnetic fields thus increasing the difficulty of navigation and employment of certain weapons systems. The frequent solar showers (the "Northern Lights") additionally disrupt the electro-magnetic spectrum and degrade communications. It is important to note that the term "ice free" for Arctic shipping has a scientific definition meaning that ice coverage is less than fifteen percent; waters may still have ice and treacherous conditions that require icebreaker ships or ships with ice-strengthened hulls for passage. The U.S. government has surveyed only a small
fraction of Alaska’s navigationally significant waters to modern standards, and the U.S. Coast Guard is working to complete a study that will identify the first commercial shipping lane off the western coast of Alaska.\textsuperscript{38} Arctic conditions are so inherently onerous that U.S. military forces operating in the Arctic multiply the duration of all tasks performed in the Arctic by a factor of three.\textsuperscript{39} The severe cold makes operating in the Arctic treacherous and exhausting.

**Governance and Alliances**

The world’s foremost governing body for the region is the Arctic Council. Established in 1996, in part to counter Russian dominance of the region, the Arctic Council serves as the primary intergovernmental forum for coordination and collaboration among Arctic stakeholders, though it specifically does not address military security.\textsuperscript{40} The U.S. is one of eight permanent members with Russia, Canada, Norway, Denmark (Greenland), Iceland, Finland, and Sweden. China is one of 12 nations with observer status.\textsuperscript{41}

From April 2015 through April 2017, the U.S. holds the chairman position on the Arctic Council (a rotating two-year position among permanent member nations), which the U.S. will not hold again until 2031.\textsuperscript{42} This leadership role is significant because proactive and timely Arctic Council actions can help stabilize the region, ensure U.S. national security interests are considered, and further secure the prosperity of the region for the greater global good.\textsuperscript{43} Working against U.S. credibility in the Arctic Council is the U.S. failure to accede to the UNCLOS; it is the only Arctic nation not to do so.\textsuperscript{44} Despite the requests of two U.S. presidents during their administrations, the U.S. Senate, whose approval is required for accession, has opposed UNCLOS because of a provision that would require some U.S. energy companies to share royalties
Internationally and potentially expose them to international lawsuits. Though the U.S. signed the Ilulissat Declaration in 2008 confirming UNCLOS as the guiding international law, the UNCLOS accession remains a key component and stated objective of U.S. Arctic policy and strategy. To demonstrate U.S. commitment to the Arctic Council, President Obama appointed Secretary of State John Kerry to serve as the Chairman and retired U.S. Coast Guard Admiral Robert Papp to serve as the U.S. Special Representative for the Arctic. Papp, a former Commandant of the Coast Guard, has extensive experience with foreign relations and international maritime affairs.

To address military matters, the eight permanent members of the Arctic Council established the Northern Chiefs of Defense Forum. Additionally, the U.S. European Command and Norway established the Arctic Security Forces Roundtable in 2011. Since 2013, these organizations have either postponed, canceled, or held their meetings without Russia, because of opposition to Russia’s actions in the Ukraine.

Another key relationship for the U.S. is its close ties with Canada. The U.S. and Canada have two bilateral common defense agreements and a bilateral civil assistance plan. The U.S. and Canada have 22 additional agreements for communication, coordination, emergency preparedness, and response.

Assessment of the Current DOD Arctic Strategy

Strategic Alignment

Though criticized by politicians for its brevity, the current DOD Arctic strategy is approximately the same length as the respective U.S. national policy and U.S. Arctic strategy that the DOD strategy supports. A close examination of the strategy shows that although it may not fully describe the intended implementation, the DOD Arctic strategy aligns well with the broader strategic documents.
The U.S. Arctic Policy, signed in 2009 as National Security Policy Directive 66 / Homeland Security Policy Directive 25, recognizes the need for U.S. leadership in the Arctic region. It outlines six U.S. policy objectives: defending the homeland, environmental protection, responsible economic development, enhancing research, strengthening cooperative institutions, and involving indigenous people in decision making. The policy’s implementation guidance assigns DOD as a co-lead for national security/homeland security and maritime transportation. Figure 1 lists the six U.S. policy objectives and seven national interests in the Arctic.

The 2015 U.S. National Security Strategy (NSS), 2014 Quadrennial Defense Review (QDR), and 2015 National Military Strategy (NMS) each reiterate U.S. interests applicable to maintaining Arctic stability and peace. The NSS states that the U.S. will confront climate change and assure access to the world’s shared spaces, reduce the potential for energy-related conflict in the Arctic, and “build on unprecedented international cooperation in the Arctic.” The QDR references the Arctic strategy (in development at the time) and provides three strategy pillars: protect the homeland, build security globally, and project power to win decisively. Though the NMS does not mention the Arctic, it emphasizes security of the global economic system and maintaining the confidence and reliability of allies through strengthened, global networks.

The National Strategy for the Arctic Region (NSAR), published in May 2013, further refines the NSS and identifies 12 broad policy objectives within three lines of effort: “Advance United States Security Interests,” “Pursue Responsible Arctic Region Stewardship,” and “Strengthen International Cooperation.” The NSAR also provides
the four guiding principles for U.S. engagement: “Safeguard Peace and Stability,” “Make Decisions Using the Best Available Information,” “Pursue Innovative Arrangements,” and “Consult and Coordinate with Alaska Natives.” The NSAR cites the contrast between robust Russian Arctic capability and that of the U.S., and it recognizes the additional financial resources necessary for increasing U.S. capability to achieve Arctic policy objectives and fulfill international treaty obligations. Table 1 lists each of the guiding principles, lines of effort, and strategic objectives.

To help implement the national Arctic strategy, the U.S. published its Implementation Plan for the National Strategy for the Arctic Region in January 2014. The implementation plan adds two approaches to the guiding principles: “Foster Partnerships with Arctic Stakeholders,” and “Coordinate and Integrate Activities across the Federal Government.” For each of the 12 objectives outlined in the national strategy, the implementation plan provides a description, the “next steps,” methods and deliverables for measuring progress, and the designation of lead agencies and supporting agencies. Table 1 incorporates the implementation plan and identifies the areas for DOD effort.

The DOD’s Arctic Strategy, published in November 2013, seeks to achieve “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.” In aligning the “ends” of the respective U.S. Arctic strategies, the DOD clearly states that its role is to keep the Arctic “peaceful, stable, and free of conflict…for future generations.” The DOD strategy further specifies the eight “ways” and respective “means” by which it will achieve the desired ends. Recognizing the need to manage risk
given the Arctic region’s complexity, uncertain pace of change, and potential volatility, the DOD strategy goes on to address some of the key challenges and risks to achieving U.S. objectives. The first of these is the risk that climate change projections may be inaccurate. Early warning and trend analyses are the “triggers” for action, especially for investment decisions. In our current era of fiscal austerity, premature or incorrect investments may detract from funding other national security priorities. Stemming from the first, the second identified risk is that “[F]iscal constraints may delay or deny needed investment in Arctic capabilities, and may curtail Arctic training and operations.”63 Because of this, the DOD strategy sets a near-term priority of increasing situational awareness through ice and weather forecasting and reporting, as well as ensuring command and control capability.64

The final two risks factors identified deal with the prospects for escalating tensions. These include the potential for provocative political rhetoric, enflamed media reporting, and increased competition for Arctic resources. In addition, aggressive military posturing may erode trust and communication and detract from cooperation and collaboration.65 To mitigate these risks, the DOD is committed to working with allies and partners and in accordance with international laws.66
Interagency, Intergovernmental, and Multinational Alignment – DOD’s Supporting Role

As highlighted in Table 1, the **DOD Arctic Strategy** aligns well with both **U.S. Arctic Policy** and the **National Strategy for the Arctic Region**. Each of these documents is clear and concise. What may not be apparent is the supporting role that DOD plays within the larger “whole-of-government” approach followed by the U.S. and the international community. The **U.S. Arctic Policy** assigns DOD as a co-lead for only two of the seven stated U.S. Arctic interests. Similarly, the **National Policy for the Arctic** and its **Implementation Plan** assigns DOD as the lead for only one of the 36 objectives, though it assigns DOD a support role for 22 others. The Government Accountability Office (GAO) acknowledges this, reporting to Congress that the U.S. “recent strategic guidance on the Arctic establishes a supporting role for DOD relative to other federal agencies based on a low level of military threat in the region.” The 46-page GAO unclassified report, which was also prepared and submitted in a classified version, lists extensive actions the DOD is taking in the region. Though the GAO report does not
make any recommendations, it does acknowledge the needed capabilities to improve marine domain awareness and communication, and it describes ongoing interagency and intergovernmental partnerships.\textsuperscript{71}

The U.S. Coast Guard (USCG), part of the Department of Homeland Security, plays a greater day-to-day role in the Arctic than DOD and the USCG has the lead for seven of the 36 objectives in the \textit{National Strategy for the Arctic Region}. The \textit{United States Coast Guard Arctic Strategy}, published in 2013, communicates the vision to “Ensure safe, secure, and environmentally responsible maritime activity in the Arctic.”\textsuperscript{72} The USCG stated objectives are very similar to DOD: improving awareness, modernizing governance, and broadening partnerships.\textsuperscript{73}

With the lead for search and rescue efforts in littoral waters, the USCG is most concerned among the uniformed services with ice breaking capability and the related challenges in funding and acquiring additional icebreaker ships has been the subject of GAO and Congressional Research Service reports, think tank products, and service white papers. The Congressional Research Service assessed, based on the Administration’s own budget submissions and fact sheets, that the U.S. may have a two to six year period in the coming years without polar icebreaker ships to enable full maritime power projection and meet international disaster response agreements in the Arctic.\textsuperscript{74} Icebreaker ships aside, the USCG closely aligns with DOD and particularly with the U.S. Navy Arctic strategy examined later in the paper.

Canada is the strongest U.S. Arctic ally and shares common policy and principles with U.S. strategies. Canada’s Arctic policy is nearly congruent with U.S. policy and its four pillars include exercising sovereignty, promoting economic and social development,
protecting Canada’s environmental heritage, and improving Northern governance.\textsuperscript{75} Canada’s military strategy is a 20-year plan published in 2008. Like U.S. military strategy documents, it recognizes the changing Arctic environmental conditions and the need to maintain military capability to ensure regional stability.\textsuperscript{76}

**Joint Alignment**

The strategic guidance of the respective armed services and each geographic combatant command (GCC) varies in date, purpose, and scope. Examining how each subordinate organization views the Arctic may provide insights on how DOD can improve its strategy and implementation measures.

The U.S. Northern Command (NORTHCOM) is the lead organization for executing the DOD *Arctic Strategy*. The NORTHCOM Commander is dual-hatted as the Commander of North American Aerospace Defense Command (NORAD), which is a combined U.S.-Canada organization. As a result, NORTHCOM closely synchronizes its efforts with Canada and NORTHCOM actively participates in Canadian exercises and maritime activities, when possible.\textsuperscript{77} Key planning assumptions for NORTHCOM are that the probability of military conflict is low and that the most likely near-term trigger for DOD activity in the Arctic is a significant safety-related accident.\textsuperscript{78} However, NORTHCOM also assesses there are catastrophic consequences for miscalculating the environment, threat, or required capabilities.\textsuperscript{79} Therefore, domain awareness is a key component of the NORTHCOM campaign plan.\textsuperscript{80} The NORTHCOM campaign plan identifies five lines of operation, three of which involve domain awareness, one for partnerships, and one for strategic agility.\textsuperscript{81}

The NORTHCOM also recognizes that the current budget situation may limit investment in Arctic capabilities,\textsuperscript{82} and it is leveraging science and technology
partnerships with other U.S. federal agencies, Canada, and academia to increase domain awareness. The NORTHCOM is revising its 2011 Commander’s Estimate for the Arctic, but a recent Arctic update included the key task to “raise the level of awareness of Arctic issues within DOD and seek efficient ways to draw DOD enterprise activities into a Whole-of-Government effort.”

The NORTHCOM command and support relationships are important to consider for implementation of the DOD strategy. The Alaskan Command (ALCOM) is a sub-unified command of NORTHCOM comprised almost entirely of Army and Air Force elements. Transferred from U.S. Pacific Command (PACOM) in October 2014, the ALCOM’s Army service component, U.S. Army Alaska, which is co-located on the same base as ALCOM, remains assigned to U.S. Army Pacific. Somewhat similarly, U.S. Pacific Fleet, also assigned to PACOM, provides the naval forces operating in the Arctic around Alaska. Considering that ALCOM has the mission to perform when needed as a joint task force for homeland defense, defense support to civil authorities, or search and rescue (each mission with different authorities and lines of funding), complex threats involving more than one of the aforementioned missions across multiple domains may complicate response and execution.

The U.S. European Command (EUCOM) works closely with NORTHCOM as well as other U.S. Arctic security partners in Europe and the North Atlantic Treaty Organization (NATO). The EUCOM is a sponsor of the Arctic Security Forces Roundtable as well as Arctic-focused combined training exercises such as ARCTIC ZEPHYR.
The Navy has the most developed strategy among the U.S. armed services, which is not surprising given the Arctic is primarily a maritime domain. The *U.S. Navy Arctic Roadmap 2014-2030* identifies four strategic objectives: sovereignty and homeland defense, providing ready naval forces, preserving freedom of the seas, and promoting partnerships. The roadmap also provides ways and means for the near-term (2014-2020), mid-term (2020-2030) and far-term (2030 and beyond). The current roadmap builds on the previous 2009 roadmap, showing both completed actions and future action items according to its doctrine, organization, training, leadership and education, personnel, and facilities process. For each action, the roadmap identifies the lead organization, support organizations, and suspense dates.

In all Arctic endeavors, the Navy maintains close partnership with the USCG. With its comprehensive, long-term plan, the Navy’s Arctic strategy roadmap appears to be a "best practice" for the DOD to emulate.

Unlike the U.S. Navy and U.S. Coast Guard, the U.S. Army, U.S. Air Force, and National Guard Bureau have not published Arctic-specific strategic guidance (none has published such guidance for any region, though). Instead, each has published overarching strategic planning guidance applicable to the Arctic region. Using the Army as an example, the *Army Strategic Planning Guidance 2014* states that “A Globally Responsive and Regionally Engaged Army” is one of the five priorities of the Chief of Staff of the Army. However, the document does not include the words “Arctic” or “Alaska,” but the document uses “homeland” six times. By comparison, “fiscal” problems (to include “situation,” “realities,” “constraints,” “austerity,” or “sequestration”) are cited eight times. Given the lesser citations for “Korea” (five times), “Middle East”
(three times), “Syria” (twice), “Russia” (once), “China” (once), and “Iran” (once), it is reasonable to infer that the Army’s top priority is to defend the homeland within constrained resources.

It is also reasonable to assume that the Arctic operational area would receive the resources relative to its significance in protecting the homeland. Key to this assumption though, is the validation of needed Arctic capabilities through the DOD Joint Strategic Planning System and the Joint Capabilities Integration Development System, and the provision of funding through the Planning, Programming, Budgeting, and Execution System. Arctic mission capabilities will not be resourced without a validated priority need and an associated, approved capability requirement.

**Feasibility, Acceptability, Suitability, and Risk**

Simply put, the *DOD Arctic Strategy* is feasible because it appears to be a strategic “economy-of-force.” This is perhaps because of the region’s relative stability, the low national security threat assessed in the region, and the DOD’s acknowledged supporting role in the federal government’s Arctic efforts. The DOD strategy also recognizes the current constrained U.S. fiscal environment. Ostensibly, it does not require significant additional funding, increased operational tempo for service members, or unsustainable commitments. In fact, the DOD strategy even states that “premature investment may reduce the availability of resources for other pressing priorities, particularly in a time of fiscal austerity.”

Despite this strategy-to-resource match, Congress has deemed the DOD *Arctic Strategy* unacceptable. This may be attributable to the related proposed drawdown of troops in Alaska. However, further analysis would indicate that the Army’s plan to drawdown its active duty end-strength, together with proposed basing adjustments, may
cause a strategic vulnerability that transcends the mostly political resistance to the loss of related jobs in Alaska. The unit identified for the majority of the reductions, the 4th Brigade Combat Team (Airborne), 25th Infantry Division, constitutes the military’s only extreme cold weather rapid response capability and the only unit in the Arctic or Pacific Rim with forced entry capability. As such, the Chief of Staff of the Army testified before Congress in late February 2016 that any decision to reduce forces in Alaska is on-hold for at least another year. While more acceptable to Congress, the delayed decision on Alaskan troop drawdown also retains the ability to implement the Arctic Strategy, but does not necessarily reaffirm the strategy itself.

The DOD Arctic Strategy is suitable because it aligns with national policy and strategy and it presents a plan to achieve the required security objectives. The strategy addresses known threats while acknowledging challenges and risks. Critics of the strategy, though, cite inadequate posture towards Russian aggression and a shortfall in maritime access as arguments for revision.

Russian military buildup in the Arctic certainly warrants caution, especially given its expansionist behavior in Crimea and Ukraine, but experts such as Admiral (Retired) Papp, believe that military confrontation is lower than the media and politicians may suggest. Russia’s economic realism and aggressive posture towards Arctic sovereignty seems akin to China’s posture towards the contested islands in the South China Sea, but the difference is that Russia is militarizing “uncontested” sovereign territory in an area with less near-term geopolitical value. Alternatively, Russia may be exploiting its Arctic development and militarization for domestic purposes. For instance, it may be feeding nationalism and pride that it perceives to be waning with the slowing
Russian economy and loss of Russian international influence following its actions in Ukraine. If Russia seeks to increase influence through energy and economic development, and if Russia is concerned with other countries besides the U.S. operating in the Arctic, then it seems that the primary means for the U.S. and others to address this threat is with diplomacy and economic power. Therefore, under these logical assumptions, an economy-of-force military strategy appears suitable.

Adding to the suitability of the DOD Arctic Strategy as an economy-of-force is the lower intensity of U.S. economic interests in the Arctic. The changing Arctic, though significant, does not currently present an existential threat to U.S. security or prosperity. Already energy independent, the U.S. does not need to expand its mineral wealth. With global access to the Pacific, Atlantic, Gulf of Mexico, and Great Lakes, along with internal lines of communication, the U.S. does not require an “Arctic shortcut” to accelerate the delivery of products to international markets. To be sure, the U.S. will need improved icebreaking capability to exercise U.S. sovereignty, preserve freedom of the seas, and perform its international search and rescue responsibilities. However, with a lesser percent of Arctic coastline and shipping lanes, the U.S. may not need icebreaking capability as much as Russia or Canada. Based on the assumption that the Arctic is a mid- to long-term issue, and informed by current fiscal realities, the current Arctic Strategy appears sufficiently robust versus the current threats, but it may not be resilient enough for an uncertain future.

The future is nearly always uncertain, and the Arctic will remain a complex environment. The most significant risk for the U.S. and DOD in the Arctic is complacency, or not identifying a problem before it evolves into a crisis. Acquisitions
and infrastructure take longer to develop for the Arctic, and the U.S. may not be able to surge related capabilities fast enough to respond to emerging requirements. Former Secretary of Defense Robert Gates stated in recent Congressional testimony “that our record since Vietnam in predicting where and how we will be engaged militarily next – even a few months out – is perfect: we have never once gotten it right.” Gates went on to testify that the military needed “funding and flexibility” to “give our forces the most versatile possible capabilities across the broadest possible spectrum of conflict.”

Considering the Arctic, the U.S. has established strong international and domestic alliances through which to mitigate risk. Implementation of our respective Arctic strategies, then, is the key to maintaining an acceptable level of risk in the Arctic.

Recommendations for DOD Arctic Strategy Revision

The NDAA for FY 2016 presents the DOD with a very similar task as it faced in FY 2011, when the revision of the *Unified Command Plan* served as a catalyst for Congress to question the DOD strategy in the Arctic. The DOD 32-page report submitted to Congress in FY 2011 identified the majority of the issues that still exist today. For its FY 2016 planning requirement, DOD should take advantage of the opportunity to present a revised approach as past actions may not have achieved desirable results.

The DOD *Arctic Strategy* broadly provides the ends, ways, and means for the U.S. military to accomplish U.S. national policy objectives. However, an implementation plan similar to that published by the White House would allow DOD to meet the statutory requirements of the NDAA, shown in Figure 3, and improve the integration of effort within current fiscal constraints. This paper offers five recommendations to answer
the research question “How can the DOD best revise its strategy and posture to accomplish the U.S. national policy and strategic objectives in the Arctic?”

Recommendation #1 - Publish an Arctic Strategy Implementation Plan

The first recommendation is that the DOD presents its strategy updates as an implementation plan, the same way as the White House published an implementation plan for the President’s National Strategy for the Arctic Region. The DOD should avoid publishing a new “base” strategy document, which this paper has shown to be unnecessary, and which may undermine the existing strategy and disrupt continuity. The DOD should combine and use the best aspects of the NSAR as well the U.S. Navy Arctic Roadmap 2014-2030 to develop its own implementation plan. This
implementation plan should provide definitive guidance for each service and set specific milestones for review and accomplishment of related service objectives.

The NDAA wording essentially requires the DOD to “show its work” for strategy formulation, and this could be added as one or more annexes to the implementation plan. Beyond the NDAA’s minimum requirements, the DOD should also identify those constraints and capabilities provided by external agencies or nations that are critical to the success of DOD in the Arctic. These include U.S. accession to the UNCLOS (Department of State), increasing USCG icebreaking capabilities (Department of Homeland Security), or other factors. Much of this information is already available in strategic assessment documents.

**Recommendation #2 – Formalize DOD Framework for Collaboration**

As the DOD coordinates an *Arctic Strategy* implementation plan, it should formalize the DOD framework for collaboration, both for the immediate delivery of the NDAA requirements and for the ongoing and enduring DOD collaboration among the many joint, interagency, intergovernmental, and multinational groups working on Arctic issues. For meeting the NDAA requirements, DOD should consider including stakeholders from outside organizations as observers, if not participants, in the process. The professional staffs from the House and Senate Armed Services Committees, staffs from the Alaska Congressional delegation, and others may add significant value in the process. Their inclusion may also engender trust on which to build future relationships.

The GAO made a recommendation to formalize the longer-term DOD framework for Arctic collaboration in the September 2015 report to Congress on DOD Arctic planning. The GAO report identified at least 12 federal agencies and 12 interagency working groups with whom the DOD participates. The GAO report cites the effective,
informal collaboration that currently exists, as exhibited by NORTHCOM, within the interagency science and technology community. However, formalizing a framework for collaboration will improve information sharing among these informal groups and demonstrate U.S. commitment to the Arctic while it holds the chairmanship of the Arctic Council.

As DOD continues to participate in the U.S. whole-of-government approach, it should also advocate the tracking of agency/department requests for resources and expenditures directly related to the Arctic strategy. The key point is that, for a comprehensive U.S. government approach, all agencies should be accountable for their respective Arctic roles and resourced appropriately to accomplish them.

Recommendation #3 - Direct Arctic Operational Planning

The third recommendation is for DOD to direct the appropriate GCC to do operational planning for emerging threats in the Arctic. Specifically, the Secretary of Defense should direct the appropriate GCCs through the *Guidance for Employment of the Force* to prepare operations plans for the various threats in the Arctic and Pacific. The threats should consider the worst case for climate change, natural and man-made disasters, and likely provocative actions by state- and non-state actors operating in multiple domains. The overall scenario should test U.S. capabilities across more than one GCC and specifically those stationed and operating in Alaska and the Arctic. This seems consistent with the uncertainty, complexity, and adaptability outlined in both the *Capstone Concept for Joint Operations* and the *Army Operating Concept*. Directing the preparation of such plans will generate the appropriate context to validate needed Arctic capabilities and better inform future risk assessments.
Recommendation #4 – Build Arctic Capability with Expeditionary Forces

The fourth recommendation is that the DOD use an expeditionary framework to build Arctic capacity. As previously mentioned, the Arctic is not a place we can deploy an untrained “quick reaction force” if a military response is required. Senior leaders are aware of the environmental and fiscal uncertainties associated with Arctic contingency planning. The NORTHCOM Commander stated in his March 2015 Congressional testimony that the most responsible approach for the Arctic is to maintain forces that are trained and equipped for extreme cold weather operations, maintain the ability to project forces to the Arctic, and to maintain a limited amount of infrastructure that can be increasingly scaled for contingencies.

Further highlighting the tension between operational needs and budget constraints, Secretary of Defense Ashton Carter cited the value of posture over presence in the DOD FY 2017 President's Budget request, released in February 2016. Secretary Carter also proposed in the budget requests to fund “offset technologies” such as assured position, navigation, and timing; unmanned undersea vehicles and other unmanned systems; and others that may be applicable for contingency operations in the Arctic.

The DOD is already working to improve Arctic capabilities through joint training exercises and associated force development, and the DOD should continue these efforts. The ALCOM conducted a series of recent, joint ARCTIC PEGASUS exercises to test the deployability of forces to Alaska’s Northern Slope, which lies north of the Arctic Circle. The progressive series of exercises began in February 2014 with the parachute insertion of an Army airborne infantry platoon. In May 2014, it included an Army engineer platoon with a heavy drop of equipment. In November 2015, an Army Stryker
infantry platoon was transported via Air Force C-17 in the first ever exercise of those vehicles above the Arctic Circle. In a similar exercise in the fall of 2014, Soldiers from the 75th Ranger Regiment conducted training at the Northern Warfare Training Center for the first time since 2001.\textsuperscript{107} Lastly, in September 2015, the Army stood up its first ever AH-64 Apache attack aviation battalion in Alaska as part of the Aviation Restructuring Initiative.\textsuperscript{108}

The DOD should consider revising existing readiness reporting systems to account for the extreme cold weather proficiency of its service members and units. For service member proficiency, the DOD should consider awarding additional skill identifiers (beyond the current skill identifier for military mountaineering) to service members who have successfully participated in Arctic training.\textsuperscript{109} This would improve the visibility of those qualifications and increase service member and unit leadership, competence, and toughness that is transferable to any mission worldwide. Similarly, the DOD should consider including the environmental conditions (such as Arctic training) under which a unit completes its mission essential tasks to allow respective services to better assess their units’ readiness for Arctic contingencies.

The DOD should also seek opportunities to leverage emerging technologies relevant to Arctic capabilities and contribute to achieving broader U.S. Arctic policy objectives. The Arctic Institute reports that the military is the only agency with the ability to monitor conditions and operate in the Arctic.\textsuperscript{110} For example, naval presence patrols, manned or unmanned, could perform hydrographic surveys and help chart new candidate Arctic sea-lanes. Army and Air Force engineers, as part of rotational training exercises, could construct expeditionary facilities or improve on existing facilities to
serve as “forward operating bases” for projected contingency operations. Not only would such missions improve training readiness, but they would also improve U.S. posture and preparedness for Arctic contingencies.

**Recommendation #5 – Strengthen Partnerships and Alliances**

The final recommendation is for DOD to continue to strengthen its partnerships and alliances, both domestically and internationally, which are arguably the U.S. center of gravity for the Arctic. Defense relationships can bolster networks to enhance the diplomatic and economic instruments of power and counter irresponsible or irrational actors who threaten to destabilize the region. Specifically, the U.S. and DOD should not counter Russian aggression with U.S. militarization, which could result in a self-fulfilling prophesy, but instead strengthen alliances with security partners and demonstrate that cooperation rather than coercion is the most appropriate and effective means for dealing with disputes.

Internationally, these alliances include the Northern Chiefs of Defense Forum, the Arctic Security Forces Roundtable, bilateral U.S.-Canada forums, and the National Guard’s State Partnership Program. In the case of the latter program, the State of Alaska has collaborated with the Mongolian Armed Forces since 2003. The Alaska-Mongolia partnership is important because Mongolia is a stable democracy supportive of the U.S., and both partners are border states with Russia. As is already being done by NORTHCOM, DOD should include Canada in all possible training exercises and personnel exchanges (Canada already provides deputy commanders for NORAD and ALCOM).

The recent NATO COLD RESPONSE exercise, conducted in Norway in February-March 2016, is another example of strengthening partnerships. The 10-day
exercise involved over 16,000 troops, including the U.S. 2nd Marine Expeditionary Brigade and troops from 11 European countries. This exercise was the largest of its kind conducted since the Cold War. For the Marines, the exercise was the culmination of nearly 60 days of Arctic training, and it both strengthened international alliances and increased U.S. Arctic capability.\textsuperscript{112}

Domestic interagency partnerships are similarly important for DOD, and DOD should continue the ongoing efforts in this area. The ALASKA SHIELD disaster response exercise held in 2014 is a prime example. Teaming with the State of Alaska, NORTHCOM and NORAD concurrently conducted their ARDENT SENTRY and ARCTIC EDGE exercises to train on defense support of civil authorities’ missions in responding to realistic natural disaster scenarios.\textsuperscript{113} These successful exercises helped prepare organizations for the most probable scenarios. The DOD should expand on such exercises to train for the less likely yet high risk contingencies that might occur in the future.

Conclusion

In the summer of 2016, a cruise ship carrying 1000 passengers will transit the Northwest Passage from Alaska to New York in what may be the first of many such future voyages.\textsuperscript{114} This event likely portends an increase in human activity in the Arctic as much as the harsh environment and improvements in technology will allow. The question, then, is if the many powerful stakeholders can do so safely, cooperatively, and peacefully. For its part, the U.S. may need to be an objective broker of competing interests, ensure unhindered access to the Arctic’s global commons, and act as a fair and trusted “partner of choice.” As an important Arctic stakeholder and global power, the U.S. will play a critical role in ensuring stability within this potentially dynamic region.
Barring any military confrontations or conflicts, the DOD will play a supporting role to other federal agencies in the pursuit of *U.S. Arctic Policy* objectives. However, as unlikely as any conflict or threat to national security in the Arctic might be, the DOD must be prepared.

The Arctic’s regional stability is not assured. Current U.S. strategy and resourcing indicates a willingness to accept some strategic risk in this region. A review of the current DOD *Arctic Strategy* shows that while the strategy is feasible and suitable to mitigate current threats, the strategy is unacceptable to Congress. This paper concludes that, if not properly coordinated with other institutional processes involving needed contingency force structure and basing, the strategy’s implementation may result in unacceptable capability gaps.

Thus, the congressionally mandated strategy revision provides an opportunity for the DOD to prepare an *Arctic Strategy* implementation plan that coordinates and documents efforts among all Arctic stakeholders. Correspondingly, the DOD must prepare operations plans for potential future threats to identify the required capabilities and help quantify the associated risks. This comprehensive analysis can inform resourcing and force development programs. Similarly, improving collaboration and communication will help inform the analysis and reduce risk in this potentially volatile, uncertain and complex region. These issues point to the key strategic question: should we continue on with the perception of “acceptable risk” for exigent Arctic problems, or should we take this congressionally mandated opportunity to find out if we are skating on thin ice?
Endnotes


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17 Dillow, “A Melting Arctic.”

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