

AIR WAR COLLEGE

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## RUSSIAN ARCTIC INTENTIONS

by

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## Biography

Lieutenant Colonel Shawn R. Timpson is assigned to the Air War College, Air University, Maxwell AFB, AL. Prior to his current assignment, Lt Col Timpson was the Deputy Chief, Requirements Division, Directorate of Strategic Plans, Requirements, and Programs at Headquarters Air Mobility Command, Scott Air Force Base, IL. The Requirements Division supports the Mobility Air Forces' executive agent to convert operational requirements into weapon systems worth \$150B. He managed 183 programs and was the AMC advocate for C-17, C-5, C-130, KC-10, KC-135, KC-46, VC-25, and OSA/EA aircraft.

Lt. Col. Timpson graduated from the University of South Florida and entered active duty in January 1999 as an Intercontinental Ballistic Missile (ICBM) crew member. After completing a tour as an ICBM crew commander, he was accepted into Undergraduate Pilot Training. He qualified as an instructor in three major weapon systems: the KC-135R and C-5B aircraft, and the Minuteman III missile system. He has held multiple deployed command positions to include Commander, 451st Expeditionary Operations Support Squadron, Kandahar Air Base, Afghanistan. Lieutenant Colonel Timpson is a senior pilot with more than 2,600 flying hours including multiple combat deployments.

## Abstract

As the Arctic continues to open up and the region achieves new geo-political importance, Russia is re-asserting itself in the region in order to regain its position as a ‘Great Power.’ Therefore, analyzing Russia’s Arctic Policy via the instruments of national power, will determine what Russia has actually accomplished, compared to its announced intentions in the region.<sup>1</sup> This is especially important due to increasing regional tensions and the overall dearth of balanced views among the “analyses of Arctic affairs.”<sup>2</sup>

Despite its unique and remote geography, global politics and security challenges affect the Arctic.<sup>3</sup> The effects of climate change is one of the many driving forces behind the Arctic’s new geo-political importance, as previously inaccessible natural resources have the potential to become available for extraction from the region. Tension between Russia and other Arctic states are resulting from the competition over these newly uncovered, valuable natural resources and the possible economic impact of access to northern waterways, particularly the Northern Sea Route (NSR).<sup>4</sup>

Overall, Russia’s Arctic Policy is a consistent part of the overall pattern of Russian foreign policy, regaining its ‘Great Power’ status on the world stage, lost with the fall of the Soviet Union. The overarching goal of Russia’s Arctic policy is to secure and maintain its access to Arctic economic resources, critical to Russia’s national security. Consequently, the region is one of Russia’s top priorities in foreign policy, economic development, and security strategy.<sup>5</sup>

Russian leadership regularly uses foreign policy in ways to allow them the flexibility to be pragmatic in the method used to promote Russia’s national interests. Russia continues to pursue its regional ambitions via negotiations and peaceful dispute through existing institutional

mechanisms, in particular the UN.<sup>6</sup> It is also crucial to recognize the Russian government's view of bilateral and multilateral compromise as the best current method to fulfill its own national interests.<sup>7</sup> These institutions provide Russia a method of enhancing its global status by highlighting itself as a reliable member of global community.<sup>8</sup>

Economic power is another method Russia is utilizing to propel it back to 'Great Power' status. Russia's economy is heavily dependent on oil and natural gas exports, and as Russia possesses over half of all the Arctic's proven hydrocarbon resources, extracting them is a strategic imperative.<sup>9</sup> The NSR is another viable source of steady income and Russia intends to capitalize on increased shipping traffic through the Arctic.<sup>10</sup> The guise of maritime security on the NSR also provides Russia an alternative means to exert control in the region, and provides an additional pressure point on other powers, evidenced by Russia's declared right to deny access, seize ships, or use other tactics.<sup>11</sup>

Since the end of Putin's second term, the military has garnered an enhanced role in efforts to return Russia to a 'Great Power' status.<sup>12</sup> Over the past ten years, Russia poured billions of dollars into its armed forces, steadily increasing its military capabilities in the Arctic.<sup>13</sup> Moscow is concerned the 'West' plans to try to deprive Russia of its Arctic resources and control of the NSR, thus Russia is strengthening its Arctic forces as a deterrent. Furthermore, Russian military activity in the air and sea has out-paced all other Arctic nations, and its Northern Fleet makes Russia the dominant Arctic power.<sup>14</sup>

Currently, Russian political, military, and economic interests in the region continue to complement each other due to Russia's long-term strategy for the Arctic.<sup>15</sup> The most likely assessment of Russia's Arctic intentions is Russia hedging its bets and attempting to play a "win-win" Arctic strategy; emphasizing its international cooperation foreign policy via the UN and

other institutions, while gaining early military and commercial regional supremacy. Russia supports diplomatic, economic, and some military cooperation in the Arctic, in an attempt to secure regional its hegemony.<sup>16</sup> As Russia is the most prepared of the Arctic nations to exploit any opportunities available, how long will Russia maintain this dual approach, or will it rely on an aggressive defense posture to shape the future of the Arctic to its liking?



## Introduction<sup>17</sup>

The United States Geological Survey assesses the area north of the Arctic Circle contains approximately 30% of the world's undiscovered natural gas and 13% of the world's undiscovered oil reserves.<sup>18</sup> Undiscovered natural gas is three times more abundant than oil in the Arctic and largely concentrated in Russia. The opening of this area will have an impact on worldwide demand for energy.<sup>19</sup> Given the history of worldwide conflict over resources, with twelve occurring between 1914 and 1982, and twelve resource based conflicts occurring throughout the world in 2001, the Arctic becomes more important as multiple countries try to exploit the region due to its decreasing ice levels.<sup>20</sup>

The Russian government views the Arctic as fundamentally Russian, and considers the remaining Arctic nations' membership in NATO a particular strategic concern.<sup>21</sup> Russia's northern shoreline encompasses half of the Arctic's coastline and the Russian Arctic produces approximately 22% of Russian Federation's GDP.<sup>22</sup> Unsurprisingly, the reduction in Arctic sea ice is a primary driver in Russia's Arctic strategy, leading to Russian engagement in the diplomatic, economic, and military arenas in the region.<sup>23</sup> Russian President Vladimir Putin highlights the area's importance by emphasizing the Russian Arctic in patriotic and nationalistic themes.<sup>24</sup>

Additionally, under former President Medvedev, Russia began the legal process to redefine its Arctic territorial boundaries beyond 200 nautical miles from its coastline, based on a claim of an extended continental shelf.<sup>25</sup> This claim may eventually grant Russia an additional

380,000 square miles of Arctic territory, containing an estimated one-quarter of the world's untapped hydrocarbon reserves.<sup>26</sup>

This political move may indicate two separate Russian mindsets: either Russia is attempting a resource and territory land grab in conjunction with its new military presence, or Russia is announcing its intentions to keep the Arctic region stable and peaceful by abiding by international charters. In either case, Russia's Arctic Policy is not one-sided and remains a coherent part of the overall pattern of Russian foreign policy, regaining the 'Great Power' status, lost with the fall of the Soviet Union. Therefore, analyzing Russia's Arctic Policy via the instruments of national power, political including both diplomatic and informational, economic, and military, will determine what Russia has actually accomplished, compared to its announced intentions in the region.<sup>27</sup> This is especially important due to increasing regional tensions and the overall dearth of balanced views among the "analyses of Arctic affairs."<sup>28</sup> But before assessing Russia's Arctic policy through the political lens, a brief overview of the Arctic and its significance is in order.

## Arctic Overview

The Arctic is the area surrounding the North Pole with its southernmost boundary defined by the Arctic Circle. Five nations, known as the Arctic Five, own territory within the Arctic Circle: Canada, Denmark (Greenland), Norway, Russia, and the United States.<sup>29</sup> The Arctic does not have a permanent land mass, but consists of a large polar ice cap over the Arctic Ocean. Roughly, half of the Arctic Ocean floor is considered “continental shelf,” an underwater extension of a neighboring land mass, while the other half is a deep-water basin.<sup>30</sup>

Currently, the Arctic is experiencing the effects of climate change at previously unforeseen levels.<sup>31</sup> The effect of climate change a driving force behind the Arctic’s new geopolitical importance as previously inaccessible natural resources could become available for extraction if the ice cover continues to recede. Because of the drastic receding ice cover, numerous regional issues have arisen between the Arctic nations (Figure 1-1). Some of these issues include international border disputes, Arctic Sea territorial claims based on undersea continental shelf extensions, vast amounts of previously unreachable fossil fuel deposits, and the control of newly opening Northern Sea Routes.<sup>32</sup>

Numerous sources raise the issue of heightened tensions between Russia and other Arctic states, resulting from the competition over formerly inaccessible natural resources and the economic impact of the Northern Sea Routes.<sup>33</sup> The situation in the Arctic has potential to evolve into a new Cold War, as Russia created an Arctic military force, established new military bases on its northern frontier, bolstered its Northern Fleet to defend Russian interests, and resumed long-range bomber patrols in the region’s airspace.<sup>34</sup> Likewise, the Russian Navy has resumed patrols in the Arctic waters for the first time since the fall of the Soviet Union. Viewed

from a military perspective at the strategic level, the steady build-up of Russian forces in the region may be an auspice of a future arms race or region of conflict. Analyzing Russia's Diplomatic and Informational Arctic Policy will help determine the likelihood of a future regional conflict.





Figure 1-1. Map of the Arctic Region<sup>35</sup>

## **Russia's Arctic Political (Diplomatic and Informational) Strategy**

Russian Arctic diplomatic and information foreign policies form a significant portion of Russia's Arctic political strategy. Overall, Russian Arctic Policy is a consistent part of Russian foreign policy, as expressed in the *2016 Foreign Policy Concept of the Russian Federation*, focusing on "consolidating Russia's position as a center of influence" and its ambition to regain 'Great Power' status lost with the fall of the Soviet Union.<sup>36</sup> Russia's current Arctic Policy follows this emphasis and provides a potential method for the nation to reestablish its international prestige.

The overarching goal of Russia's Arctic policy is to secure and maintain its access to Arctic economic resources, critical to Russia's national security; therefore, the region is one of Russia's top priorities in foreign policy and security strategy.<sup>37</sup> Russia's Arctic political strategy uses two methods to help accomplish Russia's goal of securing Arctic resources: information policy statements and diplomatic efforts. Russia's claims in the Arctic, and their method of assertion, should be considered in the appropriate context.<sup>38</sup>

### **Informational Policy Statements**

Russia published its Arctic Policy in March 2009, six months after its official signing. The Russian Security Council, whose permanent members include the nation's most important centers of power, such as: the president, prime minister, ministers of interior, foreign affairs, and defense, as well as the directors of the Federal Security Service of the Russian Federation (FSB) and the Foreign Intelligence Service, designed the fundamentals of the Arctic policy. According to Norwegian Security Policy Senior Fellow Katarzyna Zysk, "[t]he version of the document

presented to the public sheds light on how the Russian authorities think about the Arctic and reflects areas of particular interest and aspirations.”<sup>39</sup>

On the brink of bankruptcy in 1998, Russia made a remarkable economic turnaround, largely driven by sales of oil and gas produced in the northern parts of Russia (and increased oil prices after 2000).<sup>40</sup> After a period of economic weakness, Russia is now using its newly acquired wealth to reestablish its “rightful place” in the world. Russia’s tremendous amount of energy resources and its ability to develop them translate into economic growth, in turn affording its political leadership greater freedom in conducting foreign relations.<sup>41</sup> Energy exports are key pillars of Russian foreign policy as Russia possesses the world’s largest mineral and energy reserves, and is the largest natural gas exporter in the world.<sup>42</sup>

Accordingly, President Putin views Russia’s energy resources and its foreign policy as integrally linked, since energy resource strength bolstered Russia’s profile in international affairs. In fact, Putin specifically stated, “Russia enjoys vast energy and mineral resources which serve as a base to develop its economy, as an instrument to implement domestic and foreign policy,” and he describes the Arctic as “the most important region that will provide for the future of Russia.”<sup>43</sup>

Former President Medvedev also stated a key aspect of Russia’s Arctic foreign policy, noting Russia’s policy in the Arctic is not about racing but is rather a “policy of cooperation.” Russia’s overall Arctic strategy currently reflects this concept of international cooperation. A 2008 document titled *Basic state policy of the Russian Federation in the Arctic for the period until 2020 and beyond*, outlines Russia’s Arctic interests as both a strategic resource base and a zone of cooperation. Additionally, it professes Russia’s goal of being a good Arctic neighbor by

respecting the principles of international law, as well as working bilaterally and “within the framework of regional organizations” as necessary.<sup>44</sup>

As one commentator noted, “Russia has made no secret of its view its energy resources and national security are intimately connected.”<sup>45</sup> While this has raised the concern of some Western governments, Russia’s informational policy statements attempt to portray a different story. Russia’s soothing words consistently reiterate its policy of international cooperation and the desire to work within existing legal frameworks with the hope of reducing regional tensions. Russia’s diplomatic efforts mirror the claims stated above, but is this Russia’s long-term goal or is it deftly manipulating the international community?<sup>46</sup>

## **Diplomatic Policy Efforts**

Currently, Russia’s Arctic foreign policy is pragmatic as it embraces multi-polarity, traditional definitions of sovereignty, and promotes the UN as the legally appropriate international body to manage international affairs. In many aspects, it appears Russia is willing to work long-term within the framework of international law and appropriate channels of dispute resolution. Russia has demonstrated this commitment to international cooperation through a variety of methods: the Arctic Council, the reoccurring Inuit Circumpolar Conferences (ICC), and its claims on Arctic territory through UN legal channels.<sup>47</sup>

### *Arctic Council*

One of the major ways Russia displays its commitment to promoting the Arctic as a region of international cooperation and peace is through the Arctic Council. Established in 1996

as an intergovernmental forum, the Arctic Council provides a method to promote cooperation, coordination, and interaction among Arctic States. The primary topics deal with the Indigenous Arctic peoples and other Arctic inhabitants on common issues, particularly regarding sustainable economic development and environmental protection in the Arctic.

### *Search and Rescue Agreement*

Another demonstration of Russian diplomatic collaboration occurred through the two-year development of the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (ACARMSRA). Officially signed by all eight Arctic nations in May 2011, the Search and Rescue Agreement became the first legally binding agreement on any topic ever negotiated among all of the Arctic States (Figure 2-1). The Agreement demonstrates the commitment of the Arctic States to further their cooperation in addressing emerging issues in the Arctic and remains one of the few areas U.S. and Russian militaries agree upon in the region.<sup>48</sup>

### *Inuit Circumpolar Council*

A further display of Russia implementing its declared policy of international and multilateral cooperation in the Arctic occurs through the Inuit Circumpolar Council (ICC). The ICC is a multinational non-governmental organization (NGO) representing the 160,000 Inuit people, whose goals are to strengthen ties between Arctic people, and to promote human, cultural, political, and environmental rights and policies at the international level.<sup>49</sup> By signing the 2008 Ilulissat Declaration with its stated intentions, and actively participating in the ICC forum, Russia appears to be following its professed Arctic foreign policy objective of maintaining the Arctic as a “region of peace and cooperation.”



Figure 2-1. Arctic Rescue Area of Responsibilities<sup>50</sup>

### *Russia's Arctic Claim to the Commission on the Continental Shelf*

In 1997, Russia ratified the 1982 UN Convention on the Law of the Sea (UNCLOS), stipulating all Arctic nations shall have 12-mile territorial waters and 200-mile economic zones with free navigation, but exclusive rights for the use of mineral and biological resources.<sup>51</sup> In December 2001, Russia made a submission to UNCLOS and the Commission on the Limits of the Continental Shelf (CLCS) claiming the underwater Lomonosov and Mendeleev ridges are actually extensions of the Russian continental shelf. If its claim is approved, Russia would expand its exclusive economic zone by nearly one million square kilometers or 380,000 square miles, including portions of the North Pole (Figure 2-2).

Up until now, the CLCS denied Russia’s initial and updated claims (2009, 2011, and 2015) due to insufficient scientific evidence.<sup>52</sup> However, in early 2019 the CLCS declared the “outer limits of the Russian continental shelf submission are geologically similar to the structure of the continuation of the shelf and the continent of the Russian Federation.”<sup>53</sup> While this new evidence in no way guarantees the Russian claim approval, it provides positive indications compared to previous submissions. Nevertheless, Denmark and Canada are also making a similar claim. Other members of the Arctic Council—the U.S., Canada, Denmark, Norway, Sweden, Iceland, and Finland—may stand to lose if the CLCS approves Russian claims in the High North.

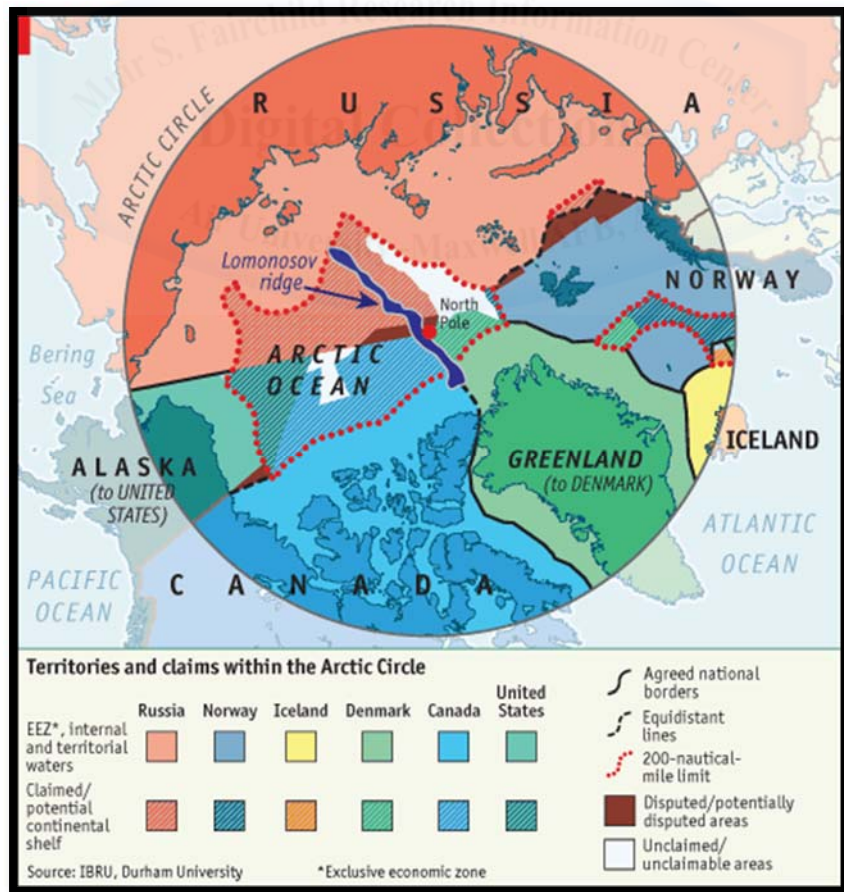


Figure 2-2. Russia’s Territory Claim<sup>54</sup>

It is crucial to recognize the Russian government's view of bilateral and multilateral compromise as the current best method to fulfill its national interests.<sup>55</sup> These multilateral institutions are primarily devoted to non-economic issues, or topics with broadly defined cooperation, and have yet to require Russia to compromise any of its stated goals. Furthermore, the institutions provide Russia multiple platforms for voicing its opinions, enhancing its status on the world stage. Finally, by co-founding these institutions, Russia preserved a strong bargaining position, thus helping Moscow secure its regional status and display itself as a reliable member of global community.<sup>56</sup> But, how does Russia's Arctic economic strategy tie with its stated political strategy?

### **Russia's Arctic Economic Policy**

After a sustained period of economic weakness, Russia is using its acquired wealth to regain its 'Great Power' status. *Russia's Energy Strategy 2030* reflects this goal stating "the most effective use of natural resources and potential of the energy sector [is] for the purposes of sustainable economic growth, improvement of quality of life, and promotion of the country's global interests."<sup>57</sup> Therefore, the overarching goals of Russia's Arctic policy are to secure and maintain its access to Arctic economic resources.

Economically, the Arctic region is important due to its abundance of natural resources and potential sea shipping routes. According to Russian geological studies, up to "90 percent of the hydrocarbon reserves found on the Russian continental shelf is located in the Arctic."<sup>58</sup> Furthermore, 66.5 percent of those reserves are located in the Barents and Kara Seas, making it the Arctic's most abundant hydrocarbon resource province.<sup>59</sup> Additionally, a significant

majority of Russia's precious metals originate from Arctic mines.<sup>60</sup> Therefore, Arctic resource development is an essential instrument for continued national economic development.<sup>61</sup> Consequently, Russia's economic policy stresses developing these natural resources and controlling its future Northern Sea shipping route.

## **Current Economic State**

Almost a quarter of Russia's Gross Domestic Product (GDP) and approximately 65 percent of its foreign exchange earnings come from its energy sector.<sup>62</sup> Russia's proven oil reserves place it in the top ten international oil states and in 2018, it regained its position as the world's second leading oil exporter behind Saudi Arabia. Russia also has substantial amounts of proven natural gas reserves, totaling a quarter of the world's known reserves (Figure 3-1).<sup>63</sup> Therefore, Russia's economy is heavily dependent on oil and natural gas exports, and the economy's overall health depends on the uninterrupted flow of natural gas.

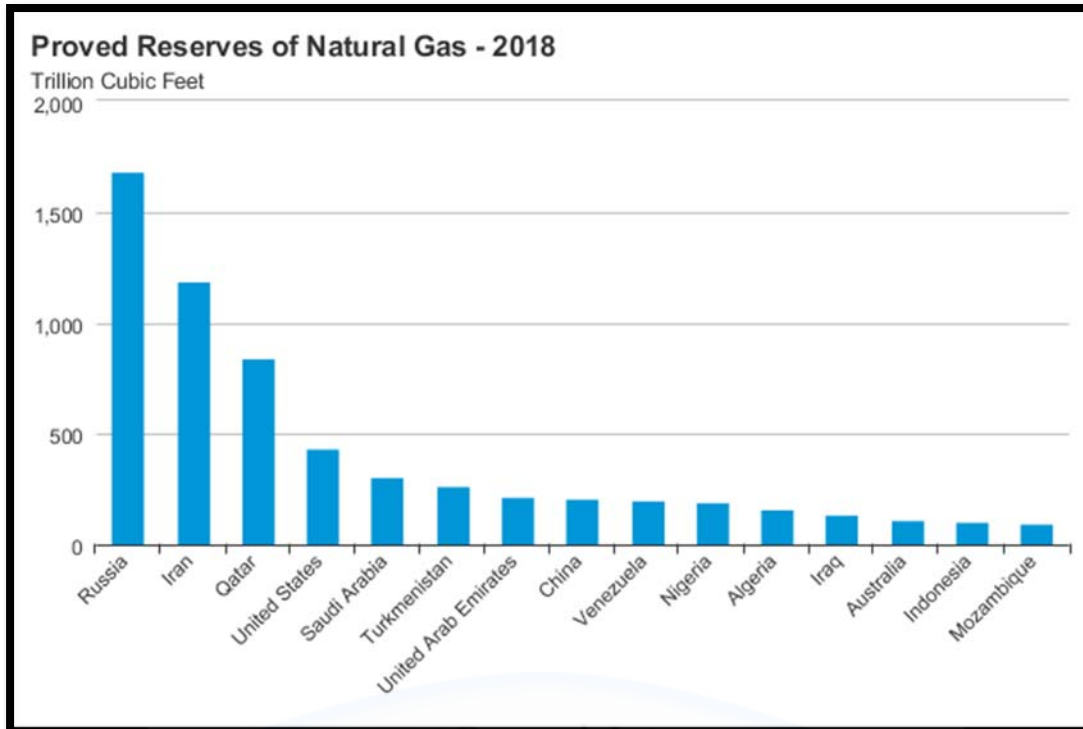


Figure 3-1. Russia's Proven Gas Reserves<sup>64</sup>

## Oil Production

In oil-producing regions of the world, the largest oil deposits are normally developed first, and only after they become exhausted do the smaller deposits receive attention. Once the large fields pass their production peak, an increasing number of new and generally smaller fields must be developed to maintain a similar level of production. From then on, it becomes increasingly more difficult to sustain a steady rate of production growth. The only method to break this cycle is to tap into fields capable of producing yields similar to the original large deposit, or another large field.<sup>65</sup>

In 2008, a Lukoil executive revealed Russia's output had fallen for the first time in a decade, and appeared it would continue its decline for the foreseeable future.<sup>66</sup> President Putin

called on industry executives to “halt the lagging growth in reserves relative to the volume of mineral resources extracted and expand the study and exploitation for the resources of the [Arctic] continental shelf and open seas.”<sup>67</sup> From 2008 to the present, Russia’s overall oil production remained relatively static, but the threat of decline persists.

In 2010, the Kremlin correctly predicted its current rate of national production would not peak until 2020, when they expected production rates to freefall.<sup>68</sup> For nations dependent on oil as a principal source of revenue, an overall reduction in supply could devastate its economy. In Russia, the devastation would result in an economic catastrophe. On average, a \$1 per barrel change in oil prices results in a \$1.4 billion change in Russian government revenues in the matching direction.<sup>69</sup>

## **Natural Gas Production**

Russia is the world’s second largest exporter of natural gas and the primary natural gas supplier to Europe and adjacent former Soviet states.<sup>70</sup> For instance, NATO members with tense relations with Moscow are largely dependent on Russian gas, with Germany importing 39 percent of its consumed natural gas from Russia and Austria importing 69 percent.<sup>71</sup> Former Soviet states such as Moldova, Latvia, Georgia, and Estonia all are entirely dependent on Russia for their supply of natural gas.<sup>72</sup> As a result, Russia commands a near monopoly on providing Europe and the surrounding areas their natural gas through a series of extensive pipelines; if these nations wish to heat their homes in the winter, they must purchase the bulk of their heating source from Russia. Over the past 10 years, Russia exploited this economic and resource leverage against its neighbors numerous times, to great effect.

Gazprom, a state-controlled corporation, owns the vast majority of Russian natural gas mining and pipeline infrastructure, and is the only corporation permitted to export natural gas.<sup>73</sup> The Kremlin's influence on Gazprom's business practices directly assists the nation's foreign policy objectives. Exports form 60 percent of Gazprom's revenue stream.<sup>74</sup> In 2010, the U.S. Energy Information Administration's (EIA) Country Analysis Brief, stated Gazprom's natural gas production forecast calls for little to no growth, and estimated its "Big Three" fields would only be able to supply 23 percent of requirements.<sup>75</sup> Conversely, EIA predicts global natural gas consumption to grow by 2.5% a year for the next 20 years.<sup>76</sup>

Historically, Russia has been unable to significantly develop its resources in the Arctic region due to a lack of key technological skills required to access them.<sup>77</sup> However, in 2018, Russia successfully built and began operating a massive, multi-partner consortium natural gas plant with a collocated shipping port in the Yamal region.<sup>78</sup> The Yamal plant, coupled with other smaller initiatives, led to an enormous increase in natural gas production and exports, propelling Russia back into the top two producing nations. Furthermore, its success led to the September 2019 Russian government approval of a \$21 billion multi-partner project to open a second Arctic plant in the Gydan peninsula with the aim of exporting 80% of its production to Asia.<sup>79</sup>

## **Arctic Shipping via the Northern Sea Route**

One of Russia's fundamental Arctic goals is the development of the Northern Sea Route (NSR) as a fully integrated transportation link and key element in maritime connections between Europe and Asia. The importance of the NSR has been highlighted in a range of recently adopted strategic documents, pointing to a "sharply increased role" of the NSR in connection

with growing extraction of the Arctic's natural resources.<sup>80</sup> Regulating the NSR provides Russia additional revenue via shipping taxes and a reason to implement northern maritime border control. Therefore, Russia claims the NSR is a "national transportation route" under its jurisdiction based on Article 234 of the UNCLOS.<sup>81</sup>

Over the past five years, Russia implemented multiple regulations on the NSR, requiring all vessels to provide advance notice and submit an application for guidance, implying the payment of a Russian access toll.<sup>82</sup> Moreover, in April 2019, the Kremlin placed additional limitations for foreign warships transiting the NSR, requiring the ship's particulars and information on each ship's captain, in addition to mandating each ship take aboard a Russian pilot.<sup>83</sup> Alexey Chepa, the deputy chairman of the Russian State Duma's international affairs committee, stated, "Control of the Northern Sea Route is simply necessary in the current international situation."<sup>84</sup>

Interestingly, these limitations occurred shortly after a French military naval vessel sailed the route without warning, also implying Russian concerns over maritime border security. These new regulatory limitations help maintain control over shipping and environment impacts due to increased commercial and military interest in the route. Russian authorities also reserve the right to deny access to NSR and in the case of un-authorized traffic, apply emergency actions against non-cooperating parties.<sup>85</sup>

## **The Northern Sea Route Viability**

If scientists' predictions of seasonal ice-free Arctic waters occur, the NSR could shorten shipping transit time from Europe to Asia by 40 percent.<sup>86</sup> This may provide Russia the

nineteenth century “Holy Grail of Victorian exploration,” an Arctic shortcut to rich Asian markets.<sup>87</sup> The shipping shortcuts of the NSR would cut existing oceanic transit times by days, saving thousands of miles in unneeded travel and reducing overall transit cost (Figure 3-2).<sup>88</sup> This savings could be even greater for megaships unable to fit through the Suez Canal and, therefore, currently sail around the Cape of Good Hope. China alone would save \$60 to \$120 billion a year by extensively using this route and as a result, China is the biggest client for NSR shipments.<sup>89</sup> In July 2018, Russia supplied its first liquid natural gas shipment from the Yamal plant to China via the route.<sup>90</sup> Finally, the opening of Arctic sea routes would also allow commercial and military vessels to avoid sailing through pirate-infested waters off the Coast of Africa.<sup>91</sup>



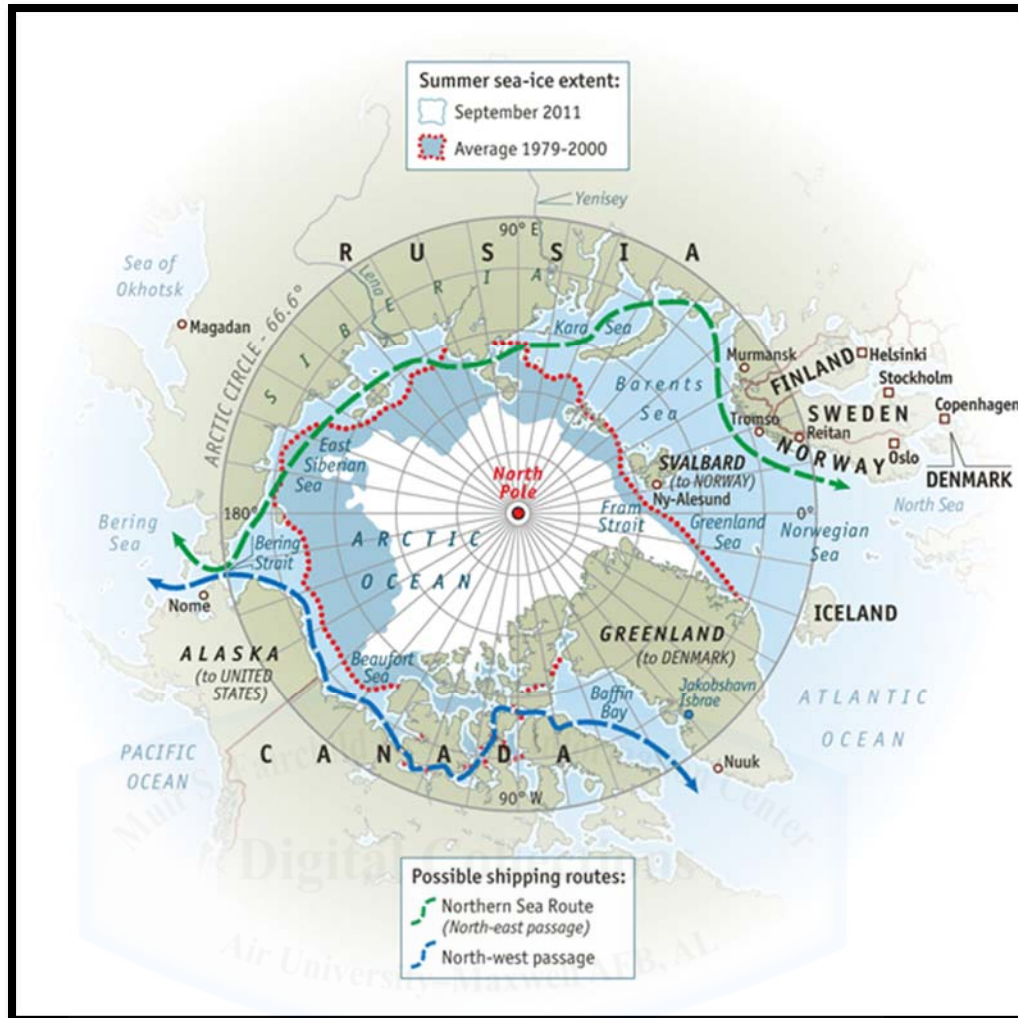


Figure 3-2. Arctic Shipping Routes<sup>92</sup>

### *Trade Levels on the NSR*

Potentially, Arctic shipping could dramatically affect global trade patterns. As marine insurers recalculate the risks involved in these voyages, trans-Arctic shipping can become commercially viable and begin on a large scale.<sup>93</sup> Increased Russian hydrocarbon extraction in the Arctic has already led to a growth of NSR shipping traffic, primarily to Asia. Due to the combined effects of climate change, increasing regional hydrocarbon production, and new ship technology, a steady increase of cargo flows through the NSR. In the 1990s, the NSR averaged 2

million tons of cargo traffic, rising to 20 million tons in 2018, and estimates expect 30 million tons of shipping in 2019.<sup>94</sup> Moreover, Russia projects shipping to increase to 80 million tons a year by 2025 and President Putin considers “this is a realistic, well-calculated and concrete task” and desires to “make the northern sea route safe and commercially feasible.”<sup>95</sup> Currently, the NSR predominantly transports oil, gas, and precious metal shipments, but this may rapidly change over the next couple of years assuming Russia mitigates its preferential treatment of domestic companies.<sup>96</sup>

### *Russian Icebreakers*

If the NSR is to prove economically viable, both for Russia and the other nations, ice, a problem for numerous months of the year, regardless of the effects of climate change, must be dealt with. Therefore, to make use of this route, Russia needs to possess nuclear powered icebreakers to maintain the stability and security of military and commercial passage in the Arctic.

Although Russia owns the world’s largest and most powerful icebreaker fleet, its limited maintenance and construction capability resulted in general fleet deterioration since the 1990s. Built in the 1970’s, Russia’s four remaining nuclear-powered icebreakers are rapidly aging, and all but one scheduled for decommission by 2020.<sup>97</sup> According to Putin, three nuclear icebreakers are currently under construction, and by 2035 Russia will own a fleet of 13 heavy icebreakers, including nine nuclear-powered ones.<sup>98</sup> Furthermore, the Ministry of Defense ordered additional militarized icebreakers, adding the qualities of a tugboat and patrol ship.<sup>99</sup> If construction delays or a reduction in the pace of rejuvenating its fleet continues, Russia’s capacity to support its economic activities in the region is likely to be drastically reduced in the early 2020’s.

## Russia's Arctic Military Policy

Because Arctic economic resources are enabling Russia's rise back to a 'Great Power' status, the region is one of the top priorities of Russia's foreign policy and security strategy. Furthermore, Russia is once again concerned about a new "front of vulnerability" in the Arctic, hence it is the only region specifically mentioned in both the *National Security Strategy through 2020* and in military doctrine.<sup>100</sup> A large portion of the *National Security Strategy* is devoted to the Arctic and includes a plan to strengthen Russian military presence there.<sup>101</sup> Moreover, international attention devoted to the region, signs of emerging energy resource competition, and a range of unresolved maritime delimitation disputes concern Russian leadership in a region they consider "rightful Russian territory."<sup>102</sup> Numerous Russian academics share this view, and openly advocate for an imperialist policy in the Arctic.<sup>103</sup> Predictably, the Kremlin has not ruled out military conflict in the region if Russian strategic goals become threatened.<sup>104</sup> In fact, Defense Minister Shoigu proclaimed in August 2018, "Competition in the Arctic could lead to potential [military] conflict."<sup>105</sup>

Therefore, to support its Arctic interests, Russia pledged to strengthen its border-guard forces in the region and tighten its security in response to "various military-political circumstances," resulting in Russian remilitarization and intensification of military activity in the High North. Moreover, the Russian variation of classical realist thinking still dominates Russian military leaders' attitudes toward international relations in the Arctic. Contrary to official Arctic policy and security concepts, large parts of the Russian military establishment perceive the United States and NATO as its main security threats.<sup>106</sup>

In a sense, Russian leadership views the Arctic under the same threat perceptions as other theaters.<sup>107</sup> Likewise, they believe the region's importance as a strategic resource base makes it more likely Russia's "Arctic opponents," the United States, Norway, Canada, Denmark, and NATO, could challenge Russian security.<sup>108</sup> Thus, there is an evident interdependence between the development of the Russian energy industry, military presence, and force projection in the Arctic today; resulting in Russia issuing militarily provocative statements, rebuilding its Arctic military forces, and conducting regional military exercises.

## **Brief Arctic Military History**

Of all the oceans, the Arctic and its surrounding region was the last to receive attention by the world's navies. The technological developments of the Cold War enabled weapon systems to sustain operations in the Arctic, a region the Soviets viewed as a territory of deterrence.<sup>109</sup> Two systems in particular, the long-range bomber and nuclear-powered submarine, led to a substantial arms buildup in the region. These were the main weapons of a potential nuclear war between the two world superpowers. As each nation deemed the ability to detect an attack and launch a counterattack as critical, both sides needed dependable observation systems as far north as possible. Thus, the Arctic was the critical strategic location for fighting a nuclear war and avoiding it.<sup>110</sup> At the conclusion of the Cold War, each side allowed their northern forces to dissipate, but this respite proved temporary judging by the Kremlin's official policy documents and statements.

## **Strategic Value of the Arctic**

Unquestionably, Russia occupies a unique position among the Arctic states. First, Russia's Arctic coastline covers approximately half of the Arctic Circle, from the Bering Strait to the Norwegian border. Secondly, the Arctic continental shelf is full of natural resources, with a large portion in Russian territory accounting for 22 percent of Russia's GDP, and includes the NSR, an increasingly valuable shipping lane.

The Arctic is also militarily important to Russia, as the nation is increasingly feeling hemmed in by NATO. With over 12,400 miles of Arctic coastline, Arctic waterways allow Russia's fleets access to the Atlantic and the Pacific Oceans.<sup>111</sup> It is also a vitally important theater for deploying the Northern Fleet, specifically for basing and supplying its nuclear submarines with ballistic missiles, a key component of its strategic nuclear deterrent forces.<sup>112</sup> As of the latest estimates, the Northern Fleet owns 81% of Russia's sea-based nuclear weapons. The operational effectiveness of its nuclear-powered strategic submarine fleet helps defend Russia from possible aggression and provides Russia regional and international influence.<sup>113</sup> Historically, Russian perceptions of requiring security via the Arctic region are not new.

## **Official Policy Documents and Provocative Statements**

The *National Security Strategy of the Russian Federation until 2020* emphasizes Arctic cooperation, but the policy also stresses the importance of a continued military presence, the need to maintain "necessary combat potential" in the North, and reveals plans to establish special Arctic military formations to "protect the country's national interests in various military and

political situations.”<sup>114</sup> This strategy considers the use of military action to resolve competition for resources near Russia’s borders, especially in the Barents and other seas, “in case of a competitive struggle for resources, it is not impossible to discount it might be resolved by a decision to use military might.”<sup>115</sup> The *National Security Strategy* also asserts the Northeast Passage (referencing the NSR) is a national transportation route under Russian jurisdiction and Russia will view any nation’s efforts to change that legal status as a threat to national security.<sup>116</sup>

Additionally, the *National Security Strategy* declares Russia will take adequate measures to withstand attempts to dictate conditions for its conduct in the region by threatening to use force. This could be regarded as typical Russian rhetoric, but viewed in the light of Russian actions in its 2008 conflict with Georgia, and the 2014 conflict with Ukraine and Crimea annexation, these comments must be regarded as plausible.

Another implication of this document is Russia’s need to strengthen its Coastal Defense Service of the Federal Security Service and border controls in the Arctic zone of the Russian Federation, as well as establish technical control over waterways along the entire NSR. Therefore, Russia’s Arctic Forces both defend territory and protect Russia’s regional economic interests, fostering some Russian experts’ belief in the need to increase the Northern Fleet’s strike capability.<sup>117</sup>

Through published strategy and doctrine documents, the Russian government stresses the importance of continued military presence as essential for securing national interests in the Arctic. These authorities however, emphasize the main purpose of military preparation is to combat terrorism at sea, smuggling, illegal migration, and unsustainable use of aquatic biological resources (fishing).<sup>118</sup> The doctrine therefore, focuses on the development of search and rescue capabilities, surveillance, and navigation systems to provide safety for and control of economic,

military, and ecological activities.<sup>119</sup> While Russia is interested in these capabilities, it is possible these documents facilitate a Russian international political ploy or deception, with the goal of deemphasizing the anti-NATO nature of its regional actions.<sup>120</sup>

## **Rebuilding of Arctic Military Forces**

According to the strategies and plans outlined earlier, Russian leadership desires military forces to the Arctic. While the former head of the Russian Northern fleet, Vyacheslav Popov, dismissed the idea of stationing new forces north, other Russian news reports suggest Russian officials do plan to send new forces north.<sup>121</sup> In fact, one senior Russian official stated Russia was already training its forces for conflict in the Arctic.

### *Non-Naval Unit Development*

One way Russia is rebuilding and modernizing its military force is through the development of new long-range aircraft (LRA) and Special Forces units. The plans to build new strategic and nuclear capable bombers will result in increased overall military activity in the Arctic, as this is their typical area of operations and training. Over the past ten years, Russia developed the Tu-22M3 Backfire, a new strategic bomber designed to replace the Tu-95MC Bear. In early 2019, production model Backfires began flight testing, and full-rate production is currently scheduled for 2020.<sup>122</sup> Additionally, Russia plans to create special Arctic military formations to protect its national interests. Illustrating this point is the Russian MoD's plan to establish an Arctic Spetsnaz to support Russia's northern policy and defend the country's continental shelf.<sup>123</sup>

## *Arctic Basing*

During a March 2019 testimony to the U.S. Senate Arms Services Committee, the Supreme Allied Commander Europe of NATO Allied Command Operations, General Scaparrotti stated, “Russia reopened ten airports along its northern [sea route], put up radar systems and periodically moved in different weapons systems to control the area.”<sup>124</sup> The Kremlin actually began this process in 2013, spending billions of dollars in upgrading facilities and military capability along the NSR, equipping them with advanced radar and missile defense systems, providing Moscow almost complete coverage of the coastline and adjacent waters.<sup>125</sup>

In 2002, Russia established a military and research base at Camp Barneo, the North Pole, a precursor to future Arctic expansion.<sup>126</sup> More recently, Russia established one of its newest Arctic outposts, a complete “closed cycle base,” on the remote Kotelny Island.<sup>127</sup> In 2016, Russia's Northern Fleet started occupying the facilities, and along with numerous other locations, remains on a continual 24-hour alert status.<sup>128</sup> As many of the new military bases are co-located with civil units, Russia’s Arctic military infrastructure inherently serves a “dual civil/military purpose,” providing Search and Rescue (SAR) operations, border enforcement, aviation control points, radar and space reconnaissance positions, and overall northern domain awareness.<sup>129</sup>

## *The Northern Fleet*

The Arctic is still an important home base and a suitable operational area for the Russian navy, in particular, the sea-based component of the Russian nuclear triad, the Northern Fleet. Russia views nuclear deterrent and strike capability as a symbol and guarantee of its ‘Great Power’ status, and thus remains a key element of Russian security policy and military strategy. Therefore, maintaining nuclear capability is the highest priority in Russian military

modernization. Just as Russia implemented modernization efforts on its long-range aircraft (LRA) and missile capabilities, Russian authorities repeatedly confirmed their intention to make the Russian Navy the second most powerful in the world within the next 20-30 years.

Russia essentially desires to recreate a 'blue-water navy' exceeding Soviet naval power of the 1980s," by building "five to six aircraft squadrons for the Northern and Pacific Fleets, constructing a fourth-generation class of Ballistic Missile Submarines (Borei), and modernizing its older sea-based nuclear deterrent (Delta IV)."<sup>130</sup> Russia successfully made progress towards the Navy's 2011-2020 modernization plan, completing four Borei class submarines, two Yasen-class guided-missile submarines, and refurbishment of Delta IV subs. By 2023, Russia plans to complete an additional ten new submarines.<sup>131</sup> Furthermore, in April 2019, the defense minister Shoigu stated "the Northern Fleet would receive 368 of the latest weapons and by the end of 2019 would contain 59% of the country's modern arsenal."<sup>132</sup>

While a great deal has changed since the height of the Cold War, the Northern Fleet, was the Soviet's most powerful fleet and, in most respects, still is Russia's most powerful fleet. However, by comparing programed naval procurement trends for 2020 to 2027, it appears likely the Northern Fleet will remain a brown-and green-water force, focused on protecting coastal areas along the NSR and on denying foreign military forces access to the Arctic Zone of the Russian Federation.<sup>133</sup> Until Russia's modernization efforts are completed, the Northern Fleet derives its strength from its nuclear submarine capability.

## Regional Military Exercises

It should come as no surprise Russian military forces routinely attempt to project power in the Arctic region. In addition to the plans to modernize and build a more capable combat force, Russia has expanded its military activities in the Arctic since 2007.<sup>134</sup> In fact, Russian military activity in the air and sea has out-paced all other Arctic nations.<sup>135</sup> These actions have raised concerns among other Arctic nations, further emphasizing Russian attention towards developing military capabilities, increasingly seen as “an important or even decisive tool in pursuing a forceful foreign policy worthy of a global power.”<sup>136</sup>

### *Aviation Exercises*

In August 2007, the Russian Air Force, acting on Putin’s directive, resumed long-range bomber flights over the Arctic for the first time since the Cold War.<sup>137</sup> During 2007, Russia penetrated Alaska’s 12-mile air defense zone 18 times, while in 2008, Russian long-range bombers conducted 87 flights in the Arctic region.<sup>138</sup> Increased Russian bomber Arctic activity remains a relevant concern. In early 2015, Admiral Gortney, head of North American Aerospace Defense Command (NORAD) confirmed Russian bomber patrols are occurring more frequently in the Arctic and they have been “aggressive in the amount of flights.”<sup>139</sup> Furthermore, in 2019 the Russian Ministry of Defense decided to resume airspace patrols of the North Pole with MiG-31BM interceptor fighters.<sup>140</sup>

Western experts have deemed Russian long-range strategic bomber patrols particularly controversial as these “patrols” have purportedly included mock bombing runs against Norway’s northern command center at Bodo. Russia continues these strategic bomber flights along the

Norwegian coast to the present day. Russia's regular Arctic bomber patrols and mock "strike missions" likely are an attempt to demonstrate regained global reach and defensive capabilities, and at a minimum, provide their aircrew 'practical' training missions.<sup>141</sup>

### *Naval and Land Exercises*

Russian military Arctic posturing is not limited to its long-range bomber force. Russia also started conducting numerous other exercises in the region, to include paratroop drops on the North Pole. For example, in 2015, Russia practiced its largest Arctic military deployment since the Cold War, mobilizing 45,000 soldiers, 3,360 vehicles, 110 aircraft, 41 naval vessels, and 15 submarines for a force readiness exercise.<sup>142</sup> In July 2008, Russia resumed Arctic naval surface patrols, sailing into disputed waters between Norway and Russia around Spitsbergen, displaying Russia's intention to defend its interests in the region.<sup>143</sup> Russian naval military operations continue to increase and in 2018 alone, the Northern Fleet accomplished over 100 Arctic patrol missions.<sup>144</sup>

Another area of concern is Russia's continued strengthening of its communication-jamming capabilities. For instance, Russia demonstrated its proficiency in creating an anti-access/area denial "bubble" during its 2017 Zapad exercise. Norway feels particularly threatened by this capability and already claims Russia electronically harasses its critical communications systems and networks.<sup>145</sup>

## Conclusion

Tension between Russia and other Arctic states, like Norway, are resulting from the competition over these newly uncovered, valuable natural resources, and the possible economic impact of access to the Northern Sea Route.<sup>146</sup> Opening of the region is one driving force behind the Arctic's new geo-political importance, as previously inaccessible natural resources have the potential to become available for extraction. Therefore, the Arctic region is an integral part of Moscow's future plans.<sup>147</sup> Since the Soviet era, the Kremlin viewed the Arctic primarily from two angles: security and economic value.<sup>148</sup> Unsurprisingly, the specific overarching goal of Russia's Arctic policy to secure and maintain its access to Arctic economic resources is consistent with the overall pattern of Russian foreign policy, regaining its 'Great Power' status, and viewed as critical to Russia's national security. Consequently, the region is one of Russia's top priorities in foreign policy, economic development, and security strategy as evidenced by how Russia employs its political (diplomatic and informational), economic, and military instruments of power.<sup>149</sup>

Russian leadership regularly uses foreign policy in techniques allowing them the flexibility to be pragmatic in the methods used to promote Russia's national interests, sometimes contradicting the country's aggressive image. Although Russia remains keenly interested in the Arctic, it continues to pursue its regional ambitions via negotiations and peaceful dispute through existing institutional mechanisms, in particular the UN.<sup>150</sup> It is critical when assessing Russian Arctic foreign policy, not to ignore its efforts to respect international institutions.<sup>151</sup> Examples of these efforts include Russia's engagement in the Arctic Council, the Search and Rescue Agreement, the Inuit Circumpolar Conference, and submitting its territory claim to the CLCS. Therefore, anticipating additional cooperative policies from Russia is sensible if the existing

institutional framework remains respected and continues to allow Russia to protect its perceived vital interests.<sup>152</sup> It is likely Russia's Arctic policy will change if these same institutions no longer protect Russian interests.

It is also crucial to recognize the Russian government views bilateral and multilateral compromise as the best current method to fulfill its own interests.<sup>153</sup> These multilateral institutions are primarily devoted to topics with broadly defined cooperation, and do not require Russia to compromise its stated goals. These institutions provide Russia another method of enhancing its global status. Moreover, by co-founding these institutions, Russia preserves a strong bargaining position, helping Moscow secure its regional status, and highlighting itself as a reliable member of the global community.<sup>154</sup>

Economic power is another method Russia is utilizing to propel it back to 'Great Power' status. Russia's economy is heavily dependent on oil and natural gas exports and as Russia possesses over half of all the Arctic's proven hydrocarbon resources, it must access them to preserve its newfound economic power.<sup>155</sup> Therefore, extracting Arctic deposits is a strategic imperative.<sup>156</sup> Over the past fifteen years, Russian leadership focused on developing its Arctic resources to compensate for future production decreases in Western Siberia.<sup>157</sup> After numerous setbacks, in 2018, Russia achieved its first major Arctic resource development success with the opening of the Yamal natural gas plant.

The NSR is another viable source of steady income and Russia intends to capitalize on increased shipping traffic through the region.<sup>158</sup> As the Kremlin views the NSR as within its territorial waters, it established the NSR administration to regulate navigation along the route and arrange for icebreaker and pilotage assistance.<sup>159</sup> Russian icebreaker support is essential to feasible transport on the NSR, thus leading to an expected revitalization of its nuclear

icebreaking fleet. The guise of maritime security on the NSR also provides Russia an alternative means to exert control in the region, and provides an additional pressure point on other powers, evidenced by Russia's declared right to deny access, seize ships, or use other tactics.<sup>160</sup> Through the cut-off of natural gas supplies to Eastern Europe, Russia previously demonstrated its willingness to use economic leverage to attain national political goals. Hence, it may only be a matter of when the Kremlin will use access to, or security concerns on the NSR, to achieve political goals.

Since the end of Putin's second term, the military has garnered an enhanced role in efforts to return Russia to the world stage as a 'Great Power.'<sup>161</sup> Over the past ten years, Russia poured billions of dollars into its armed forces, steadily increasing its military capabilities in the Arctic.<sup>162</sup> Along the NSR, new bases and airfields have opened, equipped with advanced radar and missile defense systems.<sup>163</sup> However, the improvements in Russia's Arctic military footprint are largely proportional to the overall increase in military spending since 2008.<sup>164</sup> Even so, Russian military activity in the region has out-paced all other Arctic nations.<sup>165</sup> Russia's Arctic military presence is increasingly returning to previous Cold War norms, resulting in escalating regional tension.<sup>166</sup>

Militarily, thanks primarily to the Northern Fleet, Russia is the dominant power in the Arctic. The Arctic has great significance for Russia's national security and consequently hosts two thirds of its sea-based nuclear force.<sup>167</sup> Russians, therefore, believe their geopolitical position would be considerably weaker than at present were it not for the strategic nuclear deterrent carried by the Northern Fleet.<sup>168</sup> Regardless, Russia still views the activities of the Arctic Five with a degree of mistrust. For example, Moscow believes the "West" plans to try to

deprive Russia its Arctic economic resources and control of the NSR. Therefore, Russia is strengthening its Arctic forces as a military deterrent against said concerns.<sup>169</sup>

Russia's military intentions cannot be assumed benign, bringing the issue of what it might do with these new capabilities into sharper focus. Russia's stated intentions of these capabilities are not offensive in nature, but meant to reestablish control of the waters and coastal region of the NSR.<sup>170</sup> However, Russia is deploying dual-use capabilities, and other nations should worry about Russia employing its Arctic military forces for political gain or historic 'security concerns.'<sup>171</sup> Future regional conflict cannot be ruled out, as Russia demonstrated its willingness in 2008 with Georgia, 2014 with the Ukraine, and currently in Syria, to use military force if it feels necessary.<sup>172</sup>

Currently, Russian political (diplomatic and informational), military, and economic interests in the region continue to complement each other due to Russia's long-term strategy for the Arctic.<sup>173</sup> So far, Russia is following its stated policy of economic development and international cooperation. However, the rhetoric issued by Russian leaders does not preclude the use of force. Per President Putin, the Kremlin is "open for a dialogue with our foreign partners and with all our neighbors in the Arctic region, but of course we will defend our own geopolitical interests firmly and consistently."<sup>174</sup> As the Arctic will remain strategically important to Russia for the foreseeable future, Russia's increased military activity in the Arctic and assertive foreign policy rhetoric are only the beginning of a more visible Russian presence in the region.

The most likely assessment of Russia's Arctic intentions is Russia hedging its bets and attempting to play a "win-win" Arctic strategy; emphasizing its international cooperation foreign policy via the UN and other institutions, while gaining early military and commercial regional supremacy. This is an extremely intelligent move as it preserves the most amount of options for

Russian leadership, while incurring minimal global political risk. Currently, Russia acts as a status quo power, partly because international law there plays in its favor, and partly because it is in Russia's interest to do so.<sup>175</sup> Many Russian academics and some Arctic policy experts, who study Russia's economic motivations and historic Russian security concerns, hold this view.<sup>176</sup>

Russia's Arctic policy gives some hope for continued cooperation between Russia and other Arctic nations as Russia will chair the Arctic Council from 2021 to 2023, and is responsible for leading efforts to address issues of development, shipping, extraction, and environmental protection.<sup>177</sup> Likewise, positive scientific feedback from the CLCS provides Russia new hope to have its EEZ extended almost to the North Pole, rendering it the beneficiary of a vast majority of Arctic resources without the threat of international competition. From a pragmatic point of view, the diplomatic approach also buys Russia time. By pursuing diplomatic options *first*, Russia gains time by simultaneously collaborating through international agencies, while modernizing their defense force to secure their territory from potential threats.<sup>178</sup>

At the same time, the Russian viewpoint on the Arctic region falling within its sphere of influence is at odds with Western perception. Consequently, expecting Russian cooperation on all issues is unlikely, especially on navigational rights. As evidenced by its administrative claim on the NSR, Russia's interests do not often align with U.S. or NATO interests.<sup>179</sup> Likewise, Russia considers the growing presence of other Arctic and non-Arctic nations in the region as potential threats. Russia supports diplomatic, economic, and some military cooperation in the Arctic, in an attempt to secure its hegemony there.<sup>180</sup>

On the other hand, Moscow is preparing to confront emerging threats to its NSR control, perceived Arctic territory, and hydrocarbon production projects. Russia is increasing military 'defense' capabilities in the region during a period of heightened tensions with its neighbors.<sup>181</sup>

In many ways, Russia's Arctic security programs are sensible, with the stated goal to maintain control of vital strategic economic resources, while collaborating with other Arctic states via military drills and regional SAR efforts.<sup>182</sup> Realist-informed writers however, argue Russia is using the Arctic to restore its economic might and demonstrate its military strength.<sup>183</sup> Russian military capabilities in the Arctic are dual-use in nature, and as of yet, have not taken on a significantly aggressive stance. Instead, Russia intends its military capabilities to deter its Arctic neighbors and NATO during peacetime, and to disrupt its adversaries' capabilities in wartime.<sup>184</sup>

While no direct military conflicts have resulted so far, the potential exists for skirmishes to occur. Sources of potential miscalculation are numerous as Russia's own perception of Arctic strength and superiority could embolden it, heightening the risk of miscalculation. For instance, the recent implementation of rigorous navigational concessions to utilize the NSR indicates this possibility.<sup>185</sup> As previously mentioned, a number of senior Russian analysts and leadership figures do not balk at drawing such conclusions and have urged their government to take all necessary steps, including the use of military action, to protect and defend Russia's national interests.<sup>186</sup> Thus, it appears, *if required*, Russia will use military force to maintain its position in the Arctic region.

Russia will either maintain this dual approach of cooperation or utilize an aggressive defense posture to manipulate the future of the Arctic.<sup>187</sup> For example, it remains unlikely Russia will achieve its EEZ extension claim, whereas nations such as Canada and Greenland could prevail. Consequently, the resulting Russian view towards international cooperation will be entirely different than it is now. Indeed, a more anti-Western, paranoid, and militarily active Russia will likely emerge in the Arctic.

Russia is the most prepared of Arctic nations to exploit any opportunities available and has already gained early regional commercial and military supremacy in the region.<sup>188</sup> The U.S. and other NATO Arctic Five members strongly need to consider how to achieve greater political, economic influence, as well as military parity in the region. Russia should not view the Arctic its uncontested region.<sup>189</sup>



## BIBLIOGRAPHY

- Adam Taylor, "Exxonmobil Signs Huge \$500 Billion Deal For Russian Arctic Oil," *Business Insider*, August 30, 2011. <https://www.businessinsider.com.au/exxon-mobil-rosneft-arctic-2011-8> (accessed February 1, 2020).
- "After 40 years of talks, Russia and Norway sign border agreement." *The Daily Observer*, <https://www.antiguaobserver.com/after-40-years-of-talks-russia-and-norway-sign-border-agreement/> (accessed February 1, 2020).
- Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" *JOURNAL OF EURASIAN STUDIES* Vol 10: 85–97.
- Antrim, Caitlyn L. "The Next Geographical Pivot: The Russian Arctic in the Twenty-first Century." *Naval War College Review* 63, no. 3 (1 July 2010), 15-38.
- "Arctic Sea Ice News and Analysis." National Snow and Ice Data Center. <http://nsidc.org/arcticseaicenews/> (accessed February 1, 2020).
- "Arctic sea ice extent remains low, 2009 sees third lowest mark." National Snow and Ice Data Center. [http://nsidc.org/news/press/20091005\\_minimumpr.html](http://nsidc.org/news/press/20091005_minimumpr.html) (accessed February 1, 2020).
- "Arctic Search and Rescue Agreement," Arctic Portal, [http://library.arcticportal.org/1709/1/Arctic\\_SAR\\_Agreement\\_EN\\_FINAL\\_for\\_signature\\_21-Apr-2011.pdf](http://library.arcticportal.org/1709/1/Arctic_SAR_Agreement_EN_FINAL_for_signature_21-Apr-2011.pdf) (accessed February 1, 2020).
- Assenova, Margarita. 2019. "Russia's New Rules for Northern Sea Route Violate International Law." *Polygraph.info*. March 12, 2019. <https://www.polygraph.info/a/fact-check-russia-claim-arctic/29817535.html>. (accessed February 1, 2020).
- Astrasheuskaya, Nastassia, and Henry Foy. 2019. "Polar Powers: Russia's Bid for Supremacy in the Arctic Ocean." *Financial Times*, April. <https://www.ft.com/content/2fa82760-5c4a-11e9-939a-341f5ada9d40>. (accessed September 20, 2019).
- BBC News. "Threat's to Future of Russia Oil." *BBC News*, April 15, 2008, <http://news.bbc.co.uk/2/hi/7348463.stm> (accessed February 1, 2020).
- Beehner, Lionel and Toni Johnson. "Global Oil Trends." Council on Foreign Relations, October 18, 2007, <http://cdn.cfr.org/background/global-oil-trends> (accessed February 1, 2020).
- Borgerson, Scott G. "Arctic Meltdown-the Economic and Security Implications of Global Warming." *Foreign Affairs* 87, no. 2 (March/April 2008): 63-77.

- Borgerson, Scott. 2014. "The Emerging Arctic: Risks and Economic Opportunities." The Council on Foreign Relations. 2014. <https://www.cfr.org/interactives/emerging-arctic#!/emerging-arctic> (accessed February 1, 2020).
- Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 1–46.
- "BP Offers Technology, Expertise to Develop Russia's Arctic Deposits," *Sputnik News*, January 1, 2010, at: <https://sputniknews.com/business/20100121157639867/> (accessed February 1, 2020).
- British Petroleum. "BP's Field of the Future in Norway." *Digital Energy Journal*, September 19, 2013, [http://www.digitalenergyjournal.com/n/BP\\_Norges\\_Field\\_of\\_the\\_Future\\_projects/bc86ad4a.aspx](http://www.digitalenergyjournal.com/n/BP_Norges_Field_of_the_Future_projects/bc86ad4a.aspx) ().
- "Bulava Missile in for More Tests." Naval Open Source Intelligence, <http://nosint.blogspot.com/2012/03/bulava-missile-in-for-more-tests.html> (accessed February 1, 2020).
- "Bulava (ss-nx-30) Submarine Missile." RussianSpaceWeb. <http://www.russianspaceweb.com/bulava.html> (accessed February 1, 2020).
- Bush, Jason. "Oil: What's Russia Really Sitting On?" *Bloomberg Businessweek*, November 22, 2004, <https://www.bloomberg.com/news/articles/2004-11-21/commentary-oil-whats-russia-really-sitting-on> (accessed February 1, 2020).
- Burkarin, Oleg. "Russia's Nuclear Icebreaker Fleet." *Science and Global Security* 14 (January 2006): 25-31.
- Chevron. "Chevron Announces First Oil from Tahiti Field in Gulf of Mexico." <https://www.chevron.com/stories/chevron-announces-first-oilfrom-tahiti-fieldin-gulf-of-mexico> (accessed February 1, 2020).
- CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic> (accessed September 20, 2019).
- Clote, P. "Implications of Global Warming on State Sovereignty and Arctic Resources Under the United Nations Convention on the Law of the Sea: How the Arctic is no Longer Communis Omnium Naturali Jure." *Rich.J.Global L. & Bus.* 8 (2008):195.
- "Conflict & Natural Resources." The Environmental Literacy Council. <https://enviroliteracy.org/land-use/conflict-natural-resources/> (accessed February 1, 2020).

- Cohen, Ariel, and Anton Altman. "Russia's Arctic Claims: Neither Lost nor Forgotten." The Foundry. <http://blog.heritage.org/2011/08/16/russias-arctic-claims-neither-lost-nor-forgotten/> (accessed February 1, 2020).
- Conley, Heather and Jamie Kraut. "U.S. Strategic Interests in the Arctic: An Assessment of Current Challenges and New Opportunities for Cooperation." Report of the CSIS Europe Program. Washington, DC: Center for Strategic and International Studies, April 2010.25.
- "Construction Starts for New Giant Icebreaker." The Barents Observer. [https://barentsobserver.com/en/business/construction-starts-new-giant-icebreaker?qt-popular\\_content=0](https://barentsobserver.com/en/business/construction-starts-new-giant-icebreaker?qt-popular_content=0) (accessed February 1, 2020).
- Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/> (accessed February 1, 2020).
- Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Military and Security (Part II)." The Arctic Institute. February 13, 2018. <https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/> (accessed February 1, 2020).
- Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Energy Extraction (Part III)." The Arctic Institute. February 20, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-energy-extraction-part-three/> (accessed February 1, 2020).
- Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Maritime Shipping (Part IV)." The Arctic Institute. February 27, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/> (accessed February 1, 2020).
- EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/> (accessed February 1, 2020).
- Emmerson, Charles. *The Future History of the Arctic*. New York: Public Affairs, 2010.
- ExxonMobil. "Around the World with ExxonMobil." *The Lamp*, no. 2 (2007), 3.
- "Exxon Reaches Arctic Oil Deal with Russians." *New York Times*, August 30, 2011. <http://www.nytimes.com/2011/08/31/business/global/exxon-and-rosneft-partner-in-russian-oil-deal.html?pagewanted=all> (accessed February 1, 2020).
- Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 99–116.

- Flanders, Nicholas E., Rex V. Brown, Yelena Andre'Eva, and Oleg Larichev. "Justifying Public Decisions in Arctic Oil and Gas Development: American and Russian Approaches." *Arctic* 51, no. 3 (September 1998): 262-79.
- "Gas and Oil Reserves." Gazprom, <https://www.gazprom.com/about/production/reserves/> (accessed February 1, 2020).
- "Gazprom in Foreign Markets." Gazprom Questions and Answers. <https://www.gazprom.com/f/posts/89/747450/gazprom-questions-eng-2011-06.pdf> (accessed February 1, 2020).
- Gautier, Donald L., Kenneth J. Bird, Ronald R. Charpentier, Arthur Grantz, David W. Houseknecht, Timothy R. Klett, Thomas E. Moore, Janet K. Pitman, Christopher J. Schenk, and John H. Schuenemeyer. "Assessment of Undiscovered Oil and Gas in the Arctic." *Science* 324, no. 5931 (2009): 1175.
- Gelb, Bernard A. *Russian Natural Gas: Regional Dependence*. CRS Report for Congress, Washington D.C.: Congressional Research Service, January 2007.
- Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." *Russia Knowledge*. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/) (accessed August 29, 2019).
- Gorenburg, Dmitry. "Russia's Arctic Security Strategy." *Russian Analytical Digest* 96 (12 May 2011): 11-13.
- Graff, J. "Fight for the Top of the World." *Time Magazine* 19 (2007).
- Hingley, Ronald. *The Russian Mind*. New York: Charles Scribner's Sons, 1978.
- Holmes, Stephanie. "Breaking the Ice: Emerging Legal Issues in Arctic Sovereignty." *Chicago Journal of International Law* 9, no. 1 (Summer, 2008;): 323-351.
- Hosa, Joanna. 2018. "Strategy on Ice: Has Russia Already Won the Scramble for the Arctic?" *European Council on Foreign Relations*. October 26, 2018. [https://www.ecfr.eu/article/commentary\\_strategy\\_on\\_ice\\_has\\_russia\\_already\\_won\\_the\\_scramble\\_for\\_the\\_arct](https://www.ecfr.eu/article/commentary_strategy_on_ice_has_russia_already_won_the_scramble_for_the_arct) (accessed August 29, 2019).
- Howard, Roger. *Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*. New York: Continuum, 2009.
- Huebert, Rob. *The Newly Emerging Arctic Security Environment*. Canadian Defence & Foreign Affairs Institute, 2010.

- Humpert, Malte. "The Future of the Northern Sea Route - a 'Golden Waterway' or a Niche Trade Route." The Arctic Institute. <https://www.thearcticinstitute.org/future-northern-sea-route-golden-waterway-niche/> (accessed February 1, 2020).
- "Ice-Free Arctic Summers Could Happen on Earlier Side of Predictions." 2019. Science Daily. February 27, 2019. <https://www.sciencedaily.com/releases/2019/02/190227111128.htm> (accessed September 8, 2019).
- Ilyushina, Mary, and Frederik Pleitgen. 2019. "Inside the Military Base at the Heart of Putin's Arctic Ambitions." CNN World. April 5, 2019. <https://www.cnn.com/2019/04/04/europe/russia-arctic-kotelny-island-military-base/index.html> (accessed August 29, 2019).
- International Energy Outlook 2016. 2016. International Energy Outlook 2016.
- Jaganathan , Jessica, and Vladimir Soldatkin. 2019. "Russia Ups LNG Race with Green Light on \$21 Billion Arctic LNG-2 Project." Reuters, Commodities. Reuters. September 5, 2019. <https://www.reuters.com/article/us-russia-energy-novatek-lng/russia-ups-lng-race-with-green-light-on-21-billion-arctic-lng-2-project-idUSKCN1VQ0IH> (accessed September 8, 2019).
- Kefferpütz, Roderick. "On Thin Ice?(Mis) Interpreting Russian Policy in the High North." *CEPS Policy Brief no 205* (2010).
- Keil, Kathrin. "A Potential Arctic Conflict: Insiders Vs. Outsiders." The Arctic Institute <https://www.thearcticinstitute.org/potential-arctic-conflict/> (accessed February 1, 2020).
- Kelessidis, V. C. "Challenges for Very Deep Oil and Gas Drilling-Will There Ever be a Depth." (paper presented at the 3rd AMIREG International Conference, Athens, Greece, September 8, 2009).
- Kireeva, Anna. 2019. "For All of Russia's Talk about Oil Drilling in the Arctic, Most Arctic Oil Will Likely Go Untouched." Bellona. April 24, 2019. <https://bellona.org/news/arctic/2019-04-for-all-of-russias-talk-about-oil-drilling-in-the-arctic-most-arctic-oil-will-likely-go-untouched> (accessed February 1, 2020).
- Konyshev, Valery and Aleksandr Sergunin. "The Arctic at the Crossroads of Geopolitical Interests." *Russian Politics and Law* 50, no. 2 (March-April 2012):34-54.
- Kramer, Andrew E. "Amid Peril of Warming, Old Dream Is Fulfilled." *New York Times*, October 18, 2011.
- Konovalov, Alexei. "The Issues and Prospects of an Expanded Arctic Transportation Network." Valdai.

[https://valdaiclub.com/a/highlights/the\\_issues\\_and\\_prospects\\_of\\_an\\_expanded\\_arctic\\_transportation\\_network/](https://valdaiclub.com/a/highlights/the_issues_and_prospects_of_an_expanded_arctic_transportation_network/) (accessed February 1, 2020).

Kupchinsky, Roman. "Lng - Russia's New Energy Blackmail Tool." *Eurasia Daily Monitor* 6, no. 77 (April 22, 2009), <https://jamestown.org/program/lng-russias-new-energy-blackmail-tool/> (accessed February 1, 2020).

Lasserre, Frédéric, and Pierre-Louis Têtu. 2016. "Research Gate." Research Gate. Laval University. January 2016.  
[https://www.researchgate.net/publication/309605658\\_Russian\\_Air\\_Patrols\\_in\\_the\\_Arctic\\_Are\\_Long-Range\\_Bomber\\_Patrols\\_a\\_Challenge\\_to\\_Canadian\\_Security\\_and\\_Sovereignty](https://www.researchgate.net/publication/309605658_Russian_Air_Patrols_in_the_Arctic_Are_Long-Range_Bomber_Patrols_a_Challenge_to_Canadian_Security_and_Sovereignty) (accessed February 1, 2020).

Linder, Courtney. 2019. "Russia Is Sailing a 'Floating Chernobyl' Into the Arctic." *Popular Mechanics*, August 26, 2019.  
<https://www.popularmechanics.com/technology/a28802067/floating-chernobyl-nuclear-reactor/> (accessed August 29, 2019).

Madrigal, Alexis. "How the Soviets Drilled the Deepest Hole in the World." *Wired*, August 25, 2008, <https://www.wired.com/2008/08/how-the-soviets-drilled-the-deepest-hole-in-the-world/?slide=1&slideView=10> (accessed February 1, 2020).

Main, Steven J. "If Spring Comes Tomorrow Russia and the Arctic (2011)." Master's Thesis, Defence Academy of the United Kingdom, 2011.

"Murmansk Region to Become Strategic Centre of Russia's Arctic Zone." *Russian Financial Control Monitor* (2010; 2010).

"Navigating the Northern Sea Route." The Wilson Center.  
[https://www.wilsoncenter.org/sites/default/files/navigating\\_the\\_northern\\_sea\\_route\\_status\\_and\\_guidance.pdf](https://www.wilsoncenter.org/sites/default/files/navigating_the_northern_sea_route_status_and_guidance.pdf) (accessed February 1, 2020).

"New Drilling Rigs for Arctic Climate." *Barents Observer*, June 2009.

"New laws on the Northern Sea Route." Arctic Portal. <https://arcticportal.org/ap-library/news/409-new-laws-on-the-northern-sea-route> (accessed February 1, 2020).

"News Room." Rosneft. <https://www.rosneft.com/press/releases/item/114513/> (accessed February 1, 2020).

"North Pole: A Hotbed of Competing Claims," *The Telegraph*,  
<http://www.telegraph.co.uk/news/worldnews/europe/denmark/8520081/North-Pole-a-hotbed-of-competing-claims.html> (accessed February 1, 2020).

"Oil and Gas Resources in the Arctic." *Russian Analytical Digest* 96 (12 May 2011): 7.

- “Oil and Natural Gas Resources of the Arctic.” Geology.com. <http://geology.com/articles/arctic-oil-and-gas/> (accessed February 1, 2020).
- “Oil Tax Change Possible”, *Moscow Times*, 28 November 2011. <https://www.themoscowtimes.com/2011/11/27/oil-tax-change-possible-a11046>(accessed February 1, 2020).
- Oran R. Young, "The Future of the Arctic: Cauldron of Conflict Or Zone of Peace?" *International Affairs* 87, no. 1 (2011), 193.
- Overland, Indra. "Russia's Arctic Energy Policy." *International Journal* 65, no. 4 (Autumn, 2010; 2010): 865,865-878.
- Pezard. Stephanie. 2018. “The New Geopolitics of the Arctic: Russia’s and China’s Evolving Role in the Region.” The Rand Corporation. Nov 26, 2018.
- Pezard. Stephanie. 2019. “How Not to Compete in the Arctic: The Blurry Lines Between Friend and Foe”. War On The Rocks, 27 February 2019. <https://warontherocks.com/2019/02/how-not-to-compete-in-the-arctic-the-blurry-lines-between-friend-and-foe/> (accessed February 1, 2020).
- Pipes, Richard. *The Russian Revolution*. 1st Vintage Books ed. New York: Vintage, 1991.
- Piskunova, Ekaterina. "Russia in the Arctic: What's Lurking Behind the Flag?" *International Journal* 65, no. 4 (Autumn, 2010; 2010): 851,851-864.
- Pirani, Simon, ed. *Russian and CIS Gas Markets and Their Impact On Europe*. Oxford: Oxford University Press, USA, 2009.
- “Proved Reserves of Natural Gas - 2018.” n.d. U.S. Energy Information Administration. <https://www.eia.gov/international/analysis/country/RUS> (accessed September 19, 2019).
- Rachman, Gideon. *Zero-Sum Future: American Power in an Age of Anxiety* Simon and Schuster, 2011.
- Roberts, Kari. "Jets, Flags, and a New Cold War?: Demystifying Russia's Arctic Intentions." *International Journal* 65, no. 4 (Autumn, 2010; 2010): 957-976.
- Romans, Brian. “Clastic Detritus.” WIRED. <https://www.wired.com/2010/09/seafloor-sunday-73-territorial-disputes-in-the-arctic-ocean/> (accessed February 1, 2020).
- “Rosatomflot Is Ready For More Cargo On Northern Sea Route,” The Barents Observer, <https://barentsobserver.com/en/topics/rosatomflot-ready-more-cargo-northern-sea-route> (accessed February 1, 2020).

- Rozhnov, Konstantin. "Norway and Russia 'open up For Business' in the Barents Sea." BBC News Business. <http://www.bbc.co.uk/news/business-11299024> (accessed February 1, 2020).
- "Russia Allocates Eur 10m Towards Pollution Prevention Initiatives," Arctic Council, <https://arctic-council.org/index.php/en/our-work2/8-news-and-events/61-psi-agreement-russia> (accessed February 1, 2020).
- "Russia Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal." Energy Information Administration. <https://www.eia.gov/international/overview/country/RUS> (accessed February 1, 2020).
- "Russia: Gazprom--A Troubled Giant." Radio Free Europe Radio Liberty, Dec 5, 2006, <https://www.rferl.org/a/1064448.html> (accessed February 1, 2020).
- "Russian Military Power and the Arctic." *The EU-Russian Centre Review* no. 8 (October 2008): 80-86.
- Russia's National Security Strategy and Military Doctrine and Their Implications for the EU. 2017. [https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/578016/EXPO\\_IDA%282017%29578016\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/578016/EXPO_IDA%282017%29578016_EN.pdf) (accessed February 1, 2020).
- "Russia's Navy." *Sputnik News*. <https://sputniknews.com/infographics/20090602155148856/>(accessed February 1, 2020).
- "Russian Navy to Launch One Bulava Missile in 2012." Navaltoday.com <https://navaltoday.com/2011/11/21/russia-to-launch-bulava-missile-in-spring-2012/> (accessed February 1, 2020).
- "Russia's Oil Industry: Trouble in the Pipeline." *The Economist*, 8 May 2008
- "Russian strategic bombers run Arctic exercise," September 3, 2007, <http://www.reuters.com/article/2007/09/03/us-russia-exercise-idUSL0359169120070903> (accessed February 1, 2020).
- "Russia Will Expand its Presence in the Arctic." *Russian Financial Control Monitor* (2011; 2011).
- "Search and Rescue in the Arctic." Arctic Council. <https://arctic-council.org/index.php/en/our-work2/8-news-and-events/328-search-and-rescue-in-the-arctic> (accessed February 1, 2020).
- Sevunts, Levon. 2019. "Russia Scores Scientific Point in Quest to Extended Arctic Shelf." *The Independent Barents Observer*, April 5, 2019.

- <https://thebarentsobserver.com/en/arctic/2019/04/russia-scores-scientific-point-quest-extended-arctic-continental-shelf>. (accessed September 19, 2020)
- “Shell Starts Production at Perdido.” Reuters, <https://www.reuters.com/article/shell-perdido/update-1-shell-starts-production-at-perdido-idUSN3123683920100331> (accessed February 1, 2020).
- Shoumatoff, Alex. “The Arctic Oil Rush.” *Vanity Fair*, May 2008, 1-22  
[http://www.vanityfair.com/politics/features/2008/05/arctic\\_oil200805?printable=true](http://www.vanityfair.com/politics/features/2008/05/arctic_oil200805?printable=true)  
(accessed February 1, 2020).
- Solanko, Laura and Pekka Sutela. "Too Much or Too Little Russian Gas to Europe?" *Eurasian Geography and Economics*, 50, no. 1 (2009), 63.
- Tangredi, Sam J., ed. *Globalization and Maritime Power*. Washington, DC: National Defense University Press, 2002.
- “The Arctic Council: Backgrounder” Arctic Council. <https://arctic-council.org/index.php/en/about-us> (accessed February 1, 2020).
- “The Ilulissat Declaration.” The Arctic Report <https://www.arctic-report.net/en/product/859/>  
(accessed February 1, 2020).
- “The Melting North.” n.d. The Economist. [www.economist.com/node/21556798/print](http://www.economist.com/node/21556798/print) (accessed February 1, 2020).
- “The Scramble For the Seabed.” The Economist.  
<https://www.economist.com/briefing/2009/05/14/suddenly-a-wider-world-below-the-waterline> (accessed February 1, 2020).
- Torr, David G. and Peter D Thomson. "The Merits of Dual Pricing of Russian Natural Gas." *The World Economy*, 27, no. 8 (2004), 1173-1191.
- Tree, Oliver. “Putin Vows \$770 Billion Russian Military Spending Plan Ahead of Elections.” International Business Times. <https://www.ibtimes.com/putin-vows-770-billion-russian-military-spending-plan-ahead-elections-413350> (accessed February 1, 2020).
- “Tupolev Tu-22M (Backfire).” 2019. Military Factory. March 12, 2019.  
[https://www.militaryfactory.com/aircraft/detail.asp?aircraft\\_id=930](https://www.militaryfactory.com/aircraft/detail.asp?aircraft_id=930) (accessed August 19, 2019).
- “United Nations Convention On the Law of the Sea (excerpts).” *Russian Analytical Digest* 96 (12 May 2011): 6-8.
- "United States Joins in Arctic Declaration, Supports Existing Arctic Legal Regime." *The American Journal of International Law* 102, no. 4 (Oct, 2008; 2008): 872-873.

- "U.S. Comments on Possible Russian Continental Shelf Claims in the Arctic." *The American Journal of International Law* 103, no. 1 (Jan, 2009; 2009): 148-149.
- U.S. Congressional Research Service. *Russian Military Reform and Defense Policy*, by Jim Nichol. Open-file report. Washington, DC, 2011.
- U.S. Department of State Press Release No. 2008/741, "Russian Claims to Arctic Territory," (Taken Question), <https://2001-2009.state.gov/r/pa/prs/ps/2008/sept/109928.htm> (accessed February 1, 2020).
- "U.S. Strategic Interests in the Arctic." at: <https://www.csis.org/analysis/us-strategic-interests-arctic> (accessed February 1, 2020).
- Voronov, Konstantin. "The Arctic Horizons of Russia's Strategy." *Russian Politics and Law* 50, no. 2 (March-April 2012): 55-77.
- Young, Oran R. "The Future of the Arctic: Cauldron of Conflict Or Zone of Peace?" *International Affairs* 87, no. 1 (2011): 185-93.
- Zittel, Werner, and Jorg Schindler. "Crude Oil the Supply Outlook." *Energy Watch Group*. October 2007. [https://monthlyreview.org/wp-content/uploads/2008/07/EWG\\_Oilreport\\_10-2007.pdf](https://monthlyreview.org/wp-content/uploads/2008/07/EWG_Oilreport_10-2007.pdf) (accessed February 1, 2020).
- Zysk, Katarzyna. "Russia's Arctic Strategy: Ambitions and Constraints." *Joint Force Quarterly* no. 57 (2nd quarter 2010): 103-10.
2019. "Russia Tightens Control Over Northern Sea Route." *The Maritime Executive*. March 8, 2019. <https://www.maritime-executive.com/article/russia-tightens-control-over-northern-sea-route> (accessed October 7, 2019).
2019. "Russia's Vladimir Putin Outlines Ambitious Arctic Expansion Program." *Los Angeles Times*, April 9, 2019. <https://www.latimes.com/world/la-fg-russia-vladimir-putin-arctic-expansion-20190409-story.html> (accessed October 7, 2019).

## Notes

<sup>1</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.

<sup>2</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>; CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.

<sup>3</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 4.

<sup>4</sup> "U.S. Strategic Interests in the Arctic," at: [http://csis.org/files/publication/100426\\_Conley\\_USStrategicInterests\\_Web.pdf](http://csis.org/files/publication/100426_Conley_USStrategicInterests_Web.pdf) (accessed November 01, 2011)

<sup>5</sup> Margaret Blunden, "The New Problem of Arctic Stability," *Survival* 51, no.5 (October 2009), 126.

<sup>6</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 108; Piskunova, 862.

<sup>7</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 100.

<sup>8</sup> Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" *JOURNAL OF EURASIAN STUDIES* Vol 10: 88.

<sup>9</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Energy Extraction (Part III)." The Arctic Institute. February 20, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-energy-extraction-part-three/>; Emerson, 205.

<sup>10</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.

<sup>11</sup> Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." *Russia Knowledge*. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/).

<sup>12</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 107

<sup>13</sup> Pezard, Stephanie. 2018. "The new Geopolitics of the Arctic: Russia's and China's Evolving Role in the Region." The Rand Corporation. Nov 26, 2018 pg 5.

<sup>14</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 100.

<sup>15</sup> Hosa, Joanna. 2018. "Strategy on Ice: Has Russia Already Won the Scramble for the Arctic?" European Council on Foreign Relations. October 26, 2018. [https://www.ecfr.eu/article/commentary\\_strategy\\_on\\_ice\\_has\\_russia\\_already\\_won\\_the\\_scramble\\_for\\_the\\_arctic](https://www.ecfr.eu/article/commentary_strategy_on_ice_has_russia_already_won_the_scramble_for_the_arctic)

<sup>16</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. *Russia's Military Capabilities in the Arctic*. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.

<sup>17</sup> The "seed" for investigation into and my on-going work on this topic began with my original work from a previous Master's research project.

<sup>18</sup> Donald L. Gautier et al., "Assessment of Undiscovered Oil and Gas in the Arctic," *Science* 324, no. 5931 (2009), 1175.

<sup>19</sup> The region has opened up due to decreased sea ice, potentially from climate change; Gideon Rachman, *Zero-Sum Future: American Power in an Age of Anxiety*; Simon and Schuster, 2011), 204.

<sup>20</sup> "Conflict & Natural Resources." The Environmental Literacy Council. <https://enviroliteracy.org/land-use/conflict-natural-resources/> (accessed February 1, 2020).

<sup>21</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 4.

<sup>22</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>; Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.

<sup>23</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 105.

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<sup>24</sup> Pezard, Stephanie. 2018. "The new Geopolitics of the Arctic: Russia's and China's Evolving Role in the Region." The Rand Corporation. Nov 26, 2018.

<sup>25</sup> The Russians have gathered debatable scientific evidence in support of their 2011 territory claims submission to the United Nations under the Commission on the Limits of the Continental Shelf (CLCS); this body, under the Law of the Sea Convention that addresses the continental shelf beyond 200 nautical miles, will ultimately make a recommendation based on scientific criteria concerning the Russian submission; "U.S. Comments on Possible Russian Continental Shelf Claims in the Arctic," *The American Journal of International Law* 103, no. 1 (Jan, 2009; 2009): 148.

<sup>26</sup> Ariel Cohen and Anton Altman, "Russia's Arctic Claims: Neither Lost nor Forgotten," The Foundry, <http://blog.heritage.org/2011/08/16/russias-arctic-claims-neither-lost-nor-forgotten/> (accessed December 10, 2011). This claim will be discussed in more detail in Chapter 2.

<sup>27</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.

<sup>28</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.; CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.

<sup>29</sup> Eight nations possess territory in the Arctic: The United States, Canada, Iceland, Norway, Sweden, Finland, Russia, and Denmark. The Arctic 5 are the nations whose coastal areas surround the Arctic Ocean and have a chance at legally extending their economic zones through the UN.

<sup>30</sup> Stephanie Holmes, "Breaking the Ice: Emerging Legal Issues in Arctic Sovereignty," *Chicago Journal of International Law* 9, no. 1 (Summer, 2008), 326; Holmes, 326.

<sup>31</sup> Some scientists' global climate predictions forecast a temperature change between four and seven degrees Celsius to occur in the Arctic over the next century. Whether a long-term lasting trend or not, observed temperature rises have resulted in Arctic sea ice reaching one of its lowest ever recorded values during the first half of 2019, challenging the previous record set in summer 2012 (Figure 1-1). Furthermore, Arctic sea ice levels are receding at rate of ~3 percent a decade (Figure 1-2). The long-term continuation of these ice melt levels and their implications for an ice-free Arctic Ocean waters is still a hotly contested and unresolved issue. If sea-ice melting continues at this rate, with if being the key word, the Arctic summer ice levels could experience a 40 percent decline in total volume and a 30 percent decline in sea ice coverage resulting in an ice-free Arctic by the summer of by 2050.; Sam J. Tangredi, ed., *Globalization and Maritime Power* (Washington, DC: National Defense University Press, 2002), 150.; Arctic Sea Ice News and Analysis," National Snow and Ice Data Center, <http://nsidc.org/arcticseaicenews/> (accessed Sept 16, 2019).; Arctic sea ice extent remains low, 2009 sees third lowest mark," National Snow and Ice Data Center, [http://nsidc.org/news/press/20091005\\_minimumpr.html](http://nsidc.org/news/press/20091005_minimumpr.html) (accessed December 28, 2011); "Ice-Free Arctic Summers Could Happen on Earlier Side of Predictions." 2019. Science Daily. February 27, 2019. <https://www.sciencedaily.com/releases/2019/02/190227111128.htm>.

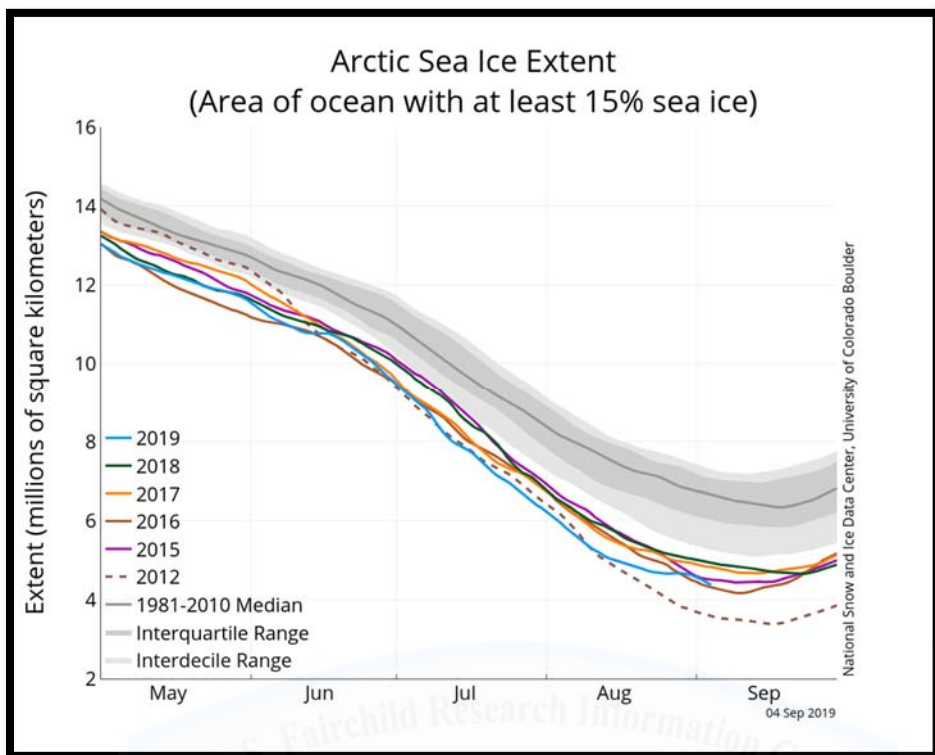


Figure 1-1. Arctic Ice Level Records; “Arctic Sea Ice News and Analysis,” National Snow and Ice Data Center.

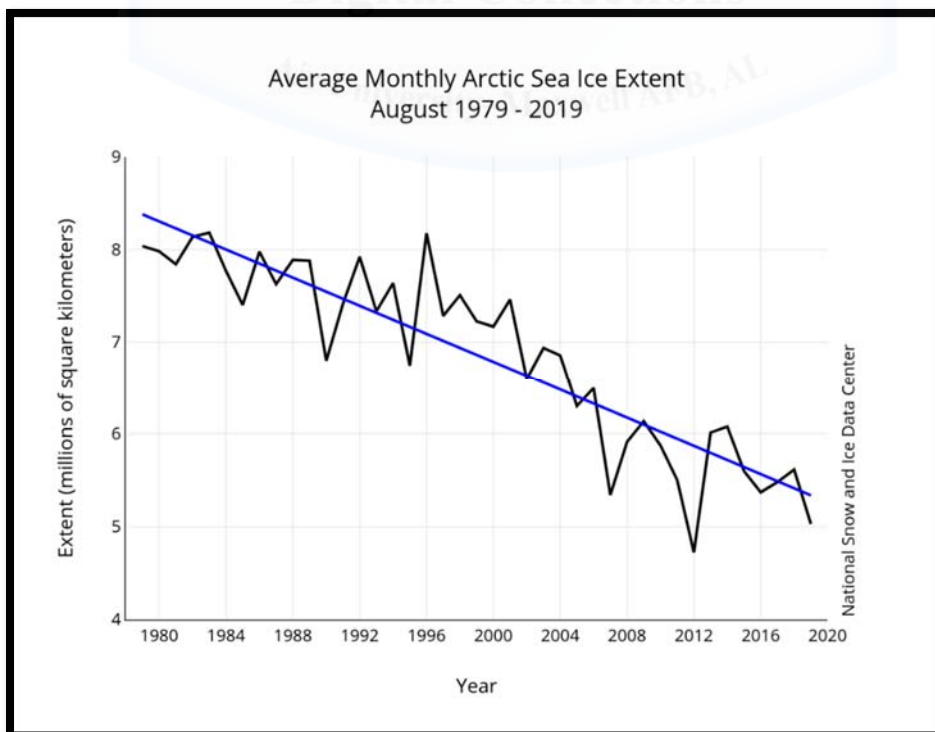


Figure 1-2. Summer Arctic Ice Level Monthly Averages; “Arctic Sea Ice News and Analysis,” National Snow and Ice Data Center.

<sup>32</sup> Tangredi, *Globalization and Maritime Power*, 155.

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- <sup>33</sup> "U.S. Strategic Interests in the Arctic," at: [http://csis.org/files/publication/100426\\_Conley\\_USStrategicInterests\\_Web.pdf](http://csis.org/files/publication/100426_Conley_USStrategicInterests_Web.pdf) (accessed November 01, 2011)
- <sup>34</sup> Margaret Blunden, "The New Problem of Arctic Stability," *Survival* 51, no.5 (October 2009), 126.
- <sup>35</sup> Kefferpütz, "On Thin Ice," 10.
- <sup>36</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Military and Security (Part II)." The Arctic Institute. February 13, 2018. <https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/>; Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.
- <sup>37</sup> Piskunova, 864.
- <sup>38</sup> Roberts, 965.
- <sup>39</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 103
- <sup>40</sup> Arild Moe and Elana Wilson Rowe, "Northern Offshore Oil and Gas Resources: Russian Policy Challenges and Approaches," *FNI Report.June* (2008),1.
- <sup>41</sup> Roberts, 963.
- <sup>42</sup> "Russia Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal," Energy Information Administration, <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed February 20, 2012).
- <sup>43</sup> Roman Kupchinsky, "Lng - Russia's New Energy Blackmail Tool," *Eurasia Daily Monitor* 6, no. 77 (April 22, 2009), [http://www.jamestown.org/single/?no\\_cache=1&tx\\_ttnews%5Btt\\_news%5D=34888](http://www.jamestown.org/single/?no_cache=1&tx_ttnews%5Btt_news%5D=34888) (accessed January 2, 2012); Ilyushina, Mary, and Frederik Pleitgen. 2019. "Inside the Military Base at the Heart of Putin's Arctic Ambitions." *CNN World*. April 5, 2019. <https://www.cnn.com/2019/04/04/europe/russia-arctic-kotelny-island-military-base/index.html>.
- <sup>44</sup> Roberts, 967-968.
- <sup>45</sup> Roberts, 975.
- <sup>46</sup> Roberts, 975.
- <sup>47</sup> Russia also made multi and bilateral agreements with other nations. For example, the 2010 agreement with Norway over maritime boundaries, the 2017 U.S.- Russian proposal (approved by the International Maritime Organization) to create six two-way routes enabling safer shipping in the Bering Strait, and 2017 Arctic Council agreement on Enhancing International Arctic Scientific Cooperation
- <sup>48</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>49</sup> The Inuit people reside in the Arctic regions of the United States, Canada, Greenland, and Russia.
- <sup>50</sup> "Arctic Search and Rescue Agreement."
- <sup>51</sup> Existing international law already provides a comprehensive set of rules governing use of the world's oceans, including the Arctic. UNCLOS regulates this international law UNCLOS and addresses navigational rights and freedoms for military and commercial vessels. It also specifies the rights of coastal nations in offshore marine areas. The following excerpts of the 186-page document delineate key definitions and requirements for a nation to expand its economic exclusive zone.

#### Article 76: Definition of the continental shelf

1. The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.
2. The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6.
3. The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

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4. (a) For the purposes of this Convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

(i) a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or

(ii) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope.

(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base.

8. Information on the limits of the continental shelf beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under Annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding.

#### Article 77: Rights of the coastal State over the continental shelf

1. The coastal State exercises over the continental shelf sovereign rights for the purpose of exploring it and exploiting its natural resources.

2. The rights referred to in paragraph 1 are exclusive in the sense that if the coastal State does not explore the continental shelf or exploit its natural resources, no one may undertake these activities without the express consent of the coastal State.

3. The functions of the Commission shall be:

(a) to consider the data and other material submitted by coastal States concerning the outer limits of the continental shelf in areas where those limits extend beyond 200 nautical miles, and to make recommendations in accordance with article 76 and the Statement of Understanding adopted on 29 August 1980 by the Third United Nations Conference on the Law of the Sea;

(b) to provide scientific and technical advice, if requested by the coastal State concerned during the preparation of the data referred to in subparagraph (a).

<sup>52</sup> The commission considered the data insufficient because it included only compiled or secondary data.

<sup>53</sup> Sevunts, Levon. 2019. "Russia Scores Scientific Point in Quest to Extended Arctic Shelf." *The Independent Barents Observer*, April 5, 2019. <https://thebarentsobserver.com/en/arctic/2019/04/russia-scores-scientific-point-quest-extended-arctic-continental-shelf>.

<sup>54</sup> "The Scramble for the Seabed," *The Economist*, <http://www.economist.com/node/13649265> (accessed February 24, 2012).

<sup>55</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 100.

<sup>56</sup> Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" *JOURNAL OF EURASIAN STUDIES* Vol 10: 88-91.

<sup>57</sup> Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" *JOURNAL OF EURASIAN STUDIES* Vol 10: 89.

<sup>58</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 105.

<sup>59</sup> Gautier et al., 1178.

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<sup>60</sup> 90 percent of Russia's nickel and cobalt, 60 percent of its copper, and 96 percent of its platinumoids are mined from this region ; Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 105.

<sup>61</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Energy Extraction (Part III)." The Arctic Institute. February 20, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-energy-extraction-part-three/>.

<sup>62</sup> Howard, *Arctic Gold Rush: The New Race for Tomorrow's Natural Resources*, 144.

<sup>63</sup> Bernard A. Gelb, "Russian Natural Gas: Regional Dependence" *CRS Report for Congress*, January 2007, 1; "Russia Energy Data, Statistics and Analysis - Oil, Gas, Electricity, Coal," Energy Information Administration, <http://www.eia.gov/emeu/cabs/Russia/pdf.pdf> (accessed February 20, 2012).

<sup>64</sup> "Proved Reserves of Natural Gas - 2018." n.d. U.S. Energy Information Administration. Accessed September 19, 2019. <https://www.eia.gov/beta/international/?fips=RS>.

<sup>65</sup> Zittel and Schindler, "Crude Oil the Supply Outlook," 9.

<sup>66</sup> BBC News, "'Threat' to Future of Russia Oil," *BBC News*, April 15, 2008, <http://news.bbc.co.uk/2/hi/7348463.stm> (accessed December 18, 2011).

<sup>67</sup> Emerson, 206.

<sup>68</sup> *Ibid.*, 206

<sup>69</sup> Lionel Beehner and Toni Johnson, "Global Oil Trends," *Council on Foreign Relations*, October 18, 2007, [http://www.cfr.org/publication/9484/global\\_oil\\_trends.html](http://www.cfr.org/publication/9484/global_oil_trends.html) (accessed September 23, 2011).

<sup>70</sup> Gelb, 1.

<sup>71</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.

<sup>72</sup> Gelb., 3.

<sup>73</sup> As of 2005, the Russian state became the major shareholder of Gazprom, owning ~51 percent of its stock.

<sup>74</sup> Simon Pirani, ed., *Russian and CIS Gas Markets and Their Impact On Europe* (Oxford: Oxford University Press, USA, 2009), 23.

<sup>75</sup> "Russia Energy Data, Statistics and Analysis."

<sup>76</sup> International Energy Outlook 2016. 2016. International Energy Outlook 2016.

<sup>77</sup> Kireeva, Anna. 2019. "For All of Russia's Talk about Oil Drilling in the Arctic, Most Arctic Oil Will Likely Go Untouched." *Bellona*. April 24, 2019. <https://bellona.org/news/arctic/2019-04-for-all-of-russias-talk-about-oil-drilling-in-the-arctic-most-arctic-oil-will-likely-go-untouched>.

<sup>78</sup> Pezard, Stephanie. 2018. "The new Geopolitics of the Arctic: Russia's and China's Evolving Role in the Region." *The Rand Corporation*. Nov 26, 2018. pg 4.

<sup>79</sup> Jaganathan, Jessica, and Vladimir Soldatkin. 2019. "Russia Ups LNG Race with Green Light on \$21 Billion Arctic LNG-2 Project." *Reuters, Commodities*. Reuters. September 5, 2019. <https://www.reuters.com/article/us-russia-energy-novatek-lng/russia-ups-lng-race-with-green-light-on-21-billion-arctic-lng-2-project-idUSKCN1VQ0IH>.

<sup>80</sup> Zysk, "Russia's Arctic Strategy," 106.

<sup>81</sup> Interestingly, ice reduction undermines Russia's Article 234 argument resting on the presence of ice to justify control. Continued reduction of sea ice will lead to more navigable Arctic Ocean in the coming decades, potential challenging Russia's NSR regulations, assuming their CLCS does not get approved. The United States and other NATO nations contest Russia's claim of maritime jurisdiction over the 3,000 nautical mile-long (5,560 km) Northern Sea Route (NSR); Representatives of the United States have repeatedly stated in spite of Russia, the Northern Sea Route should be a transport artery, open to the entire world community. The Russians point out the NSR is not only within Russia's territorial waters, but Russia has the legal right and responsibility to regulate navigation along the entire route. The United States has been and is challenging the rights of coastal countries to establish shipping rules in northern latitudes not only in Russia. The US does not recognize the right of Canada to manage its Arctic routes as well. US claims against the Northern Sea Route have their roots in the Cold War. In 1964, Washington and Moscow exchanged notes of protest because of an attempt by American ships and submarines to proceed unauthorized along the northern coast of the USSR.; Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 110. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/); Zysk, "Russia's Arctic Strategy," 107; Assenova, Margarita. 2019. "Russia's New Rules for Northern Sea Route Violate International Law." *Polygraph.info*.

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March 12, 2019; Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." Russia Knowledge. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/.81](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/.81)

<sup>82</sup> "Navigating the Northern Sea Route." The Wilson Center.

[https://www.wilsoncenter.org/sites/default/files/navigating\\_the\\_northern\\_sea\\_route\\_status\\_and\\_guidance.pdf](https://www.wilsoncenter.org/sites/default/files/navigating_the_northern_sea_route_status_and_guidance.pdf) (accessed February 1, 2020). Federal Law on the NSR and the 2013 Ministry of Transport's Rules of Navigation

through the NSR passage conditions: vessels navigating the NSR are responsible for environmental pollution, tariffs, and providing proof of liability and insurance. Russia further demands foreign ships pay for weather and ice reports, Russian pilots to guide the vessels, and using icebreaker services. In December 2017, Russia's parliament enacted a law to restrict loadings of coal, oil and natural gas at ports along the Northern Sea Route to Russian flagged vessels. It has given indications it may restrict such loadings to Russian-built vessels in the future.

Additionally, the regulations require all foreign ships to take on board Russian pilots when navigating the NSR. This to handle any potential emergency or complication due to changeable ice situations, Russian icebreakers will also be available to provide assistance.; Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." Russia Knowledge. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/).; Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Maritime Shipping (Part IV)." The Arctic Institute. February 27, 2018.

<https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/>.; 2019. "Russia Tightens Control Over Northern Sea Route." The Maritime Executive. March 8, 2019. <https://www.maritime-executive.com/article/russia-tightens-control-over-northern-sea-route.;com/law-on-the-northern-sea-route-in-the-pipeline.4987879.html> (accessed March 1, 2012).

<sup>83</sup> 2019. "Russia Tightens Control Over Northern Sea Route." The Maritime Executive. March 8, 2019. <https://www.maritime-executive.com/article/russia-tightens-control-over-northern-sea-route>.

<sup>84</sup> Assenova, Margarita. 2019. "Russia's New Rules for Northern Sea Route Violate International Law." Polygraph.info. March 12, 2019. <https://www.polygraph.info/a/fact-check-russia-claim-arctic/29817535.html>.

<sup>85</sup> Emergency measures including arrest, seizure, or possibly more dynamic action.; Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." Russia Knowledge. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/).

<sup>86</sup> Kefferpütz, 5.

<sup>87</sup> Scott G. Borgerson, "Arctic Meltdown," *Foreign Affairs* 87, no. 2 (March/April 2008): 68.

<sup>88</sup> Scott G. Borgerson, "Arctic Meltdown," *Foreign Affairs* 87, no. 2 (March/April 2008): 68.; For example, in 2010, the Norwegian shipping company Tschudi delivers a shipment of iron ore to Lianyungang China using the NSR in 21 days vice 37 days the trip would have taken through the Suez. By adding in the cost of canal fees, fuel expenses, and other variables determine freight rates, these shortcuts could shrink the cost of a single voyage by a large container ship by \$300,000. In an age of just-in-time delivery, and with increasing fuel costs eating into the profits of shipping companies, reducing long-haul sailing distances by as much as 40 percent could usher in a new phase of globalization. ; Andrew E. Kramer, "Amid Peril of Warming, Old Dream Is Fulfilled," *New York Times*, October 18, 2011. and Borgerson, 69.

<sup>89</sup> Malte Humpert, "Part 5: The Future of the Northern Sea Route - a golden Waterway or a Niche Trade Route," The Arctic Institute, <http://www.thearcticinstitute.org/2011/10/part-5-future-of-northern-sea-route.html> (accessed March 3, 2012).; Ilyushina, Mary, and Frederik Pleitgen. 2019. "Inside the Military Base at the Heart of Putin's Arctic Ambitions." CNN World. April 5, 2019. <https://www.cnn.com/2019/04/04/europe/russia-arctic-kotelny-island-military-base/index.html>.

<sup>90</sup> Ilyushina, Mary, and Frederik Pleitgen. 2019. "Inside the Military Base at the Heart of Putin's Arctic Ambitions." CNN World. April 5, 2019. <https://www.cnn.com/2019/04/04/europe/russia-arctic-kotelny-island-military-base/index.html>.

<sup>91</sup> Borgerson, 70.

<sup>92</sup> "The Melting North." n.d. The Economist. Accessed June 16, 2012. [www.economist.com/node/21556798/print](http://www.economist.com/node/21556798/print).

<sup>93</sup> Ibid.

<sup>94</sup> Pezard, Stephanie. 2018. "The new Geopolitics of the Arctic: Russia's and China's Evolving Role in the Region." The Rand Corporation. Nov 26, 2018. pg4.

<sup>95</sup> 2019. "Russia's Vladimir Putin Outlines Ambitious Arctic Expansion Program." Los Angeles Times, April 9, 2019. <https://www.latimes.com/world/la-fg-russia-vladimir-putin-arctic-expansion-20190409-story.html>

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- <sup>96</sup> Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." Russia Knowledge. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/); Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Maritime Shipping (Part IV)." The Arctic Institute. February 27, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/>.
- <sup>97</sup> Zysk, "Russia's Arctic Strategy," 109.
- <sup>98</sup> 2019. "Russia's Vladimir Putin Outlines Ambitious Arctic Expansion Program." Los Angeles Times, April 9, 2019. <https://www.latimes.com/world/la-fg-russia-vladimir-putin-arctic-expansion-20190409-story.html>
- <sup>99</sup> Admiralty Shipyards in St Petersburg has already received an order for universal ice-class patrol ships (Project 23550). These ships combine the qualities of a tugboat, an icebreaker and a patrol ship and will be armed with Klub-K missile systems and A-190 naval guns.; EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>100</sup> Piskunova, 864; Russia's National Security Strategy and Military Doctrine and Their Implications for the EU. 2017. <http://www.europarl.europa.eu/supporting-analyses>.
- <sup>101</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>102</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.
- <sup>103</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.
- <sup>104</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>105</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 5.
- <sup>106</sup> Zysk, "Russian Military Power and the Arctic," 81.
- <sup>107</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 2.
- <sup>108</sup> Zysk, "Russian Military Power and the Arctic," 83.
- <sup>109</sup> Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" JOURNAL OF EURASIAN STUDIES Vol 10: 90.
- <sup>110</sup> Huebert, 3.
- <sup>111</sup> Steven J. Main, "If Spring Comes Tomorrow: Russia and the Arctic (2011)" (Master's Thesis, Defence Academy of the United Kingdom, 2011), 42.
- <sup>112</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>113</sup> Main, 42.
- <sup>114</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 107.
- <sup>115</sup> Cohen, 8. The author notes in Chapter 2, Russia and Norway finally reached an agreement to divide the resources in the Barents Sea in September 2010.
- <sup>116</sup> Heather Conley and Jamie Kraut, "U.S. Strategic Interests in the Arctic: An Assessment of Current Challenges and New Opportunities for Cooperation," Report of the CSIS Europe Program (Washington, DC: Center for Strategic and International Studies), April 2010, 25.
- <sup>117</sup> Valery Konyshov and Aleksandr Sergunin, "The Arctic at the Crossroads of Geopolitical Interests," *Russian Politics and Law* 50, no. 2 (March-April 2012): 47.
- <sup>118</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 105.
- <sup>119</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 106.
- <sup>120</sup> Russian military attitudes towards international relations in the Arctic region are still dominated by realist thinking. According to Katarina Zysk, contrary to official Arctic policy and security concepts, the United States and NATO are the main threats to Russia's security in large parts of the Russian political, military, and academic establishment. Because Russia views the U.S. and NATO presence in the region as a direct threat, it is rebuilding its Arctic military forces and conducting regional military exercises; Zysk, "Russian Military Power and the Arctic 81.

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Rightly or wrongly, Russia believes slowly but surely, a U.S. dominated NATO hems it in. While the Warsaw pact disbanded due to numerous reasons, NATO remained and expanded, and continued to “surround” Russia. NATO also “established bases in Romania, Bulgaria, and in Central Asia; sent military personnel to train and equip the Georgian military; and exercised regularly with Ukrainian forces in Crimea and Western Ukraine,” all the while promising it was not intended to be threatening towards Russia. However, given the stringent demands for membership, such as a transparent, open political system, Russia will likely never become a NATO member; Roberts, 973.

Not surprisingly, this unsettles Russian civil and military leaders. Unfortunately, from a Russian perspective, four out of the five of the Arctic Five nations are NATO members. Regardless of NATO’s true interest in Arctic affairs, because this fact, Russian leadership does not feel this is an irrelevant issue. Consequently, Russian senior political leaders warned NATO to stay out of Arctic affairs, but “given the geo-political reality of the membership of the Arctic Five, NATO is already involved.”; Main, 25.

NATO Defense College researcher Dr. Andrew Monaghan claims Russia is influenced by its own supposed weakness, and therefore it confronts enemies at its gates. This viewpoint creates a siege mentality, inflating concerns about the power of the United States and the degree with it will wield power unilaterally, and these concerns increased from a Russian perspective as NATO expanded further east and placed Western weapon and defense systems in close proximity to Russian borders. Russia already shares immediate borders with NATO countries; therefore, the less Russia perceives it can counter NATO’s presence, the more vulnerable it feels; Roberts, 962

Even more revealing of Russia’s views towards NATO is an article, written by two Russian economists, who specialize on the Arctic. Although military issues are not the economists’ area of expertise, they touched on the challenges facing Russia’s defense capability in the Arctic: “Great is the role of the Arctic in maintaining the defense capability [“prostranstvo”] of our country. However, its main [importance] is to contain the growing military-political pressure and deep penetration of NATO in Russia’s northern geopolitical space.”<sup>120</sup> Thus, the notion both NATO and the United States are using the Arctic to impinge upon Russia’s national interests has spread among many commentators on military affairs in Russia, and intensifies Russia’s concerns over the future internationalization of issues dealing with the Arctic. Unsurprisingly, this concern is a factor in Russia’s drive to modernize its Arctic military forces.; Main, 18.

<sup>121</sup> Zysk, “Russian Military Power and the Arctic,” 83.

<sup>122</sup> Oliver Tree, “Putin Vows \$770 Billion Russian Military Spending Plan Ahead of Elections,” *International Business Times*, <http://www.ibtimes.com/articles/301514/20120220/putin-russia-spending-nato-military.htm> (accessed June 4, 2012). ; “Tupolev Tu-22M (Backfire).” 2019. *Military Factory*. March 12, 2019. [https://www.militaryfactory.com/aircraft/detail.asp?aircraft\\_id=930](https://www.militaryfactory.com/aircraft/detail.asp?aircraft_id=930).

<sup>123</sup> Zysk, “Russia’s Arctic Strategy,” 107.

<sup>124</sup> Assenova, Margarita. 2019. “Russia’s New Rules for Northern Sea Route Violate International Law.” *Polygraph.info*. March 12, 2019. <https://www.polygraph.info/a/fact-check-russia-claim-arctic/29817535.html>.

<sup>125</sup> Astrasheuskaya, Nastassia, and Henry Foy. 2019. “Polar Powers: Russia’s Bid for Supremacy in the Arctic Ocean.” *Financial Times*, April. <https://www.ft.com/content/2fa82760-5c4a-11e9-939a-341f5ada9d40>.

<sup>126</sup> Zysk, “Russian Military Power and the Arctic,” 84.

<sup>127</sup> A “closed cycle” base has its residential and operations blocks interconnected, normally underground to remove the need to travel into extreme weather conditions; Ilyushina, Mary, and Frederik Pleitgen. 2019. “Inside the Military Base at the Heart of Putin’s Arctic Ambitions.” *CNN World*. April 5, 2019. <https://www.cnn.com/2019/04/04/europe/russia-arctic-kotelny-island-military-base/index.html>.

<sup>128</sup> Ilyushina, Mary, and Frederik Pleitgen. 2019. “Inside the Military Base at the Heart of Putin’s Arctic Ambitions.” *CNN World*. April 5, 2019. <https://www.cnn.com/2019/04/04/europe/russia-arctic-kotelny-island-military-base/index.html>.

<sup>129</sup> Boulègue, Mathieu. 2019. “Russia’s Military Posture in the Arctic: Managing Hard Power in a ‘Low Tension’ Environment.” *Chatham House, the Royal Institute of International Affairs*, June, pg 14.

<sup>130</sup> Zysk, “Russian Military Power and the Arctic,” 84.

<sup>131</sup> Five Borei-class ships by 2021 and four to five Yasen-class ships by 2023; CIMSEC. 2019. “Divining Russia’s Intentions in the Arctic.” *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.

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- <sup>132</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>133</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 19.
- <sup>134</sup> Cohen, 7.
- <sup>135</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 100.
- <sup>136</sup> Zysk, "Russian Military Power and the Arctic," 85.
- <sup>137</sup> Kefferputz, 7.
- <sup>138</sup> Kefferputz, 7; Konyshov and Sergunin, 49.
- <sup>139</sup> Lasserre, Frédéric, and Pierre-Louis Têtu. 2016. "Research Gate." Research Gate. Laval University. January 2016. [https://www.researchgate.net/publication/309605658\\_Russian\\_Air\\_Patrols\\_in\\_the\\_Arctic\\_Are\\_Long-Range\\_Bomber\\_Patrols\\_a\\_Challenge\\_to\\_Canadian\\_Security\\_and\\_Sovereignty](https://www.researchgate.net/publication/309605658_Russian_Air_Patrols_in_the_Arctic_Are_Long-Range_Bomber_Patrols_a_Challenge_to_Canadian_Security_and_Sovereignty).
- <sup>140</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>141</sup> Kefferputz, 7.; Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 108.; Huebert, 16; Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 9.
- <sup>142</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>143</sup> Huebert, 17.
- <sup>144</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 9.
- <sup>145</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>146</sup> "U.S. Strategic Interests in the Arctic," at: [http://csis.org/files/publication/100426\\_Conley\\_USStrategicInterests\\_Web.pdf](http://csis.org/files/publication/100426_Conley_USStrategicInterests_Web.pdf) (accessed November 01, 2011)
- <sup>147</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>148</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>149</sup> Margaret Blunden, "The New Problem of Arctic Stability," *Survival* 51, no.5 (October 2009), 126.
- <sup>150</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 108; Piskunova, 862.
- <sup>151</sup> Piskunova, 864.
- <sup>152</sup> Piskunova, 864.
- <sup>153</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 100.
- <sup>154</sup> Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" *JOURNAL OF EURASIAN STUDIES* Vol 10: 88.
- <sup>155</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Energy Extraction (Part III)." The Arctic Institute. February 20, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-energy-extraction-part-three/>.
- <sup>156</sup> Emerson, 205.
- <sup>157</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Energy Extraction (Part III)." The Arctic Institute. February 20, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-energy-extraction-part-three/>.; Linder, Courtney. 2019. "Russia Is Sailing a 'Floating Chernobyl' Into the Arctic." *Popular Mechanics*, August 26, 2019. <https://www.popularmechanics.com/technology/a28802067/floating-chernobyl-nuclear-reactor/>.
- <sup>158</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." *The Maritime Executive*. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>159</sup> Assenova, Margarita. 2019. "Russia's New Rules for Northern Sea Route Violate International Law." *Polygraph.info*. March 12, 2019. <https://www.polygraph.info/a/fact-check-russia-claim-arctic/29817535.html>.; Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 111.

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- <sup>160</sup> Goncharoff, Paul. 2019. "Russia's Arctic North Sea Route." Russia Knowledge. March 3, 2019. [www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/](http://www.russiaknowledge.com/2019/03/09/russias-arctic-north-sea-route/).
- <sup>161</sup> Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," 107
- <sup>162</sup> Pezard, Stephanie. 2018. "The new Geopolitics of the Arctic: Russia's and China's Evolving Role in the Region." The Rand Corporation. Nov 26, 2018 pg 5.
- <sup>163</sup> Astrasheuskaya, Nastassia, and Henry Foy. 2019. "Polar Powers: Russia's Bid for Supremacy in the Arctic Ocean." Financial Times, April. <https://www.ft.com/content/2fa82760-5c4a-11e9-939a-341f5ada9d40>.
- <sup>164</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 103.
- <sup>165</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 100.
- <sup>166</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 25.
- <sup>167</sup> Ananyeva, Ekaterina. 2019. "Russia in the Arctic Region: Going Bilateral or Multilateral?" *JOURNAL OF EURASIAN STUDIES* Vol 10: 90.
- <sup>168</sup> Main, 36.
- <sup>169</sup> Russian Foreign Minister Sergei Lavrov said military deployments in the Arctic are intended to protect national interests. "We ensure the necessary defense capability in view of the military-political situation near our borders," Lavrov said, noting a recent North Atlantic Treaty Organization exercise in Norway was openly directed against Russia; Yuri Borisov, the Russian deputy prime minister responsible for the military industry, recently stated the Arctic was part of the Russian zone of interest and Moscow was not going to give up its influence on the territory.; 2019. "Russia's Vladimir Putin Outlines Ambitious Arctic Expansion Program." Los Angeles Times, April 9, 2019. <https://www.latimes.com/world/la-fg-russia-vladimir-putin-arctic-expansion-20190409-story.html>; EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>170</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 25.
- <sup>171</sup> Pezard, Stephanie. 2018. "The new Geopolitics of the Arctic: Russia's and China's Evolving Role in the Region." The Rand Corporation. Nov 26, 2018 pg 5.
- <sup>172</sup> CIMSEC. 2019. "Divining Russia's Intentions in the Arctic." The Maritime Executive. July 10, 2019. <https://www.maritime-executive.com/editorials/divining-russia-s-intentions-in-the-arctic>.
- <sup>173</sup> Hosa, Joanna. 2018. "Strategy on Ice: Has Russia Already Won the Scramble for the Arctic?" European Council on Foreign Relations. October 26, 2018. [https://www.ecfr.eu/article/commentary\\_strategy\\_on\\_ice\\_has\\_russia\\_already\\_won\\_the\\_scramble\\_for\\_the\\_arctic](https://www.ecfr.eu/article/commentary_strategy_on_ice_has_russia_already_won_the_scramble_for_the_arctic)
- <sup>174</sup> Cohen and Altman.
- <sup>175</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 2.
- <sup>176</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.
- <sup>177</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Maritime Shipping (Part IV)." The Arctic Institute. February 27, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/>.
- <sup>178</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Military and Security (Part II)." The Arctic Institute. February 13, 2018. <https://www.thearcticinstitute.org/russias-arctic-military-and-security-part-two/>.
- <sup>179</sup> Flake, Lincoln Edson. 2014. "Russia's Security Intentions in a Melting Arctic." *Military and Strategic Affairs* Vol 6. (1): 1013.
- <sup>180</sup> EESTI. n.d. Russia's Military Capabilities in the Arctic. Russia's Military Capabilities in the Arctic. Accessed August 26, 2019. <https://icds.ee/russias-military-capabilities-in-the-arctic/>.
- <sup>181</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Maritime Shipping (Part IV)." The Arctic Institute. February 27, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/>.
- <sup>182</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Maritime Shipping (Part IV)." The Arctic Institute. February 27, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-maritime-shipping-part-iv/>.
- <sup>183</sup> Devyatkin, Pavel. 2018. "Russia's Arctic Strategy: Aimed at Con." The Arctic Institute. February 6, 2018. <https://www.thearcticinstitute.org/russias-arctic-strategy-aimed-conflict-cooperation-part-one/>.

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<sup>184</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 26.

<sup>185</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 28.

<sup>186</sup> Main, 23.

<sup>187</sup> Conley and Kraut, 25.

<sup>188</sup> Conley and Kraut, 25.

<sup>189</sup> Boulègue, Mathieu. 2019. "Russia's Military Posture in the Arctic: Managing Hard Power in a 'Low Tension' Environment." Chatham House, the Royal Institute of International Affairs, June, pg 32.

