

# Critical Security Challenges in the Arctic

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## Introduction

The Arctic is the “last frontier.” Its harsh conditions, severe storms, ice cover, and long periods of darkness have made human exploration and habitation difficult. However, due to climate change, melting sea ice is opening up the Arctic like never before.

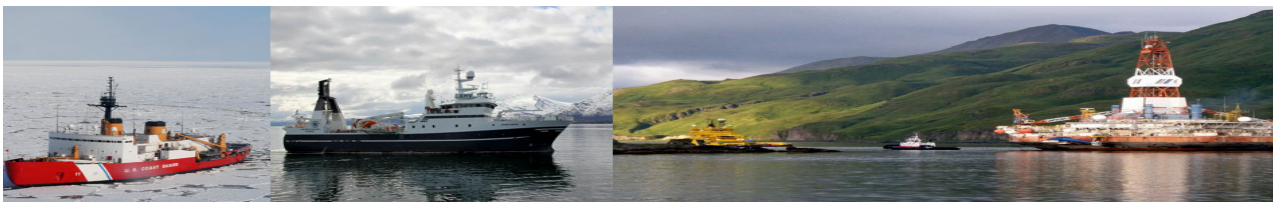
The “Arctic region” is the area lying within the Arctic Circle: latitude 66° 33’ North.<sup>1</sup> The Arctic region consists of the Arctic Ocean and the sovereign territory of Canada, Denmark (via Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States of America.<sup>2</sup>

Today, Arctic and non-Arctic nations alike are more interested in this once inaccessible region because climate change and technology are combining to open the Arctic unlike at any time in human history. Large reserves of oil and gas are located within the Arctic, as well as minerals such as coal, iron, diamonds, and copper.<sup>3</sup>

Shrinking ice coverage is opening up new trade routes, allowing shipping companies to take advantage of shorter routes.

While the retreating sea ice does present new commercial opportunities, this remains a punishing environment that will reveal new challenges. In this new era in Arctic history, it is unclear that the United States Government has enough planning or foresight in order to prepare for this new era.

This Perspective Paper will argue that on five of the most critical challenges facing the United States in the Arctic, the American government is either failing to plan for or has inadequate plans to meet these challenges.



## 5 Challenges in the Arctic

- I. Energy Exploration
- II. Territorial Disputes and the Law of the Sea
- III. Infrastructure for Emergency Response
- IV. American Military Presence
- V. Managing the U.S. Presence on the Arctic Council

### Background: The Arctic's Changing Climate

The melting and re-freezing of Arctic sea ice has remained fairly consistent for much of human history. However, sea ice began to melt rapidly in the 1970's.<sup>4</sup> According to reconstructed ice cores, scientists found that the current rate of melting is quicker and is lasting longer than it has been in at least the past 1,450 years.<sup>5</sup> In 2012, summer sea ice retreated to its lowest extent for satellite-recorded data.<sup>6</sup>

The melting sea ice is largely due to warming temperatures caused by man-made carbon emissions. The rate of change in the Arctic is astounding. The nature of Earth's greenhouse effect is such that the poles warm fastest when greenhouse gas concentrations increase. Arctic sea-ice plays a role in reflecting solar energy back into space by bouncing back energy and heat that would otherwise be absorbed by dark ocean water. The absence of sea ice allows the ocean to absorb more heat, which contributes to further warming in a feedback loop.<sup>7</sup>

In fact, temperatures in the Arctic are rising at twice the rate as the rest of the world.<sup>8</sup> Changes in the region have progressed with such speed that many experts now believe the Arctic may be entirely ice-free within a decade or two.<sup>9</sup> Residents of Alaska are already seeing these effects, as their villages literally fall into the Arctic Ocean.<sup>10</sup>



In a troubling scenario, climate change may contribute to the release of subsurface methane gas trapped beneath permafrost. As temperatures rise and permafrost melts, methane may be released in large quantities. Methane's impact on climate change is over twenty times greater than carbon dioxide.<sup>11</sup> There is evidence that this process is already underway.<sup>12</sup>

## I. Energy Exploration

With a measure of irony, a warming Arctic means that more energy resources are available – the very same fossil fuel resources that are causing the warming.

There could be vast untapped reserves of oil and natural gas in the Arctic; the U.S. Geological Survey estimates 90 billion barrels of oil, or 13% of the world's undiscovered reserves. One-third of those reserves are concentrated in U.S. territory.<sup>13</sup> Much of the Arctic is geologically unexplored, so reserve estimates are merely an educated guess and could be higher or lower.

The Obama administration has supported energy development in the Arctic as part of its “all-the-above” energy strategy.

A string of setbacks has, for now, delayed plans by certain companies for offshore drilling. Oil companies called off drilling in the American portion of the Arctic in 2013, stating that they will not resume drilling until the summer of 2014 at the earliest.

Arctic drilling conditions – sea ice, severe storms, a lack of infrastructure – have proved to be more challenging than the industry or the administration previously anticipated.



These difficulties led the Department of Interior to conduct a review of Arctic energy exploration, but it is unclear that the U.S. government has the plans or policies in place to allow energy development to proceed in a safe manner.<sup>14</sup>

Meanwhile, Russia has plans to develop oil and gas throughout the Arctic. In March, Russian oil giant Rosneft signed a cooperation agreement with the Chinese National Petroleum Corporation (CNPC) to develop oil in the Barents Sea.<sup>15</sup>

Looking forward, the U.S. government maintains support for energy development in the Arctic, but it will be a challenge to ensure that it is done safely in hostile terrain. Meanwhile, even if oil development in the American zone continues to be delayed, policymakers will have to prepare for spill response; other nations within the mostly enclosed Arctic Ocean are moving forward – and oil slicks do not recognize national boundaries.

## II. Territorial Disputes and the Law of the Sea

For much of the Arctic region, there is a clear delineation of the sea area under the control of each of the eight Arctic nations. Under international law, codified by the United Nations Convention on the Law of the Sea, states may extend their territory outward from their coast into maritime areas.

These zones are referred to as the Territorial Sea (up to 12 nautical miles (nm) from the baseline), the Contiguous Zone (up to 24 nm), and the Exclusive Economic Zone (up to 200 nm) (EEZ). The right to exploit natural resources lying in the seabed belongs to the coastal State,<sup>16</sup> and states must allow “safe passage” of vessels through all but their territorial sea.



The Law of the Sea allows states to extend their EEZ (therefore allowing exploitation of resources) if the state can prove that their continental shelf extends beyond the 200 nm limit. In the Arctic, only Russia and Norway have done so but other states may follow.

Territorial disputes in the Arctic are an excellent example of several national security issues converging onto one geographic region; because of climate change, energy resources that were previously unavailable are now becoming accessible, setting off a scramble by the Arctic (and several non-Arctic) states to use whatever international legal regimes are available to claim as much territory as possible. The Law of the Sea provides the legal framework for resolving these disputes.

The United States stands at a disadvantage for its failure thus far to ratify the treaty. As other countries submit claims to territory beyond their 200 mile EEZ, as is their right under the Law of the Sea, without ratification, the U.S. does not have the standing to challenge these claims and assert its own claims under the convention.

The American refusal to ratify the treaty has created ambiguity over territorial rights beyond its EEZ, and it means that American policymakers do not have any say over other disputes. In this time of great change and flux in the Arctic, the United States is absent from a key table at which the Arctic's future will be negotiated.

### III. Infrastructure for Emergency Response

Seasonal commercial activity in the Arctic Ocean is increasing as sea ice disappears. Already, commercial shipping has traversed the Northern Sea Route through Russian sea lanes, and plans are underway for the Northwest Passage through Canadian and American waters. However, the lack of adequate infrastructure along America's Arctic shores to service this increased traffic poses a significant challenge. The extraction of energy resources, greater shipping traffic, and new fishing opportunities also add up to the possibility of more accidents at sea.

For example, there is insufficient infrastructure to ensure safe navigation, initiate search and rescue missions, or to coordinate pollution response. This is most evident in the lack of Arctic ports for ships in distress.<sup>17</sup> The Coast Guard has no permanent presence in the Arctic; it operates out of bases in southern Alaska.<sup>18</sup> The Coast Guard also operates only one heavy and one medium icebreaker.<sup>19</sup>

America's Arctic infrastructure would be sorely tested in the event of an oil spill. The Arctic Council agreed upon a binding oil spill response plan during its 2013 meeting in Kiruna, Sweden.<sup>20</sup> However, it is unclear if the U.S. possesses the requisite infrastructure to respond to such an event, as the Coast Guard does not have a permanent presence in the Arctic. Much of Alaska's highway network, limited to begin with, is built on permafrost. Melting permafrost is causing many roads to buckle, making transportation in warmer months difficult.<sup>21</sup> As the needs to meet increased Arctic activity are rising, U.S. infrastructure is lacking at this time.



At a time when the Arctic region has become more important for national affairs, the Navy and Coast Guard have lacked the icebreaking capacity needed to ensure year-round access to Polar regions. Since 2010, only the medium icebreaker Healy has been available for service. The Coast Guard has two heavy icebreakers, the sister ships Polar Star and Polar Sea, which are unavailable for service. Commissioned in 1976 and 1978, respectively, these two ships have passed their intended 30-year service life. The Polar Star recently completed a six year hiatus from active duty, during which she underwent \$57 million in repairs.<sup>22</sup> She is undergoing testing and is expected to return to active service at the beginning of FY2014, with 7 to 10 years of anticipated service ahead. The Polar Sea has been unavailable for operation since an engine breakdown in 2010 and is likely to be decommissioned. As of the summer of 2013, only the Healy is available for service. For comparison, Russia operates 25 polar icebreakers, Finland and Sweden each have seven, and Canada has six.<sup>23,24</sup>

Two studies, the Coast Guard's 2011 "High Latitude" study and a January 2011 Department of Homeland Security Inspector General's Report have identified that the Coast Guard's icebreaking capability will be unable to meet future demands.<sup>25</sup> In their FY2014 budget, the Coast Guard has requested \$2 million for initial survey and design of a new heavy icebreaker, which could cost up to \$800 million. In the face of budget cuts and competing priorities, it is unclear whether Congress will fund such a project.

The U.S. Coast Guard released its Arctic Strategy in May 2013 with three overarching strategic objectives: improving awareness, modernizing governance, and broadening partnerships.<sup>26</sup> These objectives are worthy goals, but it is unclear whether these policy tweaks will be enough; what is needed is actual investments in modern ships and infrastructure.



## IV. American Military Presence

With the end of the Cold War, the potential for interstate conflict in the Arctic – where U.S. and Russian territory are in closest proximity – has largely receded. Currently, the United States Department of Defense does not view disputes in the Arctic as a likely source of conflict in the near-term.<sup>27</sup> As a result, the U.S. military has a light Arctic footprint, and Defense Department planners project that the U.S. will not need additional bases or deep draft ports through 2020.<sup>28</sup>

The U.S. military's Arctic strategy is focused on maintaining peace in the region and ensuring freedom of navigation. However, its ability to do so is questionable. In September 2011, the U.S. Naval War College conducted war exercises called the Fleet Arctic Operations Game (FAOG) to identify gaps that limit naval operations in the Arctic. The exercises demonstrated that the U.S. Navy is “inadequately prepared to conduct sustained maritime operations in the Arctic region,” and would need to rely upon the U.S. Coast Guard, tribal leaders, industry, and multinational partners to reduce mission risk.<sup>29</sup>



Unlike the United States, four other Arctic nations (Canada, Denmark, Norway, and Russia) have demonstrated a commitment to increasing their military presence in the region, improving infrastructure and augmenting fleet and troop levels at a rapid pace.

Canada is converting a deep-water port on Baffin Island into a major naval base, building eight new vessels via the Arctic Patrol Ship Project, and considering establishing training facilities in Resolute Bay near the Northwest Passage.<sup>30</sup> The Danish military is creating an Arctic Response Force,<sup>31</sup> and Norway has committed to purchasing 48 F-35 aircraft “for the continued presence of core areas in the High North.”<sup>32</sup>

Russia's defense commitment to the region is perhaps the most extensive; it controls the largest icebreaker fleet in the world, and is currently constructing what will be the world's largest nuclear-powered icebreaker.<sup>33</sup> Russia's largest naval fleet is its Arctic fleet, headquartered in Severomorsk off of the Barents Sea, and has publicly committed to expanding this already impressive force.<sup>34</sup>

The chances of armed conflict are remote, but as Arctic traffic increases, the U.S. government will need to be able to defend its interests. On the other hand, countries must be careful not to increase tension and mistrust by militarizing the Arctic. Carefully balancing these complexities to ensure continued peace in the Arctic will be a key task for the military as sea ice continues to melt.

## V. Managing the U.S. Presence on the Arctic Council

Canada is taking over its two-year chairmanship of the Arctic Council in 2013. The U.S. should develop a strategy over the next two years for when its term begins in 2015.

The Arctic Council was established in 1996 by the Ottawa Declaration as a “high level intergovernmental forum to provide a means for promoting cooperation, coordination and interaction among the Arctic States... on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic.”<sup>35</sup> The council includes eight permanent members: Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States; as of May 2013, twelve “Observer States” had been invited to join.<sup>36</sup>

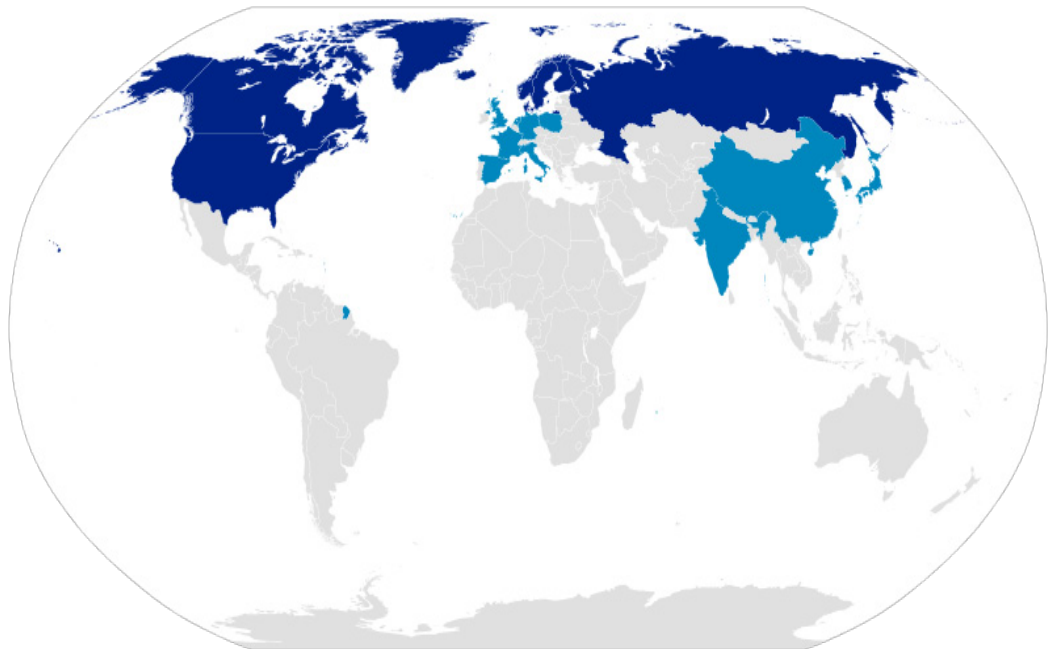
One recent development is the inclusion of China into the Arctic Council. China has repeatedly pressed for inclusion as an “observer state,” and was granted that status in May of this year (along with five other states).<sup>37</sup> The Arctic Council awarded Observer status to China after debate in a recent council meeting.

The renewed global interest in the Arctic is an indication of the region’s coming role as a stage on which to jockey for influence and resources.<sup>38</sup>

Despite this new “observer” status, the role which China intends to play in the Arctic region and Beijing’s use of the Arctic Council in advancing its national interests remains unclear.

Looking forward, as the U.S. assumes the Chair in 2015, it will need to ensure that the Arctic Council functions as a forum that can deal with the new realities within the region. American policymakers will need to lay out a coherent strategy for policy goals for the Arctic. The Obama administration published its National Strategy for the Arctic Region in May 2013, but the strategy outlined vague goals rather than a comprehensive approach.<sup>39</sup>

In the coming months, the administration should add details and a plan for implementation in order to ensure it confronts the major challenges head on.



## Conclusion

Due to rapid climate change, the opening of the Arctic promises to be an emerging geopolitical issue in the coming years. While the region will likely remain peaceful for the foreseeable future, challenges remain.

The U.S. has thus far not outlined how its energy development in the Arctic will proceed in a safe manner.

With a limited Coast Guard and Navy presence, the ability to respond to an oil spill or search and rescue mission is uncertain. The U.S. government assumes there will be increased Arctic activity from shipping, fishing, energy development, etc., but it is far from clear if the infrastructure exists to support it. Maintaining peace in the region must be a priority, but the U.S. has yet to outline a way forward. The U.S. military has no plans to expand its presence, yet it has also found current force structures to be insufficient to the missions.

How the United States addresses these five challenges will help to determine whether the Arctic is a safe, secure venue featuring international cooperation, or whether it becomes another area of resource competition, international disagreement, and conflict.

The future of the Arctic will be determined over the coming years – America should play its part.

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## Endnotes

1. National Museum of Natural History. (2013). Arctic. Retrieved May 2013, from Forces of Change web site: [http://forces.si.edu/arctic/04\\_00\\_07.html](http://forces.si.edu/arctic/04_00_07.html)
2. Arctic Region Facts: Arctic Geography, Arctic Focus. Retrieved May 15, 2013, from <http://arcticfocus.com/arcticregionfacts/>
3. Lüth, M. S. (December 21, 2011). Who Owns the Arctic? A Stocktaking of Territorial Disputes. The Global Journal. <http://theglobaljournal.net/article/view/439/>
4. Skeptical Science. (March 22, 2013). Arctic icemelt is a natural cycle. Retrieved May 2013, from <http://www.skepticalscience.com/Arctic-sea-ice-melt-natural-or-man-made.htm>
5. Skeptical Science. (November 24, 2011). Arctic Sea Ice Hockey Stick: Melt Unprecedented in Last 1,450 years. Retrieved May, 2013, from: <http://www.skepticalscience.com/Arctic-sea-ice-hockey-stick-melt-unprecedented-in-last-1450-years.html>
6. National Aeronautics and Space Administration. (September 19, 2012). Arctic Sea Ice Hits Smallest Extent In Satellite Era. Retrieved May 2013, from NASA web site: <http://www.nasa.gov/topics/earth/features/2012-seaicemin.html>
7. National Snow & Ice Data Center. (2013). Thermodynamics: Albedo. Boulder, CO. Retrieved from NSIDC web site, available at: <http://nsidc.org/cryosphere/seaice/processes/albedo.html>
8. IPCC Fourth Assessment. Climate Change 2007: Synthesis Report. Observations of Climate Change. Available at: [http://www.ipcc.ch/publications\\_and\\_data/ar4/syr/en/mains1.html](http://www.ipcc.ch/publications_and_data/ar4/syr/en/mains1.html)
9. Overland, J., & Wang, M. (2013). When Will the Summer Arctic Be Nearly Sea Ice Free? Geophysical Research Letters, 1-17.
10. Goldenberg, Suzanne. "America's First Climate Refugees." The Guardian. May 13, 2013. Available at: <http://www.guardian.co.uk/environment/interactive/2013/may/13/newtok-alaska-climate-change-refugees>
11. Environmental Protection Agency. (April 22, 2013). Overview of Greenhouse Gases. Retrieved May 2013 from EPA web site: <http://epa.gov/climatechange/ghgemissions/gases/ch4.html>
12. National Science Foundation. (2010, March 4). Methane Releases From Arctic Shelf May Be Much Larger and Faster Than Anticipated. Retrieved May 14, 2013, from NationalScienceFoundation.org: [http://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=116532](http://www.nsf.gov/news/news_summ.jsp?cntn_id=116532)
13. United States Geological Survey. (July 23, 2008). 90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic. Retrieved May 15, 2013, from USGS web site: [http://www.usgs.gov/newsroom/article.asp?ID=1980#\\_UB-watuyh241](http://www.usgs.gov/newsroom/article.asp?ID=1980#_UB-watuyh241)
14. Department of Interior. (2013). Review of Shell's 2012 Alaska Offshore Oil and Gas Exploration Program. Washington, D.C.: DOI. 1.
15. Staalesen, A. (March 25, 2013). China to drill in Barents Sea. Barents Observer, Available at: <http://barentsobserver.com/en/energy/2013/03/china-drill-barents-sea-25-03>.
16. Article 56(1)(a) UNCLOS
17. Arctic Council. (2009). Arctic Marine Shipping Assessment 2009 Report. Arctic Council. 154-155. Available at: <http://www.arctic.gov/publications/AMSA/infrastructure.pdf>
18. Papp, A. R. (November 1, 2012). The Emerging Arctic Frontier. Annapolis, MD: U.S. Naval Institute. <http://www.uscg.mil/seniorleadership/DOCS/2012-02-01;%20Proceedings.pdf>
19. O'Rourke, R. (2013). Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress. Washington DC: Congressional Research Service.
20. Boyd, A. (May 15, 2013). Binding Oil Spill Agreement Signed. Barents Observer. Available at <http://barentsobserver.com/en/arctic/2013/05/binding-oil-spill-agreement-signed-15-05>.
21. Environmental Protection Agency. (May 16, 2013). Alaska Impacts & Adaptation. Retrieved May 2013, from EPA web site:

<http://www.epa.gov/climatechange/impacts-adaptation/alaska.html>

22. Ronald O'Rourke, Congressional Research Services (July 3, 2013). "Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress" Available at: <http://www.fas.org/sgp/crs/weapons/RL34391.pdf> Ronald O'Rourke, Congressional Research Services (April 21, 2011). "Coast Guard Polar Icebreaker Modernization: Background, Issues, and Options for Congress" p. 20. Available at: [http://assets.opencrs.com/rpts/RL34391\\_20110421.pdf](http://assets.opencrs.com/rpts/RL34391_20110421.pdf)
24. Fisheries and Oceans Canada, "The Fleet of the Canadian Coast Guard", June 2013. <http://www.dfo-mpo.gc.ca/media/back-fiche/2013/CCGC-eng.htm>
25. United States Coast Guard High Latitude Region Mission Analysis Capstone Summary, Prepared for the United States Coast Guard, July 2010. Available at: <http://assets.fiercemarkets.com/public/sites/govit/hlsummarycapstone.pdf> and Department of Homeland Security, Office of Inspector General, The Coast Guard's Polar Icebreaker Maintenance, Upgrade, and Acquisition Program, OIG-11-31, January 2011, page 9. Available at: [http://www.oig.dhs.gov/assets/Mgmt/OIG\\_11-31\\_Jan11.pdf](http://www.oig.dhs.gov/assets/Mgmt/OIG_11-31_Jan11.pdf)
26. U.S. Coast Guard. (2013). United States Coast Guard Arctic Strategy. Washington D.C.: USCG. Available at: [http://www.uscg.mil/seniorleadership/DOCS/CG\\_Arctic\\_Strategy.pdf](http://www.uscg.mil/seniorleadership/DOCS/CG_Arctic_Strategy.pdf)
27. Department of Defense. (2011). Report to Congress on Arctic Operations and the Northwest Passage. Washington DC: OUSD. 10. [http://www.defense.gov/pubs/pdfs/tab\\_a\\_arctic\\_report\\_public.pdf](http://www.defense.gov/pubs/pdfs/tab_a_arctic_report_public.pdf)
28. Department of Defense. (2011). Report to Congress on Arctic Operations and the Northwest Passage. Washington DC: OUSD. 25. [http://www.defense.gov/pubs/pdfs/tab\\_a\\_arctic\\_report\\_public.pdf](http://www.defense.gov/pubs/pdfs/tab_a_arctic_report_public.pdf)
29. CDR Christopher Gray. (2011). Fleet Arctic Operations Game. Newport: U.S. Naval War College. Available at: [http://www.usnwc.edu/getattachment/Research---Gaming/War-Gaming/Documents/Publications/Game-Reports/FAOG\\_Game-Report\\_09-2011.pdf](http://www.usnwc.edu/getattachment/Research---Gaming/War-Gaming/Documents/Publications/Game-Reports/FAOG_Game-Report_09-2011.pdf)
30. National Shipbuilding Procurement Strategy, Government of Canada. (May 10, 2013). Retrieved 5 22, 2013, from Public Works and Government Services Canada: <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/snacn-nsps-eng.html>
31. DANISH DEFENCE AGREEMENT 2010-2014. (June 24, 2009). Retrieved May 22, 2013, from Danish Department of Defence: <http://www.fmn.dk/nyheder/Documents/20090716%20Samlede%20Forligstekst%202010-2014%20inkl%20bilag%20-%20english.pdf>
32. Thorshaug, S. S. (November 17, 2012). Triple A – Building Confidence in the Arctic, Amazonas and the Antarctic. Retrieved May 22, 2013, from Norwegian Department of Defense: <http://bit.ly/16UEOkV>
33. Dillow, C. (September 12, 2012). Russia is Building the World's Largest Nuclear-Powered Icebreaker. Popular Science, pp. <http://www.popsci.com/science/article/2012-09/russia-building-worlds-largest-nuclear-powered-icebreaker>.
34. RUSSIA: THE NON-RELUCTANT ARCTIC POWER. (February 12, 2011). Retrieved May 22, 2013, from Second Line of Defense: <http://www.sldinfo.com/russia%E2%80%99s-recent-arctic-moves-the-non-reluctant-arctic-power/>
35. Arctic Council Website: <http://www.arctic-council.org/index.php/en/about-us/arctic-council/about-arctic-council>
36. Including China, France, Germany, Italy, India, Japan, South Korea, the Netherlands, Poland, Singapore, Spain and the United Kingdom.
37. The other nations granted observer status include India, Italy, Japan, Singapore and South Korea.
38. Myers, S. L. (2013). Arctic Council Adds Six Members, Including China. The New York Times. [http://www.nytimes.com/2013/05/16/world/europe/arctic-council-adds-six-members-including-china.html?\\_r=0](http://www.nytimes.com/2013/05/16/world/europe/arctic-council-adds-six-members-including-china.html?_r=0)
39. The White House. (2013). National Strategy for the Arctic Region. Washington D.C. [http://www.whitehouse.gov/sites/default/files/docs/nat\\_arctic\\_strategy.pdf](http://www.whitehouse.gov/sites/default/files/docs/nat_arctic_strategy.pdf)

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