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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

RUSSIAN ARCTIC STRATEGY: OR HOW I LEARNED TO STOP WORRYING AND LOVE BUREAUCRATIC POLITICS

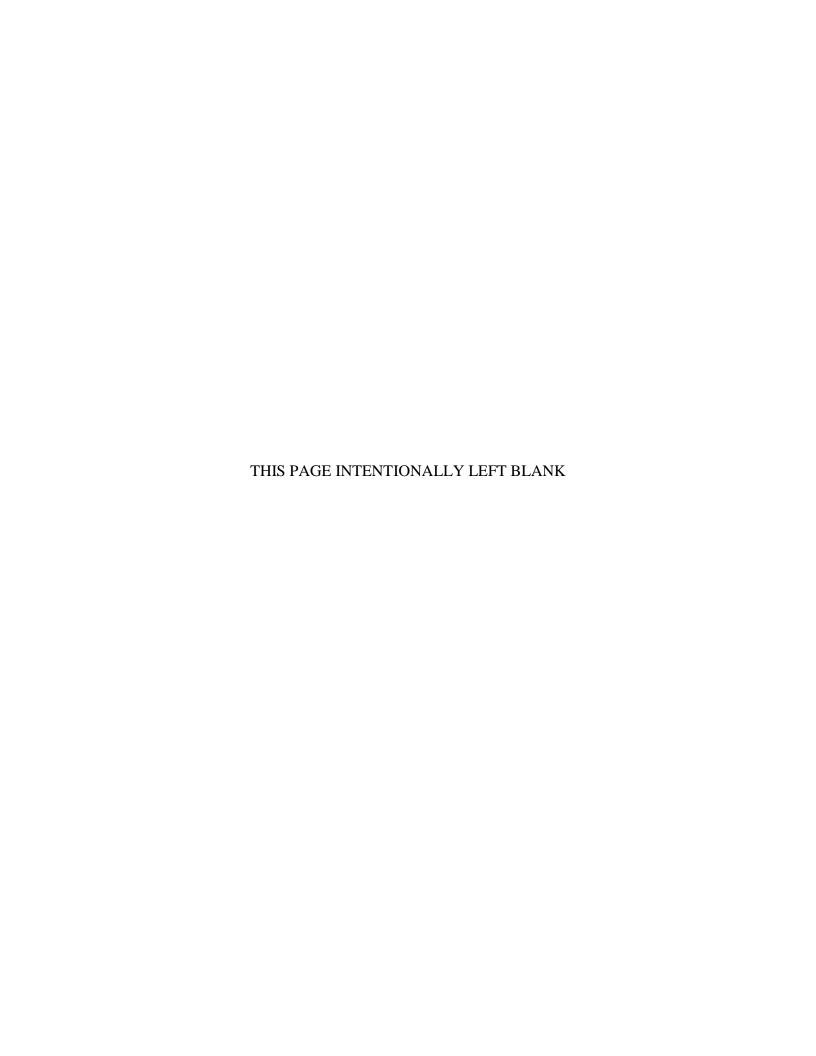
by

Daniel L. Justice

March 2018

Thesis Advisor: Emily Meierding Second Reader: Mikhail Tsypkin

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Global climate change is rapidly melting the polar ice caps and thus opening the Arctic to human activity. Russia is particularly affected by these changes as the nation with the longest Arctic coastline and a significant portion of its gross domestic product (GDP) generated above the Arctic Circle. This thesis examines how to best classify Russia's strategy in the pre- and post-2014 periods and concludes the strategy shows a remarkable degree of continuity given the dramatic changes that occurred that year. Contrary to arguments that Russia is "militarizing the Arctic" or attempting to conduct a land grab, during both periods Russia has pursued an "economic calculation" strategy, attempting to maintain a benign political environment while at the same time steering the Arctic energy and transport sectors for the purpose of reaping economic rewards. The continuity noted in Russia's strategy is perplexing when examined under a rational actor model. This thesis argues that a bureaucratic politics model more accurately reflects the reality of Russia's Arctic decision making process. The ideological beliefs of the siloviki political bloc in Russia, combined with the personal financial connections of many top politicians, has led Russia to develop and maintain its Arctic strategy.

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RUSSIAN ARCTIC STRATEGY: OR HOW I LEARNED TO STOP WORRYING AND LOVE BUREAUCRATIC POLITICS

Daniel L. Justice Lieutenant Commander, United States Navy B.S., University of Notre Dame, 2008

Submitted in partial fulfillment of the requirements for the degree of

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from the

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LIST OF ACRONYMS AND ABBREVIATIONS

ASW Anti-submarine warfare

CLCS Commission on the Limits of the Continental Shelf

CSIS Canadian Security Intelligence Service

EEZ Exclusive Economic Zone

EIA Energy Information Administration

EU European Union

FSB Federal Security Service

IEA International Energy Agency

JSC Joint Service Command

LNG liquefied natural gas
MOD Ministry of Defense

NATO North Atlantic Treaty Organization

NEP Northeast Passage
NSR Northern Sea Route
NWP Northwest Passage

OPEC Organization of Petroleum Exporting Countries

PPF Peterburgskaya Politika Foundation

SAR Search and Rescue

SSBN Ballistic Missile Submarine

UNCLOS United Nations Convention on the Law of the Sea

USGS United States Geological Survey

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I. INTRODUCTION

The melting of the polar ice caps is presenting humanity with opportunities unthought of by previous generations. Ships are now able to sail through waters that before were blocked by meters of hard packed solid ice. In the future they may be able to sail directly across the North Pole. The newly accessible Arctic Ocean also means access to the seabed below. Geological expeditions have reported significant untapped reserves of hydrocarbons on the Arctic continental shelf. The melting ice also means that nations, previously separated by a metaphorical wall, now find it possible to send their navies to their neighbors' backyards.

Nations have responded to these new realities in different ways. Some have focused on the potential worldwide environmental impacts and connections the Arctic has to global climate change. Some have raised concerns about the potential for easier military access from neighboring nations and the potential to spark conflict. Some are eager to extract the mineral wealth in the Arctic. Many have concerns about the proper way to manage the anarchy of international relations in the Arctic and several multinational institutions have sprung up to deal specifically with Arctic issues. How each individual nation has responded to each of these aspects of the changing environment may shed light on broader characteristics of that nation's behavior.

A. MAJOR RESEARCH QUESTIONS

This thesis responds to the question, "How does Russia think about the Arctic?" This phrasing implies two separate, but related, avenues of research. First, what does Russia think about the Arctic (i.e., how does it view the Arctic in the context of Moscow's policy goals?) Does it view the Arctic as a source of mineral wealth to be exploited and the associated territory defended, as an adjacent territory subject to international law, as a potential staging point to start a war against North Atlantic Treaty Organization (NATO), or as a new frontier, where they must scramble to stake their claims, like the gold rush in Alaska?

The second question is, "Why does Russia come to the conclusions it does?" Does the policy making process affect the policy itself? What is the best way to model that process? What are the significant bodies and leaders who decide the fate of Russia's Arctic policy? What systemic effects does that organization have on the policy? How do those persons and institutions respond to external stimuli? Is Russian Arctic policy driven more by external realities or the systemic effects of the political organization inside Russia?

Specifically, this thesis focuses on the periods of the Putin and Medvedev presidencies, from the turn of the 21st century until the present, with an emphasis on two periods. First, it reviews the period from 2007 (when a renewed interest in the Arctic began in Russia) up to 2014 (when a series of external circumstances affected the prospects of Russian activity in the Arctic). Two events in 2014 reduced the potential for Russia to transform the Arctic into a burgeoning energy/transit region: the spring 2014 invasion and annexation of Crimea leading to Western sanctions that affect Russia's energy industry and the Autumn 2014 drop in energy prices. Second, this thesis considers the situation in the post-2014 period and examines how Russia has or has not responded to those events.

B. SIGNIFICANCE OF THE RESEARCH QUESTION

The relationship between the Western and the Soviet (later Russian) spheres has dominated the international political arena for the past three-quarters of a century. For half of the past century, since the end of World War II until the collapse of the Soviet Union, the threat of a confrontation between the two loomed ever present over decision making on both sides. Since the collapse of the Soviet Union, the nature of the relationship has often been unclear. The United States and Russia moved out of the well-defined paradigm of the Cold War into a new one where roles and relationships were free to be redefined. In the last 25 years, the relationship has wavered between suspicion, friendliness, and aloofness, recently returning to a confrontational tone. This recent turn has led some to believe a military confrontation may be looming in the future. Because of changes to the region's economic and strategic potential, the Arctic might serve as a theater for a potential conflict between the United States and Russia.

The environmental conditions in the Arctic are changing in ways that have pushed it to the forefront of concern for many analysts. During the Cold War, the Arctic was essentially inaccessible to military forces and therefore relatively unimportant as a source of conflict between the two powers. The warming of the Arctic and melting of the ice have (and continue to) drastically changed the Arctic's accessibility. Energy and mineral resource extraction is becoming more and more feasible in previously frozen areas. The shorter transit distances between Northern Europe and Northeastern Asia may produce a larger increase in the amount of maritime traffic through the region. Russia's previously protected, ice covered, submarine operating areas and its northern coast are also now accessible to foreign warships. These, and other factors, have raised questions about Russia's priorities and intentions in the region now and in the future. Understanding Russian intentions and how they come to those intentions are the first steps in crafting U.S. policies toward the region that advance our national goals without risking unintended confrontations.

Methodologically, this thesis also has value as it attempts a deeper dive into the Russian political processes about the region. There is significant literature identifying the various material factors that bear on potential interests of the Russian state. Additionally, many security experts have cataloged recent Russian military deployments and infrastructure build-ups in the Arctic region. However, little has been done to connect those actions to the political processes that beget them. This thesis will bridge that gap and connect the policy process for the Arctic to the results. Is there an obvious relationship between periods of Russian military buildup and the ascendency of security-minded individuals in the halls of Russian power? Do certain advisors of Putin tend to push for collaborative, multinational efforts at the perceived expense of Russian security? How successful are these various groups? This line of questioning may have implications for other areas of Russia study. What is the best level of analysis to explain Russian actions? Does Russia always behave as a monolithic, unitary actor? Are there other areas of Russian policy that could be better understood by examining the "court politics" surrounding the Russian decision-making process?

Finally, beyond implications for United States/Russia relations, this topic has the potential to touch on issues that will be applicable to a number of international relations problems. How will nations in general react to changes in previously static geographies, due to the effects of climate change? Will the draw of energy resources remain as potent as it has for the last century? Will changing patterns of economic activity dramatically alter the existing security environment? These will be issues that nations will encounter more and more frequently in the future. The specific details found in the case of Russia in the Arctic may be more broadly applicable to the rest of the world.

C. LITERATURE REVIEW

Experts are unable to agree on what exactly the nature of Russia's Arctic actions are, much less what drives the state's decision-making. Acknowledging this difficulty, many have pointed openly to conflicting signals from Russia over the past decade. For example, Stephanie Pezard and her co-authors point to the contradiction between the seemingly antagonistic 2007 planting of a Russian flag on the North Pole seabed and Russia's submission to the United Nations Convention on the Law of the Sea (UNCLOS) process for making extended continental shelf claims, in keeping with international law and in recognition of that body's authority. They describe Russia's actions as "alternating in recent years between inflammatory and cooperative."

Out of the confusion, one can distil four main theories concerning the outcome and driving factors of Russian Arctic behavior. For clarity's sake, this thesis will refer to these four main viewpoints as 1) economic calculation, 2) appropriate great power cooperation, 3) military positioning, and 4) resource scramble. Of these four theories, two argue that Russia is generally cooperative in the Arctic (economic calculation and appropriate great power cooperation), while the others (military positioning and resource scramble) argue that Russian actions are more accurately portrayed as confrontational. Between the broad categorization of cooperative or confrontational, the sub-views disagree on the reasons

¹ Stephanie Pezard, Abbie Tingstad, Scott Stephenson, and Kristin Van Abel. *Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North* (Santa Monica, CA: RAND, 2017), 8.

causing Russian behavior. First, the economic calculation view believes Russia's actions have been largely cooperative and the driving impetus of that cooperation is a rational cost/benefit calculation; Russian policy makers believe they will be better situated to extract economic gains from the Arctic in a low confrontation environment. Appropriate great power cooperation, the second cooperative school of thought, agrees that Russia's actions are largely benign, but instead places the causal factor for that cooperation on the particular ideological perspective Russian decision makers hold about the Arctic as a place to demonstrate Russia as a responsible, peer nation among the great powers.

On the other side are the experts who argue that Russia is not, in fact, uniquely cooperative in the Arctic; instead, it is confrontational. The disagreement amongst authors who hold this viewpoint again stems from what they perceive to be the driving factors behind Russia's actions. The military positioning school holds that Russia's motives are a combination of a defensive worldview and fear of encirclement by the West, which drives them to be confrontational. The final perspective, resource scramble, believes Russia is simply trying to aggressively seize the resources that lay untapped in the region. Supporting evidence for each of these four viewpoints can be found in the form of statements made by Russian officials, actions of the Russian state and Russian policy documents. Determining which, if any, of the previously mentioned viewpoints most accurately depicts Russia's position, both pre and post-2014, will first require a closer look at the main arguments of each.

1. Economic Calculation

The most pervasive view from academic literature of Russian activity in the Arctic is the "economic calculation" theory, which centers on the premise that Russia is a rational actor that has determined it stands to gain more economically from the Arctic if it behaves cooperatively and encourages other nations to do the same. Pezard et al. trace the economic calculation line of reasoning back to the Soviet period, when climatic conditions made resource extraction from the Arctic more difficult and therefore disincentivized Moscow

from being needlessly belligerent for no apparent material gain.² As the Arctic has become more accessible, that calculation has potentially changed, shifting in favor or more economic benefits for continued cooperative behavior. Kristensen and Sakstrup, in one of the few reviews of Russian Arctic policy in the post–2014 era, also largely agree with this viewpoint: that encouraging international stability in the Arctic has and continues to support Russian interests for the region.³

Proponents of the economic calculation view have highlighted two main Russian economic interests in the Arctic: expanded energy resource extraction (supported by a favorable outcome of its UNCLOS submission), and growth of the Northern Sea Route (NSR) as a transit corridor. Russia's continued exploration of Arctic energy sources will require the partnerships of Western entities. Many authors have noted Russia's heavy use of energy exports as a revenue source, a practice carried forward from the Soviet Union.⁴ In 2011, Russia exported half of all the energy sources it produced.⁵ In 2015, after a crash in energy prices, 43% of Russia's state revenues come from oil and gas sales.⁶ The U.S. Geological Survey estimates another 90 billion barrels of oil and 1,670 trillion cubic feet of natural gas is technically recoverable in the Arctic.⁷ However, the technical difficulties of extracting these resources are beyond the capabilities of Russia's native energy

² Ibid., 23.

³ Kristian Søby Kristensen and Casper Sakstrup. *Russian Policy in the Arctic After the Ukraine Crisis* (Copenhagen: Center for Military Studies, University of Copenhagen, September 2016), http://cms. polsci. ku. dk/english/publications/russian-policy-inthe-arctic/Russian_Policy_in_the_Arctic_after_the_Ukraine_Crisis.pdf.

⁴ For examples, see: Susanne Oxenstierna and Veli-Pekka Tynkkynen, *Russian Energy and Security up to 2030* (London: Routledge, 2014), Lane, Taylore Rene, "Energy" *Putin's Russia: Past Imperfect, Future Uncertain* ((Lanham, MD: Rowman and Littlefield, 2013) or Marlene Laruelle, Russia's Arctic Strategies and the Future of the Far North (Armonk, NY: ME Sharpe, 2013).

⁵ Susanne Oxenstierna and Veli-Pekka Tynkkynen, *Russian Energy and Security up to 2030* (London; Routledge, 2014), 4.

⁶ U.S. Energy Information Administration, *Country Analysis Brief: Russia* (Washington, DC: Government Printing Office, October 25, 2016), https://www.eia.gov/beta/international/analysis.cfm?iso=RUS.

⁷ United States Geological Survey, 90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic (Washington, DC: Government Printing Office, July 27, 2008), https://archive.usgs.gov/archive/sites/www.usgs.gov/newsroom/article.asp-ID=1980.html.

companies.⁸ Partnerships with foreign firms will be required to make good on this potential and those partnerships have been curtailed in the wake of Western nations' sanctions on Russia since the 2014 invasion and annexation of Crimea.⁹ If Russia acts to make the Arctic itself another region of conflict, the difficulty in courting foreign firms will only be increased and Russia's ability to extract resources from the Arctic will be diminished.

In addition to helping secure foreign assistance to extract resources that lay beneath uncontested Russian territory, Russia may also hope that a benign Arctic environment will help it secure rights to resources beyond its own Exclusive Economic Zone (EEZ). This goal is related to the energy sector as potentially billions more dollars of oil lays outside of the currently recognize EEZ limits in disputed seabed territories. Russia has submitted a claim through the Commission on the Limits of the Continental Shelf (CLCS) process to secure rights to resources found on the seabed in the Arctic Ocean.

One potential reason for Russia's cooperative behavior in the Arctic may be a desire to not delegitimize the process and institutions surrounding its CLCS claim. This is a view put forward by Pezard et al. in their analysis of areas of potential areas of cooperation between the United States and Russia. ¹⁰ The basic idea is that while Russia awaits the determination of its claim to portions of the Arctic sea floor, it wants to support the claims process. Jorgen Staun of the Royal Danish Defense College also supports this view, that Russia has been very supportive of the UNCLOS process, pointing out that Russia coordinated its claim submission with Denmark and Canada on overlapping areas and has reiterated its commitment to UNCLOS as the overarching authority in the face of European Union (EU) efforts for a new treaty to govern the Arctic. ¹¹ If it undermined the process, Russia would reduce the chances of receiving a favorable ruling or at least the chances that the ruling would be adhered to by other states.

⁸ Jørgen Staun, *Russia's Strategy in the Arctic* (Copenhagen: Royal Danish Defence College, 2015), 22, https://pure.fak.dk/ws/files/7120599/Russias_Strategy_in_the_Arctic.pdf.

⁹ Stephen J Blank, *Russia in the Arctic* (Carlisle, PA: Strategic Studies Institute, July 2011), https://icefloe.net/files/RussiaInTheArctic-SBlank-pub1073.pdf, 83–84

¹⁰ Pezard, et al., Maintaining Arctic Cooperation with Russia.

¹¹ Staun, Russia's Strategy in the Arctic, 22

Beyond the potential for resource extraction, Russia's other economic goal is to leverage the opening of the NSR due to the reduced ice coverage and turn the route into a transportation link and rival to the Suez Canal. While this has been a goal of Russian strategy for almost a decade, due to various technical constraints, the NSR will likely never fully replace the Suez route, but would instead serve as a "seasonal alternative" for certain routes and shipments. Russia had hopes though, beyond serving as a transit route from Europe to Asia, a robust maritime shipping sector in the Arctic would synergistically buttress the Arctic energy sector. Katarzyna Zysk points to Russia's need for a sea route to transport goods to and from the industrial hubs that it hopes to develop in the Arctic, which would be otherwise isolated from overland routes. Consequently, the NSR is tightly tied into the further development of Russia's Arctic energy industry. Whatever its ultimate use, development of the NSR for Russia's benefit will require a "supportive, stable and predictable governance system." Russia cannot meet these three economic goals without maintaining its Arctic territories as relatively peaceful zones.

2. Appropriate Great Power Action

A second possible explanation of what drives cooperative Russian Arctic behavior is the "appropriate great power action" theory. This theory emphasizes a particular way Russian leadership views the Arctic and Russia's role in it and not economic considerations. Marlène Laruelle, associate director of the Institute for European, Russian, and Eurasian Studies at George Washington University, describes how around 2008, a distinctly new tone could be detected in Russia's Arctic rhetoric, one that emphasized cooperation, the international system, and rule of law. Laruelle believes this is part of a larger effort for Russia to build its international image and be seen as leading, responsible

¹² Heather A Conley. *Arctic Economics in the 21st Century: The Benefits and Costs of Cold* (Lanham, MD: Rowman & Littlefield, 2013), 32–33.

¹³ Katarzyna, Zysk. "Russia's Arctic Strategy: Ambitions and Constraints." *Joint Force Quarterly*, no. 57 (2010): 107–108.

¹⁴Albert Buixadé Farré, Scott R Stephenson, Linling Chen, Michael Czub, Ying Dai, Denis Demchev, Yaroslav Efimov, et al. "Commercial Arctic Shipping through the Northeast Passage: Routes, Resources, Governance, Technology, and Infrastructure," *Polar Geography* 37, no. 4 (2014), 298–324.

figure in the world order. In her view, the Arctic is simply a particularly good forum to present this image for Russia. 15

Other authors point to Russia's growing willingness to take on leadership positions in Arctic intergovernmental organizations such as the Arctic Council or the Barents Euro-Arctic Region as further evidence of Russia's desire to be seen as a leader among the new great powers. Many of the other nations in these organizations have tried to emphasize a cooperative framework for the Arctic, where disputes can be resolved through those bodies. Rowe and Blakkisrud also accept the importance of a unique mindset for the Russian Arctic. They point to the trends in descriptions of the Arctic in Russian media, which demonstrate a strong shift toward cooperatives tones. Together, Russian popular perceptions and the international system may serve to constrain belligerent behavior, as Russia attempts to portray itself as a reputable and leading member of the world order.

3. Military Positioning

The two remaining views on Russian Arctic activity argue that Russia is confrontational in the Arctic. These authors believe there are two possible motivating factors that that may drive competition: military positioning and resource scramble. According to proponents of the "military positioning" theory, the newly open Arctic Ocean leaves Russia vulnerable to military efforts from the West in an area that was previously secure due to the difficult operating environment. Since it is becoming more and more open, the Arctic is becoming a place to confront the West and reestablish Russia's great power status in the world. Many authors have recognized Russia's, and in particular President Vladimir Putin's, desire to become or to be acknowledged as a great power in a

¹⁵ Marlene Laruelle, *Russia's Arctic Strategies and the Future of the Far North* (Armonk, NY: ME Sharpe, 2013), 12–14.

¹⁶ Elana Wilson Rowe and Helge Blakkisrud. "A New Kind of Arctic Power? Russia's Policy Discourses and Diplomatic Practices in the Circumpolar North," *Geopolitics* 19, no. 1 (2014), 69.

¹⁷ Ibid., 73

multi-polar world.¹⁸ But, in contrast to the view that great powers are responsible leaders among nations, here a great power is defined as having a strong military and especially a large and capable nuclear arsenal. According to these viewpoints, the Arctic is just one more arena in which to assert this great power status, and Russia has been doing so by building up its conventional forces in the region and relying on its strategic missile submarines, all in preparation to fight in the Arctic.

Proponents of this military positioning view tend to point to two pieces of evidence: aggressive statements made by Russian leaders and the movement and stationing of military units in and around the Arctic. For example, Roger Howard points to a 2009 Kremlin security strategy that states that military force cannot be ruled out as a tool to secure Arctic resources. ¹⁹ While Howard admits that resource extraction certainly does not detract from Russian interest, he places primary motivational importance on fears that Russia's borders are newly vulnerable to attack from the West. He states, "In the eyes of Russian strategists, the retreat of the Arctic ice potentially offers a would-be aggressor a new gateway through which to attack Russia." ²⁰

Beyond policy and statements, proponents of this third view point to the actions Russia has actually taken in the Arctic: a build-up of military forces as well as aggressive military maneuvers. Robbie Grammar explains, "In recent years, Russia unveiled a new Arctic command, four new Arctic brigade combat teams, 14 new operational airfields, 16 deep-water ports, and 40 icebreakers with an additional 11 in development." More recently, Russia's flights of bomber aircraft to Alaska four nights in a row represent a new

¹⁸ See, for example, Jeffrey Mankoff, Russian foreign policy: the return of great power politics. Vol. 295, no. 10 (Lanham, MD: Rowman & Littlefield, 2009), Janusz Bugajski and Margarita Assenova, Eurasian Disunion: Russia's Vulnerable Flanks (Washington, DC: Jamestown Foundation, 2016), Pavel K. Baev, Russian Energy Policy and Military Power: Putin's Quest for Greatness (London, Routledge, 2012), or Bobo Lo, Russia and the New World Disorder (Washington, DC: Brookings Institution Press, 2015).

¹⁹ Roger Howard, "Russia's New Front Line," Survival 52, no. 2 (March 2010), 141.

²⁰ Ibid., 145

²¹ Robbie Grammer. "Here's What Russia's Military Build-Up in the Arctic Looks Like," Foreign Policy. January 25, 2017, http://foreignpolicy.com/2017/01/25/heres-what-russias-military-build-up-in-the-arctic-looks-like-trump-oil-military-high-north-infographic-map/.

activity not seen since 2015.²² Pavel Baev, an expert on Russian military reform at the Peace Research Institute in Oslo, accepts that Russia is increasing its military footprint in the region, but believes Russia is acting "delusionally" with its efforts to secure the Arctic through military means.²³ Whether the policy conclusions Russia draws are well founded or not does not change the underlying motivation.

4. Resource Scramble

Finally, the fourth school of thought asserts that Russia's confrontational behavior stems from the same desire for resource acquisition as discussed earlier. However, in contrast to proponents of "economic calculation," the proponents of the "resource scramble" theory believe that, rather than cooperation offering the most benefits to the Russian state, Russia instead sees a need to claim and defend resources. Some authors tie this need back to the same line of reasoning that drove European behavior in the Americas, Africa and elsewhere in the nineteenth century and earlier: a need to claim far-flung territory and extract the resources available there to the benefit of the mother country.²⁴ This view seems most pervasive in Western journalistic sources. A cursory Internet search of terms such as "Russia," "Arctic," and "resources" returns dozens of news articles with titles along the lines of, "Russia Is Making a Land and Resource Grab in the Arctic." 25 So while this perspective has plenty of play in the press, less can be found to support the argument in the academic literature. Many of the pieces written furthering this argument, instead of carefully examining Russian activity, instead use this view of Russian behavior as a cursory jumping off point to advocate for U.S. or NATO response to this supposed "aggression."

²² Paul Mcleary. "Russian Planes Buzz Alaska Four Nights in a Row," *Foreign Policy*, April 21, 2017, http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/.

²³ Pavel K Baev. "Russia's Arctic Ambitions and Anxieties," *Current History* 112, no. 756 (2013), 266.

²⁴ Klaus Dodds and Mark Nuttall, *The Scramble for the Poles: The Geopolitics of the Arctic and Antarctic* (Cambridge, MA: John Wiley & Sons, 2015).

²⁵ Eric Hannis, "Russia Is Making a Land and Resource Grab in the Arctic," U.S. *New and World Report*, March 14, 2017. For further examples see also, "The Next Great Game May be Played for the North Pole" Reuters War College Podcast, December 6, 2016, or Daniel Kochis, "Where's the Site of Russia's Next Land Grab? Hint: It's in the Arctic" The Heritage Foundation Blog, November 7, 2014.

Overall, the literature presents a mixed field of opinions with no consensus view covering recent Arctic policy in Russia. This confusion is complicated by the fact that Russian Arctic policy is often viewed through the larger lens of Western/Russian relations which have oscillated dramatically in the past decade, moving from periods of "reset" to new lows following the Crimean invasion. This area of study will benefit from additional scholarship. Any effort to narrow the range of possible explanations will further a better understanding of Russia's position, trends and prospects for future actions along with potential Western responses to them.

D. HYPOTHESIS AND METHODOLOGY

This thesis argues that Russian behavior in the Arctic is best described by the economic calculation school of thought. Russian activity since 2007 has largely focused on enhancing its ability to extract energy resources, secure its EEZ claims and build up the Northern Sea Route. It has acted cooperatively in the international arena, working with its neighbors on issues that affect is economic potential. It has supported the efforts of multinational bodies such as the UN's CLCS and the Arctic Council. While it has enhanced its military presence in the region, the types of forces and bases it is putting into the region are not positioned to aggressively conquer or claim new territory, but are rather focused on defense of its submarine operating areas and maritime domain awareness. These actions all fit in the narrative of Russia trying to benefit economically from the Arctic and working to create a stable region for its energy and transport sectors to thrive in.

Furthermore, this thesis argues that Russia has maintained this same general pattern of behavior following the events of 2014. Despite two significant exogenous shocks to Russia's Arctic plans, a plunge in energy prices and roadblocks to Western assistance in energy extraction, Russia has continued along the same lines of effort, to build up an energy and transport sector. The state has not yet responded to the decrease in potential economic gain by either increasing the offensive nature of their military build-up, to turn the region into an Arctic fortress and defend their EEZ claims, or by abandoning their participation in and support for international institutions governing the region. This thesis will argue that the continuity in Russian behavior, despite the reduced incentives, is due in large part to

the politics of Russia's Arctic leadership. Russia's Arctic policies are a reflection of the worldview and preferences of the group of Russian politicians and business leaders known as "siloviki." As the siloviki go, so goes Russia's Arctic policy.

The siloviki as a group have President Putin's ear. The energy and resource policies they advocate are ones Putin personally tends to agree with. They believe in the vision of Russia as an energy superpower. Many of the top influential siloviki stand to benefit personally from their stakes in Russia's energy and infrastructure sectors if the expansion of the energy sector goes forward. These individuals have also largely remained in their positions of power and influence through the 2014 period. The year 2014 may have seen a drop in oil prices, but it did not see a corresponding change in Russia's Arctic leadership. The continuity of political leadership is reflected in a continuity in policy.

This thesis proceeds as follows. Chapter II outlines Russia's Arctic incentives in the pre-2014 period. It catalogues how the changing Arctic environment led Russia to believe it had something to gain from a renewed interest in the Arctic. Chapter III then looks had how Russia responded to those incentives. It examines Russia's official policy documents and strategies, actions taken in international bodies, statements made by Russian leadership, as well as the activities actually taken in the Arctic. It shows that, of the four schools of thought outlined previously, economic calculation best describes Russia's actions. Chapter III outlines how the twin circumstances of the 2014 Crimea invasion and energy price drop affected the prospects for Russia's Arctic plan. Chapter V then looks at Russian responses to those shifts. It shows there has been a consistency in Russia's Arctic strategy through to the present, despite the events of 2014. Economic calculation still best models Russia's behavior. Chapter VI argues that the continuity noted in Russian Arctic policy is better explained by a bureaucratic politics model than a rational actor one. It lays out how the structure of Russia's political system, the key players and their interests have not changed over the 2014 period, unlike the circumstances outside of Russia. This structure makes it clear why Russia has followed a consistent strategy regardless of external stimuli.

II. RUSSIAN ARCTIC INCENTIVES PRE-2014

A. WHAT CONSTITUTES ECONOMIC CALCULATION?

The economic calculation school of thought centers on the premise that Russia is a rational actor and is taking steps in the Arctic to maximize its economic output from the region. As part of that strategy, Russia is attempting to cultivate a benign diplomatic environment in the Arctic, to help further its economic goals. While not necessarily being pursued at the expense of national security, the economic mindset is given primacy. Thus, what Graham Allison would call the goal or objective of the Russian state is economic output.²⁶ Specifically, Russia is primarily pursuing two distinct, but interconnected, objectives for its economic benefit in the region. In pursuing these goals, Russia has happened to choose an approach that has been mostly cooperative in nature. These two objectives are the expansion of its energy extraction sector in the region and the buildup of the Northern Sea Route as a maritime transportation alternative to other routes between Europe and Asia. Both of these objectives benefit Russia economically. They are interconnected and both are predicated on the changing Arctic environment making it physically easier to achieve those goals. The rest of this chapter will explain what the components of these two objectives are for the pre-2014 period in order to show why Russia may have believed following the economic calculation strategy was rational during that time.

B. WHY THE ARCTIC?

To begin, it is worth considering why Russia is interested in the Arctic at all, what it thinks it might reasonably stand to gain in the region, and why the level of interest has changed in the last two decades. In large part, the answer to those questions is climate change. Climate change is a worldwide phenomenon, but different regions experience its effects in unique ways. In the Arctic, the extent of sea ice coverage is decreasing due to

²⁶ Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd ed. (New York: Pearson, 1999)

warmer air temperatures. As the ice sheets recede, the water, which is darker than the snow and ice, absorbs more of the sun's energy and accelerates the melting process in a positive feedback loop.²⁷ These processes have led to less of the Arctic being covered by ice at any given time and also a lengthening of the low ice periods, which occur each summer.²⁸ Many authors have written about the potential negative consequences of the effects of climate change around the world, but the Russian Arctic stands out as one of the few regions where the state may actually stand to benefit from the changes to the environment.

It is this changing Arctic environment, opening new possibilities, that has piqued Russian interest in the Arctic in the last two decades. Russia and its economy will be strongly affected by the changes in the Arctic as the nation with the largest amount of territory above the Arctic Circle and the longest coastline of the five Arctic maritime nations. Three million Russian citizens live above the Arctic Circle, mostly concentrated in several large, economically important cities, including Murmansk, Arkhangelsk, and Norilsk.²⁹ Twenty percent of Russia's GDP and 22% of its exports come from the Arctic.³⁰ Russia's policies in the region will depend on its perceptions of the potential effects the new environmental conditions will have on its Arctic holdings.

1. Energy Prospects in the Arctic

Russia's economic interests in the Arctic fall into two main sectors: the energy sector and the transportation sector. Each of these has been made newly attractive by the effects of climate change. The Russian belief that there is unlocked energy potential for them in the Arctic is well founded. A 2008 U.S. Geological Survey (USGS) estimates that

²⁷Donald K. Perovich, Jacqueline A. Richter- Menge, Kathleen F. Jones, and Bonnie Light. "Sunlight, Water, and Ice: Extreme Arctic Sea Ice Melt During the Summer of 2007." *Geophysical Research Letters* 35, no. 11 (2008).

²⁸ Josefino C. Comiso, Claire L. Parkinson, Robert Gersten, and Larry Stock. "Accelerated Decline in the Arctic Sea Ice Cover." *Geophysical Research Letters* 35, no. 1 (2008).

²⁹ Laruelle, *Russia's Arctic Strategies and the Future of the Far North* (Armonk, NY: ME Sharpe, 2013), 47.

³⁰ Heather A. Conley and Caroline Rohloff. *The New Ice Curtain: Russia's Strategic Reach to the Arctic* (Lanham, MD: Rowman & Littlefield, 2015), vii.

the Arctic may contain 90 billion barrels of oil (equivalent to 12.6 billion tons or for perspective, 23 times Russia's 2015 extracted amount), 1,669 trillion cubic feet of natural gas and an additional 44 billion barrels of liquid natural gas (a combined total of 55,926.6 bcm or approximately 100 times Russia's 2015 production level).³¹ Additionally, the Arctic may also hold large quantities of gas hydrates, not included in the USGS report. Gas hydrates are a type of frozen gas that is currently difficult to extract without releasing significant amounts of greenhouse gases; however, technological progress could make extraction feasible in the next 15 years. Estimates are far ranging regarding the amount of gas hydrates present, but there could be between 6 and 600 times the amount of conventional natural gas present.³² While only a possibility at this time, such a large amount would have significant ramifications for Arctic energy development. Of these untapped sources, significant percentages are expected to lay within Russia's land territory or maritime exclusive economic zones, specifically in four areas: the South Kara Sea, South Barents Basin, North Barents Basin, and the Alaska platform. 33 Figure 1 depicts how the hydrocarbon deposits are richest in the Northern Russian coast and become less dense the further North into the Arctic Ocean and further East one goes.

³¹ United States Geological Survey, *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle* (Washington, DC: United States Geological Survey, 2008), https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf.

³² Peter Johnston, "Arctic Energy Resources: Security and Environmental Implications." *Journal of Strategic Security* 5, no. 3 (2012): 13–32. http://dx.doi.org/10.5038/1944-0472.5.3.2.

³³ Indra Øverland. "Russia's Arctic Energy Policy." *International Journal* 65, no. 4 (2010): 865–78. http://www.jstor.org/stable/25762045, 869.

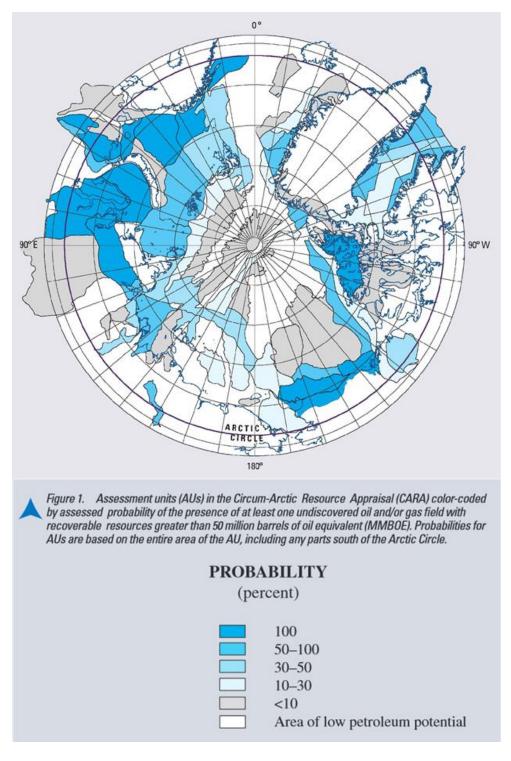


Figure 1. USCG Assessment of Hydrocarbon Probability in the Arctic³⁴

 $^{^{34}}$ Source: United States Geological Survey. $\it Circum-Arctic \, Resource \, Appraisal.$

2. Mineral Resource Prospects

In addition to the significant prospects for energy resource extraction in the Arctic, Russia also sits on top of other sources of mineral wealth, which could contribute to the economic potential of the Arctic. Specifically, the Russian Arctic contains significant quantities of non-ferrous metals (such as zinc, copper, tin and nickel), industrially important minerals (apatites, which are used in fertilizer, ceramics, and titanium), as well as precious minerals (platinum, gold, and diamonds). Estimates place 96% of the world's reserve of platinum, 90% of the nickel and cobalt, and 60% of the copper in the Arctic, mostly split between Canadian and Russian territories. Russia is the largest producer of diamonds in the world, for use in both industrial and decorative settings. The exact value of Russia's mineral wealth is difficult to calculate and depends on market prices for the different items, but, for perspective, a single diamond deposit discovered in 2012 is estimated to contain \$3.5 billion worth of reserves.³⁵ Beyond the value of simply selling the minerals, many of them serve as inputs into Russia's manufacturing and chemical industries, magnifying their value for Russia.

Finally, Russia also has stocks of rare earth metals in its northern territories, which are a strategic resource around the world. Outside of the Russian stocks, these resources are largely under Chinese control. Russia could challenge China's monopoly and reap both economic and global political benefits from doing so. While probably secondary to the potential for hundreds of billions of dollars' worth of hydrocarbon, the value of other mineral resources also will factor into Russia's decision-making. Roads, ports and administrative facilities in the Arctic that would primarily be intended for use in the energy sector would also facilitate any expansions in the mining industries. The mineral/metals aspect can be seen as a supporting factor, not enough to push Russia on its own, but a consideration alongside the energy sector.

³⁵ Laruelle, Russia's Arctic Strategies and the Future of the Far North, 151–154.

³⁶ Ibid.

C. ECONOMIC CALCULATION OBJECTIVES—RESOURCE EXTRACTION

Given the potential mineral wealth to the North, the first component of Russia's economic interest in the Arctic is the resource extraction sector. The first aspect of Russia's economic calculation strategy is to increase its extraction of natural resources from the region, mainly hydrocarbon energy sources, but also, to a lesser extent, minerals and precious metals. Higher temperatures and lower ice levels will lead to increased and easier human activity in the region. On land, the severity of Arctic winters has historically limited the productivity of the region; a study in the early 1980s estimated that Soviet industries in the Arctic lost a third of normal working hours due to work stoppages because it was simply too cold to work.³⁷ Milder climates will allow more work hours each day in the far north, increasing the productivity of industry in the region. At sea, longer summer warm periods will also make building and operating oil rigs and pumping stations easier in the milder climate. Access to these off-shore stations, as well as more remote ports, will be available for longer periods during the year as the ice cover is reduced, allowing for an easier ability to move in supplies and move out cargo.³⁸ It should be noted, however, that climate change may also bring complications to Russia's energy sector. Much of the above ground infrastructure in the Russian Arctic, including pipelines and highways, is built on permafrost. If the permafrost thaws, the stability of this infrastructure may be at risk.³⁹ This fact makes the ability to transport energy resources via the NSR all the more important.

The large potential of energy and resources in the Arctic would be an incentive for most, if not all, nations. Russia, however, has particularly high concern about its energy sector that further incentivizes it to explore the Arctic for its energy potential. Russia relies on energy extraction for several reasons, the first and most straightforward being the large

³⁷ Colin Reisser. "Russia's Arctic Cities." in *Sustaining Russia's Arctic Cities: Resource Politics, Migration, and Climate Change*, ed. Robert Orttung (New York: Berghahn Books, 2016), 18.

³⁸ Øistein Harsem, Arne Eide, and Knut Heen. "Factors Influencing Future Oil and Gas Prospects in the Arctic." *Energy Policy* 39, no. 12 (2011): 8037–8045.

³⁹ Ibid.

amount of revenue it brings in for the state. For several decades, Russia has depended on the state revenues gained from extracting and selling energy, principally petroleum and natural gas resources. This goal has been explicitly acknowledged by President Putin and is prominent in Russia's official energy policies. ⁴⁰ In 2015, Russia was the third largest producer of oil in the world, producing 540.72 million tons valued at 153.8 billion USD, falling behind only Saudi Arabia and the United States. In natural gas production, Russia ranked second after the United States, producing 573.3 bcm, accounting for 60.4 billion USD. ⁴¹ Combined, this oil and gas money provided 43% of Russia's state revenues in 2015, even after the large drop in energy prices in 2014. For the decade prior to the price drop, Russia's economy has grown significantly, in large part due to its energy sector. ⁴²

The second driving factor behind Russia's need to expand the Arctic energy sector pre-2014 was its domestic energy consumption patterns; namely the heavy reliance on subsidized natural gas. In 2009, according to the International Energy Agency (IEA), Russia subsidized \$34 billion worth of fossil fuel usage domestically (69.5% of Russia's produced natural gas remains in Russia).⁴³ The reliance comes in part from the fact that Russia's domestic energy sector has been heavily shaped by the inheritance from its Soviet past. When the Soviet Union dissolved, the Ministry of the Gas Industry was transformed into the company "Gazprom." The tight state control over the industry was retained, as was the obligation to provide low cost supplies to Russian customers.⁴⁴ This has been a major financial drain on the company. Gazprom delivered 80% of its annual gas output by volume

⁴⁰ Vladimir V Putin, "Vladimir Putin's Academic Writings and Russian Natural Resource Policy Mineral Natural Resources in the Strategy for Development of the Russian Economy." *Problems of Post-Communism* 53, no. 1 (2006): 48–54.

⁴¹ Dai Yamawaki, "Energy Resources, Economy and Sustainability of Russia." (GSAIS Working Paper Series 16-E-001. October 2016).

⁴² Theresa Sabonis-Helf. "Russia and Energy Markets," in *New Realities: Energy Security in the* 2010s and Implications for the U.S. Military, ed John R. Deni (Carlisle, PA: Strategic Studies Institute and U.S. Army War College Press, 2015), 15–45. 23.

⁴³ Lawrence Livermore National Laboratory, "Russia Energy Flow in 2011," (Working paper, Lawrence Livermore National Laboratory, 2011), https://flowcharts.llnl.gov/commodities/energy.

⁴⁴ Finn Roar Aune, Rolf Golombek, Hilde Hallre, Arild Moe, and Knut Einar Rose "Liberalizing Russian Gas Markets—An Economic Analysis" (Working Paper No. 5387, CESifo.,2015), 5,

to domestic customers during the 1990s, but still made the bulk of its revenue from foreign sales. 45 This large domestic demand was created by the low regulated costs of gas and by the unusually high number of combined heat and power facilities across the Russian countryside. Combined heat and power facilities are a specific type of electrical generating station which have high "must run" base loads during the warm summer months and cannot efficiently limit their gas usage. 46 The Russian leadership is well aware of the inefficiencies and lost revenue from these inherited practices and has attempted to reform the domestic gas sector, but have faced political backlash whenever they have done so. Verlanda and Kutschera have summed up these attempts as a "two steps forward, one step back" cycle. 47 Breaking this cycle and the shackles of their Soviet inheritance will continue to be a challenge for Russian leadership and have been a driver for Russia to look for further energy resources in the Arctic.

This is more than a commercial issue for Gazprom, it is a problem for the Russian state and therefor the Putin regime. The Russian state is the majority shareholder in Gazprom and the company's chairman has always been a high-ranking member of Russia's presidential administration. These facts are what lead Sabonis-Helf to conclude that the link between the state and the gas industry is stronger in Russia than anywhere else in the world.⁴⁸ This connection has implications for Russia's use of natural gas domestically and abroad. In Russia, natural gas does not function exclusively as an economic commodity; instead has a dual use as both an economic commodity and a political one.

Finally, Russia would have liked to expand its Arctic energy industry in the pre-2014 period because it realized it was able to use its European energy exports as a political tool to gain leverage over its neighbors to the West. A larger energy sector in the Arctic would be simply more ammunition for this political weapon. The Putin regime's desire to

⁴⁵ Ibid.

⁴⁶ Oxenstierna and Tynkkynen. Russian Energy and Security up to 2030, 143.

⁴⁷ Indra Overland and Hilde Kutschera. "Pricing Pain: Social Discontent and Political Willpower in Russia's Gas Sector." *Europe-Asia Studies* 63, no. 2 (2011): 311–331

⁴⁸ Sabonis-Helf. "Russia and Energy Markets," 20.

use energy in Russia's foreign policy can be traced back to the last years of the Yeltsin era, when Putin was an up and coming politician. In 1999, Putin wrote an article outlining his views on the appropriate role of the energy sector in Russia, stating, "Energy policy should be designed to meet more than the commercial and civilian objectives alone and should be aimed at furthering the geopolitical interests and maintaining the national security of Russia."49 Along with more standard economic decision making about where to sell its energy resources, Russia also specifically targets nations (and on occasion individual foreign politicians) on relatively short time spans with rewards and punishments in the form of energy deliveries, discounts, and withholdings to obtain favorable political effects. Natural gas is particularly attractive to Russia as a political, in addition to economic tool, due to the local control is has over the market.⁵⁰ Russia benefits from the fact that gas markets are more regional than global and, as the largest supplier in Europe, can significantly affect the market. Contributing to the regional nature of the natural gas market is the infrastructure situation in Europe. Russia inherited and continued to build a pipeline network through the former Soviet Union and into the rest of Europe. Similar to the domestic pipeline network, this allows Russia to provide lower cost gas than would be otherwise possible. Figure 2 shows a diagram of (the main international pipelines in) Russia's network.

⁴⁹ Putin, "Vladimir Putin's Academic Writings and Russian Natural Resource Policy Mineral Natural Resources in the Strategy for Development of the Russian Economy."

⁵⁰ Sabonis-Helf. "Russia and Energy Markets." 16.



Figure 2. Russian Natural Gas Pipeline Network.⁵¹

The effectiveness of these policies in actually advancing Russia's foreign policy preferences has been mixed, but the practice clearly exists as a preference of Russian decision makers. In the period between 2000 and 2014, there are many examples of Russia's use of energy resources for tools of foreign policy. Russia uses various aspects of its gas industry to reward or punish in exchange for political favors. The rewards can include favorable pricing agreements for agreeable nations and lucrative board positions for friendly leaders. The punishments may range from increased prices or taxes to outright blocking of required energy deliveries. For example, in 2005, Russia used hosting the G8 summit to cement a deal between Gazprom and the Italian energy company ENI in exchange for Silvio Berlusconi's agreement to block Germany from becoming a permanent UN Security Council member.⁵² Also in 2005, Putin signed a deal with Germany's then

⁵¹Source: Wikimedia Commons contributors, "File: Major Russian Gas Pipelines to Europe.png," Wikimedia Commons, the free media repository, https://commons.wikimedia.org/w/index.php?title=File:Major_russian_gas_pipelines_to_europe.png&oldid=202202876 (accessed July 3, 2017).

⁵² Mikhail Zygar, *All the Kremlin's Men: Inside the Court of Vladimir Putin* (New York: Public Affairs, 2016), 118.

prime minister, Gerhard Schroeder, to build the Nord Stream pipeline, 10 days before the German elections. The pipeline had originally been envisioned to run to the United Kingdom, but Russia changed the endpoint of the pipeline after political fallout between the UK and Russia over the Iraq war.⁵³ This particular pipeline had the double benefit of rewarding a German ally while reducing the amount of gas that transited through the oftencontinuous Baltic states and depriving them of the associated transit revenue. When Schroeder failed to win reelection, he was given the chairmanship of the board of the Nord Stream project.

Probably the most notable incident of Russia's gas politics was the highly public 2006 Ukrainian shutoff. The crisis took place in the larger context of Russia's concerns over the western-leaning Ukrainian president, Viktor Yushchenko. Gazprom claimed the cutoff was due to Ukraine's failure to pay for previously delivered gas and for siphoning off gas that was only meant to pass through Ukraine. Gazprom began reducing the flow of gas to Ukraine on January 1, 2006. The cutoff was immediately noticed by Ukraine and downstream EU consumers. The dispute was quickly resolved, with pressure from the EU, and supplies were restored by January 4.54 Expanding its natural gas holdings in the Arctic would allow Russia the option of continuing these types of practices in the future.

These three reasons (revenue, domestic consumption, and energy as a political tool) drove Russia to continue to expand its energy sector and, to Russia, the Arctic looked to be a promising place to do so. All of these reasons also fit into the model provided by the economic calculation school of thought; none are primarily driven by a particular national identity nor perspective on Russia's appropriate place in the world. None of these reasons would inherently push Russia into aggressive or competitive behavior in the Arctic. All of these reasons revolve around costs, benefits, and tradeoffs for Russia's Arctic policy.

⁵³ Ibid., 123.

⁵⁴ Jonathan Stern, "The Russian-Ukrainian Gas Crisis of January 2006." *Oxford Institute for Energy Studies* 16 (2006): 5–12.

D. ECONOMIC CALCULATION OBJECTIVES—NORTHERN SEA ROUTE

The second aspect of Russia's economic calculation strategy is the expansion of the Northern Sea Route. When discussing potential sea routes through the Arctic, scholars focus on three main routes: the Northwest Passage (NWP), through Canada's northern islands, the Transpolar Route, directly across the North Pole and the Northeast Passage (NEP), partially along Russia's northern coast (depicted in Figure 3).



Figure 3. The Three Polar Maritime Routes⁵⁵

The Northeast passage is often conflated with the Northern Sea Route (NSR), even in academic literature. Technically, the NSR is a specific portion of the NEP, which is

⁵⁵ Source: Albert Buixadé Farré et al., "Commercial Arctic shipping through the Northeast Passage: Routes, Resources, Governance, Technology, and Infrastructure," *Polar Geography* 37: no. 4 (2014), 298–324, DOI: 10.1080/1088937X.2014.965769.

codified in Russian law as extending only from the Novaya Zhelaniya straits to Cape Dezhnev by the Bering Strait.⁵⁶ The NEP, in contrast, is a more general term referring to the longer route starting off the Norwegian coast and terminating in the Sea of Japan. For the remainder of this paper, the NSR terminology is used to conform to the majority of academic literature, despite the technical inaccuracy.

While maritime traffic is expected to increase along all three routes, the NSR is anticipated to be the most heavily trafficked and the soonest to experience a large growth in traffic. A ship travelling from Rotterdam to Yokohama along the NSR saves a distance of 3,900 miles (37%) as opposed to traveling via the Suez Canal. From a climatological perspective, the NSR will be free of ice earlier and longer than the other two routes. From an economic perspective, the NSR has more infrastructure already built up along the route and passes through the energy dense areas of Russia's Arctic, allowing ships to both load and unload goods along the way, making the trip more profitable than a direct path from a single supply point to a single destination.⁵⁷

Russia stands to gain from the NSR in several ways, starting with the relatively straightforward matter of fees and taxes to be collected from transiting ships. Russia has asserted that the NSR portions of the NEP constitute an internal waterway and that transiting ships must give the Russian state notice of their intended travel and must pay fees to defray the costs of ice breaker assistance along the route.⁵⁸ However, compared to the hundreds of billions of dollars expected from the mineral and hydrocarbon industries, the fees from the modest number of transiting ships in the past several years, will have a

⁵⁶ Farré et al., "Commercial Arctic shipping through the Northeast Passage."

⁵⁷ Willy Østreng, Karl Magnus Eier, Brit Fløistad, Arnfinn Jørgensen-Dahl, Lars Lothe, Morten Mejlænder-Larsen, and Tor Wergeland. "Shipping in Arctic waters: A Comparison of the Northeast, Northwest and Trans Polar Passages." *Springer Science & Business Media* (2013), XXV.

⁵⁸ Katarzyna Zysk, "The Evolving Arctic Security Environment: An Assessment," in *Russia in the Arctic*, ed Stephen J. Blank (Carlisle, PA: Strategic Studies Institute of the U.S. Army War College, 2011).

miniscule effect of the state revenue; there were only 19 ships that transited the NSR in 2016.⁵⁹

The real gains to Russia will be the synergies with the energy sector from a built up transport industry and the global clout that comes with "owning" a major international transport route, similar to Panama's or Egypt's prestige from their canals. A stronger transport sector will also have a synergistic relationship with the energy sector; the route infrastructure (ports, cranes, offices, icebreakers, and navigation aids etc.) that would be required for the transport route will also serve the energy industry. Building up the energy infrastructure will require significant amounts of material and labor being moved into the Arctic. Doing so on the back of an already functioning maritime transport route will simplify matters. There is also the benefit that a robust transit route will offer additional options to take the oil and natural gas to different markets. Russia sends much of its natural gas to Europe via pipelines but expanding into a growing Asian market would be simplified if it could transport those resources through the Bering Strait and avoid building a new set of pipelines to the East. All of these combined benefits strongly incentivize Russia to push for the development of the NSR as a heavily trafficked global maritime route.

E. CONCLUSION

The economic calculation theory holds that Russia is primarily concerned with the economic buildup of the Arctic. Russia's unique incentives to expand its energy sector (revenue, domestic use, and political leverage) combined with the high prospects for large hydrocarbon deposits had incentivized them to pursue the goal of energy sector expansion in the pre-2014 period. Along with that goal, there are also good reasons for Russia to pursue other objective under the same economic calculation mindset. The NSR could represent a dramatic change to global maritime traffic patterns. Beyond the modest fees Russia might charge for its use, the NSR would confer geopolitical prestige if Russia were

⁵⁹ Transit Statistics, Northern Sea Route Information Office, http://www.arctic-lio.com/docs/nsr/transits/Transits_2016.pdf.

⁶⁰ Zysk, "The Evolving Arctic Security Environment."

⁶¹ Ibid.

able to effectively control the route and the infrastructure associated with it would also be useful in the energy industry. In the following chapter this thesis will show that, in the pre-2014 period, Russia prioritized these goals in its Arctic strategy.

III. RUSSIAN ACTIONS IN THE PRE-2014 PERIOD

Given the driving factors and motivations that incentivized Russia in the pre-2014 period, following the economic calculation strategy would have been reasonable. Next one must turn to their actual actions to see if Russia did indeed follow such a strategy. Evidence for Russia following an economic calculation strategy can be broken down into several main categories: the content of Russian official strategic documents that address the Arctic, the prioritization of their economic investments into the Arctic, and their actions in the international regimes which facilitate the economic calculation strategy. Looking at the sum of Russia's actions in the Arctic prior to 2014, one can see that Russia did all of these things. Admittedly, Russia also has security interests in the Arctic and has taken steps to achieve those goals, but the state's military activities are largely focused on its global, nuclear deterrence capabilities and not military confrontation taking place in the Arctic, as other schools of thought argue. From the start of the Putin regime, Russia showed a renewed interest in the Arctic after over a decade of looking away from the North. After some initial difficulty in settling on a strategy to approach the Arctic, by approximately 2007, the regime had settled into the economic calculation strategy and from that point on took actions according to that strategy.

A. OFFICIAL STRATEGIES

Russia's various official strategic documents and plans are the first and most straightforward source of insight into how Russia views the Arctic and how it intends to pursue its goals in the region. Beyond the first order information available in the text of the documents, one can also make assumptions based on the documents' authors. Government bureaucracies will naturally tend to defend their own "turf" and tend to recommend strategies that align with their preferred competencies.⁶² A Russian Army white paper calling for more tanks is hardly surprising. If, however, the Russian Army authored a

⁶²Allison and Zelikow. *Essence of Decision*.

document describing a need for more investment in submarines, that would be stronger evidence of the need than the same document would if it had been published by the Navy.

After the new Putin regime came into power, it took some time to develop its plans for the Arctic. The first Arctic strategy that the Putin regime was responsible for came out very early after Putin took his position as president in 2000. The 2001 Arctic strategy repeated common security themes of competition and spheres of interests. ⁶³ However, that strategy was never implemented, so its main point of interest was as a signal that the Kremlin was once again thinking about the Arctic as an important region after a decade of ignoring it. ⁶⁴ The next Arctic document was the 2004 report from the Russian State Council Working Group on National Security entitled "Interests in the Far North." ⁶⁵ The fact that this assignment was given to the security sector indicates that a security perspective was thought to be appropriate at that time. Since it was not an official strategy, just a white paper, the document shows the way the Putin regime's thinking about the Arctic was still maturing and had not yet settled into a solid strategy.

That same assumptions about a security perspective led to the first true official strategy, "The Russian Arctic Strategy for the Period Up to 2020," being produced by the Russian Security Council. This document represents a mature version of the Putin's regime's thinking about the Arctic at that time. Interestingly, despite the security council's organizational biases towards having a military/security perspective, the 2008 strategy emphasized the Arctic foremost as a "strategic resource base" and not as a region for military competition or even as an area of developing strategic risk. 66 In this sense, "strategic" does not have a security connotation, but refers to the desire to build up the economic strength of the Russian state from resource extraction and to ensure the energy security of Russia. The strategy also pointed out the importance of developing the NSR as

⁶³ Laruelle, Russia's Arctic Strategies and the Future of the Far North, 4.

⁶⁴ Ibid.

⁶⁵ Ibid. 5.

⁶⁶ Ibid.

a key national interest.⁶⁷ These are goals that a central to the economic calculation and resource scramble strategies. Through the methods Russia chose to pursue these goals however, one can find a clear preference for economic calculation.

Border security and the ability of the military to operate in the region are mentioned, but those goals are given second priority to the resource and economic issues. Then in the following year the broader document, "The National Security Strategy of the Russian Federation up to 2020" was released. Again, one would expect a security bias from the document's authors, members of Russia's security bureaucracy. However, it reiterated the view that the Arctic's primary relevance for Russia is as its resource base. 68 This evolution of perspective in the official strategies from 2001 to 2009 was evidence of a change in thinking in the Kremlin, moving from a limited view of military security to a broader concept of security to include "energy security" and "economic security." 1s also important to note that the principle influences on these two documents came in large part from two individuals in Putin's close circle: Nikolai Patrushev, Secretary of the Security Council of Russia, and Defense Minister Sergei Shoigu.⁷⁰ These two individuals are members of Russia's siloviki faction, both are considered key advisors to President Putin, and both will continue to have an outsize influence on Russia's Arctic policy from this earlier period up until the present. They also both had security/military backgrounds, yet maintained the perspective that the Arctic is a place for Russian economic growth foremost.

It is based on these two 2008 and 2009 documents that Staun traces the start of a common theme in Russia's Arctic writing for the next several years: the need for Russia to be recognized as an "energy superpower." The Arctic strategy was updated in 2013. But

⁶⁷ Russian Federation. "Basics of the State Policy of the Russian Federation in the Arctic for the Period Until 2020 and for a Further Perspective. Adopted September 18, 2008; Promulgated March 30, 2009 by President Dmitry Mevedev." Russian, transl. Boris Shapovalov (Moscow: Rossiyskaya Gazeta) (2008).

⁶⁸ Laruelle, Russia's Arctic strategies and the future of the Far North, 5

⁶⁹ Ibid

⁷⁰ Staun, Russia's Strategy in the Arctic, 15

⁷¹ Ibid. 20

very little was changed from the earlier version. The updated strategy sets out a new schedule for the work in the Arctic based on what had been completed, but overall it retains the same prioritization; economic development is priority one, while border security ranks a distance fifth.⁷² The fact that this new strategy, five years after the 2008 version, is so similar to its predecessor shows that after several years of trying to settle on an agreed vision for the Arctic, the Putin regime had finally solidified its intent. This stable strategy was one that viewed the Arctic primarily as a region with natural resources that Russia could exploit for the energy security of the nation and for economic profit.

There were two other important documents that came out of this period that support the broader plans outlined for the Arctic. They are the "Energy Strategy of Russia For the Period Up To 2030," a document produced by the Ministry of Energy and published in 2010, and the Transport Ministry's "Transport Strategy of The Russian Federation Up to 2030," published in 2008. While these two documents technically cover energy and transport issues for the entire Russian Federation, they both have heavy focuses on the Arctic and the respective roles of these two ministries in facilitating the economic calculation strategy. They both largely follow the strategic outline and vision from the Arctic Strategy and the Security Strategy but take a closer look at the details and phasing of plans. These documents show how seriously Russia took the Arctic at this time. Not only did the state produce strategic documents that explain its grand ambitions, it also produced two very detailed, technical documents, which drill down into very specific details such as the number of ports, icebreakers and supply stations needed. They also discuss the need for search and rescue capabilities to facilitate large amounts of traffic on a major transit route. These documents also give year-by-year deadlines for these facilitating capabilities to be completed. Russia has in large part not been able to meet the timelines it assigned itself, but these documents show the seriousness the state assigned to these plans at the time. These documents also reflect that the strategy outlined by the defense sectors had been accepted and were supported by other sectors of Russia's government.

⁷² Strategy Development of the Arctic Zone of the Russian Federation and the National Security up to 2020. February 20, 2013.

B. INVESTMENT

In the pre-2014 period, Russia also backed up its rhetorical commitment to the importance of the Arctic as a resource stockpile and economic windfall with actual actions to effect the changes they hoped to accomplish. Namely, the state invested large amounts of money in the region and used state-owned energy companies to build up the infrastructure needed to make good on the desire to extract resources. The two most important energy companies to consider are Gazprom and Rosneft, the state-owned gas and oil firms, respectively. Besides the official state ownership of the firms, the central government maintains close control over them by keeping key Putin allies in senior positions within the companies. In the case of Gazprom, current or previous board members have included, Dmitri Medvedev, Alexi Miller, Viktor Zubkov and Dmitri Patrushev (the son of Nikola Patrushev, who was instrumental in developing Russia's 2008 Arctic Strategy).⁷³ Medvedev served as Russia's president for four years while Putin took the role of prime minister, Miller is a former Deputy Minister of Energy, and Zubkov was First Deputy Prime Minister of Russia while Putin was Prime Minister. In the case of Rosneft, Igor Sechin (often considered Putin's deputy and the second most powerful man in Russia⁷⁴) and former German chancellor, Gerhard Schroeder are its CEO and chairman of the board.⁷⁵ Given the official state ownership of these companies and the heavy representation of Putin allies in positions of control, the actions of these companies can be taken as proxies for the intentions of the Putin regime itself.

Up to 2014, the Russian state poured money into its Arctic energy companies. The efforts were for the most part focused on the Yamal Peninsula and Timan-Pechora basin

⁷³ Marshall Goldmann, *Petrostate: Putin, Power and the New Russia* (Oxford: Oxford University Press, 2008), 141–142.

[&]quot;Alexi Miller, Gazprom." EuropeanCEO.com. August 4, 2014.

Gazprom Board of Directors. http://www.gazprom.com/about/management/directors/zubkov/.

Gazprom Board of Directors. http://www.gazprom.com/about/management/directors/patrushev/.

⁷⁴Jack Farchy, "Igor Sechin: Russia's Second Most Powerful Man," April 28, 2014 https://www.ft.com/content/a8f24922-cef4-11e3-9165-00144feabdc0.

⁷⁵ Rosneft Board of Directors. https://www.rosneft.com/governance/board/.

and to a secondary extent, the Stokman Field and the Prizrazlomnoye field (see Figure 4 for maps). The Each of these areas was the recipient of heavy investment into energy projects. For example, in 2012, work on energy projects in the Yamal Peninsula was estimated to cost \$33 billion annually. The most promising fields in the Timan-Pechora basin, the Trebs and Titov fields, were estimated to have needed \$5-6 billion worth of investment to be brought up to the production levels Russia desired in 2010. The natural gas deposits at Stokman field were estimated to cost around \$12 billion to build up. As of 2013, Russia is believed to have invested over \$5 billion in the Prirazlomnoye field. These examples are just four of the largest projects, but the trend of huge investments continues over the breadth of Russia's Arctic energy industry. The large ExxonMobil/Rosneft project that was announced in 2012 was predicted to end up putting \$500 billion worth of investment into Russia's Arctic. For perspective, during this period between 2008 and 2014, Russia's annual federal budget wavered around \$250 billion USD. Compared to the whole federal budget, these large amounts dedicated to the expansion of the Arctic energy industry show the high priority this effort was given.

⁷⁶ Staun, Russia's Strategy in the Arctic, 21

⁷⁷ Note: Values are given in currency quoted in source material. When applicable I have converted them to at the time U.S. Dollars using the average annual exchange rate in parenthetical.

Alexeev, Michael, and Shlomo Weber, eds. The Oxford Handbook of the Russian Economy (Oxford: Oxford University Press, 2013), 380.

⁷⁸ Sputnik News. "Russian Trebs, Titov Deposits May Require \$5-6 Bln Investment-Bashneft." 03/12/2010 https://sputniknews.com/business/20101203161608319/

⁷⁹ Oil and Gas Net. "Shtokman Costs Cut to U.S. \$12 Bn." November 15, 2007 http://www.oil-and-gas.net/index.php?page_id=13091.

⁸⁰ Reuters New, "Exxon, Rosneft Unveil \$500 Billion Offshore Venture" April 18, 2012. https://www.reuters.com/article/us-exxon-rosneft/exxon-rosneft-unveil-500-billion-offshore-venture-idUSBRE83H0UE20120418.

⁸¹ Gudrun Persson, Russian Military Capability in a Ten-Year Perspective-2016 (Stockholm: FOI, 2016), 142.



Figure 4. Locations of Russia's Major Arctic Investments⁸²

Beyond the direct investments made into expansion of the oil industry, the Russian state also encouraged development through tax breaks for Arctic energy companies.

⁸² Adapted from "The World Factbook, Central Intelligence Agency, accessed February 28, 2018, https://www.cia.gov/library/publications/the-world-factbook/docs/refmaps.html. Author's additions in Red.

Examples of this practice include the 2013 tax breaks Putin ordered for the Yamal Liquid Natural Gas (LNG) project⁸³ and the 2012 series of new laws that reduced tax liability on energy companies and was designed to help bring in foreign companies and investment.⁸⁴ Part of the bargaining for the Exxon/Rosneft deal included additional tax breaks as well.⁸⁵ During the pre-2014 period, Russia showed a clear desire to encourage the buildup of the Arctic energy sector through both direct investment and through tax breaks that came at the expense of state revenue.

C. CLCS CLAIM

The next place to look for evidence of Russia following the economic calculation strategy is in its actions in the international arena. If the economic calculation strategy accurately describes Russia's Arctic strategy, we would expect the state to attempt to maneuver in the international arena to increase its holdings of hydrocarbon reserves, but to do so in a way that does not antagonize other nations, thereby threatening the benign international environment Russia desires to cultivate. Beginning shortly after Putin took office as president, Russia has consistently pursued recognition of its claimed continental shelf rights and has done so within the regime set by UNCLOS. In its submission to the CLCS, Russia claimed rights to Lomonosov Ridge and the Alpha-Mendeleev Ridge as extensions of the Siberian shelf.⁸⁶ If accepted in full, Russia's claim would add an additional 1.2 million square miles of seabed to its Arctic territory.⁸⁷ Figure 5 shows the boundaries of Russia's claim compared to those of other Arctic nations.

⁸³ The Moscow Times. "Putin Orders More Tax Breaks for Yamal" October 21, 2013. https://themoscowtimes.com/articles/putin-orders-more-tax-breaks-for-yamal-28784.

⁸⁴ Reuters News. "Putin Flags Tax Breaks for Russian Offshore Oil, Gas" April 12, 2012. https://www.reuters.com/article/us-russia-offshore/putin-flags-tax-breaks-for-russian-offshore-oil-gas-idUSBRE83B1JH20120412.

⁸⁵ Reuters News. "Exxon, Rosneft Unveil \$500 Billion Offshore Venture" April 18, 2013. https://www.reuters.com/article/us-exxon-rosneft/exxon-rosneft-unveil-500-billion-offshore-venture-idUSBRE83H0UE20120418.

⁸⁶ Laruelle, Russia's Arctic strategies and the future of the Far North, 99.

⁸⁷ Ibid

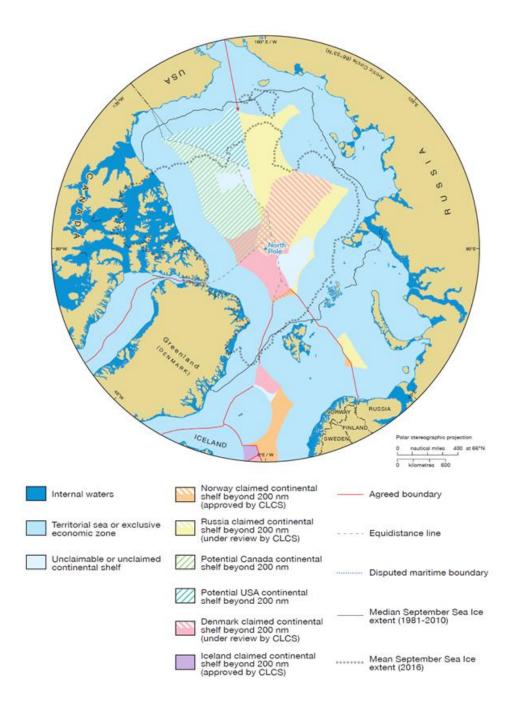


Figure 5. Status of Arctic Waters beyond 200 Nautical Miles from Shore⁸⁸

Source: "Arctic Maps," University of Durham, 4 August 2015, www.dur.ac.uk/ebru/resources/arctic/.

The extended continental shelf claim is related to Russia's ongoing efforts to expand its energy sector; while large amounts of energy resources are located in Russia's already recognized 200 nautical mile exclusive economic zone, more may lay further north. A 2015 Russian estimate by the Ministry of Natural Resources and Ecology put the potential hydrocarbon deposits in the area that Russia claims at 4.9 billion tons of oil equivalent (approximately 10 times the amount of oil that Russia extracted in 2015 or an additional 40% of what is believed to lie in the EEZ). 89 If Russia were successful in its bid, it would only gain the rights to the resources below the seabed. Notably, it would not gain rights to fishing in the area, nor would it gain any sovereign jurisdiction over maritime traffic passing above the sea floor. International recognition of Russian exclusive rights to those areas would only serve to add more potential hydrocarbon wealth to Russia.

Russia was the first state to make a claim to on an extended continental shelf in the Arctic in 2001. Being the first to do so not only expedited Russia's claim process, but also helped to enforce UNCLOS as the method by which such disputes would be arbitrated. Since then Russia has continued to uphold the CLCS process, acquiescing to the committee's request for additional scientific data in 2007 and again in 2012. Russia is successful in its bid, it will acquire the rights to enormous swaths of seabed at a very low cost. No expensive wars will have to be fought, no ships sank, no fortresses built to defend their new "territory." This rationale is consistent with the economic calculation strategy. Russia is only concerned with the end result of securing rights to additional hydrocarbon resources. It is not using the process to bully other nations or assert that it should have special privileges as a great power. In fact, Russia has negotiated its claims with those of other nations when it has been able to; in 2010 Russia signed agreements with Norway to split the so called "grey zone" in the Barents Sea which had been disputed. Fishing and hydrocarbon efforts in the area will be taken up jointly by Norway and Russia. This

⁸⁹ Katarzyna Zysk. "Maritime Security and International Order at Sea in the Arctic Ocean." *International Order at Sea*, ed Bekkevold J., Till G. (London: Palgrave Macmillan, 2016), 150.

 $^{^{90}}$ Laruelle, Russia's Arctic strategies and the future of the Far North, 98.

⁹¹ Ibid., 99.

agreement was made against the legal advice of Russia's ministry of foreign affairs who believed they were making excessive compromises.⁹² This incident shows that Russia is willing to accept small loses in the hope of smoothing along the path to a bigger win: the economic benefits of the Arctic.

Proponents of theories other than the economic calculation strategy often point to the actions and statements of Artur Chilingarov, a prominent Russian research and explorer, as evidence that, instead of looking to follow the CLCS process, Russia is trying to make a land grab in the Arctic.⁹³ These claims are misleading for several reasons. In 2007, as part of the effort to gain more data for the CLCS claim, Chilingarov led an expedition of two submarines to the seabed near the North Pole. Part of the expedition included placing a titanium Russian flag on the seabed. Later Chilingarov made provocative statements about Russia's Arctic ambitions such as, "The Arctic is ours, and we should demonstrate our presence,"94 and, in 2009, "we will not give the Arctic to anyone."95 Pezard et al. point out several reasons that, rather than seeing Chilingarov as a true herald of Russian policy and secret intentions to conquer the Arctic, it makes more sense to dismiss his statements. First, his expedition was not funded by the Kremlin; only after it was successful did the Kremlin retroactively endorse the success of the Russian explorer. Second, Chilingarov is also a member of Russia's state Duma who was in the middle of an election campaign, who knew that statements like those he made would play well to the Russian domestic electorate. Additionally, after Chilingarov's feat, Russia's foreign minister Sergei Lavrov reassured the international community by describing the event as akin to the American flag on the moon; a scientific and technological feat, not an

⁹² Ibid., 106.

⁹³ See for example: Alexander Golts, "The Arctic: A Clash of Interests or Clash of Ambitions," *Russia in the Arctic*, ed. Stephen J. Blank (Carlisle, PA: Strategic Studies Institute, 2011), 43–63.

⁹⁴ Max Delany, "Gas and Glory Fuel Race for the North Pole," *St. Petersburg Times*, July 31, 2007, www.sptimesrussia.com/index.php?action id=2&story id=22491.

^{95 &}quot;The USA and Russia Divide up the Arctic" Pogranichnik.ru, January 14, 2009, forum.pogranichnik.ru/index.php?showtopic=10737.

act of claiming land. ⁹⁶ Finally, Pavel Baev notes that in 2007, resurge Arctic interest was still new in the Kremlin. The Chilingarov expedition may have been an incident that, in part, piqued president Putin's interest in the region rather a publicity stunt that revealed the intentions he already held. ⁹⁷

D. NORTHERN SEA ROUTE

The second aspect of Russia's economic calculation strategy has been the buildup the Northern Sea Route as a major transportation route. The NSR fits into the economic calculation strategy by both being a source of (moderate) revenue for Russia but more importantly for its synergy with the energy sector. Much of the infrastructure needed for the NSR would serve as dual use with the energy sector, which needs to expand its ability to move oil and gas out of the Arctic to customers. Like the energy industry, in the pre-2014 period, Russia prioritized the NSR in its strategy documents, invested in this venture and passed laws to support its build-up. The direction and planning to build up the NSR comes from the same set of 2008 – 2009 strategic documents as the plan for the energy sector. The 2008 Transportation Strategy for Russia is the clearest, stating that it "emphasizes the need to develop the Northern Sea Route, the shipping along it, and the infrastructure on it shores."98 Again, like the energy sector, this goal has been backed up by actual investment; in 2011, the Russian government earmarked 21 billion rubles (around \$700 million USD) for NSR upgrades.⁹⁹ The upgrades needed are in the form of navigational aids, tracking stations, and communications capabilities. In 2009, Russia began work on a series of 10 search and rescue centers stretching from Murmansk to Providenya at the cost of 910 million rubles (\$29 million USD).

Besides the landside infrastructure upgrades, Russia also invested in its icebreaker fleet to keep the NSR clear. Icebreakers are needed along the NSR; although climate

⁹⁶ Pezard, et al., Maintaining Arctic Cooperation with Russia, 20–21.

⁹⁷ Pavel K. Baev, "Russia's Arctic Ambitions and Anxieties," Current History 112, no. 756 October 2013, 269.

⁹⁸ Conley, The New Ice Curtain: Russia's Strategic Reach to the Arctic, 83.

⁹⁹ Ibid.

change has significantly reduced the amount of ice coverage present, the passage is not completely clear all the time, icebreakers allow ships to transit through heavy ice and for longer periods of the year than would otherwise be possible. In 2009, the Russian federal budget allocated \$57 million USD for new nuclear icebreakers, and over the next two years, an additional \$150 million. This type of investment shows a clear priority for Russia to make the NSR viable.

Here a point should be made regarding how to think about Russia's icebreaker fleet. Are they military vessels that are part of Russia "militarizing the Arctic" or should they be considered part of the commercial infrastructure system? There are commentators who argue that icebreakers should be considered a military asset, 101 and those who lament a growing "icebreaker gap" between the U.S. and Russia as a strategic vulnerability. 102 However, the military functionality of icebreakers is very limited. Surface warships that could theoretically follow in the path of icebreakers would be extremely limited in their tactical maneuverability, only being able to operate in the pre-cleared path. This would make them sitting ducks for airborne, subsurface or even land-based attacks. Furthermore, cleared paths through the ice still have large floating chunks of ice that have been broken off from the solid sheets. These would be extremely dangerous to warships without specially hardened hulls. 103 Russia's icebreaker fleet's main military usage is clearing a path for warships to access the Atlantic Ocean in the event the sea around the bases on the Kola Peninsula freeze over. 104 The Russian icebreaker fleet is much better thought of as part of the commercial infrastructure build up or perhaps as facilitators to military units than as military assets themselves.

¹⁰⁰ Ibid.

¹⁰¹ David Barno and Nora Bensahel. "The Anti-Access Challenge You're Not Thinking About" May 5, 2015. https://warontherocks.com/2015/05/the-anti-access-challenge-youre-not-thinking-about/.

¹⁰² Adam Lemon and Brian Slattery "Russia Continues to Dominate Arctic as U.S. Struggles to Procure Icebreakers" August 8, 2016. http://dailysignal.com/2016/08/08/russia-continues-to-dominate-arctic-as-us-struggles- to-procure-icebreakers/.

¹⁰³ Andreas Kuersten. "Icebreakers and U.S. Power: Separating Fact from Fiction" October 11, 2016. https://warontherocks.com/2016/10/icebreakers-and-u-s-power-separating-fact-from-fiction/.

¹⁰⁴ Ibid.

Another part of making the NSR attractive to commercial shipping is creating a stable and predictable governance system for the route. ¹⁰⁵ Russia has addressed this issue with a set of two laws passed in 2012 and 2013: the Federal Law on the NSR (July 28, 2012), the Rules of Navigation on the Water Area of the NSR: the order of the Ministry of Transport of Russia (January 17, 2013). These laws attempted to centralize and streamline the administrative requirements to transit the NSR. ¹⁰⁶ Among other items, these laws removed requirements for ships to have an inspection in a Russian port prior to NSR transit and matched icebreakers fees to services actually required. These rules also aligned Russian domestic law with the requirements for UNCLOS Article 26 for fee structures. ¹⁰⁷ These changes make it easier and more attractive for commercial vessels to use the NSR.

Russia has also attempted to court commercial shipping by walking back previous, controversial legal claims it had made about rights in the NSR. In the early 2000s, Russia made broad interpretations of UNCLOS article 234, concerning definitions of what constituted "ice covered" waters. These earlier interpretations gave Russia significant rights to control transiting ships for supposed environmental purposes. ¹⁰⁸ It also used its interpretations of UNCLOS to claim jurisdiction over ships that had left its territorial water along the NSR and passed into the high seas. In 2012, Russia stopped making these claims. ¹⁰⁹ This indicates that Russia is more concerned with making the NSR commercially attractive than with concerns about expanding its sovereignty or control over the region. In conjunction with the infrastructure development, these laws are an attempt to make the NSR a controlled and managed institution that appeals to the commercial shipping industry.

¹⁰⁵ Buixadé Farré et al., "Commercial Arctic Shipping Through the Northeast Passage: Routes, Resources, Governance, Technology, and Infrastructure," 306.

¹⁰⁶ Ibid., 309

¹⁰⁷ Ibid.

¹⁰⁸ Ibid., .310

¹⁰⁹ Ibid.

E. AGAINST CONFRONTATIONAL THEORIES

Finally, it is worth addressing the "confrontational" schools of thought: military positioning and resource scramble. These schools of thought argue that Russia approaches the Arctic primarily from a perspective of confrontation. Military positioning argues that Russia primarily sees the Arctic as a region in which it can confront the West to assert its great power status; resource scramble argues that Russia may use military force in the Arctic to seize and defend resources. The previous evidence of Russia's actions adherence to UNCLOS procedures and its negotiations with Norway over the areas in the Barents Sea indicate it views those methods as superior to military ones to secure its resources in the Artic. As for the military positioning school, admittedly, there are more military units and bases in the Russian Arctic than there were ten years ago. However, the confrontational arguments are not simply a matter of number of units present, they are about the purpose of those units. Russia's Arctic military buildup has to be understood in a broader context of Russia's invasion paranoia and its reliance on its strategic nuclear weapons as a source of national prestige. While these military units happen to be located in the Arctic, they are better understood to be oriented toward deterrence, defensive operations and situational awareness rather towards preparing for war in the Arctic. The buildup, while it does exist, does not represent an attempt by Russia to aggressively confront other nations in the Arctic itself, but rather a reaction to deeply held convictions about vulnerability.

To understand Russia's security mindset in the Arctic it is crucial to appreciate the Russian view of the need for defense of the country and the regime. Russia has a long history and a strong memory of foreign invasion, from the Poles in the 17th century, Swedes in the 18th, French in the 19th, and Germans twice in the 20th. A Canadian Security Intelligence Service (CSIS) conference report explains the history and pervasiveness of the idea of foreign threats by stating, "the most durable ideological construct ingrained by Soviet leader Joseph Stalin and successfully awakened by President Vladimir Putin is the one of Russia as a besieged fortress, surrounded by enemies, and the state as its main

citadel."¹¹⁰ In the Arctic, this concept largely translates to the strategic defense provided by Russia's ballistic missile submarines and the protection of those assets.

There is also broad agreement among defense scholars that Russia very highly prioritizes its strategic nuclear forces. Kristensen and Norris, in their 2016 review of Russia's nuclear forces, observes that Russia views nuclear weapons, particularly strategic nuclear weapons, as "indispensable" in maintaining Russia's security and status as a great power. This perspective is echoed in the consensus viewpoint from the CSIS conference. The conference report describes nuclear weapons as a "crucial pillar of Russia's great power identity." This viewpoint is further reinforced by Russia's willingness to invest heavily in its nuclear arsenal; the nuclear forces are currently in the middle of a broad and expensive modernization effort. The high priority of their nuclear force has implications for how Russia views the Arctic, due to the large concentration of its nuclear forces stationed in the region.

Half of Russia's nuclear ballistic missile submarine (SSBN) fleet, consisting of mostly the newer Delta IV variants and the first of the new Boreis class boats, are stationed in the Arctic at the Northern Fleet command on the Kola Peninsula. Western intelligence analysts assert that the operating patterns for these submarines include patrols under the ice sheets in the Arctic. ¹¹⁴ For decades, the ice sheets offered the Russian submarines protection from NATO members' surface ships and aerial sonar systems. Anti-Submarine Warfare (ASW) ships could not transit the ice-covered ocean. Air-dropped sonar systems from land-based or ship-based anti-submarine aircraft could not penetrate the ice cover, rendering them essentially useless. Because of these limitations, NATO members were

¹¹⁰ Canadian Security Intelligence Service, "Russian Worldviews—Domestic Power Play and Foreign Behavior," (Ottawa, World Watch: Expert Notes Series Publication, 2017), 13, https://csis.gc.ca/pblctns/wrldwtch/2017/2017-06-15/20170615-en.php.

¹¹¹ Hans M. Kristensen and Robert S. Norris, "Russian Nuclear Forces, 2016,", *Bulletin of the Atomic Scientists* 72, no. 3 (2016): 125–134, https://doi.org/10.1080/00963402.2016.1170359.

¹¹² Canadian Security Intelligence Service, "Russian Worldviews—Domestic Power Play and Foreign Behavior," 51.

¹¹³ Kristensen and Norris, "Russian Nuclear Forces, 2016," 125.

¹¹⁴ Ibid., 129.

forced to rely on tracking Soviet and Russian SSBNs only through their own submarines. As the polar ice sheets recede, the protected bastions for Russian SSBNs will become more and more vulnerable to NATO tracking.

This emerging vulnerability has struck at the heart of Russia's strategic force and represents a significant concern to Russian defensive planning. To complicate matters, as the Arctic theater becomes more accessible to NATO nations, Russia is simultaneously shifting the balance of its strategic forces to the North. Russia has engaged in a large military modernization program over the last decade, more than doubling its defense spending between 2005 and 2015,¹¹⁵ and significant portions of that modernization effort has been earmarked for its nuclear forces. For example, the new Boreis class submarines are also being fitted with a new variant of missile, the SS-N-32 (Bulava) Submarine Launched Ballistic Missile (SLBM). The new missile will carry six warheads, more than the previous three or four in the predecessor SS-N-18 and SS-N-23. If Russia attempts to remain just under the upcoming 2018 START treaty limits for number of warheads, the percentage of the warheads, which reside in the Northern fleet will increase. Moving a higher portion of an important asset to a more vulnerable area will require Russia to address this weakness. Figure 6 shows the extent of Russia's submarine bastions and the area it desires to defend.

¹¹⁵ Gudrun Persson, Russian Military Capability in a Ten-Year Perspective-2016 (Stockholm: FOI, 2016), 133.

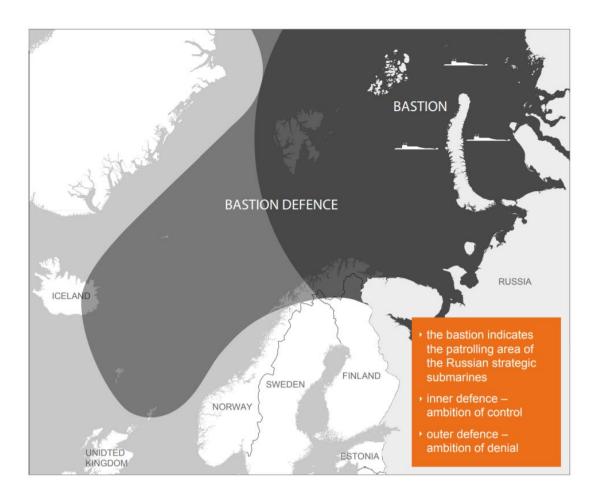


Figure 6. Graphic of Russian Submarine Bastions and Desired Defensive Perimeter¹¹⁶

Russia has responded to this changing geographical-environmental reality by enhancing the capabilities of its armed forces in the Arctic region. In 2014, Russia established its fifth joint strategic command (JSC), this one in the Arctic Region, named "Northern JSC." Russia's JSCs are the strategic-operational level headquarters that are tasked to command troops in the region in the event of hostilities. Northern JSC has specifically been given two tasks: "to ensure the nuclear strike capabilities of the Northern Fleet's strategic submarines, and to ensure situational awareness and air defence in

¹¹⁶ Source: Expert Commission on Norwegian Security and Defense Policy, *Unified Effort* (Oslo: Norwegian Ministry of Defense, 2015), 21.

Russia's Arctic." 117 The ground forces assigned to the Northern JCS consist of only three brigades: one of naval infantry units and two motor rifle brigades. Air defense is provided by four squadrons of mixed fighter/bomber aircraft. The Swedish defense report assessed that these numbers are insufficient for combat operations. The United States' assessment agrees with the Swedes', stating, "the Northern Fleet's two primary missions are to provide strategic deterrence with its ballistic missile submarines and to defend the maritime approaches to northwest Russia." 118 Russia's nuclear ballistic submarine fleet is ill suited to defending oil platforms as the Resource Scramble school would suggest. Likewise, the buildup of other units are postured to defend those strategic assets rather than offensively pursue Western military interests in the region. Therefore, the priorities for Russia's northern forces can be assessed to be deterrence, defensive operations and situational awareness, not the aggressive, confrontational, or resource grabbing mentality that the military positioning and resource scramble schools suggest.

F. CONCLUSION

Looking at the actions Russia took in the pre-2014 period, the state's economic priorities are clear. While it took some time to come to a mature strategic plan, once the Putin regime settled on one around 2008, it took clear steps to accomplish those objectives. Focusing on the economic benefits Russia would reap from an expanded Arctic energy sector and a robust NSR, Russia invested into those sectors, took steps in the international regime to support its efforts, and worked to set up their legal structures to facilitate NSR commercial traffic. These actions all fit into the model described by the economic calculation school of thought. Admittedly, Russia has also upgraded and expanded its military forces in the Arctic over the same period. Those upgrades are best understood in the context of Russia's concerns about invasion and its preoccupation with defending its strategic nuclear forces. The numbers and types of forces in the Arctic, especially their the

¹¹⁷ Ibid.

¹¹⁸ Defense Intelligence Agency, *Russia Military Power: Building a Military to Support Great Power Aspirations* (Washington, DC: Defense Intelligence Agency, 2017), 67, http://www.dia.mil/Portals/27/Documents/News/Military%20Power%20 Publications/ Russia%20 Military%20Power%20Report%202017.pdf.

submarine forces, are not positioned to aggressively seize territory or fight Western nations in the Arctic. In the next chapter this thesis will explore how the circumstances around the Russian Arctic economic calculation strategy changed in the pivotal year of 2014. The types of incentives described in Chapter II were significantly reduced, yet Russia appears to have not responded to that change.

IV. POST 2014: PROBLEMS SURROUNDING THE ECONOMIC CALCULATION STRATEGY

A. INTRODUCTION

Fundamentally, this thesis answers the question of what drives Russia's Arctic behavior. In the preceding two chapters it has argued that the incentives and Russia's actions in the pre-2014 period aligned. Russia had good reason to think it could extract significant economic benefits from the Arctic and it took reasonable actions to help accomplish those goals. These circumstances changed, however, in 2014. Due to global circumstances unforeseen by Russia, and outside of its control, the incentives that underlaid its pre-2014 strategy shifted suddenly and dramatically. If Russia is truly a rational actor in regards to its Arctic policy, one would expect to see a reaction to this shift over the course of the next several years. This has not in fact been the case, which calls into question the premise that Russia responds to circumstances in the Arctic as a rational actor.

The remainder of this chapter will cover how the incentives for Russia's Arctic strategy shifted, beginning in 2014. The combination of sanctions placed on Russia in the wake of the Crimea invasion, energy price drops, and a growing understanding of the challenges associated with the NSR all diminished the feasibility of Russia's economic calculation strategy. After understanding how these changes reduced the incentives for Russia in the Arctic, further chapters will examine how Russia responded to those shifts, providing a better understanding of what truly drives the country's Arctic policy.

B. SANCTIONS

The first challenge to Russia's Arctic strategy came in response to its actions in Ukraine in early 2014. Tensions between Russia and Ukraine had been simmering for some time in the wake of the 2004 Orange Revolution, which ousted the pro-Russian president Yanukovych. After Yanukovych was reelected in 2010, his administration walked a fine line between pro-EU and pro-Russian politics. In 2013, however, he bent to pressure from

¹¹⁹ Morelli, Vincent L. Ukraine: Current issues and U.S. policy. Congressional Research Service Washington United States, 2017.

Moscow and backed out of a free trade deal with the EU, the Association Agreement. Anger over this reversal led to protests and the Yanukovych government responded by cracking down on the "Maidan" protestors. By February 2014, the situation had deteriorated significantly, as protestors began occupying government buildings and President Yanukovych fled the country on February 24, 2014. Moscow was very concerned about the collapse of the Ukrainian government, the emerging pro-Western leadership, and particularly the status of the Russian Baltic fleet, stationed at a naval base on the Crimean Peninsula. In the ensuing days, unmarked Russian troops took control of airports and government buildings throughout the Crimean Peninsula and, eventually, they took control of the whole Crimean Peninsula. On March 16, the government that had taken control in Crimea held a referendum on Crimea's status, where allegedly 96% of voters supported being annexed. Russian annexed Crimea two days later, on March 18. 121

Russia's annexation of Crimea led to broad Western condemnation and backlash. In response to Russia's actions, the United States government along with many other nations, took a series of measures that had significant impacts on the feasibility of Russia's Arctic plans. First, beginning in March of 2014 and continuing in several additional rounds until September, the United States enacted a series of broad economic sanctions against Russia. The sanctions were aimed primarily at Russia's oil sector. The gas industry was less affected, as the EU still imports 31% of its gas from Russia and sanctioning subsidized Russian gas could directly affect the Russian people. Some of these sanctions specifically targeted Russia's energy companies and banks, in an attempt to put pressure on that crucial sector of the Russian economy and thereby force Russia to compromise in Ukraine. Figure 7 lists the energy companies and banks that have been subject to U.S. sanctions in the wake of Russia's actions in Crimea.

¹²⁰ Ibid.

¹²¹ Ibid.

¹²² U.S. Energy Information Administration, Country Analysis Brief: Russia.

¹²³ Aurélie Bros, Low Oil Prices, Sanctions and Structural Problems: The Tribulations of Russia's Oil and Gas Sector, Recherches & Documents no. 05 (Paris, 2017 (Paris: Fondation pour la Recherche Stratégique [FRS], 2017), https://www.frstrategie.org/en/publications/recherches-et-documents/low-oil-prices-sanctions-and-structural-problems-the-tribulations-of-russia-s -oil-and-gas-sector-05-2017, 15.

Gazprom Bank	Russia's 3 rd largest bank Partially state-owned
GazpromNeft	Russia's second largest oil company Privately owned
Lukoil	Second largest oil company Privately owned
Rosneft ³⁴ (+subsidiaries)	Russia's 1st oil company State-owned
Sberbank	Russia's 1st bank State-controlled
Surgutneftegas	Oil company Privately-owned
Transneft	Oil pipeline operator State-controlled
Vnesheconombank	Russian bank State-owned
VTB bank (+subsidiaries)	Russia's 2 nd bank State-controlled

Figure 7. Overview of Russian Energy Companies and Banks under U.S. Sectoral Sanctions during Obama's Presidency¹²⁴

In addition to blocking the financing sources to the energy companies, later sanctions also prohibited the export of certain technologies needed for deep-water and Arctic offshore drilling to Russia. 125 Canada and the European Union followed the United

¹²⁴ Ibid.

¹²⁵ U.S. Department of the Treasury, "Announcement of Expanded Treasury Sanctions within the Russian Financial Services, Energy and Defense or Related Materiel Sectors" (Press release, Washington, DC: Department of the Treasury, 2014), http://www.treasury.gov/press-center/press-releases/Pages/jl2629.aspx.

States with their own sets of sanctions later in March, 2017. ¹²⁶¹²⁷ As of July, 2017, 37 countries had enacted some sort of sanctions affecting Russia's energy sectors. ¹²⁸ The U.S. sanctions have been expanded and reinforced by legislation passed in 2017, prohibiting the transfer of technology to projects outside of Russia by sanctioned individuals or companies. ¹²⁹ The fact that the sanctions have been made a legal requirement vice a political one makes it unlikely that Russia will see relief from their effects any time in the near future.

These sanctions have had serious impacts on Russia's Arctic energy sector. According to the U.S. Energy Information Administration (EIA), "Virtually all involvement in Arctic offshore and shale projects by Western companies has ceased following the sanctions." A significant portion of Russian efforts in its Arctic energy sector had been in the area of offshore oil extraction. Offshore extraction is technically demanding and more difficult than comparable onshore oil projects and, although technological modernization has been a component of Russia's energy strategy since 2003, the requisite capacity remains beyond the reach of Russia's native oil companies. Aurélie Bros provides a good summary of the technical components of the sanctions and what has been denied to Russia.

This [the sanctions] means that U.S. companies and their partners, both in the USA and abroad, are not allowed to export some high-tech oil equipment (e.g., drilling units and software for hydraulic fracturing) without authorization. They also cannot offer 'full' technical assistance due to

¹²⁶ Steven Lee Myers And Peter Baker, "Putin Recognizes Crimea Secession, Defying the West," *The New York Times*, March 17, 2014, https://www.nytimes.com/2014/03/18/world/europe/us-imposes-new-sanctions-on-russian-officials.html?hp& r=0.

¹²⁷ Canadian Department of Global Affairs, "Canadian Sanctions Related to Russia," (Press Release, Ottawa, Canadian Department of Global Affairs, 2014) http://www.international.gc.ca/sanctions/countries-pays/russia-russie.aspx?lang=eng.

¹²⁸ Bros, Low Oil Prices, Sanctions and Structural Problems, 15.

¹²⁹ H.R.3364 115 Cong. (2014)), https://www.congress.gov/bill/115th-congress/house-bill/3364.

¹³⁰ U.S. Energy Information Administration, Country Analysis Brief: Russia.

¹³¹ Pami Aalto, "Modernisation of the Russian Energy Sector: Constraints on Utilising Arctic Offshore Oil Resources," *Europe-Asia Studies* 68:1 (February 2016): 38–63, https://doi.org/10.1080/09668136.2015.1113509, 50.

severe restrictions on projects related to deep offshore (more than 500 feet or 152 meters), shale oil, and Arctic continental shelf exploration – three sectors identified as strategic by the Russian government before 2014 with a view to developing the next generation of hydrocarbon resources to replace depleting brownfield production (already under pressure due to the inappropriate taxation regime). The 2017 U.S. sanctions go a step further since they include strict measures that formally forbid U.S. companies from investing in Arctic, deep-water and shale crude oil projects led by companies whose capital is held by more than 30% by Russian entities. 132

For further examples of Russia's reliance on Western technical assistance, the Prirazlomnoye field is Russia's only currently operating offshore Arctic field. Production from the installation itself required 40 companies from 15 different nations to complete. Half of the currently operating service providers for the field are from Western nations that have agreed to sanction Russia. Losing these services has caused Russia to try and turn elsewhere for replacements. In the case of Gazprom Neft-Sakhalin's work in the Dolginskoe field, Russia lost half a year of production until it was able to replace Western services with an agreement with PetroVietnam, a company with no Arctic experience. According to a Russian source, 68% of the technical equipment needed by the energy industry is now subject to sanctions and unavailable in Russia. 135

As Sergei Medvedev put it, "Russian oil companies have been left alone, with little available credit, no technology, and dim economic prospects." Without sanctions relief and the return of Western financing and technological assistance Russia will find it very difficult to expand its Arctic energy sector in the near future.

¹³² Bros, Low Oil Prices, Sanctions and Structural Problems, 16.

¹³³ Aalto, "Modernisation of the Russian Energy Sector," 50.

¹³⁴ Ibid

¹³⁵ Atle Staalesen, "Offshore Oil Feels Pain as Spare Parts Come Short," *The Barents Observer*, September 18, 2015. http://barentsobserver.com/en/energy/2015/09/offshore-oil-feels-pain-spare-parts-come-short-18-09.

¹³⁶ Sergei Medvedev, *The Kremlin's Arctic Plans: More Gutted Than Grand* (Moscow: PonarsEuarasia-Policy Memos, 2016), http://www.ponarseurasia.org/memo/kremlin-arctic-plans-moregutted-grand.

C. OIL PRICE DROP

The second blow to Russia's Arctic plans began later in 2014, about four months after the decision to invade and annex Crimea. Between June and December, 2014, the price of oil plummeted worldwide. The price of Brent crude oil dropped from around \$110 to \$45: a drop of 56%. This was the largest drop seen since 1986. The magnitude of the drop was unexpected at the time and, unlike the 1986 crash, the reason was not immediately clear to industry experts. As Figure 8, shows, prices rose again briefly in early 2015, but failed to recapture the high levels seen a year previously, topping out at around \$65 and then falling again, bottoming at around \$28 in early 2016. Since then, prices have failed to rebound fully, remaining around \$50 and only breaking \$70 again in late 2017. 139

¹³⁷ Christiane Baumeister and Lutz Kilian, "Understanding the Decline in the Price of Oil Since June 2014," *Journal of the Association of Environmental and Resource Economists* 3, no. 1 (2016): 131–158.

¹³⁸ Ibid.

^{139 &}quot;Macrotrends.net Brent Crude Oil Prices - 10 Year Daily Chart," Macrotrends.net, March 01, 2018. http://www.macrotrends.net/2480/brent-crude-oil-prices-10-year-daily-chart.

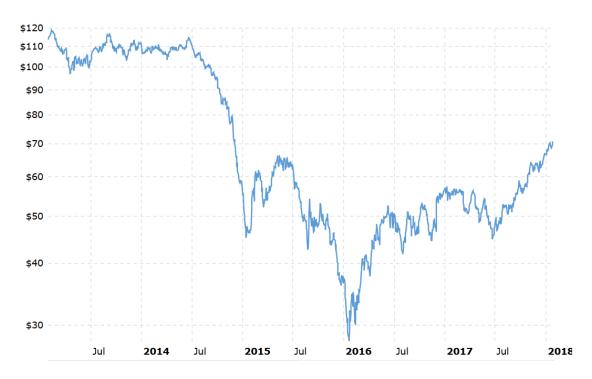


Figure 8. Five Years of Brent Crude Prices in USD¹⁴⁰

The drop in oil prices hurts Russia's Arctic strategy in two ways. First, the fall in prices hit by creating a general economic slump, which meant lower tax returns overall, and secondly by reducing revenue that comes directly from energy sales. ¹⁴¹ Russia has historically derived a large part of its budget from these resource sales; in 2015, 43% of the Russian federal budget came from returns on energy sources. ¹⁴² Although the recent fall in oil prices was less severe in rubles than dollars, the Russian federal budget revenues from energy sources still fell 21% in the year 2014 to 2015 and has dropped an addition 29% between the first half of 2015 and 2016(see Figure 9).

¹⁴⁰ Ibid.

¹⁴¹ U.S. Energy Information Administration, Country Analysis Brief: Russia.

¹⁴² Sabonis-Helf, "Russia and Energy Markets," 23.

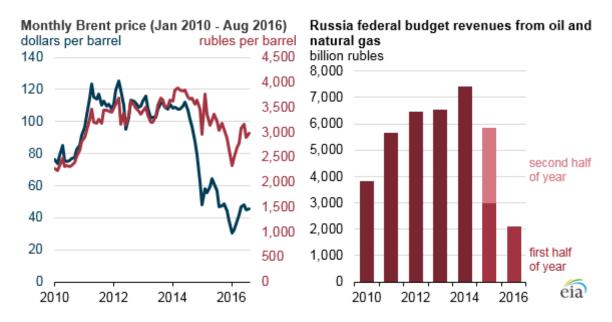


Figure 9. Russian State Budget and Relation to Oil Prices¹⁴³

Prior to the drop in prices, Russia had taxed oil in the amount of \$70 per barrel and had built those taxes into its budget projections. The average cost of Russian oil production had been in the \$15 - 20 range for the past several years. Combining these two factors, Russia needs global oil prices around \$85 - 90 in order to meet its budgetary plans from the pre-2014 period. The Kremlin's 2013 budget projected a conservative \$93 oil, which was a reduction from the 2012 \$119 value. 144 Still, at current prices, Russia cannot fulfill its budgetary commitments, meaning either it will have to scale back on its spending plans, including its large investments in Arctic energy projects and the NSR, or incur debt to meet its obligations. Moreover, the EIA does not project that oil prices will return to the levels Russia requires until around 2025. 145 Finally, the Russian \$70 tax rate also does not cover additional funding for investment in energy industry modernization, which is becoming

¹⁴³ Justine Barden, "Low Oil Prices Have Affected Russian Petroleum Companies and Government Revenues," U.S. EIA, October 20, 2016, https://www.eia.gov/todayinenergy/detail.php?id=2843.2

¹⁴⁴ Sabonis-Helf, "Russia and Energy Markets," 23

¹⁴⁵ U.S. Energy Information Administration, *Annual Energy Outlook 2011 with Projections to 2035* (Washington, DC: Energy Information Administration, 2011).

increasingly necessary in the Russian energy sector.¹⁴⁶ Without higher oil prices, Russia will be unable to keep funding and modernizing the energy sector, like it did in the pre-2014 period. This means that that the economic calculation strategy is less viable that it was in during the period of high oil prices.

The drop in oil prices also hits at a more fundamental aspect of Russia's Arctic strategy, its ability to sell Arctic oil at a profit. The low production costs for general Russian oil quoted above do not hold in the Artic; in 2014, the breakeven point for Arctic oil was estimated to be around \$78 (Figure 10), meaning Russia would actually lose money by selling Arctic oil at post-2014 prices. With oil prices significantly lower than what they had been pre-2014, the prospects for Russia reaping large economic rewards from the expansion of the Arctic energy sector look dim. The economic calculation strategy does not work if the state loses money selling oil on the global market.

¹⁴⁶ Sabonis-Helf, "Russia and Energy Markets," 23

Break-even prices for non-producing assets Break-even price, USD/bbl

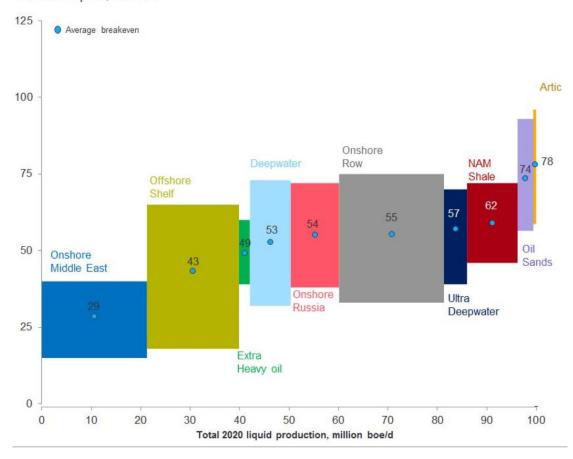


Figure 10. Break Even Prices for Non-producing Assets (Arctic Prices Are Worldwide Arctic Averages, Not Specifically Russian)¹⁴⁷

D. NSR CHALLENGES

The second aspect of Russia's economic calculation strategy in the Arctic has been the buildup of the Northern Sea Route as a major transportation route from Northern Europe to Asia. Although not as sudden or dramatic as what occurred in the energy sector, this aspect of Russia's strategy has also experienced setbacks. First, the traffic levels that Russia has hoped to achieve on the NSR have simply failed to materialize. Although traffic

¹⁴⁷ Source: "Global Liquids Cost Curve: Shale Is Pushing Out Oil Sands And Arctic, Offshore Is Still In The Race," Rystad Energy, June 12, 2014, https://www.rystadenergy.com/newsevents/news/press-releases/global-liquids-cost-curve

levels grew for the years leading up to 2014, after 2014 they dropped and have remained low.

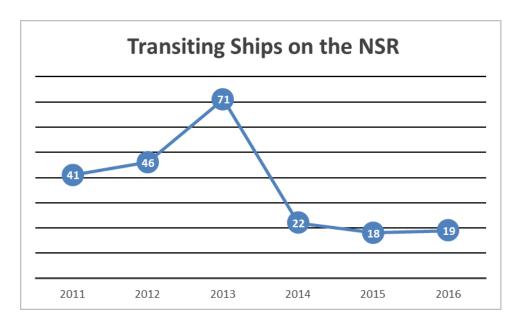


Figure 11. Number of Transiting Ships on the NSR¹⁴⁸

There are several reasons that international shipping companies have come to view the NSR as a sub-optimal transit route. Some are financial. Shipping insurance for ships transiting the NSR has been seen as prohibitive in some cases. He Russia's fee structure, which helps fund the NSR administration, has also been cited. He Also, the distance savings accrued by using the NSR are less important in a period of lower fuel prices; with cheaper gas, ships are more willing to take a longer trip, that consumes more fuel. So in this instance, the same price drop that has hindered Russia's energy sector has also made the NSR less attractive economically.

¹⁴⁸ Adapted from "Transit Statistics," Centre for High North Logistics Information Office, March 1 2018 "http://www.arctic-lio.com/nsr transits" Graphic: Author's Creation.

¹⁴⁹ Olivier Faury and Pierre Cariou, "The Northern Sea Route Competitiveness for Oil Tankers," *Transportation Research Part A: Policy and Practice* 94 (2016): 461–469, 462

¹⁵⁰ Ibid.

¹⁵¹ Malte Humpert, Interview by John Thompson, "Casting a Cool Eye on Russia's Northern Sea Route Ambitions" *Oceans Deeply*, May 3, 2017.

There are also deeper concerns, unrelated to the potentially temporary oil price drop. According to Malte Humpert, the strategic director and founder of the Arctic Institute, Russia has been unable to meet its hopes of building up the required communications and search and rescue (SAR) infrastructure required to make the NSR viable for commercial transit traffic. As of 2017, only half of Russia's planned 13 SAR centers were complete and the estimated date for initial operations of the remainder has been pushed back to 2020. Similarly, the icebreaker fleet needed to keep the NSR clear and viable is also behind schedule; in fact Russia may be losing ground as more and more of its aging icebreaker fleet becomes unusable at a rate higher than they are replaced. These unexpected roadblocks have diminished the prospects for Russia's pre-2014 plans of the NSR.

Beyond these unexpected challenges, there have also been challenges that Russia could have foreseen, but that have been highlighted more and more in the academic literature as the viability of the NSR has been increasingly studied. For one, to be a true alternative to the Suez Canal, the NSR would have to operate year-round. This will likely not be the case any time in next several decades. 154 The most generous estimates only give the NSR a 5-month operating window and that window only applies to ice hardened tanker vessels. 155 Among the problems for non-tanker container vessels are free floating icebergs, even during the "ice free" season. Non-reinforced hull ships could be severely damaged by free floating ice and would thus have to time their transit around periods where the routes

¹⁵² Ibid.

¹⁵³ Qiang Meng, Yiru Zhang and Min Xu, "Viability of Transarctic Shipping Routes: a Literature Review from the Navigational and Commercial Perspectives," *Maritime Policy & Management* 44, no. 1 (2017): 16–41, https://doi.org/10.1080/03088839.2016.1231428, 23

¹⁵⁴ Albert Buixadé Farré et al., "Commercial Arctic Shipping through the Northeast Passage: Routes, Resources, Governance, Technology, and Infrastructure," 316.

¹⁵⁵ Faury and Cariou, "The Northern Sea Route Competitiveness for Oil Tankers."

had been verified not only free of fixed ice, but also free of floating ice. ¹⁵⁶ For container shipping which operates on "just in time" scheduling systems, this is not a viable option. ¹⁵⁷

While bulk cargo shipping is better able to deal with the unpredictable scheduling of the NSR, it is still limited by physical constraints. Choke points along the NSR limit the drafts of transiting ships. By some calculations, the Sannikov and Dmitry Kaptev Straits have draft limits of 13 and 6.7 m respectively. For bulk cargo shipping this limits their load sizes to approximately 50,000 tons, a low number that undermines the economic savings of transiting via the NSR. The Suez Canal, for comparison, can accommodate ships with a dead weight tonnage of 160,000 tons and drafts of 20 m. Figure 12 compares the size restrictions using the NSR puts on ships versus those of other major maritime choke points.

¹⁵⁶ Albert Buixadé Farré et al., "Commercial Arctic shipping through the Northeast Passage: Routes, Resources, Governance, Technology, and Infrastructure," 312

¹⁵⁷ Ibid., 302

¹⁵⁸ Ibid., 304

¹⁵⁹ Ibid.

^{160 &}quot;Ship Sizes," Maritime Connector, March 12, 2018, http://maritime-connector.com/wiki/ship-sizes/.

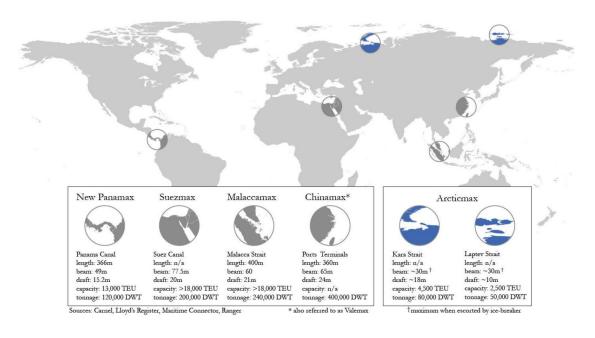


Figure 12. Comparison of Various Shipping Standard Limits¹⁶¹

Ultimately many of the analyses of the NSR conclude that it will at best serve as a limited destination shipping route, mainly focused on carrying LNG from the Yamal peninsula to Asia. 162 The impact this Asian connection might have on the route as a whole, though, should not be over-stated. Even considering this aspect, Humpert has very low expectations for the NSR in the near term

The idea of using the NSR as a shipping route is primarily studied in Asian think-tanks or as part of "what if" scenarios (e.g., what if the Straits of Malacca were to close), but it is not part of any serious near- or mediumterm (next 25 years) economic or political calculation. The NSR will not become a major shipping route. Not today and not in 2030 – or even 2050. As long as there is winter ice, which makes the Arctic Ocean unnavigable for part of the year, it will not be suitable for regular transit traffic.

¹⁶¹ Source: Carsten Ørts Hansen, Peter Grønsedt, Christian Lindstrøm Graversen, and Christian Hendriksen. *Arctic Shipping: Commercial Opportunities and Challenges* (Copenhagen, CBS Maritime, 2016), http://climateobserver.org/reports/arctic-shipping-commercial-opportunities-and-challenges/

¹⁶² Ekaterina Klimenko, *Russia's Arctic Security Policy; Still Quiet in the High North?* (Stockholm, Stockholm International Peace Research Institute (SIPRI), 2016), https://www.sipri.org/publications/2016/sipri-policy-papers/russiasarctic-security-policy-still-quiet-high-north, 10

These realities, some new, some that could have been predicted, make Russia's ambitions for the NSR to be a polar Suez Canal more and more unlikely. At best, the NSR will develop into a niche route for delivering shipments of Russian oil and gas to Asia, a far cry from the massive maritime transit corridor Russia had envisioned. This means Russia has less and less reason to continue with the level of effort and investment that it had put into the NSR in the pre-2014 period.

E. CONCLUSION

2014 was a pivotal year for Russia's Arctic strategy. Russian Arctic oil quickly became economically unviable due to a combination of low worldwide oil prices and the constraints placed on the Russian energy sector in response to the annexation of Crimea. Without high energy prices and, access to Western technology and capital, Russia will have a very difficult time continuing the Arctic energy sector build up required as part of the economic calculation strategy. Similarly, Russia's hopes for the development of the NSR have become more and more obviously farfetched. The low fuel prices have had some effect on shipping volumes, but the NSR has also been affected by geographic, economic, and environmental realities as well as the failure of Russia to build up adequate infrastructure. With the two main features of Russia's economic calculation strategy suffering such setbacks, if would make sense for Russia to dial back its own expectations, rhetoric and investments in the region. The next chapter will show, however, that has not been the case.

V. RUSSIAN ACTIONS POST 2014

A. INTRODUCTION

The events of 2014 dramatically reduced the returns Russia could reasonably expect from its economic calculation strategy. One would expect to see a rational actor respond to a change in incentives with a comparable shift in their strategy. Absent such a shift, the presumption of a rational actor has to be called into question. That is the situation one finds in Russia, post-2014. Despite low energy prices, Western sanctions, and growing problems with the NSR, Russia largely continued to follow its pre-2014 economic calculation strategy. Evidence for this continuity can be found from several sources. While it has not released an updated official Arctic strategy, Russia has maintained its previous official written strategies and continues to reiterate the same themes from those strategies in its new maritime doctrine. Russia's leadership continues to use high profile diplomatic and public relations opportunities to push for the same goals it pursued pre-2014. Russia continues to invest large amounts of money into Arctic energy and transport sector projects. It is still pursuing its efforts to gain international recognition for its UNCLOS claims and continues to foster a benign political environment for the CLCS mechanism to function in. These are largely the same type of efforts Russia engaged in before the events of 2014.

Where Russia has made changes, they have been minor adjustments and do not represent a significantly different strategy. In the energy sector they have shifted emphasis away from offshore oil and towards the liquid natural gas industry on the Yamal Peninsula. Admittedly this is a change from pre-2014, but it does not represent a departure from the Economic calculation strategy; the focus for Russia is still on the energy sector and, they are still extracting energy resources from the Arctic region for economic gain. The second change since 2014 has been the creation of the Russian Arctic Commission and the assignment of Dmitry Rogozin to head that body, with the intention of managing the various competing internal Russian interests in the Arctic. This is a change in management, not a shift in strategy. Both of these adjustments are minor compared to the rest of the continuity that can be seen. That continuity calls into question the best way to model Russia's Arctic decision making process.

B. SCHOLARLY ANALYSIS

Scholars examining Russia's Arctic policy report a surprising amount of continuity, pre- and post-2014. Mikkel Olesen argues that a prolonged sanctions regime may eventually change the circumstances but, for now, "the continuity that Russia has displayed in its Arctic policies so far, shows the degree of resilience of the approach." Alexander Sergunin, a St. Petersburg professor of foreign policy, argues that the events in Ukraine have not had any spillover effects on Russia's Arctic policy, and that Russia has maintained a consistent and "pragmatic" policy towards the Arctic, viewing it "as a region of international cooperation and peace." Heather Conley argues, "because the Arctic is so economically vital to Russia, there seems to be an implicit policy impulse from Moscow that attempts to limit the potential geopolitical damage to Arctic cooperation." 165

Kristensen and Sakstrup provide one of the articles that explicitly studies the continuity of Russia's Arctic policy in response to the circumstances in Ukraine. They argue that Russia's Arctic policy has been fundamentally consistent since the events of early 2014. They further believe Russia's primary interest in the Arctic remains in its economic potential and that the downturn in the expected financial returns have not fundamentally changed that fact. They also attribute the particular "staying power" of Russia's Arctic strategy to the fact that it rests on both the general consensus of Russia's elite and that it is sanctioned by Putin's closest inner circle. Looking at the specific details of Russia's actions post-2014, one sees further support for the argument that Russia's Arctic strategy has not fundamentally changed since the events of 2014.

¹⁶³ Mikkel Runge Olesen, "Security and Economics in the Arctic: Cooperation and Competition Rather Than Conflict Remain the Norm," (DIIS Working Paper October, Danish Institute for International Studies, 2017), 4

¹⁶⁴ Alexander Sergunin, "Is Russia Going Hard or Soft in the Arctic?" *The Wilson Quarterly* (2017), https://wilsonquarterly.com/quarterly/into-the-arctic/is-russia-going-hard-or-soft-in-the-arctic/

¹⁶⁵ Heather A. Conley and Caroline Rohloff. *The New Ice Curtain: Russia's Strategic Reach to the Arctic* (Lanham, MD: Rowman & Littlefield, 2015), 14

¹⁶⁶ Kristensen and Sakstrup. "Russian Policy in the Arctic after the Ukraine Crisis," 25167 Ibid.

There has been some scholarly argument that Russia has accelerated its military buildup in the Arctic since the events in Crimea. Ekaterina Klimenko, writing in 2016, has provided a thorough rebuke of these arguments. First, she argues that post 2014, Russia's security goals remain unchanged from those prior to 2014: to ensure border security, sovereign rights in its territory and, most importantly, providing strategic deterrence. Russia's SSBN fleet remains at the heart of its security perspective in the Arctic region. Second, although Russia has placed new forces in the Arctic since 2014, any appearance of a reaction to Crimea is a misperception. The fact is that most of these forces were announced years prior to the Ukraine crisis and have simply been delayed in their deployment due to failures in Russia's defense industry and military to implement the plans. The new forces that have arrived in the Arctic remain focused on protecting Russia's SSBN fleet from Western airborne threats. Those forces that are not aimed at deterrence or protecting strategic assets are not postures to fight in the Arctic theater. Klimenko summarizes the current state of Russia's Arctic military forces as "in, but not for the Arctic." 168

C. STRATEGIC DOCUMENTS AND LEADERSHIP STATEMENTS

The first source of evidence this study used for the pre-2014 period of Russia's Arctic priority and strategy was official strategic documents. Since 2014, Russia has not updated its Arctic strategy or its security strategy. This lack of an updated strategy could either indicate that Russia no longer views the Arctic as priority at all and is ignoring the region or that it does not see a need to update its strategic documentation. Despite the lack of a new Arctic strategy, there are other sources that shed light on Russia's current Arctic perspective. In 2015, Russia released a new maritime doctrine for its Navy that has implications for the Arctic. According to the Maritime Doctrine of the Russian Federation, Russia's priorities for its Arctic Naval forces are almost identical to the Arctic priorities seen in the pre-2014 strategies. They focus on economic goals rather than security ones. Of the nine delineated policy goals the 2015 maritime strategy lists, two are military/ strategic goals, four refer to efforts for the Russian navy to assist either the energy sector

¹⁶⁸ Klimenko, Russia's Arctic Security Policy: Still Quiet in the High North?

or the NSR, and the remaining three goals address environmental concerns and scientific research. Much like the pre-2014 strategies, a security-centric bureaucracy of the Russian state produced a strategic document that emphasizes that Russia's primary objectives in the Arctic are to achieve economic returns from the energy sector and the NSR. The fact that another security-oriented bureaucracy produced an economically focused Arctic strategy post-2014 shows that Russia fundamentally has retained its outlook in the Arctic and has not responded to the change in incentives.

In lieu of additional new maritime documents, one can also look at the pronouncements of top Russian officials for evidence of post-2014 thought among the Russian leadership. Since 2014, many key Russian leaders have continued to emphasize a vision of the Arctic as a region of cooperation to facilitate energy development and economic growth. In September of 2015, Patrushev, Secretary of the Security Council of Russia, spoke at the Fifth International Scientific Conference on Security and Sustainable Development in the Arctic. There he emphasized that Russia was and would continue to follow its previous Arctic strategic documents and called for international efforts to pursue resource development in the Arctic. 169 These types of comments are almost unchanged from his comments at a similar venue, the International Conference on Stable Development and Security Issues in the Arctic region, the previous year. In December of 2014, he reiterated the desire for US-Russia cooperation in the Arctic, despite tensions in the relationship between the two nations, and he called for international efforts to build communication and monitoring systems along the NSR.¹⁷⁰ This continuity in the comments of top Russian leaders like Patrushev echo the continuity seen in how Russia has carried out its policy.

These types of statements from Patrushev are also reinforced by those of President Putin himself. In his public statements on the Arctic since 2014, Putin has continued to emphasize the potential for resource extraction and the transportation sector, to both

^{169 &}quot;Patrushev: Arctic Should be an Area of Dialogue, Peace, and Good Neighborliness," Arctic.Ru, September 16, 2015, http://arctic.ru/international/20150916/167048.html

^{170 &}quot;Good Neighborly Relations are Russia's Priority in Arctic – Security Chief," RT, August 8, 2014, https://on.rt.com/c5ngwa

international and domestic audiences. In 2016, Russia hosted the Russian Security Council's annual Arctic conference for other members of the Arctic Council. That year, the conference itself was held onboard an ice breaker traveling from Anadyr to Pevek, through the Bering Strait and around the North coast of the Chukchi Peninsula, the last leg of the NSR. These were clear signs that Russia intended to highlight and promote the NSR's capabilities to an international audience. Putin's remarks at the conference reiterated what has become the standard Russian emphasis on the need for international political and economic cooperation to solve the Arctic's infrastructure, transport, and environmental challenges.¹⁷¹

More recently, in 2017, Putin made a high-profile visit to Russia's northernmost air force base on the Franz Josef Land islands. He was accompanied on the trip to this military installation by Dmitry Medvedev and Defense Minister Sergei Shoigu, making it an extremely high profile, public opportunity to communicate Russia's Arctic strategy. Rather than use this as a chance to tout Russia's military capabilities or defensive concerns in the Arctic, Putin chose in his remarks to emphasis the economic and energy aspects of Russia's Arctic policy. To an audience of Russian military personnel and journalists, he stated, "Natural resources, which are of paramount importance for the Russian economy, are concentrated in this region," and, later, that Russia desired, "broad partnership with other nations to carry out mutually beneficial projects in tapping natural resources, developing global transport corridors and also in science and environment protection." 172

These actions mirror the situation in 2008, when the Security Council recommended a focus on economic aspects of the Arctic. In 2017, Putin used a military setting to emphasize that the priority of Russia in the Arctic is economics rather that security. In these high profile public statements Putin has emphasized repeatedly that Russia's core desire for the Arctic is for it to be region where international cooperation is

¹⁷¹ Ragnhild Grønning, "Putin: – No Room for Geopolitical Games in the Arctic," *High North News*, Feburary 9, 2016, http://www.highnorthnews.com/putin-no-room-for-geopolitical-games-in-the-arctic/

^{172 &}quot;Putin Reaffirms Russia's Arctic Oil Claims With Visit to Island Chain" *Sky* News, March 30, 2017, https://news.sky.com/story/putin-reaffirms-russias-arctic-oil-claims-with-visit-to-island-chain-10818291

fostered so that Russia can pursue its goals of energy resource extraction and NSR expansion, exactly as the economic calculation strategy prescribes.

It is not the case that Russian leaders are completely blind to the changing circumstances around their Arctic strategy, simply that they have chosen to maintain the fundamental strategy in spite of those changes. One of the adjustments Russia has made was the creation of the "Russian Arctic Commission" in February 2015. This body is intended to coordinate the security, social, and economic efforts of Russia's numerous stakeholders in the Arctic, with the hope of more smoothly carrying out Russia's policy goals than was seen previously. The commission is specifically supposed to coordinate the efforts of the Ministry of Natural Resources and Environment, the Ministry of Energy, the Ministry of Economic Development, the Ministry of Transport, and the National Security Council.¹⁷³ Since its inception, the commission has been headed by Dmitry Rogozin, a politician with longstanding ties to the defense industrial sector and Putin. This strategy, creating a new bureaucratic commission, indicates that Russia has realized there are challenges to overcome in its Arctic strategy, but rather than view the problems as relating to the strategy itself, it views them simply as matters of poor administration and competing stakeholders. A new leader is supposed to be able to align these groups and still be able to fulfil the economic calculation strategy.

D. INVESTMENT, TAXES AND ENERGY SECTOR STRATEGY

In the post 2014 period, Russia has continued to back up its declared strategies and public pronouncements with material investments in the Arctic region. Similar to before 2014, these investments come in the form of direct state spending, direction to the national energy companies on where to focus their efforts, and tax incentives aimed at encouraging energy and transport sector expansion. The exact nature of investment in the energy sector has shifted in response to changes in energy markets and pressure from sanctions, but the energy sector as a whole has remained a priority for Russian Arctic strategy. On December 31, 2014, Alexi Miller, CEO of Gazprom, announced a shift in Gazprom's emphasis from

¹⁷³ Conley, The New Ice Curtain, 7

the offshore Shtokman field to the Yamal Peninsula LNG project. He announced the Yamal projects would be the largest energy project in Russian history, that it would be the "future of the Russian gas industry" and that the Russian government had set aside \$2.5 billion to support the project.¹⁷⁴ But, while the focus of Gazprom's effort was shifted to Yamal, the rest of Russia's Arctic energy sector has not been abandoned; Russia has also continued to invest the same in offshore oil efforts as it did previously. In 2017, Prime Minister Medvedev announced a new 160 billion-ruble (\$2.75 billion USD) investment back into continental shelf oil developments. Part of that investment will be a 23.8 billion-ruble (\$400 million USD) fund to develop new machinery and technology for Arctic exploration, replacing what has been denied through Western sanctions. 175 Besides this direct state investment, the state-owned energy companies continue to pursue the Arctic. Rosneft has planned to invest another 250 billion rubles (\$4.3 billion USD) for the period 2017–2021 in Arctic energy projects. ¹⁷⁶ Russia has also kept investing in the costly infrastructure supporting the energy industry; the state plans to spend 55 billion rubles annually (approximately \$1 billion USD) to maintain the networks of piping that the energy industries need to transport oil and gas. 177 Despite lower market prices, Russia still sees the Arctic energy sector as a worthwhile investment.

Russia has also encouraged the energy sector through methods other than direct investment. After 2014, Russia resisted pushes to increases taxes on the energy sector in order to offset the strain on the state budget. In 2016, the Russian finance ministry put forward a plan to increase the taxes on the gas and oil sector. To help make up from lost oil revenue they wanted to increases taxes so the state budget would get an additional 600 billion rubles in 2016 (\$9.9 billion USD), and 500 billion rubles (\$8.2 billion USD) in 2017. In response, the ministry of energy and the heads of the state-owned energy

¹⁷⁴ Ibid., 27 - 28

¹⁷⁵ Tsvetana Paraskova, "Russia Goes All In On Arctic Oil Development," *OilPrice.com*, October 19, 2017, https://oilprice.com/Energy/Crude-Oil/Russia-Goes-All-In-On-Arctic-Oil-Development.html

¹⁷⁶ Ibid.

¹⁷⁷ Conley, The New Ice Curtain, 28

companies pushed back, arguing that the plan would negatively affect their investment programs. They were able to stop the tax increases.¹⁷⁸ Russia instead turned to increase taxes on the metal and mining industries, showing the priority Russia gives to the energy industry over other industries in the Arctic.

Finally, beyond these financial measures, Aurélie Bros argues that Russia is taking a four-pronged approach to shielding its energy industry from the effects of 2014, in what she refers to as a "reshaping process." First, Russia has tried to control its required production levels through a 2016 deal with the Organization of the Petroleum Exporting Countries (OPEC) and through devaluing the ruble. 180 Second, it has tried to move away from using the dollar in the energy sector, both in sales and in purchasing new equipment. Third, Russia is increasingly turning to Asian partners for financing. Fourth, Russia is attempting to find technological replacements for the assistance lost to Western sanctions. 181 Admittedly, the efforts Russia is applying to the oil sector apply to the energy sector throughout all of Russia, not just the Arctic energy sector. However, they have an outsized effect on the Arctic. The Arctic is already a source of approximately 80% of Russia's gas production, so any policies towards the gas industry are largely Arcticcentric. 182 The Arctic only held approximately 17% of oil production in 2016, but is expected to become a larger percentage in the future.¹⁸³ Due to a combination of the decline of mature non-Arctic oil fields, and a failure to invest in new green fields outside the Arctic, the future of Russian oil production will move increasingly North. ¹⁸⁴ If the tax incentives and oil sector strategy remain in place for some time, the Arctic will become more affected by them. All of these efforts—direct investment, tax incentives, and the

¹⁷⁸ Bros, Low Oil Prices, Sanctions and Structural Problems, 10

¹⁷⁹ Ibid., 21

¹⁸⁰ Ibid., 10

¹⁸¹ Ibid., 18–20

¹⁸² U.S. Energy Information Administration, Country Analysis Brief: Russia.

¹⁸³ Ibid.

¹⁸⁴ Sabonis-Helf, Theresa, "Russia and Energy Markets," 23

reshaping process—show that Russia is still strongly pursuing economic returns from its energy sector, and by extension, the Arctic.

E. UNCLOS

A further point of continuity in Russia's economic calculation strategy has been its continued pursuit of its continental shelf claims under the UNCLOS regime. In December of 2014, shortly after the fall 2014 oil price drop, Denmark finished submission of its CLCS claim. Denmark surprised many Arctic onlookers by claiming extended continental shelf rights from the northern coast of Greenland, along the Lomonosov Ridge, all the way up to Russia's 200 nm EEZ. 185 This claim significantly overlapped with Russia's earlier claim and, to a lesser extent, also overlapped with areas Norway has and Canada may claim (see Figure 5, the map of current CLCS claims). Correspondence between the foreign ministries of Denmark and Russia show that Russia was surprised by Denmark's claim. 186 However, Russia's public responses to the claim were calm and diplomatic. Russia described Denmark's claim as unproblematic and expressed the belief that the overlap could be negotiated, given the benign diplomatic atmosphere around Arctic issues. Russia formally submitted a note of "non-objection" to Denmark's claim. This very measured response to Denmark's claim demonstrates the extent to which, even after 2014, Russia supported the CLCS process as its preferred method to gain recognition of its rights to the hydrocarbon reserve under the ocean floor.

A year after Denmark's claim, in August 2015, Russia resubmitted its CLCS claim. Russia's original claim had been returned by the commission, with a request for additional scientific and geological evidence that their claim was indeed a geological extension of Russia's continental shelf. Russia conducted further surveys and gathered the requested data to resubmit its claim. Russia shrunk the amount of area it was claiming in its 2015 resubmission. Kristensen and Sakstrup argue this compromise represents a continuation

¹⁸⁵ Søby and Sakstrup. "Russian Policy in the Arctic after the Ukraine Crisis," 16–18

¹⁸⁶ Ibid., 17

¹⁸⁷ Ibid., 18

of the "pragmatic and collaborative line in Russian policy after the Ukraine crisis." ¹⁸⁸ It shows Russia has not responded to the oil price drop or Western sanctions by abandoning the UNCLOS process or by attempting to solidify its claims though a military "land grab." Rather, Russia maintains the belief that a benign diplomatic environment and its cooperation will best facilitate its economic goals in the Arctic.

F. NSR EFFORTS

In addition to its continued efforts to boost its Arctic energy sector, Russia has also maintained a consistent effort to build up and promote the NSR, even after the events of 2014 revealed the weakness of this plan. These efforts have taken the form of continued investment in Russia's icebreaker fleet and other ice-capable ships, its continued work on search and rescue, port and communication infrastructure along the NSR, and Russia's continued efforts to promote the NSR as a viable transport route to the international maritime community.

Since 2014, Russia has continued with its efforts to construct new icebreakers. In June 2016 it launched the first of the its new Arkitika class icebreakers, now the world's largest and most powerful icebreaker. Each ship of this class costs Russia 122 billion rubles (\$1.9 billion USD) and they are expected to build three of this class. Russia also already has plans for a follow-on class of larger icebreakers. While there are few details available for the next class of icebreakers, the Lider Class, Deputy Prime Minister Rogozin has announced plans to begin building three of these ships in 2019. He stated that the purpose of the icebreaker fleet is to, "be able to lead whatever vessels for any customer by transit through the Northern Sea Route: caravans with goods from Asia to Europe and we

¹⁸⁸ Ibid.

¹⁸⁹ Camila Domonoske, "Russia Launches World's Biggest, Most Powerful Icebreaker" *NPR*, June 16, 2016, "https://www.npr.org/sections/thetwo-way/2016/06/16/482288188/russia-launches-worlds-biggest-most-powerful-icebreaker"

¹⁹⁰ Eduard Galimullin, "A Closer Look at Russia's Arctic Muscle Flexing" *The Russia File* (blog), November 21, 2017, https://www.wilsoncenter.org/blog-post/closer-look-russias-arctic-muscle-flexing

will be able to export our hydrocarbons in the form of liquefied natural gas not only to Europe but also to Southeast Asia."¹⁹¹

For a measure of comparison, Russia's newest ballistic missile submarine cost 23 billion rubles (\$890 million USD), so Russia is foregoing two nuclear submarines for each ice breaker. 192 This demonstrates that the NSR and associated icebreakers are given a financial priority on par with that of Russia's strategic defense. Beyond icebreakers themselves, Russia is also continuing to invest in other NSR infrastructure. To assist in transporting LNG out of the Yamal peninsula, Russia has partnered with the energy company Total to produce a class of 15 "ice capable" LNG tankers. 193 These tankers are specifically designed to transport LNG from Yamal to Asia and able to make the transit through moderate ice cover on their own without dedicated icebreaker assistance. Russia expects to continue to invest in these types of ships; in 2015 the Ministry of Industry and Trade announced an estimate of \$91 billion USD through 2030 in shipping investment in the Arctic (\$6 USD billion annually). 194

Beyond these shipping projects, Russia is also still working to improve the governance systems around the NSR, in an effort to make it more attractive to commercial shipping. One of the criticisms leveled against the NSR's feasibility has been the poor SAR capabilities for ships that have accidents along the NSR. Russia has been attempting to improve the SAR capabilities of the NSR by working along with other Arctic nations. In 2015 and 2017, Russia conducted joint SAR exercises with Norway. 195 These exercises

and

¹⁹¹ Anatoly Medved, "Russia to Build 3 Next Generation Nuclear-Powered Icebreakers by 2025," *TASS*, 27 December 2017, http://tass.com/defense/983396

^{192 &}quot;Russia Launched an Atomic Submarine" *BBC Russian*, April 15, 2007, http://news.bbc.co.uk/hi/russian/russia/newsid 6558000/6558315.stm

¹⁹³ Total, "Total Inaugurates the Northern Sea Route with LNG Carrier Christophe de Margerie" July 27, 2017, https://www.total.com/en/news/total-inaugurates-northern-sea-route-lng-carrier-christophe-demargerie

¹⁹⁴ Conley, The New Ice Curtain, 48

¹⁹⁵ Jonas Karlshakk, "Joining Efforts for Search and Rescue," *Barents Observer*, June 8, 2015 http://barentsobserver.com/en/borders/2015/06/joining-efforts-search-and-rescue-08-06

represent a serious diplomatic effort on the part of Russia, as other Western nations cut off all military exercise ties to Russia after 2014. Russia has also continued to press for international SAR cooperation through the mechanisms of the Arctic Council. In 2016 Russia succeeded in pushing an updated version to the Arctic Council's 2011 SAR agreement. 196 Clearly, strengthening the SAR capabilities around the Arctic is a goal that Russia sees as worth pursuing.

Russia is also working to make sure the rest of the world knows about the NSR and its potential. Since 2015, Russia has held an annual "Transport Week" symposium to tout the benefits of the NSR, along with Russia's other international transport sector opportunities, for foreign businesses. 197 Russia has also maintained "Arctic.ru," an English language website maintained by the Russian geographical society and the Ministry of Natural Resources and the Environment (now subordinate to Rogozin's Arctic Commission) to put out Russian Arctic news and promote the NSR. The results of this public relations push have been less than desired. Perhaps without realizing the irony, one of the selling points in Arctic.ru's February 2018 advertisement for the NSR is that there are "no lines" along the NSR. 198 Russia has clearly realized the NSR has not produced the amounts of traffic it desires, but has chosen to continue pursuing international shipping rather than abandon or even downplay the NSR due to the now obvious shortcomings.

G. CONCLUSION

Looking at Russia's Arctic strategy pre and post 2014, it would be difficult to tell that major changes had taken place in the surrounding environment, judging by Russia's actions alone. In both pre- and post-2014, Russia has developed strategic guiding

Mikhail Fomichev, "Russian-Norwegian Rescue Exercises Underway in Barents Sea," May 30, 2017, https://arctic.ru/international/20170530/621749.html

¹⁹⁶ The Arctic Council, "Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic," https://arctic-council.org/eppr/current-activities-projects/agreement-on-cooperation-on-aeronautical-and-maritime-search-and-rescue-in-the-arctic/

 $^{^{197}}$ "Transport Week 2017," Russian Ministry of Transport, March 3, 2018, http://transweek.ru/2017/en/

¹⁹⁸ "The Northern Sea Route (NSR)," Arctic.Ru, Feburary 1, 2018, https://arctic.ru/infographics/20180201/704043.html

documents that emphasizes the Arctic as a locale for energy resource extraction and the expansion of the NSR for Russia's benefit. They have supported those plans by investing in the NSR and Arctic energy projects. They have provided favorable tax environments for the energy sector. Russia has expanded diplomatic capital on its efforts to secure rights to additional hydrocarbon reserves through the UNCLOS process. Russia has and continues to build icebreakers to facilitate commercial traffic on the NSR and is working to promote the NSR as a viable route for the international shipping community. The shifts that have occurred in Russia's Arctic strategy have been relatively minor, moving emphasis from one area of the energy sector to another and consolidating its Arctic leadership under one bureaucracy. Overall, Russia has largely not responded to the events of 2014 with a corresponding shift it its Arctic strategy; it is still following the economic calculation strategy. This fact calls into question whether the rational actor model is appropriate to understand how Russia develops its Arctic strategy. The following chapter will argue that applying a bureaucratic politics model produces a model that explains this seeming contradiction in Russian Arctic policy.

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VI. BUREAUCRATIC POLITICS

Given the discontinuity in the post-2014 period between Russia's incentives and its actions in the Arctic, the rational actor model of state behavior does not appear to be an accurate one for describing the decision-making process in the Kremlin. Such models of state behavior treat states as monolithic and rational decision-making entities. While such models have great value in simplifying international relations, they are of limited utility in efforts to analyze the detailed nuances of a single nation's specific policy processes. Instead, the continued pursuit of the economic calculation strategy is better explained when models of Russia's Arctic policy process include the incentives and goals of the individual actors who create the policy. To better understand how states develop and implement specific policies, one must open the black box and examine the workings of state institutions, group and individual actors, and the interactions among them that contribute to a final policy choice. Such analyses will provide a truer understanding of the state's likely choices and provide insight into how those choices may be influenced from the outside. This chapter will show that unlike the exterior economic and political environment surrounding the Russian Arctic, the interior political environment was largely consistent, across 2014. That consistency explains the continuity in the strategy Russia has followed.

A. ESSENCE OF DECISION

This chapter will apply the model laid out by Graham Allison in *Essence of Decision* to analyze the inner workings of Russia's process to arrive at Arctic policy decisions. Allison refers to the model as the "governmental politics model" but it has generally come to be known as the "bureaucratic politics model" in later scholars' works. Allison originally presented the model as one way to explain U.S. and Soviet actions in the Cuban Missile Crisis in 1962, but the model has subsequently gained wide acceptance and use in foreign policy analysis, international relations, and other social science fields.

Hudson suggests the bureaucratic politics model is most appropriate to analyze decision making in circumstances that are both non-crisis and non-routine. ¹⁹⁹ The case of Russian Arctic policy is both non-crisis and non-routine. It is not a crisis situation because the various pertinent decisions are made over the course of months, if not years, and are not in response to specific events which must be addressed rapidly, in the course of days. There is therefore time for a thorough analysis of the information available to the decision makers and time for them to go through a deliberate process. Nor is Russian Arctic policy routine. Decision makers need to react to changes in the environment around the Arctic, both physical and geopolitical. In the past several decades global climate change has shifted the physical realities in the Arctic in ways never before experienced by humankind. The shrinking of the polar ice caps has potentially opened new maritime trade routes and unlocked hundreds of billions of dollars worth of mineral resources. To take advantage of these changes, Russia cannot administer the Arctic region as "routine."

Hudson describes bureaucratic politics as a "complex intersection of small group dynamics, organizational process, domestic political forces and the personal characteristics of relevant individuals." The model stresses that states are not monolithic, unitary actors but are in fact composed of many individual and quasi-independent group actors. These various players do not go through a decision-making process only once; they repeat many iterations of the policy "game." Nor do they consider individual decisions in isolation, but rather must consider hundreds of choices daily. They prioritize their various choices to the best of their ability. They may also make strategic compromises on some choices. Players may even be deliberately transactional, supporting another actor in an instance of low priority for their constituency in exchange for the other's support in a higher priority effort. ²⁰¹

Allison lays out four main questions that must be answered in a bureaucratic politics analysis.

¹⁹⁹ Valerie M. Hudson, *Foreign Policy Analysis: Classic and Contemporary Theory* (Lanham, Rowman & Littlefield, 2013), 73

²⁰⁰ Ibid., 101

²⁰¹ Allison and Zelikow Essence of Decision: Explaining the Cuban Missile Crisis

- 1. Who plays?
- 2. What factors shape player's preferences?
- 3. What determines a player's impact on the results?
- 4. What is the game?

The question of "who plays?" is fairly straightforward. Which persons or groups have the ability to influence the decision-making process? These may be the heads of official government bodies, such as the secretaries of various departments, they may be actors from outside the government such a lobby groups, or they may be individuals who have the ear of the decision maker with no particular constituency.

The factors shaping players' preferences is a more complicated piece of the analysis. This encompasses what the players believe should be the ultimate goal for the organization, but it also includes what steps they think should be taken to achieve that goal. Players' preferences may also be shaped by ulterior motives. The head of an agency may push for an agenda which would not truly be in the state's best interest, but might increase the agency's budget and their own standing in the administration. In some cases, players can be grouped together into blocs of like-minded individuals who share similar perspectives and may act coherently to forward their perspective.

Allison believed a player's impact on the decision-making process is a function of their power. Further, he argues that power is derived from at least three parts: a player's particular bargaining advantages (what they control), their skill at bargaining, and their perception of the first two items.²⁰² Bargaining advantage might come from the decision maker's trust, which a player has curated over time, from particular expertise, or from their ability to move resources (promises to deliver a voting bloc or control of budgetary decisions). Players may also differ in their diplomatic abilities. The head of a nation's espionage agency may have that position due to their skill as a spy, but may lack the skills to work well with other senior officials. Finally, advantages may exist in fact, but players may fail to recognize them and utilize them.

²⁰² Allison and Zelikow, Essence of Decision: Explaining the Cuban Missile Crisis

The final question Allison poses ("What is the game?") refers to the actual mechanisms through which decisions are made. Allison stresses the channels players use to exert their influence. Are issues discussed at face to face meetings with principal players or do various factions submit written proposals? Does the decision maker pick a path from the first set of competing suggestions or are there many rounds of refinement and compromise? Are decisions only made by formal declarations by the decision maker, or are subordinate players expected to execute their intent until told otherwise? Some "rules of the game" may suit a particular player's strengths while others may not.

Structurally, the rest of this chapter will take each of Allison's four questions and will show that the answers to those questions both lead to the observed policy outcome and have remained largely consistent through the 2014 period. This model best explains the continuity in policy outcome which the unitary rational actor model is unable to.

B. WHO PLAYS?

1. Putin

Allison's first question is simply, "Who plays?" The most important player to examine when considering any Russian policy is President Vladimir Putin. Russia analysts almost unanimously agree that, in matters of foreign policy, defense, or military issues, and on any issue viewed as important enough to the entire Russian nation, Putin is the unchallenged and final source of authority. Russian Arctic policy is an example of an issue considered important enough to merit his attention. Pavel Baev believes that the Arctic is in fact a region of significant personal interest for Putin and has been for many years. Baev partially ascribes this interest to Putin's concern about the gas industry, but also notes that Putin has a sincere interest in Arctic wildlife and the environment. ²⁰³ To further demonstrate his interest in Arctic matters, in 2009, Putin took a position as the Chair of the Russian Geographical Society, an organization dedicated to exploration of the Arctic whose president at the time was Artur Chilingarov, the explorer of the North Pole seabed

²⁰³ Pavel Baev, *Russia's Arctic Policy and the Northern Fleet Modernization* (Oslo, Peace Research Institute Oslo (PRIO), 2012), 16

flag fame.²⁰⁴ No serious decisions about Russia's Arctic policy will be made without Putin's approval.

Putin has been in a position to oversee Arctic policy for the entire period of concern, 2007 to the present. Putin was firmly in his position of power by the end of his second term in office, in May 2008. Putin came to this top position from years of political moves and power grabs. In his first two presidential terms, Putin struck out at the power of the Russian oligarchs, the independent media, the regional governors, and the Duma (state parliament). Dawisha refers to this initial power grab as the first of three periods in Putin's reign. She marks its end with the 2003 Yukos affair, when Putin had cemented his authority over any other possible entity. Since then, Putin has led a nation largely absent of any power bases independent of himself. At the time interest in the Arctic was growing in the Kremlin, Putin was shaping final policy with his interests in mind.

Despite leaving the office of the president to satisfy constitutional requirements from 2008 – 2012, Putin has remained the primary decision maker in Russia up to the present. Writing in 2017, Dmitri Trenin describes Putin as "the decider on all key foreign, security and defense issues" and as "wield[ing] absolute power in his country." Vladimir Gel'man refers to Putin's current position as being "boss of Russia." Putin's position atop Russia's decision-making process was consistent through the critical 2014 period. This supremacy, however, does not mean that he is a completely insulated ruler, or that all Russian decision making can be seen as an extension of Putin's personal psychology.

²⁰⁴ "Artur Chilingarov," Antarctic Logistics & Expeditions, March 7, 2018, https://antarcticlogistics.com/2010/08/28/artur-chilingarov/

²⁰⁵ Karen Dawisha, *Putin's Kleptocracy: Who Owns Russia*? (New York: Simon and Schuster, 2015), 332

²⁰⁶ Bryan Frederick, Matthew Povlock, Stephen Watts, Miranda Priebe and Edward Geist. *Assessing Russian Reactions to U.S. and NATO Posture Enhancements* (Santa Monica, CA: RAND Corporation, 2017), https://www.rand.org/pubs/research_reports/RR1879.html.

²⁰⁷ Dmitri Trenin, "Looking Out Five Years: Who Will Decide Russian Foreign Policy?," *Carnegie Center* Moscow August 17, 2017, http://carnegie.ru/commentary/72811

²⁰⁸ Vladimir Gel'man, *Authoritarian Russia: Analyzing Post-Soviet Regime Changes* (Pittsburgh, University of Pittsburgh Press, 2015), 73

2. Siloviki

Putin does have underlings, advisors, and subordinates who matter for Russia's Arctic policy. The particular players may change over time as individuals gain and lose influence, either due to the repercussions of their own actions or as consequences of events outside of their control. Before exploring the particular individuals, however, it is useful to attempt to understand Putin's advisors in terms of their political blocs, and how those blocs have changed over time.

The retinue of lieutenants Putin inherited when he ascended to the presidency was different from the one around him today. In early 2000, the advisors could be grouped into three factions, "1) The 'Family' (Yeltsin's people), 2) the 'St. Petersburgers', Putin's friends and trustees from when he lived in St. Petersburg and 3) the 'chiefs of power ministries.'"209 Putin rapidly dismissed the first group as part of his larger effort to eliminate power bases independent of himself. The second group split along rough ideological lines into the more liberal and reform-minded camp, led by Anatoly Sobchak, and those whose views and backgrounds corresponded with the "chiefs of power ministries" on the other. This later group, a fusion of Putin's hardline St. Petersburg associates and Russia's top defense and security personnel, evolved into the group today known at the *siloviki*. This evolution of the ideological camps under Putin was largely accomplished prior to his 2004 bid for reelection.²¹⁰ Even if some of the individuals in each camp have changed, the divisions between political blocs are largely the same today and have certainly been consistent over the 2014 period.

The first and most important political bloc to understand is the siloviki. This bloc has held significant sway in Russian politics for over a decade; it was influential in its Arctic Policy pre-2014 and remains so today. "Siloviki" might be literally translated as

²⁰⁹ Jørgen Staun, *Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy* (Copenhagen, Danish Institute for International Studies (DIIS), 2007), https://www.researchgate.net/publication/281237252_Siloviki_versus_Liberal-

Technocrats_The_fight_for_Russia_and_its_foreign_policy, 27

²¹⁰ Ibid.

"person of force" and refers to individuals associated with the military and security services. ²¹¹ Putin himself served as a KGB intelligence officer early in his career and later ran its successor, the Federal Security Service (FSB) agency. Many of his advisors share similar backgrounds and it may be that Putin feels more comfortable with and trusting of those with similar formative experiences to himself. Staun, however, argues that their shared backgrounds matter less to the siloviki than their shared worldviews that unite them more strongly than their previous occupations. ²¹² Since at least the end of Putin's second term in office, around 2008, Frederick, et al. contend, the siloviki have been ideologically united camp, are the most influential group under Putin, and that their influence has been largely consistent. ²¹³ The siloviki as a group and some of its individual members are, therefore, important players to consider in Allison's model, both pre- and post-2014.

Writing in 2007, Staun considered the key siloviki players to include Igor Sechin, Viktor Ivanov, Vladimir Ustinov, Sergei Ivanov, Nikolai Patrushev and Mikhail Lavrov. ²¹⁴ Of these, Sechin, Sergei Ivanov, and Patrushev remain critical today. At the time, Sechin was the deputy head of Putin's presidential administration and the chairman of Rosneft, the large, state-owned, oil company. He was considered the leader of the siloviki faction. ²¹⁵ Ivanov held the post of the First Vice Prime Minister and was considered a possible successor to Putin for the 2008 election. In 2007, Patrushev was the director of the FSB. Baev credits Patrushev and Sergei Shoigu (at the time considered a third-tier siloviki member of Putin's court ²¹⁶) as stoking Putin's interest in the Arctic and moving Arctic policy up to a top priority. ²¹⁷ The views of the siloviki were therefore instrumental in sparking Russia's Arctic revival.

²¹¹ Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 37

²¹² Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy, 29

²¹³ Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 37

 $^{214\} Staun, \textit{Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy}, 28$

²¹⁵ Ibid.

²¹⁶ Ibid., 32

²¹⁷ Baev, Russia's Arctic Policy and the Northern Fleet Modernization, 16

Now, in 2018, the siloviki are still the most powerful bloc in Russia. The members however have changed slightly over the past decade. Today, Russia political analysts generally consider the most important members of the siloviki group to still include Sergei Ivanov, most recently the Chief of Staff of the Presidential administration;²¹⁸ Nikolai Patrushev, currently Secretary of the Security Council of Russia;²¹⁹ and Igor Sechin, still the CEO of Rosneft.²²⁰ In addition, some members of the group have become more important including Sergei Shoigu, now Minister of Defense.²²¹ Also promoted from "third-tier" status is Sergei Chemezov, CEO of the defense industrial corporation, Rostec. Alexander Bortnikov, has become increasingly key as director of the FSB. Dmitri Rogozin was not particularly important for Arctic issues in the pre-2014 period however he is now Deputy Prime Minister of Russia in charge of the defense industry of Russia and head of the Russian Arctic Commission and therefor influences Arctic policy.²²² These seven advisors, aided by some second-tier players, represent the core of Putin's lieutenants and have been a major factor in shaping his decision making in the post 2014 era. Furthermore, their views in regards to the Arctic have been largely consistent since the late 2000s.

3. Liberals

The second major political bloc that is important for Russia's Arctic policy is the "liberal technocrats." Frederick, et al., argue that they are the second most influential group in Russian politics. These are the heirs of the splintering of Putin's St. Petersburg followers, mixed with a few reform-minded holdovers from the 1990s. Many members of the liberal faction have bridged the pre and post-2014 periods.²²³ This group places more emphasis on confronting Russia's economic and structural challenges than its security ones.²²⁴

²¹⁸ Minchenko Consulting Group, $Politburo\ 2.0.\ and\ Syrian\ Gambit\ (Moscow,\ Minchenko\ Group,\ 2015)$

²¹⁹ Staun, Russia's Strategy in the Arctic, 15

²²⁰ Minchenko Consulting Group, *Politburo 2.0. and Syrian Gambit.*

²²¹ Trenin, Looking out Five Years: Who Will Decide Russian Foreign Policy?

²²² Ibid.

²²³ Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy

²²⁴ Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 37

Prominent members of this groups, both in the mid-2000s and today, include former President and again Prime Minister Dmitry Medvedev, Alexei Kudrin, a Putin crony from his St. Petersburgh days who has served as Deputy Prime Minister and Minister of Finance from 2000 until 2011, Alexei Miller, another graduate of the St. Petersburg mayoral office and currently CEO of Russia's other energy giant, Gazprom, and German Gref, a businessman who as Minister of Economic Development and Trade of Russian Federation engineered Russia's admission into the WTO and currently serves as the CEO of Russia's largest bank.²²⁵

While perhaps less influential than the siloviki, this groups still has clout in the administration and boasts many seasoned members of Putin's team who remain in positions of authority after years of other advisors leaving or being forced from power. While this group may less influential than the siloviki over the period in question, their input likely still matters when considering Russian Arctic policy.

4. Unaligned Players

There are also some players who may be important for Arctic decision making, but who are not aligned with either of the two major political blocs. Among the unaligned figures, Arkady Rotenberg is a childhood friend of Putin's and has remained a loyal aide for decades. He has parlayed that friendship into a number of lucrative business ventures. He is now one of the wealthiest people in the world, having bounced back successfully from U.S. sanctions, and he is CEO of Stroygazmontazh, a construction firm responsible for building oil and gas pipelines in the Arctic as well as other infrastructure projects in the Arctic. 227 It is likely that if Rotenberg asked Putin to give Stroygazmontazh a contract to expand energy infrastructure in the Arctic, it would be done.

²²⁵ Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy, 29

²²⁶ Tom Parfitt, "Building Bridges Pays Off for Vladimir Putin's Friend Arkady Rotenberg," *The Times*, October 17 2017, https://www.thetimes.co.uk/article/building-bridges-pays-off-for-vladimir-putin-s-friend-arkady-rotenberg-lqwnbz5sm

²²⁷ "Arkady Rotenberg," Forbes Profile, March 13, 2018, https://www.forbes.com/profile/arkady-rotenberg/

Secondly, while not a member of Putin's closest circles in general, Viktor Zubkov is an important player in the Arctic question. As chairman of the board at Gazprom, Russia's largest natural gas company, Zubkov holds significant power over one of the key aspects important to the Arctic.²²⁸ Also, as a former Deputy Prime Minister and Prime Minister, he is no stranger to the power games occurring in the Kremlin and therefore well equipped to promote Gazprom's interests in Moscow.

Summarizing the past decade of Russian Arctic political players, the critical points are that Putin was and has remained the ultimate decider for Arctic policy due to the issue's importance to Russia, but also to his personal interest. Under Putin, the siloviki group has remained the lead bloc over the past decade. The individual members have changed some, but Sechin, Ivanov, Shoigu and Patrushev have remained. The liberals as individuals have had a more stable bloc, but, are a less influential group. Finally, it is also important to remember the influence of Arkady Rotenberg; while politically neutral, his closeness to Putin, combined with his infrastructure business means that he also influences Russian Arctic policy.

C. PLAYER'S PREFERENCES

Having identified the key players for Russia's Arctic policy, the next issues to consider are the goals, beliefs, prejudices, and motivations of the players. Allison phrases this as "What factors shape players preferences?" Which issues are held in common agreement and which are points of contention? Then, which of these points will have specific application to the Arctic? Finally, how have those beliefs changed over the past decade?

1. What Does Putin Want?

The first perspective to consider is Putin's personal desires. Absent strong pushes from his lieutenants, where would he direct Russia's Arctic policy? Putin has a rather long history of interest in the idea of natural resources being used to advance the state's interest.

²²⁸ "Viktor Zubkov," Gazprom, March 1, 2018, http://www.gazprom.com/about/management/directors/zubkov/

In 1996, during a period when Putin was between jobs, due to election cycles in St. Petersburg, he found the time to pursue a graduate degree and write a thesis on the subject of proper management of mineral resources by a state.

A few caveats are appropriate to put this work into context. First, the quality of the scholarship of Putin's dissertation is very low; dozens of pages are lifted word for word from a book titled Strategic Planning and Policy by William King and David Cleland. Second, it is not entirely clear that Putin actually authored much of the work himself. Beyond the plagiarism claims, some analysts have contended the work is simply the product of a "diploma mill" operation and does not represent any original thought. Finally, although the Russian government describes President Putin as having a PhD in economics, Gaddy and Danchenko say the degree he was awarded would be more accurately compared to a modern day Western MBA than a doctoral degree.

Despite all these caveats regarding authorship and originality, Putin's signature is on the front page of the document and Gaddy and Danchenko still argue that the work represents an accurate and mature depiction of Putin's views on proper management of the state's resources. So, it can be taken as a reasonable proxy for his preferences from his early periods in office up until today. In his thesis, Putin argues that natural resources are the ultimate currency of a state and that they should form the foundation of the state security in case of an economic disaster. Because of their importance, natural resources must ultimately be the property of the state, to ensure they are not abused. For day to day management, however, Putin would prefer to leave the responsibility in the hands of private enterprise rather than central planners. He only proposed the state watch over the private enterprises and be ready to remand control if the private companies abuse the state's "security net" too much for their own profit.

This formulation fits nicely into the economic calculation strategy; the Russian state developed the strategic guidance for the Arctic energy sector and expects its subordinate organizations (Rosneft, Gazprom and the various ministries) to carry out that strategy. If the subordinate organizations begin to stray too far from the strategy, it is the proper role of the Russia state to step in and hold the line, making them stick to the strategy.

Although the paper was authored years before Putin came to power, it is still useful to show his thinking. Gaddy argues that this viewpoint is mature for Putin at that time and that is was in fact shaped by his family's experiences with resource mismanagement during the siege of Leningrad. Putin repeated these themes and the same general views in another article written in 1999, titled "Mineral Resources in the Development Strategy of the Russian Economy": further evidence that he was not still refining his beliefs over the interceding three years. Today, in 2018, Trenin argues that same basic prescription still represents Putin's preferences for the energy sector: day to day operation is run according to a market economy with the background of ultimate state oversight. Putin's own preferences mesh well with the observed economic calculation strategy and have remained consistent over the entire period of interest.

2. What Do Putin's Advisors Want?

Turning next to Putin's advisors, there are two different types of incentives to consider when looking at what their preferences would be regarding Russia's Arctic policy. The first is the ideological beliefs held by the siloviki and the liberals as they apply to the Arctic. Fundamentally, what do they think is the "right" thing to do in the Arctic? The second are the personal, often financial, stakes they have in Arctic companies and industries. Even if a particular policy might be at odds with an actor's belief, they may still see it as preferable if it is good for their industry, company or bank account.

Experts contend there are several general beliefs that are held by most Russian elites. Perhaps the most universally held belief is the need for Russia to be a strong state and a great power. That belief was held a decade ago and remains key today.²²⁹ Trenin believes being a great power outside of the post-Soviet space is chief among Russia's

²²⁹ Kathleen J. Hancock, "Russia: Great Power Image Versus Economic Reality," *Asian Perspective* 31, no. 4 (2007): 71–98. http://www.jstor.org/stable/42704609.

foreign policy goals.²³⁰ He also agrees that the strong Russian state is viewed as crucial.²³¹ Many scholars argue that these two views, strong state and great power, are actually inseparable in Russian thinking.

The Russian concept of *derzhavnost* encompasses a view, both in international and domestic affairs, of traditional "great powerness" and a perspective on the role of the state internally. *Derzhavnost* means Russia should have privileged access inside its sphere of influence and merits consultation from other great powers outside of it. It also means that, inside Russia, the state is and should be the central driver and organizer of the national agenda, not the will of the people, nor the preferences of elites outside of the state apparatus, nor global market forces.²³²

This vision of Russia as a strong state will likely mean that Arctic policy will be directed, rather than develop organically. It also means that whichever specific means are selected, the end is Russia's great power status. This perspective on the appropriate role of the Russian state can be seen in the "energy superpower" idea that many analysts saw Russia trying achieve in the pre-2014 period.²³³ Energy extraction should be pursued because it benefits the state and the state will take actions to accomplish this. This perspective is largely unchanged over the last decade. Even if the term "energy superpower" has fallen out of favor, the themes are still echoed in statements made by Russian leadership. A speech Putin gave in 2010 at the International Arctic Forum highlighted his desire for responsible, cooperative development of the Arctic energy and

²³⁰ Dmitri Trenin, "Demands on Russian Foreign Policy and Its Drivers: Looking Out Five Years," *Carnegie Center Moscow* August 10, 2017, http://carnegie.ru/commentary/72799.

²³¹ Dmitri Trenin, "Looking out Five Years: Ideological, Geopolitical, and Economic Drivers of Russian Foreign Policy," *Carnegie Center Moscow*, August 22, 2018, http://carnegie.ru/commentary/72812.

²³² Canadian Security Intelligence Service, "Russian Worldviews—Domestic Power Play and Foreign Behavior," 14.

²³³ Peter Rutland, "Russia as an Energy Superpower," *New Political Economy* 13:2, 2008, 203–210, https://doi.org/10.1080/13563460802018547.

transport sectors to promote Russia's economic growth.²³⁴ The bullet points for that 2010 speech could have almost been used word for word for his 2017 speech at Franz Joseph Land island, where he again emphasized using the Arctic energy and transport sectors to strengthen the Russian state.²³⁵ The desire of Russian leaders to further the *derzhavnost* concept in the Arctic has not changed over the last decade.

Today, Russian elites also generally recognize the problems with Russia's current economic system, largely driven by energy extraction. Most Russian elites accept that oil prices are not moving back up any time soon and they must adjust to deal with these low commodity prices for the foreseeable future.²³⁶ While Russian elites largely agree on the fact of this development, their proposed responses to it lead to some of the most glaring rifts between the major political blocs. To mix gambling metaphor, post-2014 Russian elites are essentially faced with the decision to either "fold" or "double down" in the Arctic. After 2014, they could either give up on the previous decade's efforts to turn the Arctic into a source of revenue and a world class transport corridor. Doing so would be to "fold," accepting the sunk costs and looking to pivot in their Arctic strategy. Alternately, Russia's elites could choose to "double down." Fearful of having wasted the past decade's efforts, they would choose to put more effort and more investment, into the Arctic in the hope that they could save some of the dwindling expected returns. This choice would encompass continuing to follow the economic calculation strategy. A less charitable description of this strategy might call it "throwing good money after bad," rather than "doubling down." The specific choices Putin's advisors would prefer depend on which strategy they believe is appropriate.

^{234 &}quot;Prime Minister Vladimir Putin addresses the international forum 'The Arctic: Territory of Dialogue," Archive of the Official Site of the 2008–2012 Prime Minister of the Russian Federation Vladimir Putin, September 23, 2010, http://archive.premier.gov.ru/eng/events/news/12304/.

^{235 &}quot;Putin Reaffirms Russia's Arctic Oil Claims With Visit to Island Chain" *Sky* News, March 30, 2017, https://news.sky.com/story/putin-reaffirms-russias-arctic-oil-claims-with-visit-to-island-chain-10818291.

²³⁶ Trenin, "Looking out Five Years: Ideological, Geopolitical, and Economic Drivers of Russian Foreign Policy."

3. Disagreements—The Siloviki Perspective

The siloviki position is not new, but has been held fairly consistently for at least the past decade.²³⁷ The siloviki, and especially the ones central to the Artic policy making, would likely have pressed President Putin to "double down." As direct evidence of the inner workings of the Kremlin are largely inaccessible, instead general policy preferences must be used as a substitute. The siloviki group generally believes the best response to low commodity prices and the associated financial burden on Russia is to increase the state's efforts to drive solutions to these problems. Their preferred method of doing this would be to fully nationalize the remaining quasi-independent energy companies. They fundamentally fear that allowing the energy sector to take its natural course, free from steering by the central government, would be disastrous for Russia. In the case of the Arctic, this would mean allowing the energy companies to reduce their efforts in Arctic in response to the price drops, potentially turning to other areas of Russia's energy sector.

The siloviki have taken lessons from the 1990s in Russia when powerful oligarchs were able to amass miniature empires under their control in the wake of the collapse of the Soviet Union. The siloviki believe this system contributed to Russia's weakness during the 1990s and are very wary of allowing oligarchs to consolidate too many resources and power, out of control of the central government.²³⁸ They instead advocate for a full nationalization of the energy sectors, believing only this will allow control and steering of the sectors for the benefit of the state and not individual oligarchs.²³⁹ They believe that a nationalized energy sector will best position Russia to compete as a great power in the future.

²³⁷ Ian Bremmer and Samuel Charap. "The Siloviki in Putin's Russia: Who They Are and What They Want." *The Washington Quarterly* 30, no. 1 (2007): 83–92.

²³⁸ Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 38.

²³⁹ Ibid.

4. Disagreements—Liberal Perspective

The liberal camp takes a different view on the solution to Russia's current economic stagnation. The liberals would be more willing to "fold" in the Arctic, recognizing that the investments over the last decade are largely lost and, not continue to throw good money after bad. They argue that depending on raw material extraction is not a viable economic model for Russia going forward. They believe Russia needs to reform its economy and diversify its income base away from energy and other raw material exports. ²⁴⁰ The liberals resist further nationalization of the energy section. They further argue that if it must be done, it should be done so slowly and through transparent legal channels, as opposed to the extrajudicial takeovers seen in Putin's first two terms as president. ²⁴¹ While it is important not to exaggerate their openness, the liberals are also slightly more likely to accept compromise with the West than the siloviki, hoping to regain access to the financing and technology needed in the Arctic. ²⁴² It is not entirely clear exactly how the liberals would direct Russia's Arctic strategy if they were able to have their way, but it seems unlikely that they have been the driving force behind the strategy that has been observed.

5. Personal Interests

In addition to the Arctic policy preferences that develop out of ideological positions, Russian elites may also have preferences that are rooted in their own personal interests. Those interests may be financial, or they may be related to the chance to further their power and status as the head of a company or ministry. These preferences may or may not align with their ideological ones. If they do align, it is simply more incentive to push for a particular agenda. If there is conflict between ideological and personal preferences, the choice of what policy to support will be more difficult.

Many writers have commented on the ways in which Russian elites use blurred political and business ties to amass personal fortunes; this practice is no different in the

²⁴⁰ Ibid., 39.

²⁴¹ Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy.

²⁴² Ibid.

Arctic.²⁴³ This practice crosses ideological lines; many of the most important players in the Russian Arctic on both sides of the aisle also have personal stakes in the ownership of Arctic companies or derive their political capital from being in charge of Arctic-related ministries. Already mentioned are the connections between Putin's lieutenants and the energy companies Rosneft and Gazprom. These connections have been consistent for years.²⁴⁴ Igor Sechin has been on the Rosneft board since 2004.²⁴⁵ He became the CEO in 2012 and still holds that post.²⁴⁶ Likewise, Miller has been the CEO of Gazprom since 2001.²⁴⁷ Whatever philosophical differences Sechin and Miller may have, both stand to benefit personally if the Russian state continues to support and encourage their respective companies in the Arctic. In both cases, Rosneft and Gazprom have benefited for years from the patronage of the Russian state.

Similarly, Rotenberg may not align politically with a particular ideological bloc, but as the CEO of Stroygazmontazh he stands to benefit financially if there is a continued need for his company to build and maintain the networks of pipes and electrical distribution systems in support of the Arctic energy sector. This has been the case since Rotenberg founded Stroygazmontazh and continues up to the present.²⁴⁸ In some instances, the evidence of graft in Russian Arctic decision making is barely hidden. In 2007, Gazprom was weighing a plan to build 350 miles of pipeline along one path or 1500 miles along another in the Arctic. Amazingly, they chose the longer path that also gave \$44 billion of

²⁴³ See: Karen Dawisha, *Putin's Kleptocracy: Who Owns Russia*? (New York: Simon and Schuster, 2015). Or, Mark I. Levin and Georgy A. Satarov, "Rent Seeking Through Control of the State in Russia," *Companion to the Political Economy of Rent Seeking* ed. Roger D. Congleton and Arye L. Hillman (Cheltenmham: Edward Elgar Publishing, 2015).

²⁴⁴ For an excellent summary of the various intertwined board and government positions of Putin's advisors see *Putin's Kleptocracy: Who Owns Russia*?, 338.

²⁴⁵ Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy, 21.

²⁴⁶ Management Board," Rosneft, March 13, 2018, https://www.rosneft.com/governance/management/item/6119/.

²⁴⁷ "Alexi Miller| Gazprom," EuropeanCEO, March 13, 2018, https://www.europeanceo.com/profiles/alexi-miller-gazprom/.

²⁴⁸ Joshua Yaffa, "Putin's Shadow Cabinet and the Bridge to Crimea," *The New Yorker*, May 29, 2017, https://www.newyorker.com/magazine/2017/05/29/putins-shadow-cabinet-and-the-bridge-to-crimea.

business to Rotenberg.²⁴⁹ This personal interest would incentivize Rotenberg to argue for the "double down" strategy.

Finally, while perhaps not as financially tied to the Arctic as others of Putin's advisors, Dmitry Rogozin is also still incentivized to push for continued Arctic expansion, both in the energy sector and the NSR, since he has been given responsibility for coordinating Russian Arctic efforts. Being in charge of a forgotten backwater, full of derelict oil wells, is not a bright future for Rogozin. He too would want to encourage President Putin to continue to invest in and promote the Arctic energy sector over the energy sector elsewhere in Russia. In Rogozin's case, his position also incentivizes him to push for the NSR expansion as well as the energy sector expansion. As his Arctic Commission is charged with overseeing the Ministry of Transport in the Arctic, his political stock would rise if the NSR did succeed in becoming a major part of the global maritime sector.²⁵⁰ Rogozin also has responsibilities as the deputy prime ministry for the defense industry. He was recently partially behind a push for president Putin to increase Rosatom's authority along the NSR.²⁵¹ Rosatom is the parent company to the icebreaker building Atomflot, both, however, also fall under the defense industrial sector, so what's good for Atomflot and Rosatom's bottom lines is good for Rogozin. (In 2007, Rosatom's CEO was Sergei Naryshkin, another member of the siloviki bloc and perhaps part of the push for the NSR and icebreaker expansion prior to Rogozin.²⁵²) In both instances (energy and the NSR), Rogozin will increase his political capital in the Kremlin as head of the Arctic Commission if more and more resources continue to pour into the region, leading Rogozin to use his influence to see the Russia continues to pursue economic calculation in the Arctic.

²⁴⁹ Ibid.

²⁵⁰ Conley, The New Ice Curtain: Russia's Strategic Reach to the Arctic, 8

²⁵¹ Charles Digges, "Report Says Rosatom Will Take Over Arctic Development – Vastly Increasing Role of Icebreakers," *Bellona*, November 16, 2017. http://bellona.org/news/nuclear-issues/nuclear-russia/2017-11-report-says-rosatom-will-take-over-arctic-development-vastly-increasing-role-of-icebreakers.

²⁵² Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy, 32.

Summarizing the answers to Allison's second question regarding players' preferences, most Russian elites believe there is a role for the state to direct policy in crucial sectors such as energy. Putin himself has held this position since the mid-1990s. The siloviki block are more likely than the liberals to support continuing Russia's current track of pouring money in to the Arctic. These ideological positions have been held for some time and are not products of the 2014 oil price crash. Beyond any ideological positions, many of Russia's elite have personal financial reasons to support continued state patronage of the Arctic energy and transport industries. This too has been the case for years in Russia. So even for those who would pause at throwing good money after bad, must also consider their own bottom line.

D. PLAYER'S IMPACT

Allison phrases his third questions as, "What determines player's impact on the results?" In some systems, this question may hinge on which department a person is in charge of or if they have high interpersonal skills. In contrast, for Russia, this question largely boils down to how close the person is to Putin. For the past decade and a half, Putin has consistently hunted down and eliminated any sources of power independent of himself. As a result, today, the remaining Russian elites derive their power from Putin and not from private wealth, or any other independent source.²⁵³ Russian elites are often fabulously wealthy, but that wealth does not guarantee a lasting political impact. Putin giveth and Putin taketh away. To assess their impact on Arctic policy, one therefore needs to look at how Putin's advisors have risen and fallen over time.

Many Russia analysts have attempted to track the movements of power groups and of individuals in and out of favor with Putin. The "rise of the siloviki" was a common theme in work done over the past decade and many authors have agreed the siloviki group has been in power consistently for years.²⁵⁴ Trenin agrees with this view of siloviki

²⁵³Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 36.

²⁵⁴ See for examples: Andrei Illiarionov, "The Siloviki in Charge." *Journal of Democracy* 20, no. 2 (2009): 69–72, or Ahmed Mehdi and Shamil Yenikeyeff, *Governors, Oligarchs, and Siloviki: Oil and Power in Russia* (Working Paper: IFRI, Russie. Nei. Visions 68, Paris: 2013).

supremacy today and argues the role of security personnel has grown even larger since 2014 and Russia is now run by a quasi "military high command."²⁵⁵ He argues that a combination of patriotic fervor from the Russian people and a control of the information Putin receives gives the Siloviki a strong hold over the levers of power in Russia.²⁵⁶ Trenin singles out Shoigu and Rogozin as the two siloviki who should be watched the closest in Russia's political power struggles. The RAND analysis also agrees with Trenin's assessment, concluding that the siloviki are the most powerful power groups in Russia, with liberals a distant second.²⁵⁷ If this assessment is accurate, we can expect the siloviki's preferences have carried significant weight in shaping Russia's policy decisions post 2014.

In attempt to present a broad picture of who is influential in Russia, this chapter examined several sources. The first is Jorgen Staun's rankings of the levels of influence of individual siloviki and liberals in his 2007 study. Additionally, the Minchenko Consulting group has produced an annual report for the past five years, documenting and explaining the movements of Putin's top aides in and out of favor. This chapter has used to their 2012, 2013 and 2017 reports to chart the movement of lieutenants in and out of power across the 2014 period. Also, for the post 2014 period, the Peterburgskaya Politika Foundation (PPF) compiled their own list of influential Russian elites in the summer of 2017 based on the most recent evidence of political moves in Moscow. Finally, the analysis of Dmitri Trenin, writing in 2017 on the drivers of Russian policy, has been included.

Starting with the earliest (2007), Staun saw the most powerful advisors as Sechin, Ivanov, Patrushev, Medvedev, Kudrin, and Miller. For 2012 and 2013 Minchenko largely agreed, although in general they assigned the liberals a lower level of influence. They also

Weir, Fred. "Oligarchs Out, 'Siloviki 'In? Why Russia's Foreign Policy Is Hardening," *The Christian Science Monitor* (2015).

Taylor, Brian D. "The Russian Siloviki & Political Change." Daedalus 146, no. 2 (2017): 53-63.

²⁵⁵ Trenin, "Looking out Five Years: Who Will Decide Russian Foreign Policy?"

²⁵⁶ Ibid.

²⁵⁷ Ibid.

argued that Shoigu jumped significantly in influence between 2012 and 2013 as he moved from being the minister of emergency situations to the minister of defense.

Minchenko argues that in the post-2014 period the most influential people in Russia, whose fortunes will determine the course of future policy, are Sechin, Shoigu, Chemezov, Rotenberg, Kovalchuk, Medvedev, Sobyanin, and Volodin. 258 Their 2015 list also included Ivanov and Timchenko, but they asses those two have dipped in their influence to be second tier actors by 2017. Of the siloviki, Minchenko assesses Sechin to be at the top of his power, but potentially soon to be in trouble and he is beginning to make enemies of other elites. Sergei Shoigu is likewise assessed to be near the peak of his influence but may continue to rise in prominence as defense minister if the country continues to be at war. Many of the siloviki have consistently been in power over the last decade.

Notably, the only prominent liberal on the Minchenko list in the post-2104 period is Medvedev. The Minchenko report argues that Medvedev is powerfully positioned due to his young age (52), his long history of loyalty to Putin, and his experience in the Russian government.²⁵⁹ Of the non-aligned actors, Rotenberg is assessed to be powerful, but potentially losing some of his influence as his ability to act as a Western intermediary is diminished in the wake of further poor relations between Russia and the West. Ultimately, the non-siloviki actors have not maintained the same level of influence the siloviki have.

The Minchenko assessments of personal power and influence levels are largely in line with those of a separate Russian assessment of potential successors to Putin. The PPF compiled its own list of influential Russian elites in the summer of 2017 based on the most recent evidence of political moves in Moscow. For the liberals, they agree with Medvedev's high rating, believing he has responded well to the last year's poor reviews in the Russian media and thus weathered that storm of criticism. ²⁶⁰ They disagree, however,

²⁵⁸ Ibid., 5.

²⁵⁹ Ibid., 6.

²⁶⁰ "Russian Think Tank Rates Putin's Likely Successors," Saint Petersburg Peterburgskaya Politika, August 21, 2017, https://fpp.spb.ru/fpp-top-successors, 4.

with the Minchenko report in regards to Kudrin; they believe his stock is falling as he was behind a failed economic reform agenda in the summer of 2017.²⁶¹ On the siloviki side, they likewise agree that Shoigu's influence will continue to grow with continued military conflicts.²⁶² They are more optimistic about Sechin's prospects, pointing to his successful moves against his business rival Gazprom (and its liberal CEO, Miller).²⁶³

The overall results of these analyses are tabulated in Figure 13. Players are divided into their associated camps and listed with their respective ministries or industries which have stakes in the Arctic in the pre and post-2014 period. Finally, the various opinions of their level of influence are listed along with the source of that assessment. Individuals in bold are those that have retained a stable high level of influence throughout the past decade. Ivanov, Sechin and Medvedev have been the most consistently influential of Putin advisors. Patrushev, Rotenberg and Kudrin follow them in influence.

²⁶¹ Ibid., 6.

²⁶² Ibid., 5.

²⁶³ Ibid., 8.

Who	Position(s) Pre-2014	Influence Level Pre-2014	Position(s) Post -2014	Influence Level Post-2014
Sergei Ivanov	First Deputy Prime Minister	Tier 1 (Staun) Tier 1 (Minchenko 2012 and 2013)	Special Envoy for Transportation and the Environment	Tier 1 but dropping (Minchenko)
Sergey Shoygu	Minister for Emergency Situations	Tier 3 (Staun) Tier 3 (Minchenko 2012) Tier 1 (Minchenko 2013)	Minister of Defense	Tier 1 (Minchenko) Tier 1 (PPF) Tier 1 (Trenin)
Dmitri Rogozin	Ambasador to NATO	Nil	Head of Russian Arctic Commission and Deputy Prime Minister of Russia in Charge of Defense Industry of Russia	Tier 2 (Trenin)
Igor Sechin	Chairman Rosneft, Deputy Head of the Presidential Administration	Tier 1 (Staun) Tier 1 (Minchenko 2012 and 2013)	Executive Chairman Rosneft	Tier 1 (Minchenko) Tier 1 (PPF)
Nikolai Patrushev	Director of the FSB	Tier 1 (Staun) Tier 2 (Minchenko 2012 and 2013)	Secretary of the Security Council of Russia	Tier 2 (Minchenko)
Dmitry Medvedev	President, First Deputy Vice-Prime Minister, Head of Board of Gazprom	Tier 1 (Staun) Tier 1 (Minchenko 2012 and 2013)	Prime Minister	Tier 1 (Minchenko) Tier 1 (PPF)
Alexei Kudrin	Finance Minister, on Gazprom Board	Tier 1 (Staun) Tier 2 (Minchenko 2013)	No Formal Role	Tier 2 (Minchenko)
Alexei Miller	Director of Gazprom	Tier 1 (Staun) Tier 2 (Minchenko 2012 and 2013)	CEO - Gazprom	Tier 3 (Minchenko)
German Gref	Minister for Economic Development and Trade	Tier 1 (Staun) Tier 2 (Minchenko 2012 and 2013)	CEO and Chairman Sberbank.	Tier 2 (Minchenko)
Arkady Rotenberg	Co - Owner Stroygazmontazh	Tier 2 (Minchenko 2012)	Co - Owner Stroygazmontazh	Tier 1 (Minchenko)
Viktor Zubkov	First Deputy Prime Minister	Tier 3 (Minchenko 2012 and 2013)	Chairman - Gazprom	Tier 3 (Minchenko)

Figure 13. Putin's Key Advisors, their Influence and Sectors

E. HOW THE GAME IS PLAYED

The final question Allison addressed is "What Is the Game?" This refers to an analysis of the ways in which the systematic organization of the government affects decisions making. What are the rules the players follow? Are recommendations made through a series of face to face meetings? Are formal, written proposals drafted and submitted? How are different parts of a problem delegated to subordinate parts of the government? Understanding these processes in Putin's Russia has been a challenge for

many analysts.²⁶⁴ Russia analysts have however identified a few broad, agreed-upon trends.

Part of the difficulty in analyzing the Putin regime's decision making is that the process seems to be largely informal and one in which personal relationships are key. 265 This type of systemic informality further shows how important personal relations are in achieving a policy goal in Russia. Again, writing in 2007, Staun argues that this system of informal, personal relations trumping official positional influence is not unique to Putin, but rather an evolution of the type of system he inherited from Yeltsin and his "family." Instead of a system where influence comes from being the head of a large government agency, in Russia those who have influence are later given positions as a reward. 266 This type of system means the personal closeness to Putin and how much one is trusted by him is the most important predictor of influence on policy. It also means that the elites around Putin have to jockey against each other to gain positions of favor.

It I also likely that an extremely small number of those personalities matter. In Putin's informal system, there are no official meetings with the heads of all the appropriate agencies. Instead many critical foreign policy decisions are made on the basis of very small, ad-hoc group meetings or potentially even personal meetings with a single advisor. The case of the decision to invade Crimea provides a poignant example. Putin has since claimed he alone was responsible for the decision to invade. However, Daniel Treisman believes it is more likely that plans and preparations for a possible invasion were made with consultation with the full 12-person Security Council. Then, a few days later, Putin met with three people to make the decision to go ahead with the invasion: Sergei Ivanov,

²⁶⁴Konstantin Gaaze "Court and Politburo: Putin's Changing Inner Circle," *Carnegie Center Moscow*, September 22, 2017, http://carnegie.ru/commentary/73193.

²⁶⁵ Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 37.

²⁶⁶ Staun, Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy, 26.

²⁶⁷ Frederick et al., Assessing Russian Reactions to U.S. and NATO Posture Enhancements, 37.

Nikolai Patrushev, and FSB chief Aleksandr Bortnikov.²⁶⁸ This critical group was composed of entirely siloviki. In his analysis of the Crimea decision Fyodor Lukyanov specifically notes that there was no representation from the liberal camp in this decision.²⁶⁹ This example shows that second tier advisors may have influence on creating plans or preparing for reversible decisions, but the irreversible, critical decisions are made by Putin, perhaps in consultation with a very small group of the most trusted advisors.

A final point to note is the way in which policy is carried out once it has been decided. In her 2013 analysis of Russia's governance in action, Alena Ledeneva looked at how the Russian political system had evolved since 1998, thus providing a good overview of the pre-2014 era. She concludes that a dense series of informal networks with an array of unwritten, but commonly understood norms are responsible for anything actually happening in Russia.²⁷⁰ She refers to the concept as "sistema." She argues that it has three key components under Putin: it is pervasive and absolutely required to accomplish anything, it depends on a series of rewards doled out according the sistema principles rather than market forces, and it depends on a blurring of private and public boundaries.²⁷¹ This description of Putin's system echoes the point Allison made, that even if a decision maker has absolutely power, there is still some amount of consensus required to make underlings carry out orders in a satisfactory manner. This description is very much in keeping the way Karen Dawisha described the Russian political system in 2014, just before the sanctions and oil price crash.²⁷² Since 2014, there is little to suggest that there have been any fundamental changes to the way Russia works. Writing in 2016, Trenin echoes Dawisha's

²⁶⁸ Danielle Treisman, "Crimea: Anatomy of a Decision," *The New Autocracy: Information, Politics, and Policy in Putin's Russia*, ed. Daniel Treisman (Washington, DC, Brookings Institution Press, 2018), 13

²⁶⁹Steven Le Myers, "Russia's Move Into Ukraine Said to be Born in Shadows, "*New York Times*, March 7, 2014, https://www.nytimes.com/2014/03/08/world/europe/russias-move-into-ukraine-said-to-be-born-in-shadows.html?ref=ellenbarry& r=2.

²⁷⁰ Alena V. Ledeneva, *Can Russia Modernise?*: Sistema, Power Networks and Informal Governance (Cambridge, Cambridge University Press, 2013).

²⁷¹ Ibid., 20.

²⁷² Dawisha, Putin's Kleptocracy: Who Owns Russia?

comments about Russia being a "kleptocracy."²⁷³ Likewise, the most recent 2017 Minchenko report concludes that the, "informal network-based governance structure" is still intact, the only change in the last few years is that Russia's shrinking economy and Western sanctions have left less "pie" to be distributed amongst the elites.²⁷⁴ The way Russia worked in 2007 as interest in the Arctic was rising is fundamentally how it works today.

For the Arctic and the decision-making process surrounding it, sistema has a critical impact. For the liberal camp, their efforts at economic reform are not just fighting against the siloviki camp, with a different policy aim, they are fighting against a deeply ingrained political culture that is pervasive throughout Russia. Reforming the economic system, by returning more power to private companies would mean drawing distinct lines between the public and private domains and abolishing the system of rents on which sistema runs. This is why Trenin believes such a move is incredibly unlikely to actually occur. He claims that the scope of reforms which would be required would end the domination of Russia by the elites who have built their control on the current system.²⁷⁵ To dismantle it would be to also sacrifice their own positions.

F. CONCLUSION

Looking at the people around Putin gives a clearer understanding of why Russia has acted the way it has in response for the events of 2014. Allison's model for analysis show that there are two main groups to consider with diverging views on the best way forward for Russia in the Arctic. Of those two groups, the siloviki appear to have the most influence, both as a bloc and in the case of key individuals close to Putin. Due to their ideological beliefs regarding the need for the state to steer the critical energy sector and their personal stakes in many of the Arctic companies, the siloviki are more likely to support "doubling down" in the Arctic, as Russia has been seen to in fact do post 2014.

²⁷³ Dmitri Trenin, Should We Fear Russia? (Cambridge, Polity Press, 2016), 49.

²⁷⁴ Minchenko Consulting Group, *Politburo 2.0. Renovation Instead of Dismantling*.

²⁷⁵ Trenin, "Looking out Five Years: Ideological, Geopolitical, and Economic Drivers of Russian Foreign Policy."

There are liberals who would try to steer a different path, being more willing to "fold," but they are numerically smaller, have fewer top influencers, also still have some personal incentives in the Arctic. Furthermore, these would be reformers are handicapped by the structure of Russia's corrupt elite system. Trying seriously to enact the major reforms that would be required to open the Arctic to Western business cooperation would cost them their positions in the system, and potentially bring the whole system crashing down on top of them.

In the case of the NSR, while there are some synergistic connections to supporting the transportation of LNG to Asia as discussed in previous chapters, the push for continued expansion seems to be less about siloviki ideology and more about a way for Dmitry Rogozin to strengthen his position as head of an Arctic energy-transport-infrastructure empire. Finally, Putin's own instincts would lead towards the path of ensuring Russia's energy self-sufficiency, through forceful state direction if necessary. He has a history of suspicion about giving too much freedom to private business entities over Russia's strategic resources and may view the Arctic situation through that lens.

Given this analysis, the apparent anomaly of Russia's continuity in Arctic policy begins to look clearer. Moving away from the conception of Russia as a monolithic rational actor and looking at it instead as a hierarchy of competing and disagreeing individual actors sheds significant light on its Arctic policy. It does not make sense that a rational actor would pursue an agenda with weaker expected returns as heavily as one with strong returns. It does make sense, however, that a state would continue stumbling along a path that the people at its highest echelons of power stubbornly insist is the ideologically correct one and also conveniently the one which will continue to line their own pockets.

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VII. CONCLUSION

At its beginning, this thesis posed the question, "how does Russia think about the Arctic?" This question implies two separate avenues of investigation. First, what does Russia think about the Arctic? That is, what is Russia trying to accomplish there and what methods is it using to achieve those ends? The second part of the question is, what is the best way to model the factors that go into Russia's decision making? To answer these questions, this thesis examined conditions in the Arctic and Russian policy, both pre- and post-2014. It has found that, to answer the first question, of the various schools of thought on Russian Arctic policy, the economic calculation school best represents Russia's strategy both pre- and post-2014.

In the pre-2014 era, Russia saw the opportunity to strengthen the country by pursuing the economic potential of an increasingly accessible Arctic. To increase the chances of successfully doing so, Russia pursued a policy of encouraging a benign Arctic diplomatic environment. It also invested heavily in the Arctic energy sector and the NSR. Russia pursued additional rights to hydrocarbon resources through the UNCLOS process, but did so in a way that was cooperative and non-disruptive to the UNCLOS process itself. It also developed a reliable governance system for the NSR to lure worldwide shipping clientele. Russia saw the Arctic as an economic opportunity to strengthen the Russian state.

This finding indicates that, contrary to what some analysts have claimed, Russia does not primarily pursue military confrontation in the Arctic. While it is true that Russia has increased the size of its military presence in the region, that growth does not represent an attempt by Russia to "take over" the Arctic or that the country is preparing to fight a war in the Arctic. The most important aspect of Russia's military in the Arctic is its nuclear submarine force. For decades, Russia has used the cover of the polar ice caps to hide its ballistic missile submarines. As environmental changes are making that tactic less feasible, and as Russia continues to view its nuclear arsenal as essential to its military strategy, Russia has responded by increasing its ability to defend its Arctic-stationed nuclear forces. The much discussed "icebreaker gap" is also a red herring. Russia's icebreaker fleet should no more be viewed as "military assets" than the snowplows that clear roads on a military

base are. The icebreakers are primarily suited to serve the needs to the NSR. Although Russia's surface ships may need icebreakers to break out of the Arctic during the high ice periods, it is not likely that they will fight in the Arctic. Klimenko has best summarized the military situation: "in, but not for the Arctic." ²⁷⁶

In 2014, the circumstances surrounding Russia's Arctic strategy shifted dramatically. The United States and other Western nations placed Russia under sanctions in response to its action in Crimea. These sanctions denied Russia access to the financing and technology required for continuing to expand its Arctic energy sector. Then, later in the year, the price of oil dropped significantly, making Russia's Arctic energy business model unprofitable. Additionally, mounting evidence of the NSR's inadequacies as an international transit corridor caused traffic levels to plummet that year and they have since never rebounded. Given these facts, Russia had much less reason to continue pursuing the economic calculation strategy after 2014.

Nonetheless, after 2014, the country persisted with the economic calculation strategy. Russia continued to invest in its Arctic energy sector. Its leaders continued to espouse their belief in a peaceful, economically vibrant Arctic, based on the energy and transport sectors. Russia continued to build expensive icebreakers to facilitate the development and use of the NSR. The fact that Russia kept thinking the same way about the Arctic, despite the shift in circumstances, sheds light onto the second question: "how does the decision-making process work?"

If one assumes Russia's Arctic policy process can be adequately modeled by the rational actor model, the state's response to 2014 is perplexing. Circumstances changed, but Russia continued with the same Arctic strategy. The situation becomes clearer when one looks at Russia's Arctic decision making process through the lens of Graham Allison's bureaucratic politics model. Here we can see the influence of the *siloviki* bloc in Russian politics. They are the most influential bloc in Russia that has Putin's ear. Their concern about too much freedom for independently wealthy oligarchs and for the need to steer the Russian economy have led them to encourage Russia to stay the course in its Arctic

²⁷⁶ Klimenko, Russia's Arctic Security Policy, 26 – 28.

policies. These beliefs also mesh easily with President Putin's personal convictions that the energy sector is crucial to the success of the Russian state and needs to be specially looked after by the central government. Many of the same advisors who genuinely believe in Russia continuing its Arctic policies may also have more personal incentives behind their support, as many are invested in Arctic companies that are benefiting from the state's policies, such as the case of Igor Sechin and his long history as chairman of Rosneft. Finally, there is the factor of Russia's political system, where power is built on a system of blurred responsibility and heavy state involvement in all aspects of big business. Making the types of systemic changes that would allow a reversal on Russia's Arctic policy would involve actions which would weakening Arctic heavy industries like Gazprom and Rosneft. This would cost those in power their own positions as heads of those important industries, thus encouraging them to push for the status quo. Given these circumstances, it becomes clearer why Russia has continued to pursue its pre-2014 economic calculation strategy, despite the 2014 change in circumstances.

Consequently, the best way to model Russia's Arctic decision making process is through a bureaucratic politics model. While the geophysical realities of the melting polar ice caps and the presence of significant hydrocarbon wealth surely sparked Russian elites' initial interest in the region, the specifics of Russian Arctic strategy have been carried through by personnel and organizational interests, rather than calculated, benefit-maximizing decision making. This fact may have implications for how Russian policy is studied outside of the Arctic as well. If such a concentrated bloc of Russian elites determine its Arctic policy, might the same hold true in other areas? As was briefly mentioned earlier, the decision to invade and annex Crimea was likely made by President Putin in consultation with an extremely small group of advisors. Is the way that Russia is approaching the Syrian conflict a result of careful deliberation about geopolitics, or is the use of non-governmental mercenaries more of a signal of the interests of those elite in charge of the military-industrial complex? In regard to Russia's China policies, should we pay more attention to Moscow, or the regional elite in Russia's Far East? Are there power dynamics and divergent interests at stake there, as well, that may lead to different policy outcomes?

This finding also brings into question how we should view the stability of Russia's policies. In the Arctic, the views of the strongest political bloc, the *siloviki*, roughly correspond to the view of President Putin, so stability has been maintained through most of his regime. Does this alignment of power and perspective remain over all aspects of Russian policy? Or are there areas where Putin's lieutenants chafe under the policies he pushes on them? When he is re-elected President in 2018, Putin will be 65 with the potential to be president until he is 71. Is there a possibility that sometime in the future his personal power will begin to wane and cracks may begin to appear between his policies and preferences and those of his underlings? When the time comes for a new regime to take power, how will the ensuing political fighting and realignments manifest themselves in future policies?

A few upcoming key events may be pivotal turning points for Russia's Arctic strategy. First, the role of Dmitry Medvedev, following the 2018 elections, is highly questionable. One possibility is that he will move to take over Gazprom. This would be a move against Igor Sechin, an attempt to try and wrest control as the unofficial leader of Russia's energy sector.²⁷⁷ If this were to happen, the liberal bloc would get a powerful advocate who then would have a personal investment in the energy sector. Perhaps Medvedev would be a powerful enough player to turn around Russia's Arctic policies, shifting them to a strategy away from state direction of the energy and transport sectors, and allowing natural market forces to take hold. Additionally, the CLCS may rule on Russia's extended continental shelf claims, confirming or denying Russia's rights to more hydrocarbons on the sea floor in the Arctic. While a ruling in Russia's favor would be a political victory and bolster the strength of the international legal regime in the Arctic, without significant advances in Russian technical competency, it seems unlikely they could effectively exploit those gains, thus limiting the effects to symbolic and political ones. Alternately, if the CLCS denies Russia's claim, that may be the final straw that breaks the metaphorical camel's back, causing Russia to abandon its economic strategy. It is also possible that oil prices could surprise forecasters' expectations and rise dramatically. This

²⁷⁷ Minchenko Consulting Group, Politburo 2.0. and Syrian Gambit, 6

would return much of the economic rationale behind Russia's policies and would likely cement its strategy more firmly.

Finally, the other significant factor to consider is Chinese-Russian cooperation on Arctic projects. At the same time strained relations with the West are pushing Russia eastwards, China is becoming increasingly interested in the Arctic. The Arctic energy sector and the NSR are both areas where Russia and China are developing aligned interests. China's Arctic interests initially seemed to be largely scientific, but are now more focused on hydrocarbons, as its energy demands grow.²⁷⁸ China sees the Russian Arctic as a source of energy resources and sees the NSR as an excellent way to get them to China.²⁷⁹ Russia, for its part, certainly welcomes new customers for its energy resources and would welcome new investors and technological partners. But Russia fears losing too much control of the Arctic to China; some see the emerging partnership not as China being a customer, but a "co-developer" of the Arctic.²⁸⁰ The Chinese partnership also has limitations, as China will likely not be able to replace Western technological assistance for deep offshore drilling for years to come.²⁸¹ China and Russia have also clashed over the extent of the NSR that Russia claims as internal waters. 282 Tensions over the legal regime of Russia's oceans have led to problems between Russian and China previously, at one point leading to Russian naval border guards firing at and boarding a Chinese fishing vessel in 2012.²⁸³ On the whole, the Chinese-Russian-Arctic connection will likely be complicated but important, without a clear end state in sight. As long as China continues to see the Russian Arctic as a good source of energy resources, the economic calculation strategy may stay (barely) viable. If China lowers its energy needs or finds superior sources to the Russian Arctic, the

²⁷⁸ Camilla Sorensen and Ekaterina Klimenko, *Emerging Chinese-Russian Cooperation in the Arctic* (Stockholm: SIPRI Policy Paper, April 2017), 7.

²⁷⁹ Ibid., 8.

²⁸⁰ Ibid., 21.

²⁸¹ Stephanie Pezard and Timothy Smith, "Friends if We Must: Russia and China in the Arctic," *War on the Rocks*, May 6, 2016, https://warontherocks.com/2016/05/friends-if-we-must-russia-and-chinas-relations-in-the-arctic/.

²⁸² Ibid.

²⁸³ Kevin Voigt, "Shots Fired as Russia Detains Chinese Fishing Ships," CNN World, July 18, 2012, https://www.cnn.com/2012/07/18/world/asia/russia-china-fishing-vessel/index.html.

economic calculation strategy may lose its last chance to pay off. Finally, if China begins to challenge the international legal regime in the Arctic like it has in the South China Sea, that may become too much for Russia and force a harder, more militant Arctic strategy.

Russia has demonstrated a clear desire to extract economic benefit from the Arctic. It shows no sign of slowing down those policies in the near future. But with continued pressure from external circumstances and the eventual political leaderships changes that must happen, it is not clear whether those policies will remain in place indefinitely. No matter what the future brings for the Arctic and Russia's policy, given the systemic constraints on the Russia's policy making process, analysts will be well served to consider the effects that Russia's political elite, their incentives, and power structures will have on eventual policy outcomes.

LIST OF REFERENCES

- Aalto, Pami. "Modernisation of the Russian Energy Sector: Constraints on Utilising Arctic Offshore Oil Resources," *Europe-Asia Studies* no. 68:1 (February 2016): 38–63. https://doi.org/10.1080/09668136.2015.1113509.
- Allison, Graham and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd ed. New York: Pearson, 1999.
- Antarctic Logistics & Expeditions. "Artur Chilingarov." Accessed March 7, 2018. https://antarctic-logistics.com/2010/08/28/artur-chilingarov.
- Archive of the Official Site of the 2008–2012 Prime Minister of the Russian Federation Vladimir Putin. "Prime Minister Vladimir Putin addresses the international forum 'The Arctic: Territory of Dialogue." September 23, 2010. http://archive.premier.gov.ru/eng/events/news/12304/.
- Arctic.Ru. Ministry of Economic Development Drafts Arctic Zone Development Project." November 10, 2017. http://arctic.ru/infrastructure/20171110/686564.html.
- Arctic.Ru. "The Northern Sea Route (NSR)." Accessed February 1, 2018. https://arctic.ru/infographics/20180201/704043.html.
- Arctic.Ru. "Patrushev: Arctic Should be an Area of Dialogue, Peace, and Good Neighborliness." September 16, 2015. http://arctic.ru/international/20150916/167048.html.
- The Arctic Council. "Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic." https://arctic-council.org/eppr/current-activities-projects/agreement-on-cooperation-on-aeronautical-and-maritime-search-and-rescue-in-the-arctic
- Aune, Finn Roar, Rolf Golombek, Hilde Hallre, Arild Moe, and Knut Einar Rose. "Liberalizing Russian Gas Markets—An Economic Analysis." Working Paper No. 5387, CESifo., 2015.
- Baev, Pavel K. "Russia's Arctic Ambitions and Anxieties." *Current History* 112, no. 756 (2013).
- Baev, Pavel. *Russia's Arctic Policy and the Northern Fleet Modernization*. Oslo, Peace Research Institute Oslo (PRIO), 2012.
- Barden, Justine. "Low Oil Prices Have Affected Russian Petroleum Companies and Government Revenues," U.S. EIA, October 20, 2016. https://www.eia.gov/todayinenergy/detail.php?id=28432.

- Baumeister, Christiane and Lutz Kilian, "Understanding the Decline in the Price of Oil Since June 2014." *Journal of the Association of Environmental and Resource Economists* 3, no. 1 (2016): 131–158.
- BBC Russian. "Russia Launched an Atomic Submarine." April 15, 2007. http://news.bbc.co.uk/hi/russian/russia/newsid_6558000/6558315.stm.
- Blank, Stephen J. *Russia in the Arctic*. Carlisle, PA: Strategic Studies Institute, July 2011. https://icefloe.net/files/RussiaInTheArctic-SBlank-pub1073.pdf.
- Bremmer, Ian. and Samuel Charap. "The Siloviki in Putin's Russia: Who They are and What They Want." *The Washington Quarterly* 30, no. 1 (2007): 83–92.
- Bros, Aurélie. Low Oil Prices, Sanctions and Structural Problems: The Tribulations of Russia's Oil and Gas Sector. Recherches & Documents no. 05. Paris: Fondation pour la Recherche Stratégique [FRS], 2017. https://www.frstrategie.org/en/publications/recherches-et-documents/low-oil-prices-sanctions-and-structural-problems-the-tribulations-of-russia-s -oil-and-gas-sector-05-2017.
- Buixadé Farré, Albert, Scott R Stephenson, Linling Chen, Michael Czub, Ying Dai, Denis Demchev, Yaroslav Efimov, et al. "Commercial Arctic Shipping Through the Northeast Passage: Routes, Resources, Governance, Technology, and Infrastructure." *Polar Geography* 37, no. 4 (2014).
- Canadian Department of Global Affairs. "Canadian Sanctions Related to Russia." Press Release, Ottawa: Canadian Department of Global Affairs, 2014. http://www.international.gc.ca/sanctions/countries-pays/russia-russie.aspx?lang=eng.
- Canadian Security Intelligence Service. "Russian Worldviews—Domestic Power Play and Foreign Behavior." Working paper, World Watch: Expert Notes series publication No. 2017–06-02.
- Centre for High North Logistics Information Office. "Transit Statistics." Accessed March 1 2018 http://www.arctic-lio.com/nsr transits.
- Comiso, Josefino C., Claire L. Parkinson, Robert Gersten, and Larry Stock. "Accelerated Decline in the Arctic Sea Ice Cover." *Geophysical research letters* 35, no. 1 (2008).
- Conley, Heather A. *Arctic Economics in the 21st Century: The Benefits and Costs of Cold.* Lanham, MD: Rowman & Littlefield, 2013.
- Conley, Heather A., and Caroline Rohloff. *The New Ice Curtain: Russia's Strategic Reach to the Arctic.* Lanham, MD: Rowman & Littlefield, 2015.
- Dawisha, Karen. *Putin's Kleptocracy: Who Owns Russia*? New York: Simon and Schuster, 2015.

- Defense Intelligence Agency, Russia Military Power: Building a Military to Support Great Power Aspirations. Washington, DC Defense Intelligence Agency, 2017. http://www.dia.mil/Portals/27/ Documents/News/Military%20Power%20 Publications/ Russia%20 Military%20Power%20Report%202017.pdf.
- Digges, Charles. "Report Says Rosatom Will Take Over Arctic Development Vastly Increasing Role of Icebreakers." *Bellona*. November 16, 2017. http://bellona.org/news/nuclear-issues/nuclear-russia/2017-11-report-says-rosatom-will-take-over-arctic-development-vastly-increasing-role-of-icebreakers.
- Dodds, Klaus, and Mark Nuttall, *The Scramble for the Poles: The Geopolitics of the Arctic and Antarctic.* Cambridge John Wiley & Sons, Nov 30, 2015.
- Domonoske, Camila. "Russia Launches World's Biggest, Most Powerful Icebreaker." NPR. June 16, 2016. https://www.npr.org/sections/thetwo-way/2016/06/16/482288188/russia-launches-worlds-biggest-most-powerful-icebreaker.
- EuropeanCEO. "Alexi Miller| Gazprom." March 13, 2018. https://www.europeanceo.com/profiles/alexi-miller-gazprom/.
- Faury, Olivier and Pierre Cariou. "The Northern Sea Route Competitiveness for Oil Tankers." *Transportation Research Part A: Policy and Practice* 94 (2016): 461–469.
- Fomichev, Mikhail. "Russian-Norwegian Rescue Exercises Underway in Barents Sea." May 30, 2017. https://arctic.ru/international/20170530/621749.html.
- Frederick, Bryan, Matthew Povlock, Stephen Watts, Miranda Priebe and Edward Geist. *Assessing Russian Reactions to U.S. and NATO Posture Enhancements*. Santa Monica, CA: RAND Corporation, 2017. https://www.rand.org/pubs/research_reports/RR1879.html.
- Forbes Profile. Arkady Rotenberg." Accessed March 13, 2018, https://www.forbes.com/profile/arkady-rotenberg/.
- Gaaze, Konstantin. "Court and Politburo: Putin's Changing Inner Circle." *Carnegie Center Moscow*. September 22, 2017. http://carnegie.ru/commentary/73193.
- Galimullin, Eduard. "A Closer Look at Russia's Arctic Muscle Flexing." The Russia File (blog), November 21, 2017. https://www.wilsoncenter.org/blog-post/closer-look-russias-arctic-muscle-flexing.
- Gazprom. "Viktor Zubkov." Accessed March 1, 2018. http://www.gazprom.com/about/management/directors/zubkov/.
- Gel'man, Vladimir. *Authoritarian Russia: Analyzing Post-Soviet Regime Changes*. Pittsburgh: University of Pittsburgh Press, 2015, 73.

- Grammer, Robbie, "Here's What Russia's Military Build-Up in the Arctic Looks Like," Foreign Policy, January 25, 2017. http://foreignpolicy.com/2017/01/25/heres-what-russias-military-build-up-in-the-arctic-looks-like-trump-oil-military-high-north-infographic-map/.
- Grønning, Ragnhild. "Putin: No Room for Geopolitical Games in the Arctic." *High North New.*, Feburary 9, 2016. http://www.highnorthnews.com/putin-no-room-for-geopolitical-games-in-the-arctic/.
- Hancock, Kathleen J. "Russia: Great Power Image Versus Economic Reality." *Asian Perspective* 31, no. 4 (2007): 71–98. http://www.jstor.org/stable/42704609.
- Hannis, Eric, "Russia Is Making a Land and Resource Grab in the Arctic," *U.S. New and World Report*, March 14, 2017.
- Hansen, Carsten Ørts, Peter Grønsedt, Christian Lindstrøm Graversen, and Christian Hendriksen. *Arctic Shipping: Commercial Opportunities and Challenges*. Copenhagen, CBS Maritime, 2016. http://climateobserver.org/reports/arctic-shipping-commercial-opportunities-and-challenges/.
- Harsem, Øistein, Arne Eide, and Knut Heen. "Factors Influencing Future Oil and Gas Prospects in the Arctic." *Energy policy* 39, no. 12 (2011): 8037–8045.
- Howard, Roger. "Russia's New Front Line." Survival 52, no. 2 (2010).
- Hudson, Valerie M. Foreign Policy Analysis: Classic and Contemporary Theory. Lanham: Rowman & Littlefield, 2013.
- Humpert, Malte. Interview by John Thompson. "Casting a Cool Eye on Russia's Northern Sea Route Ambitions." *Oceans Deeply*. May 3, 2017.
- Johnston, Peter. "Arctic Energy Resources: Security and Environmental Implications." *Journal of Strategic Security* 5, no. 3 (2012): 13–32. http://dx.doi.org/10.5038/1944-0472.5.3.2.
- Klimenko, Ekaterina. *Russia's Arctic Security Policy; Still Quiet in the High North?*Stockholm, Stockholm International Peace Research Institute (SIPRI), 2016. https://www.sipri.org/publications/2016/sipri-policy-papers/russiasarctic-security-policy-still-quiet-high-north.
- Kristensen, Hans M., and Robert S. Norris. "Russian Nuclear Forces, 2016." *Bulletin of the Atomic Scientists* 72, no. 3 (2016): 125–134.

- Kristensen, Kristian Søby, and Casper Sakstrup. Russian Policy in the Arctic After the Ukraine Crisis. Copenhagen: Center for Military Studies, University of Copenhagen, September 2016. http://cms. polsci. ku. dk/english/publications/russian-policy-inthe-arctic/Russian_Policy_in_the_Arctic_after_the_Ukraine_Crisis.pdf.
- Laruelle, Marlene. *Russia's Arctic Strategies and the Future of the Far North*. Armonk: ME Sharpe, 2013.
- Ledeneva, Alena V. Can Russia Modernise?: Sistema, Power Networks and Informal Governance. Cambridge: Cambridge University Press, 2013.
- Maritime Connector. "Ship Sizes." Accessed March 12, 2018. http://maritime-connector.com/wiki/ship-sizes/.
- Macrotrends.net. "Brent Crude Oil Prices 10 Year Daily Chart." Accessed March 01, 2018. http://www.macrotrends.net/2480/brent-crude-oil-prices-10-year-daily-chart.
- Mcleary, Paul, "Russian Planes Buzz Alaska Four Nights in a Row," Foreign Policy. April 21, 2017. http://foreignpolicy.com/2017/04/21/russian-planes-buzz-alaska-four-nights-in-a-row/.
- Medved, Anatoly. "Russia to Build 3 Next Generation Nuclear-Powered Icebreakers by 2025." *TASS.* 27 December 2017, http://tass.com/defense/983396.
- Medvedev, Sergei. *The Kremlin's Arctic Plans: More Gutted Than Grand.* Moscow: PonarsEuarasia-Policy Memos, 2016. http://www.ponarseurasia.org/memo/kremlin-arctic-plans-more-gutted-grand.
- Meng, Qiang, Yiru Zhang and Min Xu. "Viability of Transarctic Shipping Routes: a Literature Review from the Navigational and Commercial Perspectives." *Maritime Policy & Management* 44:1. (2017) 16–41. https://doi.org/10.1080/03088839.2016.1231428.
- Morelli, Vincent L. *Ukraine: Current Issues and U.S. Policy*. CRS Report No. RL33460. Washington, DC: Congressional Research Service, 2017. https://fas.org/sgp/crs/row/RL33460.pdf.
- Minchenko Consulting Group. *Politburo 2.0. and Syrian Gambit.* Moscow, Minchenko Group, 2015.
- Minchenko Consulting Group. *Politburo 2.0. Renovation Instead of Dismantling*. Moscow, Minchenko Group, 2015.
- Myers, Steven Lee and Peter Baker. "Putin Recognizes Crimea Secession, Defying the West." *The New York Times*, March 17, 2014. https://www.nytimes.com/2014/03/18/world/europe/us-imposes-new-sanctions-on-russian-officials.html?hp&_r=0.

- Myers, Steven Le. "Russia's Move Into Ukraine Said to be Born in Shadows." *New York Times*. March 7, 2014. https://www.nytimes.com/2014/03/08/world/europe/russias-move-into-ukraine-said-to-be-born-in-shadows.html?ref=ellenbarry&_r=2.
- Olesen, Mikkel Runge. "Security and Economics in the Arctic: Cooperation and Competition Rather Than Conflict Remain the Norm." DIIS Working Paper October, Danish Institute for International Studies, 2017.
- Østreng, Willy, Karl Magnus Eier, Brit Fløistad, Arnfinn Jørgensen-Dahl, Lars Lothe, Morten Mejlænder-Larsen, and Tor Wergeland. *Shipping in Arctic Waters: A Comparison of the Northeast, Northwest and Trans Polar Passages.* Heidelberg: Springer Science & Business Media, 2013.
- Overland, Indra, and Hilde Kutschera. "Pricing Pain: Social Discontent and Political Willpower in Russia's Gas Sector." *Europe-Asia Studies* 63, no. 2 (2011): 311–331.
- Øverland, Indra. "Russia's Arctic Energy Policy." *International Journal* 65, no. 4 (2010): 865–78. http://www.jstor.org/stable/25762045.
- Oxenstierna, Susanne, and Veli-Pekka Tynkkynen. *Russian Energy and Security Up to 2030*. London; New York: Routledge Contemporary Russia and Eastern Europe Series. Routledge, 2014.
- Paraskova, Tsvetana. "Russia Goes All In On Arctic Oil Development." OilPrice.com. October 19, 2017. https://oilprice.com/Energy/Crude-Oil/Russia-Goes-All-In-On-Arctic-Oil-Development.html.
- Parfitt, Tom. "Building Bridges Pays Off for Vladimir Putin's Friend Arkady Rotenberg." *The Times.* October 17 2017. https://www.thetimes.co.uk/article/building-bridges-pays-off-for-vladimir-putin-s-friend-arkady-rotenberg-lqwnbz5sm.
- Perovich, Donald K., Jacqueline A. Richter- Menge, Kathleen F. Jones, and Bonnie Light. "Sunlight, Water, and Ice: Extreme Arctic Sea Ice Melt During the Summer of 2007." *Geophysical Research Letters* 35, no. 11 (2008).
- Persson, Gudrun. *Russian Military Capability in a Ten-Year Perspective-2016*. FOI Working Paper, Stockholm: FOI, 2016.
- Pezard, Stephanie, Abbie Tingstad, Scott Stephenson, and Kristin Van Abel. *Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North.* DOI: 10.7249/RR1731 Santa Monica, CA: RAND, 2017.
- Pezard, Stephanie and Timothy Smith. "Friends If We Must: Russia and China in the Arctic." *War on the Rocks* (Blog), May 6, 2016. https://warontherocks.com/2016/05/friends-if-we-must-russia-and-chinas-relations-in-the-arctic./

- Putin, Vladimir V. "Vladimir Putin's Academic Writings and Russian Natural Resource Policy Mineral Natural Resources in the Strategy for Development of the Russian Economy." *Problems of Post-Communism* 53, no. 1 (2006): 48–54.
- Reisser, Colin. "Russia's Arctic Cities." in *Sustaining Russia's Arctic Cities: Resource Politics, Migration, and Climate Change*, edited by Robert Orttung. New York: Berghahn Books, 2016.
- Rosneft. "Management Board." Accessed March 13, 2018. https://www.rosneft.com/governance/management/item/6119/.
- RT. "Good Neighborly Relations are Russia's Priority in Arctic Security Chief." August 8, 2014. https://on.rt.com/c5ngwq.
- Russian Federation. "Basics of the State Policy of the Russian Federation in the Arctic for the Period Until 2020 and for a Further Perspective. Adopted September 18, 2008; Promulgated March 30, 2009 by President Dmitry Mevedev." Russian, transl. Boris Shapovalov (Moscow: Rossiyskaya Gazeta) (2008). http://www.arcticgovernance.org/russia-basics-of-the-state-policy-of-the-russian-federation-in-the-arctic-for-the-period-till-2020-and-for-a-further-perspective.4651232-142902.html.
- Russian Ministry of Transport. "Transport Week 2017." Accessed March 3, 2018. http://transweek.ru/2017/en/.
- Rutland, Peter. "Russia as an Energy Superpower," *New Political Economy* 13:2, 2008, 203–210, https://doi.org/10.1080/13563460802018547.
- Rystad Energy. "Global Liquids Cost Curve: Shale Is Pushing Out Oil Sands And Arctic, Offshore Is Still In The Race." June 12, 2014. https://www.rystadenergy.com/newsevents/news/press-releases/global-liquids-cost-curve.
- Sabonis-Helf, Theresa. "Russia and Energy Markets." in *New Realities: Energy Security in the 2010s and Implications for the U.S. Military*, edited by John R. Deni (Carlisle, PA: Strategic Studies Institute and U.S. Army War College Press, 2015), 15–45.
- Saint Petersburg Peterburgskaya Politika. "Russian Think Tank Rates Putin's Likely Successors." August 21, 2017. https://fpp.spb.ru/fpp-top-successors.
- Sergunin, Alexander. "Is Russia Going Hard or Soft in the Arctic?" *The Wilson Quarterly*, 2017. https://wilsonquarterly.com/quarterly/into-the-arctic/is-russia-going-hard-or-soft-in-the-arctic/.
- Sorensen, Camilla and Ekaterina Klimenko. *Emerging Chinese-Russian Cooperation in the Arctic*. Stockholm: Stockholm International Peace Research Institute (SIPRI), April 2017.

- Staalesen, Atle. "Offshore Oil Feels Pain as Spare Parts Come Short." *The Barents Observer*, September 18, 2015. http://barentsobserver.com/en/energy/2015/09/offshore-oil-feels-pain-spare-parts-come-short-18-09.
- Sky News. "Putin Reaffirms Russia's Arctic Oil Claims With Visit to Island Chain." March 30, 2017, https://news.sky.com/story/putin-reaffirms-russias-arctic-oil-claims-with-visit-to-island-chain-10818291.
- Sputnik News. "Russian Arctic Commission Urges MoD to Specify State Border in Arctic Ocean." May 24, 2016. https://sputniknews.com/russia/201605241040159880-russia-arctic-defense-ministry/.
- Staun, Jørgen. *Russia's Strategy in the Arctic*. Copenhagen: Royal Danish Defence College, 2015.
- Staun, Jørgen. Siloviki Versus Liberal-Technocrats: The Fight for Russia and Its Foreign Policy. Copenhagen, Danish Institute for International Studies (DIIS), 2007. https://www.researchgate.net/publication/281237252_Siloviki_versus_Liberal-Technocrats_The_fight_for_Russia_and_its_foreign_policy.
- Stern, Jonathan. "The Russian-Ukrainian Gas Crisis of January 2006." Oxford Institute for Energy Studies 16, January 2006.
- Total. "Total Inaugurates the Northern Sea Route with LNG Carrier Christophe de Margerie." July 27, 2017. https://www.total.com/en/news/total-inaugurates-northern-sea-route-lng-carrier-christophe-de-margerie.
- Treisman, Danielle. "Crimea: Anatomy of a Decision." *The New Autocracy: Information, Politics, and Policy in Putin's Russia.* edited by Daniel Treisman. Washington, DC: Brookings Institution Press, 2018.
- Trenin, Dmitri. "Demands on Russian Foreign Policy And Its Drivers: Looking Out Five Years." *Carnegie Center Moscow* August 10, 2017. http://carnegie.ru/commentary/72799.
- Trenin, Dmitri. "Looking Out Five Years: Who Will Decide Russian Foreign Policy?" *Carnegie Center Moscow* August 17, 2017. http://carnegie.ru/commentary/72811.
- Trenin, Dmitri. "Looking out Five Years: Ideological, Geopolitical, and Economic Drivers of Russian Foreign Policy." *Carnegie Center Moscow* August 22, 2018. http://carnegie.ru/commentary/72812.
- Trenin, Dmitri. Should We Fear Russia? Cambridge: Polity Press, 2016
- United States Geological Survey. "Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle," 2008. https://pubs.usgs.gov/fs/2008/3049/.

- US.. Department of the Treasury. "Announcement of Expanded Treasury Sanctions within the Russian Financial Services, Energy and Defense or Related Materiel Sectors." Press release, Washington, DC: Department of the Treasury, 2014. http://www.treasury.gov/press-center/press-releases/Pages/jl2629.aspx.
- U.S. Energy Information Administration. "Annual Energy Outlook 2011 with Projections to 2035." Washington, DC: Energy Information Administration, 2011.
- U.S. Energy Information Administration. *Country Analysis Brief: Russia*. Washington, DC: U.S. Energy Information Administration, 2016. https://www.eia.gov/beta/international/analysis.cfm?iso=RUS.
- Voigt, Kevin. "Shots Fired as Russia Detains Chinese Fishing Ships." *CNN World*, July 18, 2012. https://www.cnn.com/2012/07/18/world/asia/russia-china-fishing-vessel/index.html.
- Wilson Rowe, Elana, and Helge Blakkisrud. "A New Kind of Arctic Power? Russia's Policy Discourses and Diplomatic Practices in the Circumpolar North." *Geopolitics* 19, no. 1 (2014).
- Yamawaki, Dai. "Energy Resources, Economy and Sustainability of Russia." GSAIS Working Paper Series 16-E-001. October 2016.
- Yaffa, Joshua. "Putin's Shadow Cabinet and the Bridge to Crimea." *The New Yorker*. May 29, 2017. https://www.newyorker.com/magazine/2017/05/29/putins-shadow-cabinet-and-the-bridge-to-crimea.
- Zygar, Mikhail. *All the Kremlin's Men: Inside the Court of Vladimir Putin.* New York: Public Affairs, 2016.
- Zysk, Katarzyna. "Maritime Security and International Order at Sea in the Arctic Ocean." In *International Order at Sea*, edited by J. Bekkevold J. and G. Till. London: Palgrave Macmillan, 2016.
- Zysk, Katarzyna. "The Evolving Arctic Security Environment: An Assessment." *Russia in the Arctic*. Edited by Stephen J. Blank. (Carlisle, United States: Strategic Studies Institute of the U.S. Army War College, 2011).
- Zysk, Katarzyna. "Russia's Arctic Strategy: Ambitions and Constraints." *Joint Force Quarterly*, no. 57 (2010).
- Zysk, Katarzyna. "Russia Turns North, Again: Interests, Policies and the Search for Coherence." *Handbook of the Politics of the Arctic*, edited by Leif Christian Jensen and Geir Honneland. Cheltenham: Edward Elgar Publishing, 2015.

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