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14. ABSTRACT

Redefining U.S. Arctic Strategy

Climate change continues to affect the Arctic region at a rate over twice the global average. Current estimates project the region will be navigable to maritime traffic in the off season as early as 2030. After nearly two decades of neglect, the U.S. has reached a point that autonomous recovery is improbable to achieve its objectives defined in National Security Strategy for the Arctic Region, the DOD Arctic Strategy, and the U.S. Navy Arctic Roadmap. Therefore, to achieve these objectives, the U.S. should focus its multinational efforts toward a unified cooperation while it serves as chair of the Arctic Council. Domestically, the U.S. should refocus and realign the mission of ALCOM towards creating a dedicated research and development department, constituting JTF-AK dedicated to charting the Arctic region in coordination with the other Arctic states, and establishing itself as the training command for area and operational expertise.

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Redefining U.S. Arctic Strategy

by

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Lieutenant Commander, U.S. Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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15 May 2015

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Paper Abstract

Climate change continues to affect the Arctic region at a rate over twice the global average. Current estimates project the region will be navigable to maritime traffic in the off season as early as 2030. After nearly two decades of neglect, the U.S. has reached a point that autonomous recovery is improbable to achieve its objectives defined in National Security Strategy for the Arctic Region, the DOD Arctic Strategy, and the U.S. Navy Arctic Roadmap. Therefore, to achieve these objectives, the U.S. should focus its multinational efforts toward a unified cooperation while it serves as chair of the Arctic Council. Domestically, the U.S. should refocus and realign the mission of ALCOM towards creating a dedicated research and development department, constituting JTF-AK dedicated to charting the Arctic region in coordination with the other Arctic states, and establishing itself as the training command for area and operational expertise.

Introduction

In the past century, there have been dramatic changes taking place in the Arctic region causing it to warm at a rate faster than twice the global average.¹ In 2012, the Arctic sea ice reached its lowest recorded extent in history at 1.3 million square miles.² This has opened the region to human access for a larger portion of the year and resulted in increased international interest. While the majority of these interests are driven by economic endeavors such as maritime commerce, resource extraction, fishing, and tourism, there are military issues requiring a new focus from the U.S. and the other Artic states.

In order to address these concerns, the U.S. has published the National Strategy for the Arctic Region as its capstone policy document. This strategy is built on three main lines of effort: advancing U.S. security interests, pursuing responsible Arctic region stewardship, and strengthening international cooperation in the region.³ In order to accomplish these lines of effort, the U.S. guiding principles have been established as: safeguarding peace and stability, decision making using the best available information, pursuing innovative arrangements, and coordinating with the native Alaskans.⁴

To accomplish these lines of effort, the Department of Defense (DOD) published its Arctic Strategy which delineates the desired end state of a secure and stable region with national interests safeguarded, the homeland protected, and nations working cooperatively to

¹ Intergovernmental Panel on Climate Change (IPCC). *Climate Change 2007: Synthesis Report*. Accessed 15 April 2015 at

<http://www.ipcc.ch/publications_and_data/publications_ipcc_fourth_assessment_report_synthesis_report.htm

² National Snow and Ice Data Center. *Arctic Sea Ice Extent Settles at Record Seasonal Minimum*. NSIDC press release. 19 Sept. 2012. Accessed 15 April 2015 at < http://nsidc.org/arcticseaicenews/2012/09/arctic-sea-ice-extent-settles-at-record-seasonal-minimum/>

³ U.S. President. *National Strategy for the Arctic Region*, Washington, DC: White House, May 2013. Accessed 15 April 2015 at https://www.whitehouse.gov/sites/default/files/docs/nat_arctic_strategy.pdf ⁴ Ibid

address challenges.⁵ The main supporting objectives are defined as to "ensure security, support safety, and promote defense cooperation, and prepare to respond to a wide range of challenges and contingencies."⁶ Furthermore, the DOD clearly articulated this desired end state will be achieved as a multinational effort or independently if required.

Further delineating policy, the U.S. Navy published its Arctic Roadmap in order to define its objectives and concerns with the region. The roadmap states that this region is of national interest from a security perspective and the U.S. Navy has key roles, responsibilities, and opportunities there. Naval functions are no different from other geographic regions; however the harsh environment and limited capabilities make operations significantly more difficult.⁷ The objectives set forth by the Arctic Roadmap are to ensure sovereignty, provide for homeland defense, provide naval forces ready to respond as needed, preserve freedom of the seas, and promote partnerships both within the Federal Government and internationally.⁸ Given these dynamics, combined with an underutilized chain of command and the inability to sustain an effective maritime presence in the region, a need for change exists in the current force structure and partnership capacity.

However, these objectives cannot currently be accomplished by the U.S. unilaterally. The redesigned structure should be a multinational effort focused on building partnership capacity, information sharing, and unity of effort. The main focus for the U.S. should be to coordinate with the Arctic Council to maintain a maritime presence within the region. Additionally, the current command structure of Alaska Command (ALCOM) does not

⁵ U.S. Department of Defense. *Department of Defense Arctic Strategy*, Washington, DC: Office of the Secretary of Defense, November 2013. Accessed 15 April 2015 at <

http://www.defense.gov/pubs/2013_Arctic_Strategy.pdf>

⁶ Ibid. Pg 2.

⁷ U.S. Navy, Office of the Chief of Naval Operations. *The U.S. Navy Arctic Roadmap for 2014 to 2030*, Washington, DC: Department of the Navy, CNO, February 2014. Accessed 15 April 2015 at arctic roadmap.pdf>

⁸ Ibid

provide clear guidance or capabilities to accomplish the objectives. Therefore, to achieve its Arctic objectives, the U.S. must redefine the mission of ALCOM while simultaneously reinforcing partnership capacity with the Arctic Council to establish sustained maritime presence.

Background



Figure 1

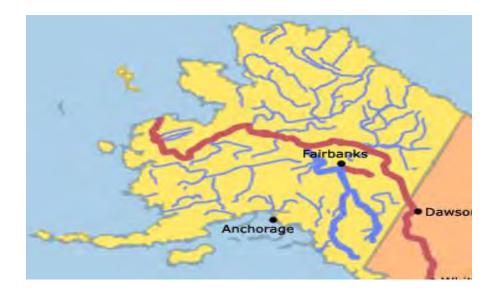


Figure 2

According to the U.S. Navy Roadmap the Arctic Region is "the area that encompasses all U.S. and foreign territory north of the Arctic Circle and all U.S. territory north and west of the boundary formed by the Porcupine, Yukon, and Kiskokwim Rivers, and all contiguous seas and straits north of and adjacent to the Arctic Circle." ⁹

In a world reliant upon non-renewable fossil fuels, there is a constant race between the next cutting edge technology for energy, or the discovery of new areas for fuel exploitation. The Arctic region has vast potential to have a significant economic impact. Current estimates state the Arctic contains approximately 30% of the world's natural gas reserves. Additionally, it is estimated that approximately 15% of the worlds undiscovered oil resources lie under the Arctic seabed. While much of this region is unexplored, recent studies point to the potential for trillions of dollars of undiscovered resources.¹⁰

In 1996, the Arctic Council was formally declared as a "high-level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic states, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues; in particular, issues of sustainable development and environmental protection in the Arctic."¹¹ Current members of the Arctic Council are the U.S., Canada, Finland, Iceland, Russia, Norway, Denmark (including Greenland and the Faroe Islands), and Sweden. Since its inception, its scope has adapted as the region has become more accessible. Recent developments concerning the effects of regional warming have reduced maritime transit times via the Northern Sea Route and the Northwest Passage

⁹ This definition is consistent with the Arctic Research and Policy Act of 1984 and Arctic Council usage. Chief of Naval Operations, *The U.S. Navy Arctic Roadmap for 2014 to 2030* (Washington, DC: Department of the Navy, February 2014), 40. See Figures 1 and 2 for an estimated graphical representation from an international and U.S. perspective.

¹⁰ *Climate Change in the Arctic*, The Economist. September 24, 2011. Accessed 15 April 2015 at http://www.economist.com/node/21530079>

¹¹ Arctic Council Secretariat. *About the Arctic Council*, Arctic Council, 2011. Accessed April 15, 2015 at http://www.arctic-council.org/index.php/en/about-us/arctic-council/history

by up to a week.¹² This reduction has drawn major interest from the Arctic states plus the European Union, China, Japan, and the Republic of Korea as well as having potential economic benefits of area exploration.

The Arctic Council was formed without a strict legal charter, but as a forum to foster and develop cooperation and collaboration on Arctic issues.¹³ The council's chairmanship rotates every two years and all decisions made by the council must be by unanimous agreement. Canada held the chairmanship from 2013 until 2015 and focused their efforts towards economic development within the region. However, as of late Canada and other Arctic states have developed strained relations with Russia in a response to their actions in the Crimea and eastern Ukraine. Their overt and covert actions have led Canada and other Arctic states to presume the Arctic Council cannot continue to function with Russia as a key member.¹⁴ Recently these perceptions were accelerated when the Russian deputy prime minister referred to "the Arctic is a Russian Mecca."¹⁵ Additionally, last month the Russian military conducted a war game with over 35,000 troops and dozens of warships and submarines in the Arctic in a naked display of its militaries ability to defend its interests in the region.¹⁶ Canada has reacted to these Russian actions by boycotting an Arctic Council meeting.¹⁷

¹² Lasserre, Frederic. *Climate change and commercial shipping development in the Arctic*, Accessed 9 May 2015 at http://www.arcticnet.ulaval.ca/pdf/compendium2012-13/3.9_commercial_shipping.pdf

¹³ Ebinger, Charles and Evie Zambetakis, *The Geopolitics of Arctic Melt*, International Affairs 85, no. 6 (2009). Accessed 15 April 2015 at < http://www.brookings.edu/~/media/research/files/papers/2009/11/arctic-melt-ebinger-zambetakis/11_arctic_melt_ebinger_zambetakis.pdf>

¹⁴ Conley, Heather and Jamie Kraut. US strategic interests in the Arctic: an assessment of current challenges and new opportunities for cooperation. Center for Strategic and International Studies, 2010.

 ¹⁵ Bender, Jeremy. *Russian deputy prime minister: 'The Arctic is a Russian Mecca'*, Business Insider, April 20, 2015. Accessed 25 April 2015 at http://www.businessinsider.com/the-arctic-is-a-russian-mecca-2015-4
¹⁶ Morello, Carol. *A chill is already in the air ahead of the next meeting of the Arctic Council*, The Washington

Post, April 21, 2015. Accessed 25 April 2015 at < http://www.washingtonpost.com/world/national-security/achill-is-already-in-the-air-ahead-of-the-next-meeting-of-the-arctic-council/2015/04/21/7a38baf0-e3a5-11e4-81ea-0649268f729e_story html>

¹⁷ Ibid.

The United States assumed the two-year rotating chairmanship of the Arctic Council on April 24, 2015. Secretary of State John Kerry has stated the effects of climate change in the Arctic present "one of the most obvious shared challenges on the face of the planet today."¹⁸ Despite the rising potential for conflict amongst the Arctic states as mentioned above, the U.S. plans to focus on ways to aid indigenous inhabitants adapt to the changing environment. This policy is contradicted by a recent report urging the U.S. to shift its focus to foster a unified cooperation with Russia and the other Arctic states.¹⁹ Michael Sfraga, professor at the University of Alaska has identified the council's importance on the international stage as "there are few places on the planet where eight nations are in continued engagement and dialogue, like in the Arctic Council."²⁰ This statement identifies the need for the U.S. to focus on unified cooperation to maintain the Arctic as a peaceful region during its chairmanship.

With international interest, the U.S. must remain committed to the Arctic Council as a multinational effort; however, the U.S. must also ensure its domestic concerns are addressed. These include, but are not limited to, homeland security, freedom of navigation, national sovereignty, and the protection and enforcement of the Economic Exclusion Zone. But while other countries recognize the strategic importance of the Arctic and invest in modern technology and associated doctrines, the U.S. continues to neglect this area. Of the FY16 federal budget of \$3.9 trillion, the Arctic requests a paltry \$4 million, effectively denying the

¹⁸ Ibid.

¹⁹ Collins, James, Michael Sfraga, Ross A. Virginia, and Kenneth Yalowitz. *How America Can Step Up Its Leadership Role in the Arctic, The National Interest.* April 21, 2015. Accessed 25 April 2015 at <http://nationalinterest.org/feature/how-america-can-step-its-leadership-role-the-arctic-12689> ²⁰ Morello, Carol. *A chill is already in the air ahead of the next meeting of the Arctic Council*, The Washington Post, April 21, 2015.

U.S. the ability to maintain an effective maritime presence.²¹ Another example of this neglect is the U.S. failing to ratify the United Nations Convention on the Law of the Sea (UNCLOS) as other Arctic states have done. The U.S. relies on international law as sufficient to address maritime issues within the Arctic region, including national security. Additionally, the U.S. is fearful that agreeing to UNCLOS terms will create an unfavorable allocation of resources that could ultimately restrict movement of the Navy in the Arctic region.²²

Russia has increased its military air and naval patrols and is developing modern icebreakers to replace their existing fleet within five years. Additionally, they have a dedicated military training program to promote area and environmental expertise.²³ Canada has refined deep water ports as well as trained dedicated naval and ground forces for cold weather operations.²⁴ Denmark has established its Arctic Response Force to strengthen their enforcement of sovereignty and surveillance as a dedicated Arctic unit.²⁵ Norway recently became the first NATO state to permanently relocate its military command leadership to the region.²⁶ These moves show a level of renewed focus and prioritization in the Arctic that the U.S. must reconsider in order to ensure its concerns are addressed appropriately.

ALCOM was created in 1947 and was tasked with the defense of the Alaskan

frontier. ALCOM has witnessed a multitude of command elements and responsibility shifts

²¹ Barno, David and Nora Bensahel. *The Anti-Access Challenge you're not thinking about,* 05 May 2015. Accessed 07 May 2015 at http://warontherocks.com/2015/05/the-anti-access-challenge-youre-not-thinking-about/?singlepage=1

 ²² Ebinger, Charles and Evie Zambetakis. *The Geopolitics of Arctic Melt*, International Affairs 85, no. 6 (2009).
²³ Russia moves to bolster Arctic military presence, Alaska Dispatch. September 28, 2011. Accessed 15 April

²⁰¹⁵ at < http://www.adn.com/article/russia-moves-bolster-arctic-military-presence> ²⁴ Bennett, Mia. *Military exercises in Arctic reveal gap in US capabilities*, Alaska Dispatch. May 7, 2012.

Accessed 15 April 2015 at <http://www.adn.com/article/military-exercises-arctic-reveal-gap-us-capabilities> ²⁵ Arctic Council. *Denmark, Greenland and the Faroe Islands, Kingdom of Denmark Strategy for the Arctic 2011-2020.* Accessed April 15, 2015 < http://um.dk/en/~/media/UM/English-site/Documents/Politics-and-diplomacy/Greenland-and-The-Faroe-Islands/Arctic%20strategy.pdf>

²⁶ First NATO headquarters in the Arctic as Norway moves its military leadership into the Arctic Circle, 10 November 2010. Accessed 22 April 2015 at < http://arcticportal.org/old-news/266-first-nato-headquarters-inthe-arctic-as-norway-moves-its-military-leadership-to-the-arctic>

throughout the years. In October 2014, ALCOM was transferred to a subunified command of USNORTHCOM from USPACOM. When transferred, the duties and responsibilities of the dissolved Joint Task Force Alaska (JTF-AK) transferred as well. JTF-AKs mission was "in coordination with other government agencies, deter, detect, prevent and defeat threats within the Alaska Joint Operations Area in order to protect U.S. territory, citizens, and interests, and as directed, conduct Civil Support operations."²⁷ The current responsibilities of ALCOM include conducting homeland defense, civil support, and mission assurance to defend Alaska and secure U.S. interests, however lack the capabilities to perform them.²⁸

Despite ALCOM maintaining the armed forces dedicated for the Arctic region, its functions still remain split between USPACOM and USNORTHCOM. ALCOM currently participates in two annual military exercises, neither of which truly addresses Arctic military roles or multinational efforts. Exercise NORTHERN EDGE is a PACOM exercise that is based on responding to a crisis within the northern Asia-Pacific.²⁹ Exercise ARCTIC EDGE is based on coordination with the state of Alaska and the Department of Homeland Security focused on natural disaster scenarios.³⁰ As of this writing, ALCOM is not tasked with providing support to the key issues identified by USNORTHCOM in the Unified Command Plan. These include all domain awareness, infrastructure, mobility within the region, search and rescue (SAR) capabilities, and charting the region.³¹

nttps://www.fas.org/sgp/crs/natsec/R420//.pdf

²⁷ Feickert, Andrew. *The Unified Command Plan and Combatant Commands: Background and Issues for Congress*, 03 January 2013. 44. Accessed on 30 April 2015 at < https://www.fas.org/sgp/crs/natsec/R42077.pdf>

²⁸ Alaska Command, Accessed 30 April 2015 at

<http://www.jber.af.mil/library/factsheets/factsheet.asp?id=5286>

²⁹ Alaska Command, Accessed 30 April 2015 at

<http://www.jber.af.mil/alcom/northernedge/northernedge2015.asp>

³⁰ Alaska Command, Accessed 30 April 2015 at http://www.jber.afmil/alcom/arcticedge14.asp

³¹ Feickert, Andrew. *The Unified Command Plan and Combatant Commands: Background and Issues for Congress*, 03 January 2013. Accessed on 30 April 2015 at < https://www.fas.org/sgp/crs/natsec/R42077.pdf>

Sustained Maritime Presence

In order to address international and domestic concerns, the Arctic region requires a sustained maritime presence focused on readiness, capability, and security. This should be accomplished through a multinational effort that promotes information sharing, coordinated exercises, and partnership capacities that provide area expertise and operational knowledge.

Regional readiness is defined as SAR, disaster relief, and crisis response by the Arctic states. The first legally binding agreement arranged by the Arctic Council provided an international instrument on cooperative SAR operations in the region.³² This coordination shows potential, but additional agreements are required to address overall consequence management readiness. This should be accomplished by regular multinational and joint exercises to maintain broader international presence and synergy. The focus of the exercises should be to demonstrate the ability to operate in the Arctic for crisis management scenarios. Information sharing will be paramount by all states involved to prevent duplication of effort of partner nations. Such collaborative exercises could also aid in the deterrence of potential Russian aggression as it would be an invested partner for matters concerned with regional readiness.

Additionally, exchange programs should be developed and sustained to promote information sharing and area expertise among the Arctic Council. The Personnel Exchange Program (PEP) currently provides opportunities to foster cooperation and the standardization of operational doctrines.³³ Of the Arctic states, only Canada and Norway are active partners

³² Arctic Council. *Search and Rescue in the Arctic*, Published 22 June 2011. Accessed 15 April 2015 at

<www.arctic-council.org/index.php/en/environment-and-people/oceans/search-and-rescue/157-sar-agreement> ³³ OPNAVINST 5700.7H, Published 17 September 2007. Accessed 15 April 2015 at

http://doni.documentservices.dla.mil/Directives/05000%20General%20Management%20Security%20and%20 Safety%20Services/05-

^{700%20}General%20External%20and%20Internal%20Relations%20Services/5700.7H.pdf>

in the PEP. Russia, Canada, Norway, and Demark currently have dedicated training programs for area expertise and specialized brigades that the U.S. could significantly benefit from. In order to exploit this valuable opportunity, the U.S. should create a line of effort during its tenure as chair of the Arctic Council to create an agreement similar to the PEP, but limited to the Arctic states. Additionally, the U.S. should formalize a specific training program utilizing the Canadian and Russian models in order to provide longevity and sustainment of a ready force.

Regional capability is defined as joint and international maritime coordination as a whole of government approach. This is the major deficiency of the United States current policy; the lack of a detailed regional plan and a significant capability gap for modernized equipment. The goal of this coordination is to prevent doctrine and policy conflicts among the maritime operational environment. Capable vessels are required for the extreme operating environment in the region, including ice breakers and other purpose built Arctic warships. Currently, several Arctic states possess a fleet capable of sustained maritime presence. Russia has increased both naval and air patrols in the region and possesses twenty icebreakers, seven of which are nuclear powered.³⁴ In addition to the largest icebreaker fleet, Russia possesses a large surface and submarine fleet capable of operating in the region. Canada maintains an Arctic-ready fleet that is over four times larger than the U.S.³⁵ As of this writing, sustained U.S. Navy Arctic maritime presence is limited to submarine operations that conduct routine patrols of the region. The U.S. Coast Guard is limited to three icebreakers, with only two operational, both of which are nearing the end of their service lives.

³⁴ Katarzyna Zysk. Russia's Arctic Strategy Ambitions and Constraints, Joint Forces Quarterly 57.

³⁵ Ebinger, Charles and Evie Zambetakis, *The Geopolitics of Arctic Melt*, International Affairs 85, no. 6 (2009).

The U.S. must determine the value of the region and apportion the investment required to protect its interests.³⁶ Significant financial and time investment will be required from many departments of government in order to research and develop a fleet capable of maintaining a year round presence. Currently there is a projected cost of \$1 billion for each new icebreaker an estimated \$20 billion and decades to complete a capable fleet and infrastructure.³⁷ Combine this estimate with the current budget of \$4 million per fiscal year and there exists a significant gap that cannot be overcome by the U.S. in the near term. Therefore, there exists the need to create a partnership to sustain the maritime presence to provide the necessary regional capabilities.³⁸ This gap demonstrates the U.S. should increase its focus, leadership, partnership, and funding within the region.

While the Arctic region is at a low risk for large scale military confrontation, security involves protection from maritime trafficking and piracy that seek to exploit increased operations. To accomplish this, international information and capability sharing should be achieved via exercises as described above. These exercises would define the responsible authority or state for geographic areas or particular missions within the region. Building this partnership capacity throughout the Arctic states will provide the longevity of safety and security for the increased maritime traffic and freedom of navigation.

This process should begin with the U.S. ratification of the UNCLOS rather than continue the belief that it relinquishes too much sovereignty to the United Nations. As a nonsignatory, the U.S. has less credibility in the region and cannot assert rights concerning

³⁶ Doughton, Sandi. Aging Fleet Slows U.S. in Arctic "Chess Game," Seattle Times, September 20, 2007. Accessed 15 April 2015 at http://www.seattletimes.com/seattle-news/aging-fleet-slows-us-in-arctic-chess- game/> ³⁷ Ebinger, Charles and Evie Zambetakis. *The Geopolitics of Arctic Melt,* International Affairs 85, no. 6 (2009).

³⁸ Barno, David and Nora Bensahel. THE ANTI-ACCESS CHALLENGE YOU'RE NOT THINKING ABOUT, 05 May 2015, Accessed 07 May 2015 at http://warontherocks.com/2015/05/the-anti-access-challenge-voure-not- thinking-about/?singlepage=1>

resource extraction afforded outside of the Economic Exclusion Zone.³⁹ The 2010 Quadrennial Defense Review states that it strongly advises acceding to UNCLOS in order to support the cooperative engagement within the region.⁴⁰ Ratification will protect naval operations within the region and will allow legal exploration for gas and oil resources.⁴¹ Furthermore, acceding will gain the legal basis for the prevention and persecution of maritime trafficking and piracy.⁴² Lastly, acceding will increase U.S. legitimacy and allow for the security of vital interests and partnerships with the other Arctic states.

Regional readiness, capability, and security are the major obstacles facing the U.S. and are indicative of the neglect concerning the Arctic region. In order to overcome this obstacle, the U.S. should utilize its chairmanship of the Arctic Council to develop and foster both leadership and partnership with the Arctic states to promote capability sharing and the coordination of multinational exercises. In order to accomplish this, USNORTHCOM should play a major role in the Arctic Council as the leading advocate for this partnership. This will aid in the development of a sustained maritime presence in the region.

Command Structure

The DOD strategy articulates the need to improve nautical charts, enhance oceanic models, improve accuracy of estimates of ice extent and thickness, and monitor climate change.⁴³ USNORTHCOM articulates the need to coordinate with other government agencies in order to provide SAR capabilities, humanitarian assistance, disaster relief, and law enforcement within the region. However, several deficiencies such as all domain

 ³⁹ Ebinger, Charles and Evie Zambetakis. *The Geopolitics of Arctic Melt*, International Affairs 85, no. 6 (2009).
⁴⁰ U.S. Department of Defense, *Quadrennial Defense Review Report*, February 2010.

⁴¹ Demos, Telis. *Arctic Circle Oil Rush*, Fortune 156, no. 4. August 20, 2007. Accessed 15 April 2015 at http://archive fortune.com/2007/08/07/news/international/arctic oil fortune/index htm>

⁴² Charles Ebinger and Evie Zambetakis. *The Geopolitics of Arctic Melt*, International Affairs 85, no. 6 (2009).

⁴³ U.S. Department of Defense Arctic Strategy, November 2013.

awareness, infrastructure, asset mobility, SAR capabilities, and charting of the region were identified after a detailed examination.⁴⁴ ALCOM's current defined mission is inadequate and requires change. However, with proper utilization of the available assets and coordination throughout USNORTHCOM, ALCOM has the ability to provide for improvement in the noted deficiencies. Redesigned mission areas for ALCOM should include dedicating a research and development department, creating a Joint Task Force solely dedicated to charting the Arctic in coordination with Arctic states, and establishing itself as the training command for the region. This can be accomplished by re-constituting JTF-AK with a specific and limited mission area.

As mentioned previously, the U.S. has neglected the Arctic over the past two decades. Research and development have been constrained while other nations have developed technologies to maintain their focus and presence in the region. ALCOM should be assigned a dedicated research and development department. This department should focus on future capabilities that would allow the U.S. to lead and contribute to international efforts in the Arctic. The department should relieve the current U.S. Coast Guard efforts to coordinate with international partners to expedite the process and maintain "trying to keep from recreating the wheel."⁴⁵

JTF-AK should request forces capable of navigating the Arctic in order to chart the region. Currently, with dedicated pre-deployment training and structural modifications, the U.S. Navy has the ability in its submarine fleet to operate in the region for extended periods of time. Utilizing dedicated Arctic submarines, the outer limits of the continental shelf can be

⁴⁴ Feickert, Andrew. *The Unified Command Plan and Combatant Commands: Background and Issues for Congress*, 03 January 2013.

⁴⁵ LaGrone, Sam. *Coast Guard Working with Canadians, Finns on Future Icebreaker Design*, USNI News, 06 March 2015. Accessed 08 May 2015 at < http://news.usni.org/2015/03/06/coast-guard-working-with-canadians-finns-on-future-icebreaker-design>

defined to delineate the exact area of legal interest for resource extraction, assuming the ratification of UNCLOS. Additionally, new use of unmanned underwater vehicles (UUV) could prove a cost effective alternative to ice hardened warships, icebreakers, or submarine operations. This technology has been recently studied in the Arctic region for the use of continental shelf mapping. Initial studies of UUVs have yielded positive results.⁴⁶

The U.S. should formalize a specific training program utilizing the Canadian and Russian models to provide the sustainment of a ready force within the Arctic. This will be accomplished via information sharing as well as a focus on PEP, or a similar program within the Arctic Council as described above. To accomplish this, ALCOM should be designated as the training command of all Arctic military forces, to include U.S. and exchange participants. Despite recent Russian aggression and increased military presence in the region, the U.S. would significantly benefit from their operational expertise and training program and their input should not be discounted. As of this writing, Russia possesses the most regionally focused military; ALCOM must capitalize on this in order to protect U.S. interests.

Counterargument

Some may say that the U.S. should focus solely on domestic, vice international, efforts in the Arctic to protect its national interests in the region. The U.S. should prioritize a regional sustained maritime presence and chain of command aligned with national policies. This should include funded research and development for a capable fleet tailored to the operational environment, as well as the establishment of bilateral agreements with other Arctic states.

⁴⁶ McMillan, John. Autonomous Underwater Vehicle Operations in the Arctic, Offshore Technology Conference, 23 March 2015. Accessed 06 May 2015 at < https://www.onepetro.org/conference-paper/OTC-25543-MS>

This will allow the U.S. to protect its self-interest and focus regionally, vice globally. With this approach, the U.S. will be allowed to focus on internal interests by the current command structure coupled with the ability to develop a fleet that would benefit the U.S. in multiple areas rather than the Arctic exclusively. In order to accomplish this, the U.S. should approve a research and development task force to design and build a fleet capable of operating in the harsh environment of the Arctic. With the two operational ice breakers nearing the end of their service lives and the absence of any ice hardened warships there exists a need for rapid development for the U.S. to accomplish this task autonomously.⁴⁷

Recently this theory of self-interest, through the use of bilateral agreements, has been accomplished by Arctic states. The benefit to this approach is to leverage each Arctic state for its strengths to achieve an agreement that is mutually beneficial rather than rely on the unanimous agreement required by the Arctic Council. In 2008, Russia's Security Council identified the Arctic as an area of national strategic importance whose resources need to be exploited, but controversy existed with Norway regarding boundaries.⁴⁸ Despite both being signatories to the 1982 UNCLOS, the controversy concerned an area situated along the Kola Peninsula and Norwegian coast. This dispute dates to the 1970s and originally concerned fishing rights, but has expanded through the years to include resource extraction. In 2010, the dispute was more concerned with oil, gas, and access to potential resources. With both countries staking a legitimate claim to this territory, a peaceful resolution was desired to prevent potential conflict.⁴⁹ In order to overcome this dilemma, Russia and Norway led the

⁴⁷ O'Rourke, Ronald. *Coast Guard Polar Icebreaking Modernization: Background Issues for Congress,* Washington, DC: Congressional Research Service, April 22, 2015. Accessed 25 April 2015 at https://www.fas.org/sgp/crs/weapons/RL34391.pdf>

⁴⁸ Morello, Carol. *A chill is already in the air ahead of the next meeting of the Arctic Council*, The Washington Post, 22 April 2015.

⁴⁹ Cohen, Ariel. *From Russian Competition to Natural Resources Access: Recasting U.S. Arctic Policy*, The Heritage Foundation Report #2421, Washington, DC: The Heritage Foundation, June 2010. Accessed 24 April

way to achieve a constructive model on how Arctic states should settle their differences in a bilateral and peaceful manner. Their treaty divides disputed territory that permits both sides to conduct oil and gas exploration within their respective region along clearly divided lines.

Along the concept of bilateral agreements, in 2007, Russia and Canada were in negotiations to utilize ice breakers to allow the port of Churchill to remain open year round rather than just four months that were previously the norm.⁵⁰ In 2009, Denmark and Canada worked bilaterally to determine the extent of their respective continental shelves to resolve a contemporary dispute.⁵¹ While these particular agreements are between two of the eight Arctic states, it does show how diplomatic solutions can be achieved by individual states bilaterally, rather than through a unanimous agreement of the Arctic Council. The U.S. should enter agreements with bordering Arctic states to preserve its self-interests in the region rather than attempt to seek arrangements that all states will agree upon. This will minimize the time and financial investment required for an international agreement and could better serve the U.S. These examples prove that an international agreement is not required to protect and preserve national interests in the region. With a whole of government approach, the U.S. is capable of achieving its objectives independently.

While this argument is valid and has merit, it fails to address the key issues of the region as defined in the U.S. Navy Arctic Roadmap. Namely, the U.S. is currently lagging too far in the research and development to effectively provide domestic protection in the

²⁰¹⁴ at <http://www.heritage.org/research/reports/2010/06/from-russian-competition-to-natural-resources-access-recasting-us-arctic-policy>

⁵⁰ Underhill; Shawn McCarthy. *Russia Offers to Break the Ice on the Route to Port Churchill,* The Globe and Mail, January 11, 2007. Accessed 15 April 2015 at

⁵¹ Peterson, Nikolaj. *The Arctic as a New Arena for Danish Foreign Policy: The Illulissat Initiative and its Implications*, Danish Foreign Policy Yearbook, 2009.

region. The U.S. lacks regional expertise and the required capabilities, such as modern ice breakers and ice hardened warships, to succeed in the region autonomously.

With sequestration budgets a factor, the U.S. faces financial limits that significantly affect its ability to maintain an Arctic fleet. With no end point in sight for these concerns, the likelihood of gaining funding solely dedicated to developing a fleet of modern vessels in the near future is not likely. Therefore, the U.S. will serve its self-interest better by building partnership capacity and information sharing required to maintain presence in the region.

There are also some who believe that an Arctic region based on self-interest could lead to a potential "arms race" situation and promote potential conflict.⁵² While this probability remains low, it is not impossible that this could lead to discontent within the Arctic states and potential for conflict. Without the U.S. acceding to UNCLOS, this could provide an environment that leads to states feeling threatened by the U.S. which could promote a hostile relationship potentially leading to conflict. Without the global scale commitment by the U.S. by acceding to UNCLOS, all validity of any potential claim the U.S. may have in the region will be neglected. In order to promote the safety and security on a global scale, the Arctic Council must work together to show unity of effort throughout the region.

Conclusion / Recommendations

Climate change continues to affect the Arctic region at a rate over twice the global average. Current estimates project the region will be navigable to maritime traffic in the off season as early as 2030. After nearly two decades of neglect, the U.S. has reached a point that autonomous recovery is improbable to achieve objectives defined in National Security

⁵² Xie, Kevin. *Some BRICS in the Arctic: Developing Powers Look North,* Harvard International Review, Vol 36, No. 3, Spring 2015. Accessed 11 May 2015 at https://www.questia.com/library/journal/1G1-411013832/some-brics-in-the-arctic-developing-powers-look-north

Strategy for the Arctic Region, the DOD Arctic Strategy, and the U.S. Navy Arctic Roadmap. The U.S. is lagging too far behind other Arctic states in research and development to create a fleet capable of protecting its interests independently. The current U.S. Arctic fleet is insufficient and lack of regional expertise presents a deficiency that cannot be overcome in the near term. While other Arctic states have invested time and capital dedicated to the region, the U.S. has neglected this expanding area in an effort to focus attention elsewhere. This lack of dedicated focus had placed the U.S. at a significant disadvantage that now warrants a multinational effort to overcome.

In order to overcome these deficiencies, the U.S. should focus its chairmanship of the Arctic Council on unified cooperation among Arctic states, not on ways to aid indigenous inhabitant's adaptation of the changing environment. The adaptation is a valid concern, but should not be the main focus. This unified cooperation will promote unity of effort within the region by use of multinational exercises focused on area operations such as SAR, disaster relief, and maritime commerce monitoring. Additionally, a program similar to the PEP should be established between the Arctic states to provide information and operational expertise within the region and standardized doctrine. This will promote building partnership capacity, information sharing, and unity of effort by all members of the Arctic Council to reduce the potential of future conflict.

Domestically, ALCOM must be repurposed with a dedicated JTF in order to meet national interest objectives within the region. Future responsibilities will include creating and maintaining a dedicated training program similar to the Canadian and Russian models. Additionally, in the near term, ALCOM should utilize current operational capabilities such as dedicated submarines to accomplish tasks to create clearly defined boundaries to promote

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legal exploration and claim to undiscovered resources. ALCOM will continue to advocate to USNORTHCOM to gain the required funding to develop future capabilities such as UUVs and capable surface vessels for the future to maintain the required presence to meet its objectives.

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