





HOW CAN THE US EFFECTIVELY EXECUTE A STRATEGY THAT ALLOWS THE UTILIZATION OF ITS CURRENT POWER AND INFLUENCE TO FURTHER PURSUE ITS INTEREST IN THE ARCTIC?

LCol K.D. Branch

JCSP 40

Master of Defence Studies

PCEMI 40

Maîtrise en études de la défense

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2015-17.

Avertissement

Les opinons exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2015-17.



CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES JCSP 40 – PCEMI 40 2014 - 2015

MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

HOW CAN THE US EFFECTIVELY EXECUTE A STRATEGY THAT ALLOWS THE UTILIZATION OF ITS CURRENT POWER AND INFLUENCE TO FURTHER PURSUE ITS INTEREST IN THE ARCTIC?

LCol K.D. Branch

"This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence."

Word Count: 14574 Compte de mots: 14574

"La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.'

Table of Contents

- I. Abstract
- II. Introduction
- III. Historical Context/Background
- IV. The Arctic People
 - a. European Arctic
 - b. North American Arctic
- V. The Arctic Ecosystem
- VI. The Arctic Council
- VII. United Nations Convention on the Law of the Sea (UNCLOS)
- VIII. International Context
 - a. Russian Interest in the Arctic
 - b. Chinese Interest in the Arctic
 - c. Canadian Arctic Strategy
 - d. Kingdom of Denmark/Greenland Arctic Strategy
 - e. Sweden Arctic Strategy
 - f. Finland Arctic Strategy
 - g. Iceland Arctic Policy
 - h. European Union Arctic Strategy
 - IX. Domestic Context
 - a. US Arctic Interest
 - b. US Arctic Policy
 - c. Current US Political Appetite for Arctic
 - X. Territorial Disputes Current Disputes
 - a. Hans Island
 - b. Lomonosov Ridge
 - c. North Pole
 - d. Northwest Passage
- XI. Opportunities/Assumptions
- XII. Means
- XIII. Ways
- XIV. Risks
- XV. Conclusion
- XVI. Bibliography

Abstract

The US has had an Arctic strategy since President Obama published it in 2013. The purpose of this paper is to expound upon that strategy by looking at specific details that must be addressed in order to maximize the effectiveness of the existing strategy. The research focuses on the historical and international context to justify the importance of refining the ways and means of the strategy to maximize results. It also addresses how the domestic context of the US is a hindrance to the implementation of the strategy and makes recommendations on how to leverage strategic communications as an educational tool to garner domestic support for allocating money to invest in the Arctic. Lastly, analysis is performed to make recommendation on how to successfully implement the US instruments of national power as the means to generate ways to effectively proceed with the execution of the strategy.

Introduction

The Arctic is currently a peaceful and stable region of the planet that is free from conflict. One of the key goals of the United States (US) is to keep it that way. The US and its Arctic partners are committed to taking a stand today that will positively impact the future of the Arctic. These partnerships should be focused on making the Arctic safe for maritime traffic; industrial activities, and tourism. It should also include adequate search and rescue capabilities and supporting infrastructure. Also, a significant focus should be focused on protecting the natural state of the Arctic ecosystem by eliminating as much environmental disrupting change as possible to the Arctic environment and climate. The US truly feels that a quality strategy effectively executed with buy-in from other nations who share similar interest will lead to a prosperous Arctic.

The increased warming of the Arctic and severe climate change has generated significant US national security interest. The result is a US developing a strategy focused on the security, stability and cooperation of partner nations in the Arctic. The US has a greater focus on the North American Arctic versus the European Arctic; however, as a major player on the global scale, the US has the power and influence to enact fast and significant change in the Arctic. In the past, the US Arctic focus has primarily been concentrating on sustaining energy independence in the State of Alaska and the continental shelf extended from its landmass. Recent movements by Russia in the Arctic have created potential threats to the US homeland. Such activity in the Arctic on this level has not been prevalent since the Cold War. It only has the potential to worsen as the Arctic climate becomes milder and the likely increase in maritime traffic, and energy exploration, and maritime traffic increases.

Despite the US owning no territory in the European Arctic, the European Arctic arguably poses a greater immediate threat to US national security interest versus the North American Arctic. This is due to the emerging Russia threat and how it can either directly or indirectly affect NATO allies in the region. Also, this region of the Arctic is more densely populated areas and already possesses defined transportation networks with numerous usable ports, roads and other supporting infrastructure. This has generated an increased Russian military presence and a resurgence of the Russian military bases in the Arctic. This alone is enough to bring warning to US interest in the Arctic. The threat of an already proven aggressive Russia seeking significant territorial claims and a establishing a large military presence in the region is a direct threat to US national security. The US, like several other Arctic nations, is aware of this potential threat. That is why the US is more engaged in military to military partnerships and exercises in the Arctic. It has also created conditions for the US to take the lead to ensure security, support safety, promote defense cooperation, and work in conjunction with like-minded entities to maintain the stability of the region.

This paper will provide some background on the Arctic from an historical perspective. It will also discuss some of the key interests of other Arctic nations and identify some of the potential threats associated with the desire for more and more nations to gain access to the Arctic, its potential waterways, and abundance of petroleum and mineral resources. Lastly, the paper will answer the question of how can the US effectively execute a strategy that allows the utilization of its current power and influence to further pursue US interests in the Arctic. This strategy will ensure security; sustain

cooperation and regional stability; protect and conserve the Arctic environment; and facilitate economic growth and development in the Arctic. In addition, it will ensure that the necessary cooperation is obtained to eliminate aggression and maintain stability in the region beyond simple bi-lateral and multi-lateral arrangements. It will set the conditions for the establishing and extending standards under the construct of international law.

Historical Context/Background

Arctic exploration can be traced back to around 330 BC. During this period, a Greek merchant by the name of Pytheas of Massalia explored the waters of the Northern British Isles. In his writings, he described a landmass that ways located six days North of Britain. He referred to the landmass as Thule¹. It is not clear on whether Thule was a part of Iceland, Norway, the Shetland, or Faroe Islands; however, his descriptions of the sun, the aurora, and polar ice are consistent with what is currently know about the Arctic. Over 500 years later in 870 BC, a Norwegian Viking by the name of Floki Vilgerdarson, was given credit for the discovery of what is the modern day Iceland. On his ship he carried three ravens and whenever he thought he was near land he released the ravens one by one so that they could show him the right way. The ravens always came back to the ship with exception to one day. The third raven continued to fly forward and Floki's curiosity was peaked and he followed. Floki followed that raven and found a new landmass. More Viking voyages occurred throughout the same period ultimately leading to the discovery of Greenland and due to worldwide climatic warming the finding and colonization Iceland and the Northeast coast of North America².

¹ Woods Hole Oceanographic Institute, Polar Discovery, Accessed: January 21, 2017: http://polardiscovery.whoi.edu/arctic/330.html.

² Arctic Knowledge Hub, "History of Arctic Maritime Transport, Accessed February 01, 2017: http://www.arctis-search.com/History+of+Arctic+Maritime+Transport.

In the 14th and 15th centuries, a new interest in the Arctic came about due to the enthusiasm of European monarchs for a faster trade route to India, Southeast Asia and China. This lead to the theory of a shorter route through the Arctic to connect Europe and the trade rich regions of India and Southeast Asia. The pursuit of the Northwest Passage officially began. In the subsequent years, numerous brave sailors attempted to prove the theory of the Northwest Passage. Unfortunately, the majority of them either failed miserably or disappeared and never seen again. In 1906, a Norwegian explorer by the name of Roald Amundsen successfully located and navigated the Northwest Passage³. The voyage took his crew three winters to complete. Despite his efforts, he still failed to complete the entire transit from east to west. The feat was not totally accomplished until almost 40 years later by a Canadian ship called St. Roch in 1942. The ship was commanded by Captain Henry Larsen The St. Roch was able to complete the entire trip from east to west in only 86 days making it the first ship to transit the Northwest Passage, in its entirety, in one season⁴.

Interest in transiting the Northwest Passage significantly decreased following the success of the St. Roch. The period following World War II shifted the priorities in the Arctic for a commercial transport focus to one of national security interests; mainly the Soviet Union threat. In order to defend against the danger of being attacked by Soviet bombers over the Arctic. The Distant Early Warning (DEW) Line was constructed between 1954 and 1957⁵. The DEW linked a chain of communication and radar systems spanning over 3,000 miles from the coast of Alaska to the shores of Greenland. In addition, over 300 ships occupied the Arctic waterways loaded with cargo to provide

³ Arctic Knowledge Hub

⁴ Ibid

⁵ Ibia

support to military forces with a mission to repel an invasion of North America via the Arctic. This initiative led to the enhancement of the understanding of fracture mechanics, which led to development of more durable materials for shipbuilding. Shipbuilding began to modernize and construction methods placed emphasis on the ability of the ship to operate in the harsh and cold waters of the Arctic Ocean. The extensive support of military operations in the Arctic provided the necessary expertise and equipment to develop a more eager mariner with even greater ambition to navigate the waters of the Arctic Ocean.

The 1970s brought about resurging interests in commercial shipping in the Arctic. The Northern Sea Route had matured faster than the Northwest Passage and facilitated year round shipping by the late 1970s. In 1993, the Canadian Government began an initiative to bring together several international shipping companies and Arctic nations collectively attempted to develop international standards for the operation and construction of vessels for Arctic transport. The more recent climate change and melting of Arctic ice has contributed to an even larger interest in international standards. The melting of the Arctic ice not only provides access to an enormous amount of oil and natural gas, but it also facilitates faster shipping routes for a fraction of the cost that it would have taken utilizing the traditional commercial sea routes.

Recent warmer temperatures and decreased ice has again placed great emphasis on generating solutions to support the needs of both public and private interest in seeking maritime routes in the Artic. There are currently four primary waterways for transit in, out and around the Arctic. The first is the Northern Sea Route. The Northern Sea Route goes along the Arctic coast of Russia. It is projected to reduce the distance between

Europe to Asia by approximately 9,000 kilometers and reduce transit time by 10-15 days compared to the current route through the Suez Canal⁶. The Northern Sea Route is also projected to be the first route to become totally free of ice. The next route is the Northwest Passage. The Northwest Passage is along the coast of Canada. The Northwest Passage is calculated to reduce transit time from East Asia to Europe by approximately 11,000 kilometers as compared to the Panama Canal route⁷. It is projected to facilitate year around traffic by 2020. The next route is the Arctic Bridge, which links Murmansk, Russia to Narvik, Norway and the Canadian port of Churchill. This route would provide the most direct route from the Nordic countries of Europe to North America. Finally, there is the Transpolar Sea Route which is in the central Arctic and links the Strait of Bering to the Atlantic Ocean of Murmansk⁸. The Transpolar Sea Route is the most complex of all of the sea routes. It is the straight line route from the North Atlantic to the Northern Pacific and absolute faster route to Asia. Unfortunately, it is the most dangerous. It goes directly through the most iced over portion of the Arctic; the North Pole (see figure 1).

⁶ Hofstra University, "The Geography of Transport Systems", Accessed February 10, 2017: https://people.hofstra.edu/geotrans/eng/ch1en/conc1en/polarroutes.html.

⁷ Ibid

⁸ Ibid

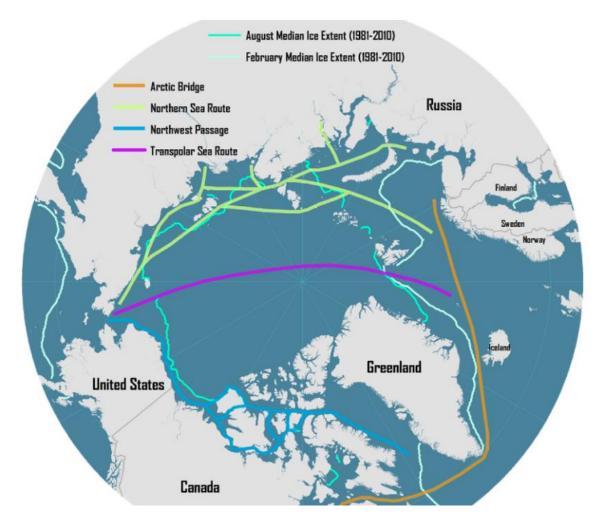


Figure 1 Polar Shipping Routes9

The Arctic People

European Arctic

The Arctic area is estimated to have been populated by different nomadic communities for more than 10,000 years. The harsh weather conditions are the primary reason for the nomadic trends of the Arctic populations prior to the modern era. It is estimated that one half of the total Arctic population resides in Russia. This includes the three major cities of Murmansk (300,000), Norilsk (170,000), and Vorkuta (60,000)¹⁰. In

⁹ Hofstra

¹⁰ Russian Geographical Society, "The Arctic", Accessed April 30, 2017: arctic.ru/population.

fact, the Russians have been identified as one of the earliest settlers of the Arctic. The European Arctic is a mix of Caucasian and indigenous people. The Ethnic Russian indigenous tribes consist of the Pomors, Ust-Tsilems, Markovtsy, Kolymchams, and Gizhigans¹¹. The Caucasians in the Arctic have migrated there more recently during the 20th century to pursue the job opportunities created by the petroleum, minerals and fisheries industries. There are no permanent settlements above the 78-degree north latitude line.

North American Arctic

The North American Arctic is considered to be more homogeneous than the European Arctic. It is believed that the nomadic tribes of North America migrated from Europe and Asia across the Bering Strait into Alaska, Northern Canada, and eventually Greenland. In Alaska, the people are known as Inupiaq and Yup'ik (Eskimo); in Canada and Greenland are referred to as Inupiaq and Kalaalit (Inuit)¹². The other indigenous people who are racially or ethnically related to the Eskimo are called the Aleuts.

Although similar to the Eskimo, the Aleuts have their own language and culture. Aleuts were the original inhabitants of southwest Alaska, the Kodiak archipelago and the Aleutian Islands a region characterized by nearly treeless, rocky shores teeming with a rich array of wildlife on land and in the sea¹³. The majority of the aboriginal people in the region are referred to as Eskimo-Aleuts; however, the specific tribes prefer to be referred to in accordance to their ethnicity.

Arctic inhabitants have a tendency to reside in large cities south of the Arctic Circle or in the coastal areas were they have a better opportunity to find employment.

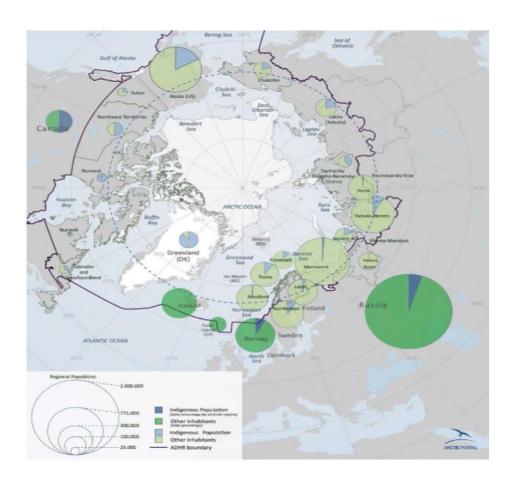
1 1

¹¹ Russian Geographical Society

¹² United States History, "The Aleuts", Accessed May 01, 2017: http://www.u-s-history.com/pages/h994.html.

¹³ United States History

The primary tribes are the Whitehorse (Yukon Territory), Yellow Knife (Northwest Territory), Nuuk/Gothab (Greenland) and several others along the coast. The Yakuts, primarily residing in Russia, is the largest group with an estimated population of approximately 500,000. Six of the tribes are represented on the Arctic Council. Just like in the European Arctic, the traditional activities such as hunting, fishing, reindeer herding and indigenous arts and crafts have started to diminish due to the increased modernization of the region. In the 20th century, exploration of natural resources became the most lucrative job market. This is more so in Norway, Sweden, and Finland who have Arctic economies that are more diverse than the economies in the North American Arctic. This also includes Russia who not only has large investments in petroleum products, but also gold reserves in the Arctic.



The Arctic Ecosystem

The ecosystem of the Arctic is a very dynamic open ecosystem that is driven by the sun. For the majority of the year, the Arctic consists of 15 million square miles of polar sea ice covering the massive tip of the earth 15. The complex ecosystem starts to take shape as the summer begins to arrive. The massive snow blankets that cover the landscape begin to thaw and uncover the snow lairs that the land mammals have been using for shelter over the harsh winter. As the snow and ice began to melt, they overflow the landmasses forcing warmer waters to begin to flow into the icy waters of the Arctic Ocean. The increasing temperatures of the ocean water triggers the northward migration of land species that starts the cycle of life in the Arctic. As the sun continues to warm the landscape, surface vegetation begins to populate the landmass and draws migrating reindeer, geese, ducks, and waders to feed off of the insects that the plants attract. The land surface temperatures rise slowly and the melting of the soil facilitates microorganisms, insect larva and other organic matter to begin activities 16. This continuum makes up the relatively cyclic ecosystem of the Arctic.

Climate changes have always impacted the ecosystem in the Arctic for many millennia and the system has always seemed to bounce back. Even through the ice age of 10,000 years ago, there was still plant life in the Arctic that began the life cycle in the region. This web of life dictates who and what survives in the Arctic. When the food

_

¹⁶ The Articls, p. 1.

¹⁴ Stępień, Adam, Timo Koivurova and Paula Kankaanpää (eds), 'Strategic Environmental Impact Assessment of Development of the Arctic - Assessment conducted for the European Union,' Arctic Centre, University of Lapland, 2014. http://www.arcticinfo.eu/en/sada.

¹⁵ The Articls, Stefansson Arctic Institute, "The Arctic is an Ecosystem", 2000, Accessed May 02, 2017: http://www.thearctic.is/articles/overviews/ecosystem/enska/index.htm, p. 1.

supply for a particular predator decreases, the predator populations begin to decrease.

Once the predator population decreases enough, the food source begins to re-establish itself. It is a very perfect natural balance within the Arctic region. The largest environmental concern is the addition of several new variables to the equation due to the influx commercial and research activities across the region. The concern of how the addition of man-made chemicals, pollution, and overfishing will impact the ecosystem is a serious concern for many of the Arctic nations. The most critical concern is the potential extinction of many Arctic animal and plant species. This is the primary reason why establishing and standardizing good environmental policies is a key component of an Arctic strategy and is a priority in the US strategy.

The Arctic Council

In 1996, the eight nations with land holdings or territory in the Arctic region established the Arctic Council. The member nations are Canada, Norway, Kingdom of Denmark, Sweden, Iceland, Russia, Finland and the US. These eight nations have traditionally cooperated bi-laterally and multi-laterally on Arctic disputes in the past. However, in 1996 these nations established the Ottawa Declaration that created a standing multi-lateral intergovernmental forum to address issues related to the Arctic. In addition to the member states, there are 12 non-Arctic countries approved to participate as observers to the Arctic Council. These 12 observer nations are France, Germany, the Netherlands, Poland, Spain, the United Kingdom, China, Italy, Japan, South Korea, Singapore and India. There are six Permanent Participants groups representing the indigenous people of the Arctic. These groups are the Aleut International Association, Arctic Athabaskan Council, Gwich'in Council International, Inuit Circumpolar Council,

Russian Arctic Indigenous Peoples of the North, and Saami Council. Unlike other international organizations, the Arctic Council is not a treaty-based institution. It is merely a multi-lateral forum that operates on the basis of consensus as related to cooperation and further development of the Arctic region. The key goals of the Arctic Council are to work towards sustainable development, the environment, and scientific cooperation, and security¹⁷.

The chairmanship is rotated amongst the eight members of the council every two years. The chairman has traditionally been the foreign minister of the country that is holding the seat. The Senior Arctic Official (SAO) is the appointed person from the government of chairmanship who manages the day to day operations of the Arctic Council. The United States currently has chairmanship; however, they are scheduled to relinquish chairmanship to Finland in May 2017. The eight Senior Arctic Officials (SAO) and six Permanent Participant representatives primarily carry out the day-to-day work of the council. These officials are assisted and advised by a series of working groups, expert groups, and task forces¹⁸. The US chairmanship focused primarily on three areas. These areas were improving economic and living conditions in Arctic communities; Arctic Ocean safety, security and stewardship and climate change. The US theme of their chairmanship is "One Arctic: Shared Opportunities, Challenges and Responsibilities". The planning and strategy of the US chairmanship has produced many superb ideas and programs to support the Council's initiatives in the Arctic.

The publication of the Arctic Strategy in conjunction with the chairmanship of the Arctic seemed to intersect at the most opportune time for the US. However, despite the

 $^{^{17}}$ Arctic Council, Accessed September 15, 2016: http://www.arctic-council.org. 18 Arctic Council

effects of climate change making significant changes to the Arctic region, there is still very little domestic appetite for a robust investment in the affairs of the Arctic by the mainstream US population. President Obama provided some rhetoric on climate change initiatives, but despite referring to the Arctic there was not much Arctic specific language in his message. There is little to no advertisement on the main networks to educate the US population on the issues in the Arctic. The word Arctic escaped the political platforms during the 2016 US presidential election. In fact, no candidates mentioned specific initiatives related to growth, development, or national security concerns in the Arctic. This had to have been frustrating to the other Arctic nations, because the strong political rhetoric used in diplomatic forums to promote cooperation aren't consistent with the political message that the US is expressing domestically.

United Nations Convention on the Law of the Sea (UNCLOS)

UNCLOS is a convention that is designed to clarify international laws related to defining territorial waters, sea lanes, and, ocean resources¹⁹. As of September 2016, 168 countries, to include the European Union have joined the convention²⁰. Unfortunately, the United States is the only Arctic nation that has not ratified UNCLOS as of the current date. UNCLOS defines territorial waters as 12 nautical miles off of the coastline of the respective nation. In addition to the 12 nautical mile territorial designation, each country has an area designated as an exclusive economic zone (EEZ) that extends 200 nautical miles from the shore²¹. Territory can be extended even farther with the proof of the existence of a continental shelf that extends from the coastline. A continental shelf is

¹⁹ Naja Bentzen, Mark Hall, and Christian Dietrich, European Parliament, "Arctic Continental Shelf Claims, Mapping Interests in the Circumpolar North, January 2017, Accessed February 15, 2017:

http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595870/EPRS_BRI(2017)595870_EN.pdf.

²⁰ İbid

²¹ *Ibid*

defined as the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance²². If a country is able to prove the existence of a continental shelf, it receives exclusive rights to any resources that reside within the seabed or surrounding area. The controversial process of precisely defining specific territories and sovereign rights one of the largest obstacles that a US Strategy must address to breach a clear path to maintaining the stability in the Arctic.

International Context

Russian Interest in the Arctic

Russia ratified UNCLOS on March 12, 1997. Since that time, they have been extremely aggressive in extending their territory in the Arctic. Russia has submitted claims for territory that extends to the North Pole. Russia is staking a claim to the seabed beyond the 200-mile zone along the entire Russian polar sector including the zone under the North Pole. This attempt is for Russia to claim an exclusive economic zone over the continental shelf abutting its shores legally under the provisions of UNCLOS. A Russian ministry of natural resources spokesperson stated that Russia's claim is based on scientific evidence that the continental shelf extends north from the Eurasian landmass far under the planet's ice cap²³.

Russia has the largest Arctic population of all eight Arctic nations (see figure 2).

²² Ibid

²³ Andrew E. Kramer, "Russia Presents Revised Claim of Arctic Territory to the United Nations", New York Times, February 09, 2016, Accessed March 27, 2017: https://www.nytimes.com/2016/02/10/world/europe/russia-to-present-revised-claim-of-arctic-territory-to-the-united-nations.html?_r=0.

Even though the population has decreased since the fall of the Soviet Union, increased military buildup is regenerating the populations in the Russian Arctic. Russia has also stepped up military activities and oil and gas exploration in the far north to include rebuilding Cold War-era naval bases and airstrips on the New Siberian Islands, across the Chukchi and East Siberian seas from Alaska²⁴. In fact, the current Russian military buildup in the Arctic has been labeled by several officials and analysts as the largest since the fall of the Soviet Union and with many more military capabilities²⁵. This build up includes the creation of an Arctic Command and approximately 40 icebreakers. In addition, three new nuclear icebreakers are under construction²⁶.

Russia, like all the other Arctic nations, has expresses great interest in the Arctic and the opportunities to boost its economy and global positioning. Russia's Arctic strategy has four areas of emphasis: develop a national strategic resource base to support socio-economic development; preserve peace and cooperation; protect the environment; and the continued development and marketing of the Northern Sea Route for the movement of commercial cargo²⁷. The strategy is hinged on some key tasks that make up the priorities for the Russian Arctic strategy. These priorities are defense of the Russian homeland, continental shelf delimitation, and improving the transportation and communications infrastructure in the Arctic.

²⁴ Ibid

²⁵ Reuters, "Putin's Russia in the Biggest Arctic Military Push Since the Soviet Fall", January 31, 2017, Accessed on February 10, 2017: https://reuters.com/article/us-russia-arctic-insight-idUSKBN15E0W0.

²⁷ Vadim A. Sokolov, Embassy of the Russian Federation to the United States of America, "The Russian Arctic Strategy 2020", Washington, Accessed June 15, 2016: https://www.star.nesdis.noaa.gov/star/documents/meetings/Ice2013/dayOne/Sokolov_Russian.pdf.

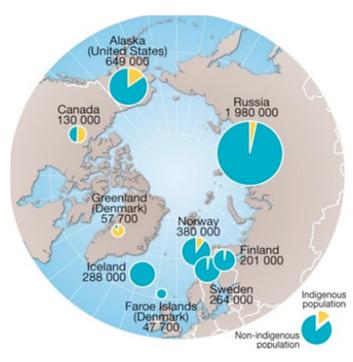


Figure 3 Population in the circumpolar Arctic²⁸

Chinese Interest in the Arctic

Some may wonder why a country that is not located in the Arctic has significant interests in the Arctic. China considers itself as a near Arctic State, therefore, it has a role to play in the development of international policies in the Arctic and how those policies impact the national interest of China. In 2013, the Arctic Council voted to allow China to become an observer state. In addition to China, the council also granted observer status to other large economy countries outside of the Arctic such as India, Italy, Japan, Singapore and South Korea. There is no official Arctic policy in China at the moment; however, China has been assertive in its effort to influence Arctic policy.

²⁸ Bentzen et. al

China's Arctic interests have two primary objectives: shorter shipping lanes to European markets and access to enormous deposits of oil and natural gas²⁹. The journey by sea from East Asia to Western Europe is approximately 24,000 kilometers (km) via the Panama Canal. The trip is 13,600 km if routed through the Arctic Ocean via the Northwest Passage³⁰. In addition, the Northern Sea Route that passes through the Russian Arctic reduces the maritime journey from East Asia to Western Europe from 21,000 km via the Suez Canal to a significantly shorter 12,800 km. This translates to a 10-15 day reduction in labour and fuel costs related to the shipping of goods. This is a tremendous savings for China who is one of the leading exporters of goods in the world³¹. The Northern Sea Route is projected to become free of ice and passable several years faster than the Northwest Passage. These routes are becoming more of a reality as the melting of the Arctic ice increases from year to year. In 2007 the Northwest Passage was open for commercial traffic during the summer months and is projected to facilitate year round travel as early as 2020³².

China currently has seven polar icebreakers available. There is one research vessel (another under construction with an estimated completion of 2019), five military vessels and one commercial vessel that were purchased from Canada in 1997. In comparison, the US only has an estimated seven icebreakers currently in service. The significant of the Northern maritime routes to China became more evident in April 2016 when Chinese spokesman Pengfei Liu told the reporters that "there will be ships with

²⁹ Adam P. MacDonald, "Is China's Arctic Strategy Really that Chilling?", East Asia Forum, March 16, 2016, Accessed on March 2016: http://www.eastasiaforum.org/2016/03/16is-china-arctic-strategy-really-that-chilling ³⁰ Dr. Jean-Paul Rodrigue, PhD, Hofstra University, Dept. of Global Studies & Geography, New York, 2017, Accessed April 02, 2017: https://people.hofstra.edu/geotrans/eng/ch1en/conc1en/polarroutes.html.

³² NW Passage Revisited, Northwest Passage Dispute, January 29, 2017, Accessed March 15, 2017: https://nwpassagerevisited.wordpress.com/category/northwest-passage-dispute/.

Chinese flags sailing through this route in the future"³³. He was referring specifically to the Northwest Passage. The statement is controversial because the Northwest Passage has been claimed by Canada as its sovereign territory. If China follows through on this action, it is projected to cause tension between the Canadian and Chinese governments similar to the tensions with Southeast Asian nations over China's aggressive moves in the South China Sea. China has proven in the South China Sea that they are willing to use their economic and military might to impose their will upon weaker nations to achieve national interests.

The other Chinese interest in the Arctic is the potential energy resources that the melted ice is giving access to. The US Geological Survey in 2008 estimated that 22% of the world's undiscovered conventional oil and natural gas deposits are located in the Arctic³⁴. Will have a significant impact on reducing energy dependencies from other nations. The Chinese have already involved themselves in numerous research projects that have assisted with building partnerships with Arctic nations. An example is resource development projects in Greenland and Russia. China has poured large sums of money into the local development of Greenland to the point in which the local population has begun to protest the dominance of China over Greenland's economy³⁵. Despite the suspicion of Arctic nations of China's true intention, many Arctic nations are receptive to the Chinese due to the large investments that they place into the research and development of region. These investments have been consistent with their interests in sustaining access to energy resources, creating more efficient trade routes and a more

³³ Eurasian Business Briefing, "China eyes up Northwest Passage in threat to Canadian sovereignty", Accessed March 27, 2017: http://www.eurasianbusinessbriefing.com/china-eyes-northwest-passage-threat-canadian-sovereignty/.

³⁴ Bentzen et. al

³⁵ MacDonald

active role in international governance. Lastly, unlike the United States, China ratified UNCLOS. China's actions in the South China Sea have challenged their position on UNCLOS; however, the situation continues to develop, as arbitration over a lawsuit filed by the Philippines is undergoing resolution by UN.

Canadian Arctic Strategy

It is said that the Arctic is part of the Canadian soul³⁶. The Arctic is a significant part of the Canadian culture and directly connected to the nation's identity as a Northern nation. The North is a significant part of the Canadian heritage as it can be traced back to a rich history of Arctic exploration and history that has been transcended through its mainstream culture. This distinct claim goes back for well over a millennia as hunters, fishermen and nomadic people settled in the Arctic lands and waterways far before the presence of Europeans in the North. Canada's Northern Strategy clearly states that the Canadian people know that their ability to enforce their sovereignty will be critical in shaping the future of the Arctic³⁷.

The Canadian Northern Strategy has four priorities. These priorities are exercising Arctic sovereignty, promoting social and economic development, protecting the Northern environmental heritage, and improving and devolving northern governance, so that Northerners have a greater say in their own destiny. "Canada's far north is a fundamental part of Canada – it is part of our heritage, our future and our identity as a country"³⁸. Canada feels that the growing international interest in the Arctic requires its country to become more aggressive in its leadership of the Arctic on the world stage. This is

³⁶ Bentzen et. al

³⁸ Ibid

³⁷ Government of Canada, Canada's Northern Strategy our North, our heritage, our Future, Ottawa, 2009, Accessed August 14, 2016: http://www.northernstrategy.gc.ca/cns/cns.pdf.

imperative to ensure that Canadian sovereignty is protected and its national interests are secured from external actors with Arctic interests.

The Northern Strategy also articulates a very concise vision by the Canadian Government. Its vision consists of the following: "self-reliant individuals live in healthy, vital communities, manage their own affairs and shape their own destinies; the Northern tradition of respect for the land and the environment is paramount and the principles of responsible and sustainable development anchor all decision-making and action; strong, responsible, accountable governments work together for a vibrant, prosperous future for all – a place whose people and governments are significant contributing partners to a dynamic, secure Canadian federation; and we patrol and protect our territory through enhanced presence on the land, in the sea and over the skies of the Arctic". In addition, they have four reinforcing priorities: "Exercising our Arctic Sovereignty; Promoting Social and Economic Development; Protecting our Environmental Heritage; Improving and Devolving Northern Governance".

This aggressive vision statement leads one believe that Canada's commitment is serious and enduring in the Arctic. Canada ratified UNCLOS in November 2003. Since that time, they have been effectively utilizing the Commission on the Limits of the Continental Shelf (CLCS) as a pathway towards sovereignty to legally extend its territory in the Arctic (Figure 4). As late as 2013, Canada's aggressive research and fact-finding programs led to the filing of a submission to expand its continental shelf in the Arctic Ocean to an area of over 1.2 million square kilometers⁴¹. By 2018, Canada expects to support its final Arctic continental shelf claim to expand the seabed to encompass the

_

³⁹ Government of Canada

⁴⁰ Ibid

⁴¹ Bentzen et. al

North Pole. This assertive move has the potential to create tension with Russia who in 2007 made a similar claim to North Pole that was unfounded, but later resubmitted the claim with additional supporting scientific evidence to the claim the territory.



Figure 4 The legal path towards sovereignty⁴²

Kingdom of Denmark/Greenland

The Kingdom of Denmark is made up of Denmark, the Faroe Islands and Greenland. The primary momentum in the Arctic by the Danish has been extensive research projects north of Greenland in conjunction with Canada and Sweden⁴³. They ratified UNCLOS in 2004 and have since been committed to using UNCLOS as the primary mechanism to resolve territorial disputes. The Kingdom of Denmark Arctic Strategy is very similar to that of the other Arctic nations. The focus of the Kingdom of Denmark Arctic Strategy 2011-2020 is strengthening current international relationships to facilitate a peaceful, secure and collaborative Arctic capable of resolving disputes and expanding social and economic growth in the region⁴⁴. Despite a strategy based on peace and collaboration, Denmark is committed to enforcing its sovereignty through a very

⁴³ Ibid

⁴² Ibid

⁴⁴ Kingdom of Denmark, "Denmark, Greenland and the Faroe Islands: Kingdom of Denmark Strategy for the Arctic 2011–2020", Accessed April 01, 2017: http://naalakkersuisut.gl/~/media/Nanoq/Images/Udenrigsdirektoratet/100295_Arktis_Rapport_UK_210x270_Final_W eb.pdf.

visible military presence and its membership in the North Atlantic Treaty Organization (NATO) Alliance under the provisions of Article Five to provide a collective defence.

The Kingdom of Denmark has also been aggressive in the filing of its claim to expand its continental shelf claims in and around Greenland. Their most recent submission was in 2012 covered areas that overlap Russian territorial claims. The Russians have sought a bilateral solution between the two nations; however, Denmark has maintained its position to utilize the provisions under CLCS to resolve the dispute⁴⁵. In addition, Denmark has continued to pursue a very aggressive research program in the Arctic. As the world's leader in research and education in the Arctic, they have decided to take their programs a step further by establishing a separate Greenlandic Arctic Strategy. This would place the Greenland government in the role as lead for the research and education while the Danish government retains the authority to establish foreign policy, defence and security measures⁴⁶. This additional commitment to research is most likely connected to their submission of territorial claims of the continental shelf, which requires extensive analysis and assessment to prove legitimacy.

Sweden Arctic Strategy

Sweden has committed to working to ensure that the Arctic region remains free of conflict and issues are addressed collectively by a body of international partners working in cooperation. Sweden has a goal, similar to most other Arctic nations, to promote economic growth, improve the social well-being of indigenous people in the Arctic, and preserve the precious Arctic ecosystem through protecting the environment specifically focus on the human impacts on climate change. The significant Arctic climate change as

⁴⁵ Bentzen et. al

⁴⁶ Ibid

directly affected the traditions, practices, and culture of the indigenous people of Sweden. The Swedish government feels strongly about the rights of the indigenous people to maintain their identities and continue cultural practices. Like many of the other Arctic nations, they have deep historical and culture ties to the Arctic. The Swedish Arctic can be traced backed to the Sami who are estimated to be the oldest group of ethic people north of the Arctic Circle⁴⁷. It is believed that they migrated from the east nearly 8,000 years ago. Swedish research in the Arctic can be traced back to 1732 when the biologist/plant researcher Carl Linnaeus embarked upon a journey through what they refer to as the Lapland. His tremendous discoveries in the field of botany became popular and influenced many other to research the plant life in the region.

The purpose of their Arctic strategy is to present Sweden's relationship with its Arctic partner nations together with the current priorities and future outlook of Sweden and integrate them with the perspective of the other seven Arctic nations⁴⁸. The priorities of the Swedish strategy are climate and the environment, economic development, and the human dimension⁴⁹. The Swedish Government believe that these three priorities are all nested and necessary. If they are able to prevent man-made impacts on climate change, then the natural Arctic environment will sustain and the indigenous people can retain their traditions and culture. The economic development peace is closely tied to the human dimension just as the preservation of the environment is. A healthy Swedish economy not only improves the quality of life in the country, but also funds the research and social programs necessary to support its people.

_

⁴⁷ Government Offices of Sweden, Ministry of Foreign Affairs, Sweden's Strategy for the Arctic Region", 2011, p. 12.

⁴⁹ Government Offices of Sweden, p. 23.

It is also important to mention that Sweden is one of three European Union (EU) member states that are a part of the Arctic Council. Sweden played a significant role in the development of the EU Arctic Strategy when in December 2009 the Swedish EU President worked diligently to support an EU Arctic Strategy. The EU is quickly becoming a solid platform for the European Arctic nations to leverage support to establish more cooperation in the Arctic. Sweden has also been able to leverage other relationships through its membership in the Nordic Cooperation, Barents Euro-Arctic Council, and Sami Cooperation. These relationships have become critical with respect to achieving the Swedish goal of improving cooperation so that they can effectively pursue Arctic priorities.

Finland Arctic Strategy

Finland has been very active in Arctic issues for many years. In fact, they played a significant part in initiating the first ever minister-level meeting between Arctic nations in 1991, which became the beginning of international environmental cooperation in the Arctic and the predecessor to the Arctic Council. These efforts led to the Rovaniemi process, which is an international conference that brings together government officials, scholars, and all others interested together to discuss Arctic perspectives. Finland considers itself as an Arctic expert. Unlike the larger Arctic countries, the majority of Finland's landmass and people are directly affected by the Arctic climate. One third of all the people living north of the 60th parallel are Finns⁵⁰. Finland has also become a leader in Arctic research and development. They have achieved success within the energy

⁵⁰ Prime Minister's Office, "Finland's Strategy for the Arctic Region 2013. Government resolution on 23 August 2013", Finland, August 23, 2013, p.17.

industry, Arctic maritime shipping industry, mining industry and areas of clean technology.

The increase in activity in the Arctic over the last five to ten years has led to Finland developing an official Arctic Strategy in October 2012. The strategy is based on Finland's Arctic vision: "Finland is an active Arctic actor with the ability to reconcile the limitations imposed and business opportunities provided by the Arctic environment in a sustainable manner while drawing upon international cooperation"⁵¹. Finland's 2013 strategy focuses specifically on Finland's unique Arctic experience and capabilities. This is not the first Arctic strategy published by Finland. The first was published in 2010 and focused largely on external matters. The 2010 Strategy defined objectives for Finland's Arctic policy and the means for advancing national objectives in various international and regional forums within the context of the European Union, Nordic cooperation and bilateral relations⁵². The 2013 strategy takes a more comprehensive approach and focuses on considerations that encompass the big picture from the Finland perspective. Finland's key interest consists of the creation of new business opportunities, security and stability, international cooperation and the dissemination of Arctic technology and expertise⁵³.

Finland's role in the Arctic is based on four primary pillars. These pillars are an Arctic country, Arctic expertise, sustainable development and environmental considerations and International cooperation⁵⁴. Finland is engaged in numerous innovative ways to exploit the economic opportunities available in the Arctic region and

⁵¹ Prime Minister's Office, p.7. ⁵² *Ibid*, p.17. ⁵³ *Ibid*, 2013, p.7.

⁵⁴ Prime Minister's Office, p.8.

how it can positively impact their citizens. The Finns see the Arctic region enormous market opportunity with huge growth potential. More importantly, the growth is significantly close to Finland's landmass, which creates countless opportunities to improve their economy and quality of life. The Finns understand that the economic success in the Arctic is hinged on their ability to get international cooperation and investments from international, regional and local private companies.

Lastly, Finland's expertise in the Arctic maritime plays a key role in their strategy and future success. Finland has established a very solid reputation for navigating the icy waters of the Arctic. They have also achieved significant success in the area of constructing vessels capable of negotiating the cold harsh waters of the Arctic region. They have been operating vessels for many years along the Northwest Passage and Northern Sea Route. Finn companies are on the cutting edge of the development of advanced icebreakers and exporting their technological advances to other Arctic nations such as Canada, Norway, Russia, the United States and China. These capabilities have proven to be essential as the urge to transit the northern sea routes have increased. Finland can and will be the leader in Arctic transportation and safety as this market begins to expand in the next decade.

Iceland

Iceland has always had a great interest in the Arctic by virtue of its geographical location. These interest is why the Iceland Parliament feels that Iceland is one of the countries with the greatest influence on the future development in the region; safeguarding economic, environmental and security-related interests in the North; and working towards closer cooperation with other nations, international organisations,

autonomous regions and stakeholders⁵⁵. The Iceland Arctic policy is based on twelve principles: 1) promoting and strengthening the Arctic Council 2) Securing Iceland's position as a coastal state in the Arctic 3) promoting the understanding that the Arctic region extends both to the North Pole and part of the North Atlantic 4) resolving differences related to UNCLOS 5) strengthening and increasing cooperation with the Faroe Islands and Greenland 6) supporting the rights of indigenous peoples 7) building on agreements and promoting cooperation with other states and stakeholders 8) use available means to prevent human-induced climate change 9) safeguard broadly defined security interests in the Arctic 10) developing further trade relations 11) advancing Icelander's knowledge of Arctic issues 12) increase consultations and cooperation at the domestic level on Arctic interest⁵⁶.

Iceland's proximity to the Arctic Circle makes its people more dependent on the resources of the Arctic more so than most of the other Arctic nations. The Icelander's rely heavily on the fisheries, energy and tourism business to sustain their economy. This is the primary objective for the Iceland Arctic Policy. It places emphasis on Iceland being involved in the development of any legal, ecological, economic or territorial disputes in the Arctic. They have secured multi-lateral agreements with Norway and Denmark for continental shelf rights that provide access to resources that support their economy.

Icelanders feel that the Arctic region should be regarded as a single vast area in an ecological, political, economic and security-related sense and not just a narrow geographical sense within the Arctic Circle, tree line, or a temperature of 10 degrees

_

⁵⁶ *Ibid*, p. 2.

⁵⁵ Althingi (Iceland Parliament), 139th Legislative Session, "A Parliamentary Resolution on Iceland's Arctic Policy", March 28, 2011, p. 6.

centigrade in July as a reference point⁵⁷. Iceland's interests improving relations with other Arctic states, facilitating Nordic cooperation, defence cooperation with the United States, regional defence and security cooperation with Norway, Denmark and Canada, cooperation with the other seven Arctic States in the Arctic Council, relations with the European Union through participation in the so-called Northern Dimension (a cooperative forum including Russia, the EU, Iceland and Norway) and cooperation with Russia in the Arctic Council, through the Barents Euro-Arctic Council and within the Northern Dimension⁵⁸.

Lastly, Iceland has made a large commitment to educating Icelanders and others on the Arctic region. They have worked very diligently on research in the fields of climate change, glacier research, marine biology, international politics and law, security, oil and gas extraction, history and culture, economic and social development, gender equality, health care issues and Arctic shipping⁵⁹. One of their initiatives to pursue Arctic education goals is through the development of an international Arctic centre. The project is being developed in conjunction with the University of Akureyri. Also, other Iceland Universities have established networks to share information and further the overall knowledge base on Arctic issues.

European Union Arctic Strategy

The European Union Arctic Strategy by in large is a culmination of the strategies of three Arctic nation partners Denmark, Finland and Sweden. Despite the specific roles of each nation varying in nature, they all are focused on environmental security and the

Althingi, p. 7.
 Ibid, p. 7.
 Ibid, p. 11.

expansion of research in the region. Sweden and Finland both refer to the EU as a vital Arctic partner and support a strengthening of its role in the region; however, Denmark's approach is a bit different. Denmark looks at the EU as more of a stakeholder than so as a member of the Arctic nations. Denmark's strategy expresses reservations as to the EU's respect of the laws, traditions, cultures and needs of Arctic people.

EU Arctic policy has evolved significantly in recent years, culminating in the April 2016 Joint Communication from the European Commission and the High Representative/Vice President (HRVP) for Foreign Affairs and Security Policy. The Communication focuses on the environment and climate change, sustainable development, and peaceful international cooperation, with overarching support for scientific research. The areas of focus are Arctic security, defense issues, international security cooperation, and human security. These focus areas are consistent with the priorities of the EU's Arctic member nations. The EU pledges to continue to focus on policy coherence, engagement with other Arctic stakeholders, and the essential needs of the region's population.

The EU pursues its goals through what is referred to as circumpolar governance. This consists of the Conference of Arctic Parliamentarians, which is a biennial conference for delegations elected by the parliaments of the eight Arctic states, the European Parliament, and representatives of indigenous peoples and international observers⁶⁰. The conference addresses issues such as maritime transport, education and research, human development and climate change. The other approach is sustaining bilateral and multi-lateral relationships in the Arctic. This goals is geared towards building

⁶⁰ European Parliament, Policy Department, "EU Arctic Policy in Regional Context", Belgium, July 06, 2016, p. 10.

stronger relations with Eastern partners and neighbours; strengthening internal EU resilience; selective engagement on areas of clear EU interest; and support for Russia civil society and people-to-people contacts⁶¹. The role of the EU in the Arctic will only expand as more and more EU members become expand their national interests into the Arctic region.

Domestic Context

US Arctic Interest

The US has been an Arctic nation with important interests in the region since the purchase of Alaska from Russia in 1867. At that time, national security and economic development were key US interests. The US made a very bold and aggressive move towards its Arctic interest under President Harry Truman in September 1945. President Truman signed Proclamation 2667, which is the Policy of the United States with Respect to Natural Resources of the Sub Soil and Sea Bed of the Continental Shelf. The purpose of this proclamation was to extend the US jurisdiction of the submerged lands and outer continental shelf for the purpose of developing the capability to acquire petroleum and mineral resources. In a situation where the shelf extends into the waters of another nation, negotiations could occur to secure a bi-lateral agreement. The proclamation was shortly followed by the Outer Continental Shelf Lands Act, which made the provisions of the proclamation the law of the US. In addition, President Truman signed Proclamation 2668, which is the Policy of the United States with Respect to Coastal Fisheries in Certain Area of the High Seas. Together they were known as the Truman Proclamation and the intent behind the policies were not only to extend US territory, but also establish

⁶¹ *Ibid*, p.16.

unimpeded navigation on the high seas that these provisions encompassed⁶². Further significant changes in the domestic and international political arena, environmental, scientific and technological developments, and increasing global interdependence of petroleum products created new priorities and opportunities for the US and the other Arctic nations to state their claims in the region⁶³.

US Arctic Policy

In May 2013, President Obama released the United States National Strategy for the Arctic Region. This strategy was designed to address the anticipated challenges of the Arctic that are projected to arise from the environmental challenges and potential increased maritime traffic in the Arctic region. The foundation of the US strategy is the national security interests in the Arctic region. This strategy has three primary lines of efforts: advance US security interest, pursue responsible Arctic region stewardship, and strengthen international cooperation. The US committed in this strategy to invest the necessary resources in constructing ships and aircraft to operate in the Arctic to support commerce, provide support to search and rescue operations, and with modernizing the Arctic infrastructure and introduction of capabilities⁶⁴. The second line of effort is the pursuit of responsible Arctic stewardship. This includes a commitment to assisting the communities in the Arctic region with an emphasis on protecting the environment and research and development. The third line of effort is to strengthen international cooperation through bilateral relationships and multilateral relationships. This also

_

⁶² Harry S. Truman, "Policy of the United States with Respect to Natural Resources of the Sub Soil and Sea Bed of the Continental Shelf', September 28, 1945, Washington, D.C., Accessed April 20, 2017: http://www.gc.noaa.gov/documents/gcil_proc_2667.pdf, p. 67.

US State Department, "Arctic", Accessed February 03, 2017: https://www.state.gov/e/oes/ocns/opa/arc/.

⁶⁴ The White House, "National Strategy for the Arctic Region", Washington, D.C., May 2013, p. 2.

includes the pursuit of US accession to UNCLOS⁶⁵.

The US has committed to utilized international bodies such as the Arctic Council and the United Nations to pursue arrangements that advance collective interests, promote shared Arctic state prosperity, protect the Arctic environment, and enhance regional security, and we n work toward U.S. accession to UNCLOS⁶⁶. Despite the failure of the US Senate to ratify UNCLOS, the US Department of Defence has been a supporter of UNCLOS as a way to ensure the promotion of regional cooperation and the rule of law. It provides the rights, freedoms, and necessary requires to sustain current sea lines of communications (SLOCS) and facilitate long-term Department of Defence strategic interests⁶⁷. Although accession of UNCLOS would be a show of cooperation by the US, the US can achieve the goals of its strategy with or without the ratification of UNCLOS.

In fact this historical basis is why some argue that the Accession to UNCLOS would not materially advance any U.S. national interest in the Arctic region. The argument is that the US involvement in bilateral and multilateral arrangements such as the Arctic Council provides the US with a sufficient seat at the table to pursue its interest in the Arctic. The fact the United States has successfully protected its interests in the Arctic since it acquired Alaska in1867, far before UNCLOS existed, many conservative politicians (particularly in the US Senate), believe that the US can achieve its goals without ratifying UNCLOS. More specifically, the conservative base in the US is reluctant to adhere to provisions of UNCLOS, which requires revenue sharing, deep seabed mining, and mandatory dispute resolution. These provisions are required as ways

_

⁶⁵ White House, p. 2.

⁶⁶ *Ibid*, p. 9.

⁶⁷ US Department of Defense, "Report to Congress on the Strategy to Protect United States National Security Interests in the Arctic Region", Washington, D.C., December 2016, p. 12.

to diminish existing leverage that the US currently has to resolve issues (i.e. instruments of national power). However, the failure to ratify UNCLOS eliminates leverage against China's aggressive moves in the South China Sea that test the conventions of UNCLOS.

The US Arctic policy is based on five primary objectives: meeting US national security interests; protecting the Arctic environment and conserving its living resources ensuring environmentally-sustainable natural resource management and economic development in the region; strengthening institutions for cooperation among the eight Arctic nations; involving the Arctic's indigenous communities in decisions that affect them; and enhancing scientific monitoring and research on local, regional, and global environmental issues⁶⁸. This includes improving economic and living conditions in arctic communities, providing Arctic Ocean safety, security and stewardship, and addressing the impacts of climate change.

The very remote communities in the North American Artic are dealing with numerous threats that will impact their future health and quality of life. This ranges from extensive unemployment to adapting to the current record breaking warming and climate change. The US has pledged to commit to the development of renewable energy to stimulate public-private partnerships and lower energy costs. There are also initiatives in place to maintain the freshwater security, improve the telecommunications infrastructure, support mental wellness, and mitigate health risk associated with black carbon output and the promotion of improved sanitation and public health initiative ⁶⁹. These initiatives are imperative to the survival of Arctic communities that are at risk of severe hardships as a

--

⁶⁸ US State Department

⁶⁹ The White House

result of climate change and the potential of heavy pollution and hazardous gases are released from beneath the ice as a result of temperature increases. This risk directly impacts food, access to drinking water, and the adequate infrastructure to support the viability of the economy of these communities. Of course this would be a large undertaking and will require the financial and political support of several countries and international organizations.

Providing Arctic Ocean safety, security and stewardship is another key goal required to stabilize the region. The ability to facilitate commercial maritime activity is essential to obtaining the public and private funding necessary to provide the infrastructure to support an increase in maritime activity. The lack of an adequate communications infrastructure severely degrades search and rescue capabilities in the regions. This significantly increases the risks for catastrophes and threatens the safety of those wishing to invest in the Arctic. The US has focused on preparedness and response programs during their years of chairmanship of the Arctic Council. This has led to a shared responsibility of search and rescue and an increase in standardized shipping protocols. The Arctic Council is also continuing its work towards a network of marine protected areas and enhanced international cooperation in the Arctic Ocean⁷⁰. This includes initiatives to counter ocean acidification and its negative impacts on the unique Arctic ecosystem.

Lastly, there is a tremendous focus of addressing the impacts of climate change and the effects on the people, animals, and vegetation of the region. The most immediate area to address is the reduction of black carbon (soot) and methane emissions. These two elements adversely impact all living things in the Arctic. These initiatives are being

⁷⁰ White House, p.3.

spearheaded by international law, bi-lateral, and multi-lateral agreements to make more strict environmental laws and policies. It also includes a large public affairs campaign to increase public understanding of the impacts of climate change and how they can positively contribute to efforts to eliminate it. The goals associated with these principles targeted at increasing the resiliency of the region through the establishment of an early warning indicator system and a Pan-Arctic Digital Elevation map to provide more information on shorelines and surface areas in the Arctic⁷¹.

Current US Political Appetite for Arctic

Administration. Thus far, there has been no dialogue by the Trump Administration in reference to the future direction of the US in the Arctic. However, messages via social media by hen Presidential Candidate Trump gave the impression that there will be a drastic change in US priorities in the Arctic. The most significant indicator is his "Tweets" in reference to climate change. In 2012, he tweeted, "the concept of global warming was created by and for the Chinese in order to make US manufacturing non-competitive". President Trump has not published an Arctic policy as of yet; however, it is believed that his approach would be more focused on attaining energy independence through the privatization of the energy sector and construction of pipelines to feed the energy to the continental US. As of now, it seems like President Trump is going to dig Alaska deep with his 'America First' and 'self-sustainability' policies⁷². If this is his position on the Arctic, then there are concerns on the US commitment in the future. In addition, the 2016 US political platforms did not mention the Arctic at all. In fact, the

_

72 NW Passage Revisited

⁷¹ United States State Department, "US Chairmanship of the Arctic Council", Accessed November 12, 2017:https://www.state.gov/e/oes/ocns/opa/arc/uschair/index.htm; February 3, 2017.

conditions in the Arctic failed to make the platform of any candidate in the mainstream. This demonstrates that there is very little interest in the Arctic from the American public perspective. The fact that these perspectives equate to votes, it is very unlikely that the Arctic will be an interest where many resources will be allocated. More significantly, the relinquishment of the chairmanship of the US in May 2017may provide an even smaller political interest in the Arctic.

On the other hand, US Defense Secretary James Mattis described Russia's military buildup in the Arctic as aggressive steps to threaten stability in the Arctic and pledged to prioritize the development of a new US strategy⁷³. President Trump has been very vocal about is desire to improve US/Russia relationships. This concept seemed very likely until President Putin denounced recent US cruise missile strikes into Syria and active investigations have been initiated to look into Russia's interference in the 2016 US elections. These two issues will more than likely become obstacles that will disrupt full cooperation between the two nations. Lastly, the new budget proposal in the US mentions increased military spending, but there are no specific earmarking of funds to support the current Arctic strategy. It is very realistic at this time to assume that significant US developments in the Arctic will primarily come from the private sector in support of maritime infrastructure and energy exploration.

-

⁷³ Reuters

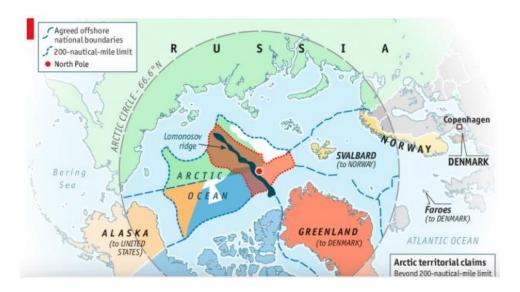


Figure 5 Territorial Disputes

Territorial Disputes

Territorial disputes in the Arctic can be traced back to 1903 when Canada established the North-West Mounted Police detachment on Herschel Island off the North coast of the Yukon Territory. The establishment of this outpost was the first action utilized by Canada to establish its sovereignty in the Arctic⁷⁴. Canada became more aggressive in its claim of the Arctic in February 1907, when Senator Pascal Poirier proposed a resolution before the Senate to declare the lands and islands between Canada and the North Pole as Canadian territory. In 1909, the US became a part of the conversation when Admiral Peary planted the US flag at the North Pole claiming it and the entire region as US territory. Later that year, Canada continued to expand its claims by officially taking possession of Melville Island in the Arctic Archipelago. In 1925, Canada doubled down on its Arctic claims. They amended the Northwest Territories Act in June 1925, which officially designated that its boundaries extended through the Arctic

⁷⁴ Stimson, "Evolution of Arctic Territorial Claims and Agreements: A Timeline (1903-Present)", September 15, 2003, Stimson, Accessed March 28, 2017: https://www.stimson.org/content/evolution-arctic-territorial-claims-and-agreements-timeline-1903-present.

to the North Pole.

In April 1926, Russia made its first official claim in the Arctic. Russia issued a decree that stated that all lands and islands between Russia and the North Pole were Russian territory. This move was a countered to Canada's previous and thus laid the foundation for several decades of dispute over territory in the Arctic. During the 1940s, the Arctic claims became even more aggressive. In September 1945, the US established Proclamation 2667 which gave the US the ability to preserve and utilize the natural resources of the subsoil and sea bed of the continental shelf extended from the US shores. The US claimed exclusive jurisdiction over its continental shelf resources and stated that there should unimpeded navigation of the Arctic waters. The declaration of unimpeded travel through the Arctic Ocean was challenged a year later by Canada who attempted to extend their claims by also claiming the frozen sea of the Arctic as sovereign Canadian territory.

December 1973 was the first time that nations were beginning to establish bilateral agreements and utilize international organizations to resolve disputes in the Arctic. Canada and the Kingdom of Denmark signed an agreement on the delimitation of the continental shelf between Greenland and Canada and submitted it to the United Nations for a final decision. Despite the effort given by both nations, there was no resolution on the sovereignty of Hans Island which is a small 1.3 square kilometer uninhabited island divided by the territorial line. This led to the formation of UNCLOS Commission on the Limits of the Continental Shelf (CLCS) in 1982. Under Article 76 of the CLCS, nations are allowed to extend sovereignty beyond the limits of the economic exclusionary zones (EEZ) if the CLCS verifies that a country's continental shelf extends further.

In 1985, tension flared up between the US and Canada once again over the Arctic. The US Coast Guard sent a vessel through the Northwest Passage without requesting formal permission from Canada. Canada claimed that this was a violation of their sovereignty; however, the US didn't feel a need to inform Canada because their current policy was that all are free to transit the Northwest Passage freely. Three years later, a bi-lateral agreement called the Agreement on Arctic Cooperation was established between the US and Canada. This agreement was designed to reaffirm Canada's position that the Northwest Passage was a part of internal water. This is still the Canadian position as of today, even though the US continues to disagree with the claim.

Current Disputes

Currently there are several unresolved territorial disputes active in the Arctic. The US and Canada are in disagreement over the Northwest Passage. The US considers the Northwest Passage as an international waterway whereas Canada considers the waterway to be internal waters and part of its sovereignty territory. The China have also shown a great displeasure for Canada's and pledged to transport vessels through the water way in the near future under that premise. There is also the disagreement between the Kingdom of Denmark, Canada and Russia over the Lomonosov Ridge in the Arctic Ocean. This issue has yet to be resolved; however, it seems as if Canada is confident that the UN will award the territory to them based on scientific evidence. Then there is Norway's claim to the 200 nautical miles zone around Svalbard as a result of a treaty with Russia. The territorial claim is resolved, but there is still dispute over the recognition of the fisheries protection zone. Lastly, there is the heated dispute between Canada and the Kingdom of Denmark over the uninhabited Hans Island. The boundary of the two states separates the

island, but neither party is expressing interest in the sharing of the landmass.

Hans Island

The Hans Islands is a small-uninhabited island that is disputed by Canada and the Kingdom of Denmark. The dispute was escalated when the Canadian Minister of National Defence, Bill Graham, posed for pictures with a newly erected Canadian flag during the Canadian military Exercise Frozen Beaver 75. Exercise Frozen Beaver was the first visit to Hans Island by Canadian Forces. Canadian Forces helicopters and Canadian Rangers landed on the island and replaced a previously planted Danish flag with a Canadian one as well as left a stone plaque marker symbolizing it as Canadian sovereign territory. Despite the Island being uninhabited, the action gave the perception of Canada purposely violating Denmark's sovereignty. Fortunately the matter was resolved peacefully; however, is there a guarantee of continuous peaceful resolution as Arctic interest continues to expand.

This dispute is ongoing between Canada and the Kingdom of Denmark. The two nations have both acknowledge that the only realistic solution is to split the island. The two most popular recommendations are shared jurisdiction or splitting the border down the center of the island. The possible reason for the delay is Canada's foreign policy priority to assert its sovereignty in the Arctic⁷⁶. A compromise with the Kingdom of Denmark may show a weakness in their stance. This is key as they hold the same stance on several other disputes. Unfortunately, no agreement has been made to date, but the two nations still cooperate in the Arctic and sources say that they are close to a

-

⁷⁵ Stimson

⁷⁶ John Innitson, "Dispute Over Hans Island Nears Resolution. Now for the Beaufort Sea", The Globe and Mail, August 23, 2012, Accessed March 15, 2017: http://www.theglobeandmail.com/news/politics/dispute-over-hans-island-nears-resolution-now-for-the-beaufort-sea/article563692/.

resolution.



Figure 6 Hans Island Dispute⁷⁷

Lomonosov Ridge

The Lomonosov Ridge is a resource rich area that interest several Arctic nations, but none as much as Canada, the Kingdom of Denmark and Russia. Each has insisted that the ridge is an extension of their respective continental shelf. The issue is that there has not been enough scientific evidence to this point to resolve the matter under the CLCS. The US argument is that the ridge isn't an extension of any nation's continental shelf and believes that no state has the right to claim it. Several claims have been submitted to the CLCS. Canada and Russia's positions are that the CLCS needs to make the final ruling. Both Russia and Canada have submitted strong scientific cases, Canada is very confident that their case will prevail⁷⁸. Canada claims that the ridge is an underwater extension of Ellesmere Island and has submitted the claim that the ridge is an underwater extension of Ellesmere Island. If the scientific information submitted proves Canada to be correct, they would gain access to the resource rich seabed. If Russia

World Atlas, "Hans Off! Canada and Denmark's Arctic Dispute", Accessed March 15, 2017:
 http://www.worldatlas.com/articles/hans-island-boundary-dispute-canada-denmark-territorial-conflict.html.
 British Broadcasting Company, "Russia and Canada Seek UN Ruling on Lomonsov Ridge", September 10, 2010,
 Accessed March 15, 2017: http://www.bbc.com/news/world-europe-11331904.

should prevail, this would provide them with possession of nearly one-half of the Arctic region to include the North Pole⁷⁹.



Figure 7Lomonosov Ridge⁸⁰

North Pole

On December 10, 1991, Russia became the first Arctic nation to submit a claim to the CLCS. Their outlandish claim was for the entire 1.2 million square kilometer Arctic region to include the North Pole. Subsequently, they made several additional claims to the North Pole. In both 2015 and 2007, Russians planted titanium deep-sea flags on the seabed below the North Pole to double down on its claim of the North Pole. In 2007, "When Russian divers planted their flag on the North Pole seabed," says Per Stig Moller, a former Danish foreign minister, "I chided my Russian counterpart by saying: 'Just because you plant a flag there doesn't mean you own it.' To which he replied: 'Just because the Americans plant a flag on the Moon..."

"The Arctic has always been Russian," declared Artur Chilingarov, one of the polar explorers "2". The nation was more so a show of aggression to other Arctic nations. More specifically to Canada and the

⁷⁹ Stimson

⁸⁰ British Broadcasting Company, Lemonosov Ridge, Accessed March 15, 2017: http://newsimg.bbc.co.uk/media/images/44032000/gif/ 44032849 arctic russia416.gif.

^{81 &}quot;Frozen Conflict", The Economist, Dec 17, 2014, Accessed: Mar 28 2017:

 $http://www.economist.com/news/international/21636756-denmark-claims-north-pole-frozen-conflict \ ^{82} \textit{Ibid}$

Kingdom of Denmark, who have made similar claims to the North Pole through the CLCS process. This began the resurgence for tension in the Arctic region. Suddenly, several nation took note of the massive amount of resources that the Arctic had to offer and made a mad dash to try and secure territorial rights.

Northwest Passage

The dispute between the US and Canada over the Northwest Passage goes back well over 40 years. The initial tension is believed to have begun with a US super tanker call the SS Manhattan transiting the Northwest Passage to verify the feasibility of transporting oil through the route. Less than a year after the conclusion of the voyage, the then Canadian Prime Minister Pierre Trudeau's government passed a bill known as, "The 1970 Arctic Water Pollution Prevention Act," which states that only the Canadian government has the full jurisdiction and coastal control over the Northwest Passage, and no other country's vessel can enter the passage without its consent⁸³.

The US immediately took a stance announcing that its position is that the Northwest Passage is an international waterway and all nations have the right to transit the route with or without permission from Canada. The Chinese government who is an observer of the Arctic Council and very interested in maritime transit in the Arctic, holds the same position as the US on the issue. The issue should probably be a matter to be addressed by UNCLOS, but the US has not ratified UNCLOS. China is a member, but their aggressive nature in the South China Sea may work against them in their position in the Northwest. The dispute is still unresolved, but has the potential to erupt as ice continues to melt and the route becomes more feasible for mass maritime commercial traffic.

83 NW Passage Revisited

-

Opportunities/Assumptions

The execution of a quality US Arctic Strategy that brings the Arctic Nations closer together would create numerous opportunities to resolve current disputes over territory, improve Arctic environmental regulations as a part of International Law, and improve the quality of life for indigenous populations. The Arctic not only facilitates access to an enormous amount of energy, but also generates an opportunity for significant quality of life improvements for indigenous populations. The climate change is not just melting the ice of the Arctic, it is also making significant changes to the ecosystem and forces the inhabitants to adjust their lifestyles to continue to survive in the environment. An increase in infrastructure would bring about opportunities to establish more modern economies and potentially lucrative port cities to facilitate maritime traffic. An approach in this manner brings needed economic relief and commercialization to desolate Northern regions in need of modernization and employment.

This level of growth will require a significant level of cooperation. Cooperation amongst Arctic Nations is the necessary remedy not only resolves disputes, but also prevents the horrors of war from showing its presence in the great north region. Of course such cooperation will hinge on the council's ability to halt further Russian expansion and make a resolute determination on the boundaries of each nation. This also takes into consideration the Northwest Passage which should become an international waterway free from Canadian restrictions on maritime traffic. This level of cooperation must be linked to other international disputes and used as leverage to pursue interests that are best for the region.

This would include efforts to resolve US and Russian differences on Syria, Ukraine, and Crimea. Russia's cooperation in the Arctic matters; however, their recent behaviour on the world stage has made the pursuit of greater cooperation more distant than it has been since the days of the Cold War. The issues have become even more endangered with allegation in 2016 of Russia utilizing offensive cyber capabilities to influence the outcome of the US presidential elections. The investigations are ongoing, but the perception makes it very difficult for the necessary mutual trust between the US, Canada, the EU, and Russia to reach levels that would result in better cooperation in the Arctic.

The matter becomes even more difficult due to the US Congress refusal to ratify UNCLOS. Any significant cooperation will require US ratification of UNCLOS and it can be assumed that this will eventually occur as multi-lateral and bi-lateral agreements are superseded by international law. Of course this means very little on the surface to the natives, but it could be the catalyst for the investment necessary to support an infrastructure that would facilitate the generation of a robust maritime transportation market in the region and a needed boost in the economies of the Northern region.

Unfortunately, the current geo-political climate favours positions of increased friction in the region as US/Russia relationships degrade and the Chinese continue to pursue aggressive pursuit of their economic interests. These events have the potential to create the potential for bi-lateral agreements between Russia and China and severely threaten the sovereignty of Western nations and create trends that will potential set the conditions for Cold War level defensive postures. This assumption must be taken seriously as the Chinese become more and more assertive in the pursuit to increase maritime traffic in the

Northern waters to reduce the travel time to European markets. China has been very assertive in claiming territories in the South China Sea and could demonstrate similar behaviour in the Arctic to pursue its national interests.

Means

The US will have to be very strategic in how it uses its instruments of national power to pursue positive gains in the re-shaping of the future Arctic region. The main effort of an effective US strategy in the Arctic must be rooted in the ability to properly utilize diplomacy in pursuit of national interests. The most effective tool would be the ability to continue to leverage international organizations such as the Arctic Council, European Union, and United Nations to pursue the necessary cooperation required to implement environmental policies, facilitate maritime transportation, and improve the quality of life for the indigenous populations. In addition to the effective use of diplomacy, it is imperative that the US senior leadership articulates the importance of the massive investment in the Arctic to the American public.

The US must also take advantage of its robust media capabilities to effectively utilize strategic communications to share Arctic interest to the populous. There has to be a more rigorous public affairs and information operations campaign to communicate not only the damage that climate change causes, but also ways to alleviate the effects and assist the natives with adapting to changes that this phenomenon will bring along. The presidential and congressional elections include no platforms that relate to climate change. This has to change if there is to be any significant spending in the Arctic. The lack of information has generated little to no interests by the masses in America and have place the Arctic problem in the back of the line of issues on the nation's agenda. Without

a significant effort to educate the masses of the US, it is very difficult to see the US

Congress investing any time in resources in the Arctic. An information campaign must
began and it has to include the government and private firms in a joint effort to

communicate the needs to the people and generate more conversations about conditions
in the Arctic and how they affect the rest of the world.

The military instrument also has a place in this strategy. In order to achieve the goals outlined in the US Arctic Strategy, there must military involvement. The military involvement ranges from supporting a search and rescue network to combating piracy and smuggling from an increase in commercial shipping. The US Northern Command (NORTHCOM) has the responsibility for providing command and control and the required capabilities to face any threats to US nation security the Arctic. The US Department of Defence has established an Arctic Capability Advocacy Working Group (ACAWG) to consolidate stakeholders from the entire defence department to identify gaps and determine solutions to problem sets associated with the Arctic⁸⁴. The US also shares a bi-lateral US-Canada defense relationship referred to as the North American Aerospace Defence Command (NORAD). NORTHCOM and NORAD both share the same staffs, but maintain separate lines of authority to ensure that there no conflicts of interests between the two nations as a result of different policy positions by their respective governments. The US also utilizes the North Atlantic Treaty Organization (NATO) and other forums such as the Northern Chiefs of Defense Conference and Arctic Security Forces Roundtable as critical engagements for cooperation to facilitate achieving its national security goals.

-

⁸⁴ US Department of Defense, p. 4.

The US also has been effective in the creation of several bi-lateral and multi-lateral military exercises, training events, personnel exchanges and liaison relationships that have been instrumental in increased cooperation in the Arctic. These events include the Arctic Security Forces Roundtable (ASFR), EXERCISE ARCTIC EAGLE, EXERCISE RCTIC ZEPHYR and several other tabletop exercises designed to enhance information sharing, domain awareness, and military cooperation ⁸⁵. The foundation for the effectiveness of these ventures is the establishment of more modernized and weather durable communications platforms to operate in the harsh weather conditions, high-latitude ionic disturbances environment, and in the vicious geomagnetic storms that adversely affect modern communications equipment. In addition, there must be a more significant investment in the construction of icebreaker vessels in the US Navy and Coast Guard. This is necessary for sustaining commercial traffic and establishing safe waters for potential cruise liners that are anticipated to swarm the Arctic as the waterways become more passable.

Lastly, the economic interest is extremely important for the effectiveness of the US Arctic Strategy. The economic priorities will include foreign assistance, security assistance, trade and financial policy. In order to address the potential environmental impacts, there is a need for large sums of money to perform research and combat the toxic gases being released from beneath the ice. In addition, the large infrastructure projects, public and private, have to be augmented in order to lure adequate investors into the region to build the economy. Also, the economic interest can be used to ensure

⁸⁵ US Department of Defense, p. 4.

compliance of international laws and multi-lateral agreements in the region as well as in the form of sanctions to punish non-compliance.

Ways

The "theory of victory" is hinged on the ability of the US to ensure that the Arctic Council remains a cooperative organization and use its strength and influence to persuade the International community to support implementing regulatory guidance that will facilitate stabilizing the region, protecting the environment, and development for the indigenous populations. The US, along with the Arctic Council and other international organizations, will use its instruments of national power to influence partner nations to pursue the resolution of territorial disputes in the Arctic. The US will use trade and financial policies to create incentives for the resolution of territorial disputes. The use of persuasive diplomacy and trade policy will be used to reduce China's aggressive nature in the Arctic Council and to resolve potential conflicts with China over access to Arctic resources. In addition, the same methods will be used for the US to convince one of its closest allies, Canada, to agree to terms that will enable free passage through the Northwest by vessels under international flags.

Simultaneously, the US diplomats must lobby the UN and member nations to extend environmental regulations to UNCLOS and creating the international laws and norms necessary to enforce regulatory guidance. The US will also use this opportunity to negotiate what it considers as unfavourable conditions of UNCLOS and eventually ratify. The ratification of UNCLOS by the US must occur. In order to set the conditions required for stability and protection of the environment in the region, one standard has to be utilized. UNCLOS must serve as the international standard for the Arctic and other

regions in the world. The US Senate has to change its position and vote to ratify UNCLOS to receive the best results of the strategy. It is not required, but it is strongly encouraged and can be instrumental in getting further cooperation from other nations. The US military supports the Law of Sea Convention (LOSC) and is very confident that those provisions are consistent with US Department of Defense long-term strategic interests⁸⁶.

The Northern Chiefs of Defense Conference and Arctic Security Forces

Roundtable should be used to re-initiate negotiations for improvements of to the 2011

search and rescue (SAR) agreement. The current agreement assigns specific sectors to

some nations and requires other nations to provide support. A future SAR agreement in

the Arctic should be focused on the establishment of standardized assets integrated across
the eight Arctic Nations with a unified headquarters. Of course, the true integration will
require the interoperability of communications systems and standardized training. This is
the most logical course of action to ensure safety across the vast and dangerous Arctic

Sea that will attract numerous vessels as the waterways become more passable and
infrastructure erects along the shorelines.

The pursuit of regulatory compliance will result in a negotiation to fund an Arctic Environmental Center of Excellence (CoE). The CoE will consolidate current working groups and provide feedback to the council environment conditions and recommendation on regulatory guidance. The US will look at negotiations to establish multi-lateral assistance programs to fund this activity and use the UN and other international organizations to enforce the regulatory guidance under the auspice of international law.

⁸⁶ US Department of Defense, p. 12.

The use of the trade and financial instrument will be used to improve economic development in the region. Arctic nations, as well as Alaska, will be engaged to create tax benefits for private industries in the Arctic. The surge of industry will create infrastructure development and job opportunities for indigenous populations impacted by the changing environment. This initiative will be reinforced by the use of media outlets to reinforce the messaging for increased domestic support in the region. Lastly, there will be the push for the investment in icebreakers in the US Coast Guard and Navy fleets to increase maritime traffic in the Arctic. Other Arctic nation will be encouraged to increase their icebreaker fleets as well. In addition, a system of tolls similar to that of the Panama Canal would be established along the Arctic waterways to share the cost of infrastructure throughout the Arctic as well as create additional jobs for the indigenous populations in the region.

Risks

The risks of this strategy are attached to two key areas. The risks are associated with disputes of territory by sovereign nations and the freedom of movement through what is deemed by many as international waterways. The continued pursuit of territory for the rights to energy resources can easily set the conditions for the resurgence of a Cold War dynamic in the Arctic. Lastly, the US Geological Survey (USGS) estimates that there are 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids located in the Arctic. This amount of energy independence and economic potential sets the conditions for numerous conflicts to occur over territorial claims. It is imperative for the US to maintain cooperation in the region in

other to prevent the risks of any altercations amongst nations pursuing claims in the region.

The large buildup of Russian military facilities in the Arctic only further the risks of increased tension over territorial disputes. In addition, Russia has established an Arctic Command that consists of four brigade combat teams, 14 operational airfields, 16 deep-water ports, and 40 icebreakers⁸⁷. This buildup creates a lot of concern in the European Arctic and directly challenges NATO members and their sovereignty. The lack of a comparable US force in the region creates conditions that may become a catalyst for intensifying current disputes if not resolved in the near future.

The other concern is the risk of damaging the US/Canadian relationship over the Northwest Passaged being viewed as Canadian territory versus an international waterway free of navigation by any nation. The US does not agree with Canada on this claim, specifically Canada's position that they can deny transit through the Northwest for any vessel that refuses to coordinate with the Canadian Coast Guard in advance of transiting the waterway. This just as several other minor disputes have the potential to add fuels to fires that can easily be intensified by a more trafficable Arctic that would provide larger amounts of energy resources or profit from commercial maritime transit.

Conclusion

_

The US has the power and influence to directly impact the future of the Arctic region. The proper use of its instruments of national power: diplomacy, information, military and economy in a comprehensible strategy will definitely provide the push required to achieve universal objectives in the Arctic. There are many potential threats

⁸⁷ Robbie Gramer, "Here's What Russia's Military Build-Up in the Arctic Looks Like", Foreign Policy, January 25, 2017, Accessed February 02, 2017: http://foreignpolicy.com/2017.01/25/heres-what-russias-military-build-up-in-the-arctic-looks-like.

that lurk over the Arctic region, but many of them are controllable through bi-lateral, multi-lateral, and international agreements that will prevent conflict in the region. The answer to the questioned address in this paper whether or not the US can effectively execute a strategy that allows the utilization of its current power and influence to further pursue US interest in the Arctic is yes. The conditions are currently set for movement in the Arctic. The only thing lacking is a firm pivot by a tough power broker in the region. The US must become that power broker. This is the only way that the Arctic will be secured, stability sustained, cooperation upon nations achieved, the environment protected, and economic growth and development can be reached.

The US Arctic strategy must remain collaborative in nature to be successful. It will take a large commitment of money, resources and man hours to invest in the Arctic that has been envisioned in the strategy of many of the Arctic nation. The results are very achievable and must be actioned upon to advance US national security interests, pursue responsible stewardship, and strengthen international collaboration and cooperation to meet the challenges of rapid climate-driven environmental dynamic in the Arctic. A whole-of-government approach will be required to fulfill the US commitment; however, a whole-of-world approach will be required to sustain the Arctic while simultaneously introducing its treasures to the rest of the world. This includes the use of public and private joint business ventures and investments. The Arctic nations can set the conditions for success, but all must play a significant role in investing in the necessary infrastructure and environmental policy required to protect the Arctic and kindly integrate it into the rest of the global construct.

Bibliography

Althingi (Iceland Parliament), 139th Legislative Session, "A Parliamentary Resolution on Iceland's Arctic Policy", March 28, 2011, p. 6.

Arctic Council, Accessed September 15, 2016: http://www.arctic-council.org.

Arctic Knowledge Hub, "History of Arctic Maritime Transport, Accessed February 01, 2017: http://www.arctis-search.com/History+of+Arctic+Maritime+Transport.

Bentzen, Naja, Mark Hall, and Christian Dietrich, European Parliament, "Arctic Continental Shelf Claims, Mapping Interests in the Circumpolar North, January 2017, Accessed February 15, 2017:

 $http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595870/EPRS_BRI(2017)595870_EN.pdf.$

British Broadcasting Company, Lemonosov Ride, Accessed March 15, 2017: http://newsimg.bbc.co.uk/media/images/44032000/gif/_44032849_arctic_russia416.gif.

British Broadcasting Company, "Russia and Canada Seek UN Ruling on Lemonosov Ridge", September 10, 2010, Accessed March 15, 2017: http://www.bbc.com/news/world-europe-11331904.

Eurasian Business Briefing, "China eyes up Northwest Passage in threat to Canadian sovereignty", Accessed March 27, 2017: http://www.eurasianbusinessbriefing.com/china-eyes-northwest-passage-threat-canadian-sovereignty/.

Evolution of Arctic Territorial Claims and Agreements: A Timeline (1903-Present)", September 15, 2003, Stimson, Accessed March 28, 2017: https://www.stimson.org/content/evolution-arctic-territorial-claims-and-agreements-timeline-1903-present.

"Frozen Conflict", The Economist, Dec 17, 2014, Accessed: Mar 28 2017: http://www.economist.com/news/international/21636756-denmark-claims-north-pole-frozen-conflict.

Government of Canada, Canada's Northern Strategy our North, our heritage, our Future, Ottawa, 2009, Accessed August 14, 2016: http://www.northernstrategy.gc.ca/cns/cns.pdf.

Government Offices of Sweden, Ministry of Foreign Affairs, Sweden's Strategy for the Arctic Region", 2011, Accessed June 15, 2016:

Gramer, Robbie, "Here's What Russia's Military Build-Up in the Arctic Looks Like", Foreign Policy, January 25, 2017, Accessed February 02, 2017: http://foreignpolicy.com/2017.01/25/heres-what-russias-military-build-up-in-the-arctic-looks-like.

Groves, Steven, "Accession to Convention on the Law of the Sea Unnecessary to Advance Arctic Interests", Backgrounder #2912 on International Law (/issues/international-law), June 26, 2014, Accessed June 10, 2016: Backgrounder #

Hofstra University, "The Geography of Transport Systems", Accessed February 10, 2017: https://people.hofstra.edu/geotrans/eng/ch1en/conc1en/polarroutes.html.

Innitson, John, "Dispute Over Hans Island Nears Resolution. Now for the Beaufort Sea", The Globe and Mail, August 23, 2012, Accessed March 15, 2017: http://www.theglobeandmail.com/news/politics/dispute-over-hans-island-nears-resolution-now-for-the-beaufort-sea/article563692/.

Kingdom of Denmark, "Denmark, Greenland and the Faroe Islands: Kingdom of Denmark Strategy for the Arctic 2011–2020", Accessed April 01, 2017: http://naalakkersuisut.gl/~/media/Nanoq/Images/Udenrigsdirektoratet/100295_Arktis_Rapport_UK_210x270_Final_Web.pdf.

Kramer, Andrew E., "Russia Presents Revised Claim of Arctic Territory to the United Nations", New York Times, February 09, 2016, Accessed March 27, 2017: https://www.nytimes.com/2016/02/10/world/europe/russia-to-present-revised-claim-of-arctic-territory-to-the-united-nations.html?_r=0.

MacDonald, Adam P, "Is China's Arctic Strategy Really that Chilling?", East Asia Forum, March 16, 2016, Accessed on March 2016: http://www.eastasiaforum.org/2016/03/16is-china-arctic-strategy-really-that-chilling.

NW Passage Revisited, Northwest Passage Dispute, January 29, 2017, Accessed March 15, 2017: https://nwpassagerevisited.wordpress.com/category/northwest-passage-dispute/.

Prime Minister's Office, "Finland's Strategy for the Arctic Region 2013. Government resolution on 23 August 2013", Finland, August 23, 2013, p.17.

Reuters, "Putin's Russia in the Biggest Arctic Military Push Since the Soviet Fall", January 31, 2017, Accessed on February 10, 2017: https://reuters.com/article/us-russia-arctic-insight-idUSKBN15E0W0.

Rodrigue, Jean-Paul PhD, Hofstra University, Dept. of Global Studies & Geography ,New York, 2017, Accessed April 02, 2017: https://people.hofstra.edu/geotrans/eng/chlen/conclen/polarroutes.html.

Russian Geographical Society, "The Arctic", Accessed April 30, 2017: arctic.ru/population.

Sokolov, Vadim A., Government of the Russia Federation, "The Russian Arctic Strategy for the Period up to 2020", Accessed June 15, 2016:

https://www.star.nesdis.noaa.gov/star/documents/meetings/Ice2013/dayOne/Sokolov_Russian.pdf.

Stępień, Adam, Timo Koivurova and Paula Kankaanpää (eds), 'Strategic Environmental Impact Assessment of Development of the Arctic - Assessment conducted for the European Union,' Arctic Centre, University of Lapland, 2014. http://www.arcticinfo.eu/en/sada.

Stimson, "Evolution of the Arctic Territorial Claims and Agreements: A Timeline (1903-Preset), September 15, 2013, Accessed March 15, 2017: https://www.stimson.org/content/evolution-arctic-territorial-claims-and-agreements-timeline-1903-present.

The Articls, Stefansson Arctic Institute, "The Arctic is an Ecosystem", 2000, Accessed May 02, 2017: http://www.thearctic.is/articles/overviews/ecosystem/enska/index.htm.

The White House, "National Strategy for the Arctic Region", Washington, D.C., May 2013, p. 2.

Truman, Harry S, "Policy of the United States with Respect to Natural Resources of the Sub Soil and Sea Bed of the Continental Shelf", September 28, 1945, Washington, D.C., Accessed April 20, 2017: http://www.gc.noaa.gov/documents/gcil_proc_2667.pdf, p. 67.

US Department of Defense, "Report to Congress on the Strategy to Protect United States National Security Interests in the Arctic Region", Washington, D.C., December 2016, p. 12.

United States State Department, "Arctic", Accessed February 03, 2017: https://www.state.gov/e/oes/ocns/opa/arc/.

United States State Department, "US Chairmanship of the Arctic Council", Accessed November 12, 2017:https://www.state.gov/e/oes/ocns/opa/arc/uschair/index.htm; February 3, 2017.

United States History, "The Aleuts", Accessed May 01, 2017: http://www.u-s-history.com/pages/h994.html

Woods Hole Oceanographic Institute, Polar Discovery, Accessed: January 21, 2017: http://polardiscovery.whoi.edu/arctic/330.html.

World Atlas, "Hans Off! Canada and Denmark's Arctic Dispute", Accessed March 15, 2017: http://www.worldatlas.com/articles/hans-island-boundary-dispute-canada-denmark-territorial-conflict.html.