The Arctic: A Clime and Place: The 2015 National Military Strategy refines the threats our nation faces by stating that Russia is one of the US top security threats. The seriousness of this threat was reinforced by General Dunford during his confirmation testimony to become the 19th Chairman of the Joint Chiefs of Staff. This paper examines the Arctic's economic impact as well as the military implications for both Russia and the United States.

The Prize: The Arctic's economic allure is directly related to the significant natural resources lying beneath the ocean and in the substantial savings derived from shorter shipping routes enabled by receding polar ice. A 2008 US Geological Service report estimates 22 percent of the world's undiscovered oil and natural gas lie beneath the Arctic. Of these resources, 84 percent are expected to be concentrated in two regions, one along the continental shelf off northern Alaska and a larger region spanning the Barents and Kara Seas north of Norway and Russia.<sup>2</sup>

Polar region ice has historically prevented through passage of commercial ships seeking to transit from the Pacific to the Atlantic. However, the polar ice caps are receding at a pace of approximately 13 percent per year. As

the ice pack shrinks, three routes (depicted in graphic) have been identified across the Arctic Ocean. The most important route is the Northern Sea Route (NSR) that passes almost exclusively through Russian waters. It is currently the most viable route with an open commercial transit season projected for four weeks by 2020.3 Strategically, an open NSR allows Russia to connect her Asian and European naval forces.

The Polar routes are expected to offer savings for routes between Northern Europe and the Northern Asian ports that are 24 percent shorter compared to the Strait of Malacca and the Suez Canal transit. Chinese scholars have estimated significant financial savings will include up to \$600,000 per ship, per direction with annual savings of approximately \$60B-\$120B.4

The Polar Bear: Russian Hard Power: At the peak of the Cold War, the Arctic was one of the most militarized areas in the world. Concurrent with the dissolution of the Soviet Union, resources were directed to more pressing national needs and Arctic military capabilities atrophied. However, in light of the increasing vulnerability of Russia's thawing northern flank over the past decade, and the international repercussions of the 2014 Ukrainian Crisis, the region has gained newfound significance for President Putin. In multiple venues, President Putin has stated that with one-third of Russia's territory within the Far North not only is the Arctic

<sup>&</sup>lt;sup>1</sup> Joint Chiefs of Staff. The National Military Strategy of the United States of America 2015, June 2015 s/36/Documents/Publications/2015 National Military Strategy.pd

<sup>&</sup>lt;sup>2</sup> Kenneth J. Bird, et al., 'Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle', US Department of the \* Kenneth J. Bird, et al., \*Circum-Arctic Resource Appraisal. Estimates of Office of Interior, US Geological Survey, 2008. http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf. (Graphic) Chief of Naval Operations, \*The United States Navy Arctic Roadmap for 2014 to 2030, February 2014. http://www.navy.mil/docs/USN\_arctic\_roadmap.pdf\*

3 Chief of Naval Operations. \*The United States Navy Arctic Roadmap for 2014 to 2030. February 2014. Graphic, p. 18.

http://www.navy.mil/docs/USN arctic roadmap.pdf

Jeffrey Kuperman, "The Northern Sea Route: Could It Be The New Suez Canal?" Berkley Political Review, December 22, 2014. http://bpr.berkely.edu/2014/12/22/the-northern-sea-route-the-new-suez-canal/. Malte Humpert, "Part 5: The Future of the Northern Sea Route - a 'Golden Waterway' or a Niche Trade Route," Arctic Institute Center for Circumpolar Security Studies, 3 October 2011. http://thearcticinstitute.org/

within Russia's traditional "sphere of our special interest" but his government is intent on fully restoring and improving Soviet-era bases and preserving Russia's role as a "leading Arctic power." 5

In his January 2016 national security review, President Putin stated that the US is Russia's principal security threat. This marks the first time since the end of the Cold War that Russia has separated the US from NATO when defining security concerns. Previously, Russia has signaled that NATO encroachment into its traditional spheres of influence is their most significant external threat. President Putin has backed his political rhetoric with hard power actions enabled by a relatively substantial growth in military spending. This spending amounted to an additional \$20B in 2015 defense spending...at a time when other governmental departments were required to execute ten percent across-the-board cuts.<sup>6</sup>

The resources enabled by the 2015 windfall are being used for both the refurbishment and expansion of old Soviet bases, upgrading of the Northern Fleet, and construction of new permanently manned facilities that include a new Arctic Joint Strategic Command (JSC) and 14 new airfields. The establishment of the JSC reflects a Russian effort to implement a regional command structure modeled on a US-style Joint Task Force Headquarters. The new HQ is centered on the Northern Fleet, which comprises two-thirds of the whole Russian Navy, and includes two Arctic-warfare brigades (approximately 9,000 troops) that has been established since 2009. Russia, who charges up to \$400,000 for each commercial ship it provides icebreaking services to, has stated they intend to increase their fleet of 40 icebreakers (which already includes six nuclear powered vessels) with the launch of 11 additional nuclear powered icebreakers in the next three years.

Russia's significant increase in military spending and attention paid to their Northern Fleet is closely linked to their desire to revitalize their strategic military capability. At their peak in 1984, the Soviet nuclear ballistic missile submarine (SSBN) fleet conducted 102 patrols. The dissolution of the Soviet Union and subsequent financial distress restricted SSBN patrols until 2002 when no SSBN patrols took place. It is estimated that in 2013 Russia had only nine aged Delta-class SSBNs. However, in early 2013, Russia launched a new SSBN-line, the Borei-class. Russian defense officials have stated that they intend to launch between eight and twelve Borei SSBNs by 2020. As commercial traffic increases along the Northern Sea Route, it is possible that the Russians will be very sensitive to the presence of foreign military forces in the area. It is likely that Russia, dusting off their own Cold War tactics, will operate to protect SSBN operating areas and to maintain access routes to the Atlantic Ocean (e.g. the Barents and Greenland Seas) and the Pacific Ocean (e.g. the Chukchi and Bering Seas).

Over the past decade, Russia's military has demonstrated that their interest and capabilities in the Arctic are not merely window dressing for political rhetoric. The planting of the Russian flag on the North Pole in 2007 marks the starting point for steadily increasing Arctic

<sup>&</sup>lt;sup>5</sup> "Meeting of the Security Council on state policy in the Arctic," The Kremlin, Moscow, April 22, 2014. <a href="http://en.kremlin.ru/events/president/news/20845">http://en.kremlin.ru/events/president/news/20845</a>. Vladimir Putin, "Speech at the plenary session of the Third International Arctic Forum The Arctic – A Territory of Dialogue," September 25, 2013. <a href="http://en.kremlin.ru/events/president/transcripts/19281">http://en.kremlin.ru/events/president/transcripts/19281</a>. Katarzyna Zysk, "Russia's Arctic Strategy: Ambitions and Restraints," in *The Fast-Changing Arctic: Rethinking Arctic Security for a Warmer World.* Barry Scott Zellen, ed. p. 281. Ms. Zysk quote is derived from Moscow's 2008 *Fundamentals of State Policy of the Russian Federation in the Arctic for the Period up to 2020 and Beyond.*<sup>6</sup> Dakota L. Wood, ed. 2016 Index of U.S. Military Strength: Assessing America's Ability to Provide for the Common Defense, The Heritage Foundation.

Dakota L. Wood, ed. 2016 Index of U.S. Military Strength: Assessing America's Ability to Provide for the Common Defense, The Heritage Foundation. pp. 144. <a href="http://index.heritage.org/military/2016">http://index.heritage.org/military/2016</a>. A. Buixade Farre et al. "Commercial Arctic shipping through the Northeast Passage: routes, resources, governance, technology, and infrastructure," Polar Geography, 2014, Vol 37, No 4. <a href="http://dx.doi.org/10.1080/1088937X.2014.965769">http://dx.doi.org/10.1080/1088937X.2014.965769</a>
Ankit Panda, "Russia to Build 10 Arctic Airfields by 2016," The Diplomat, 15 January 2015, <a href="http://thediplomat.com/2015/01/russia-to-build-10-arctic-airfields-by-2016">http://thediplomat.com/2015/01/russia-to-build-10-arctic-airfields-by-2016</a>

airfields-by-2016.

Duncan Depledge, "Hard Security Developments", in Arctic Security Matters, Report No. 24 – June 2015, EU Institute for Security Studies <a href="http://www.iss.europa.eu/uploads/media/Report\_24\_Arctic\_matters.pdf">http://www.iss.europa.eu/uploads/media/Report\_24\_Arctic\_matters.pdf</a>

Jeffrey Kuperman, "The Northern Sea Route: Could it Be The New Suez Canal?" Berkley Political Review, December 22, 2014.

<sup>&</sup>lt;sup>9</sup> Jeffrey Kuperman, "The Northern Sea Route: Could It Be The New Suez Canal?" Berkley Political Review, December 22, 2014. <a href="http://bpr.berkely.edu/2014/12/2/the-northern-sea-route-the-new-suez-canal/">http://bpr.berkely.edu/2014/12/2/the-northern-sea-route-the-new-suez-canal/</a>. Ships traveling the NSR, even in the summer, must pay \$400,000 for icebreaker support. Keith Johnson, "Searching for Leads in the Opening Arctic," Foreign Policy, September 14, 2015. <a href="http://foreignpolicy.com/2015/09/14/searching-for-leads-in-the-opening-arctic/">http://foreignpolicy.com/2015/09/14/searching-for-leads-in-the-opening-arctic/</a>.

To Federation of American Scientists. "Russian SSBN Fleet: Modernizing But Not Sailing Much,"

<sup>&</sup>lt;sup>10</sup> Federation of American Scientists. "Russian SSBN Fleet: Modernizing But Not Sailing Much," https://fas.org/blogs/security/2013/05/russianssbns/.

focus. 11 This symbolic action was soon followed by the resumption, following a 15-year hiatus. of the regular deployment of long-range reconnaissance and bomber aircraft along the Norwegian coast and along/over the Pole. 12 These initial efforts have steadily increased in scope and pace as Russia seeks to back up the aspirational goals contained in Moscow's 2008 Fundamentals of State Policy of the Russian Federation in the Arctic for the Period up to 2020 and Bevond.

The past five years have been noteworthy for the increasing scale and complexity of Russia's Arctic exercises. In September 2012, Russia conducted a large-scale exercise involving more than 7,000 troops, over 20 surface ships and submarines, and 30 aircraft. 13 In 2014, in addition to placing the Barents Sea under constant surveillance by fighter jets, Russia deployed Pantsir-S (air defense) and Iskander-M (theater ballistic missile) missiles, and began renovating airfields to accommodate next-generation aircraft and advanced S400 air defense systems. 14 In 2015, Russia conducted both a planned operation in March that involved 80,000 troops, 220 aircraft, 41 ships, and 15 submarines as well as a 'snap' drill in May when President Putin deployed 12,000 troops in response to NATO Arctic maneuvers. <sup>15</sup> This year Russian Airborne Forces are planning to conduct additional large-scale exercises. <sup>16</sup> These evolutions can be expected to enhance the experiences previously gained in unmanned air vehicles, assault aircraft and helicopter squadrons performing massed air strikes, and tactical assault forces conducting landing operations. 17 Future aspirations include the Russian Defense Minister's intention to permanently deploy a military unit in the Arctic by 2018. 18

Backing into the Issue: US Interest: Instead of focusing on an increased military presence in the Arctic, the US leverages diplomatic engagements within the Arctic Council to address evolving issues. The Council is an international forum that draws its core membership from the eight countries bordering the Arctic Ocean. 19 The organization is focused on representing the peaceful coordination of Arctic policy and focuses on sustainable development and environmental protection. By the end of 2015, the United States had assumed the rotating twoyear chairmanship and the Department of Defense and the Department of Homeland Security have issued Arctic-related strategies focused on supporting President Obama's 2013 National Strategy for the Arctic Region.<sup>20</sup> In conjunction with their Arctic strategy documents, the maritime services, through Cooperative Strategy – 21, have noted that as the Arctic becomes more accessible and more widely used it will become more strategically important. This will entail an increased requirement to operate in "ice-covered and ice-obstructed waters."<sup>21</sup> However, the Department of Defense's overall Arctic posture lacks the depth and breadth of Russia's efforts:

 <sup>11&</sup>quot;Russia Plant Flag Under N Pole," BBC News, 2 Augusts 2007. <a href="http://news.bbc.co.uk/2/hi/europe/6927395.stm">http://news.bbc.co.uk/2/hi/europe/6927395.stm</a>
 12 Zysk, p. 290. "Russia Restarts Cold War Patrols," BBC News, 17 August 2007. <a href="http://news.bbc.co.uk/2/hi/europe/6950986.stm">http://news.bbc.co.uk/2/hi/europe/6950986.stm</a>
 13 "Russia launches large-scale military exercise in the Arctic region," BBC Monitoring Former Soviet Union – Political Supplied by BBC Worldwide Monitoring, 23 September 2012, <a href="https://www.exisnexis.com/hottopics/lnacademic">www.lexisnexis.com/hottopics/lnacademic</a>
<a href="https://www.stratfor.com/analysis/russias-plans-arctic-supremacy">https://www.stratfor.com/analysis/russias-plans-arctic-supremacy</a>
<a href="https://www.stratfor.com/analysis/russias-plans-arctic-supremacy">https://www.stratfor.com/analysis/russias-plans-arctic-supremacy</a>
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<a href="https://www.stratfor.com/analysis/russias-plans-arctic-supremacy">www.stratfor.com/analysis/russias-plans-arctic-supremac

John Dyer, "Russia is Wrapping the Arctic in a Loving Militarized Embrace," October 22, 2015. https://news.vice.com/article/russia-is-wrapping-the-

<sup>18 &</sup>quot;Russian Airborne Troops Plan Large-Scale Arctic Exercises in 2016," December 7, 2015. http://www.rferl.org/content/russia-arctic-troops-

exercises/27398219.html
TOpen Source Center, "Russia: Arctic Naval Infantry's Training Year Reviewed, Preparation for Winter Landing Exercise," Na Strazhe Zapolyarya, 11/27/2015

18 "Russian Airborne Troops Plan Large-Scale Arctic Exercises in 2016," December 7, 2015. http://www.rferl.org/content/russia-arctic-troops-

exercises/27398219.html

The Arctic Council's core members are: Canada, the Kingdom of Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway,

Russia, Sweden and the United States.

20 White House, 2013 National Strategy for the Arctic Region https://www.whitehouse.gov/sites/default/files/docs/nat\_arctic\_strategy.pdf. Department of Defense. Arctic Strategy – 2013. http://archive.defense.gov/pubs/2013 Arctic Strategy.pdf. Department of the Navy, 2014 U.S. Navy Arctic Roadmap 2014-2030 issued by U.S. Navy Task Force Climate Change. http://www.navy.mil/docs/USN\_arctic\_roadmap.pdf. United States Coast Guard, Arctic Strategy, 2013. http://www.uscq.mil/seniorleadership/DOCS/CG\_Arctic\_Strategy.pdf

21 Department of the Navy. A Cooperative Strategy for 21<sup>st</sup> Century Seapower. March 2015. http://www.navy.mil/local/maritime/150227-CS21R-

Final.pdf p. 18.

- Army In conjunction with a wider drawdown to achieve an end-strength of 450,000, the Army is reportedly planning to reduce its only extreme-cold weather airborne brigade by 59%.<sup>22</sup>
- Marine Corps The Marine Corps maintains the Marine Corps Prepositioning Program-Norway (MCPP-N) in a series of caves around Trondheim. 23
- Navy The Navy has no surface vessels with requisite reinforced hulls. Their near-term surface capabilities are restricted to open water areas. Current efforts are limited to submarine transits of the polar cap and air flights.<sup>24</sup>
- Coast Guard The Coast Guard has two active icebreakers, The USCGC Polar Star and the USCGC Healey. The Polar Star was launched in 1976 and retired at the end of its service life; however, it was reactivated in 2013 and is expected to be operational through 2020. President Obama has requested an additional icebreaker be expedited but Congress has yet to authorize the \$1B (est.) required to build this vessel. 25

Relevance to USMC: While there is no imminent military threat in the Arctic, that does not mean we will not operate there. As noted in Cooperative Strategy - 21, "The security environment changes, the tactics, techniques and procedures change, the threats change, but what won't change is [the Marine Corps'] role as the Nation's crisis response force of choice."26 While there are no specific deployment or employment concepts for Marine units in the Arctic, as the nation's "force in readiness", the Marine Corps may well find itself operating in this challenging environment—whether in the Arctic or in other cold weather areas. Ensuring that we continue to take advantage of cold weather training opportunities, both in exercises and at the Marine Corps Mountain Warfare Training Center at Bridgeport, California is a prudent measure to ensure we are ready for "every clime and place."

Note: The SSR represents a forum for innovative thinking, and is not USMC policy. Report produced by LtCol Todd Manyx (todd.manyx@usmc.mil), and approved by SIG Director Col. Phillip Ridderhof (phillip.ridderhof@usmc.mil). To be added to the distribution list, please contact Maj Brian Laurence at (brian.laurence@usmc.mil).

<sup>25</sup> US Coast Guard. "Polar Icebreakers," Acquisition Directorate. May 2015. <a href="https://www.uscg.mil/acquisition/icebreaker/pdf/icebreaker.pdf">https://www.uscg.mil/acquisition/icebreaker/pdf/icebreaker.pdf</a>. Kristin Holmes, "Obama wants new Coast Guard icebreakers in the arctic," CNN Politics, September 1, 2015. http://www.cnn.com/2015/09/01/politics/obamaicebreakers-alaska-arctic-visit-climate-change/.

28 Department of the Navy. A Cooperative Strategy for 21st Century Seapower. March 2015. http://www.navy.mil/local/maritime/150227-CS21R-

Final.pdf p. 10

<sup>&</sup>lt;sup>22</sup> Tara Copp, "Arctic heats up over Army cuts to cold weather airborne brigade," Stars and Stripes, October 30, 2015.

http://www.stripes.com/news/arctic-heats-up-over-army-cuts-to-cold-weather-airborne-brigades

23 Christopher P. Cavas, "Inside the US Marine Corps Prepositioning Program-Norway," Defense News, September 22, 2015. http://www.defensenews.com/story/defense/show-daily/modern-day-marine/2015/09/20/inside-us-marine-corps-prepositioning-programnorway/32511065/ <sup>24</sup> 2014 U.S. Navy Arctic Roadmap 2014-2030, p. 18.