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The Bering Strait - Strategic Choke Point

By

Tod O'Connell

LCDR, United States Navy

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Introduction

In the 1950's, advancements in rocket technology led the United States to recognize outer-space as a new domain that would advance the national interests of the country. However, it wasn't until 1957 when the USSR launched Sputnik 1 into low-earth orbit, thus commencing the "Space Race," that the national leadership recognized an operational imperative to send men to the surface of the moon. This operational imperative focused US resourcing and training and enabled the country to gain an edge over the USSR in opening the space domain.

In the 21st century, global climate change is compelling the United States to recognize the Arctic as a new environment that can advance the national interests of the country.

Guidance in the *National Strategy for the Arctic Region*, the Department of Defense's (DoD)
Strategy for the Arctic Region and the US Navy's Artic Roadmap outlines broad directions for development of Arctic capabilities. Lacking from this guidance is an operational
imperative to ensure capabilities and training are developed and resourced on a timeline that
provides the US the ability to dominate the Arctic domain. Instead of waiting for another
Sputnik, national leaders need to recognize that operational imperatives ALREADY exist,
and planning for specific Arctic operations needs to commence now. Just as bringing men to
the moon was the operational imperative that enabled the US to win the Space Race, control
of the Bering Strait as a strategic choke point is the operational imperative that will win any
future Arctic conflicts.

Russia and China also perceive the changing Arctic as significant for their national interests. Russia views the region as its backyard, or at least squarely in its sphere of influence, and is significantly far ahead of the US in its ability to operate in the far North.

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China sees the Arctic as free from international boundaries and actively seeks to prevent

Arctic countries from dividing the region amongst themselves at the expense of the

international community. Due to Chinese interests and increasing Russian activity in the

Arctic region, the US must conduct operational planning and revise the region's naval chain

of command in order to improve their ability to control the Bering Strait as a strategic choke

point in the event of heightened tensions with either country.

Arctic Strategic Importance

Warming Trends ⁱ		
Time Span	Global Temperature Rise (°C/decade)	Linear Trends (°C)
1901-2000	-	.60
1906-2005	.06	.74
1956-2005	.13	-
Max Ice Extent ⁱⁱ , ¹		Min Ice Extent
Year	Area (millions of sq. km)	Area (millions of sq. km)
2012	15.30	3.39
2013	15.17	5.06
2014	14.96	5.03
2015	14.54	4.41
2016	14.52	-

Table 1. Warming and Ice Diminishment Trends

The scientific community largely accepts that global temperatures are slowly and steadily rising. With rising global temperatures comes an associated trend of diminishing Arctic sea ice. Representative data for these trends are tabulated in Table 1, and Figure 1 displays the 2012 minimum ice extent (outlined in red) overlaid with the average minimum ice extent from the past 30 years. As stated by the former director of the Navy's Task Force

¹ The maximum extent of the ice sheet represents the largest area of the polar ice sheet throughout the year, and is typically reached in March. Ice diminishes through the summer, and typically reaches its minimum extent in September.

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Climate Change, Rear Admiral David Titley, "The consensus of most models and researchers is that the Arctic will experience ice-free conditions for a portion of the summer by 2030."



Figure 1. Minimum Ice Extent, 2012 vs. 30 year average. (US Navy Graphic) iv

As rising temperatures and sea levels expose a variety of global concerns, they also create opportunities for the international community. Ice-free conditions in the Arctic Ocean open new international shipping routes. Figure 2 displays the significant Arctic sea routes and provides an indication as to when they may become viable. This accurately reflects that the Northern Sea Route (NSR) is currently available for use during the summer months, and various paths through the Northwest Passage (NWP) may be open by 2030.

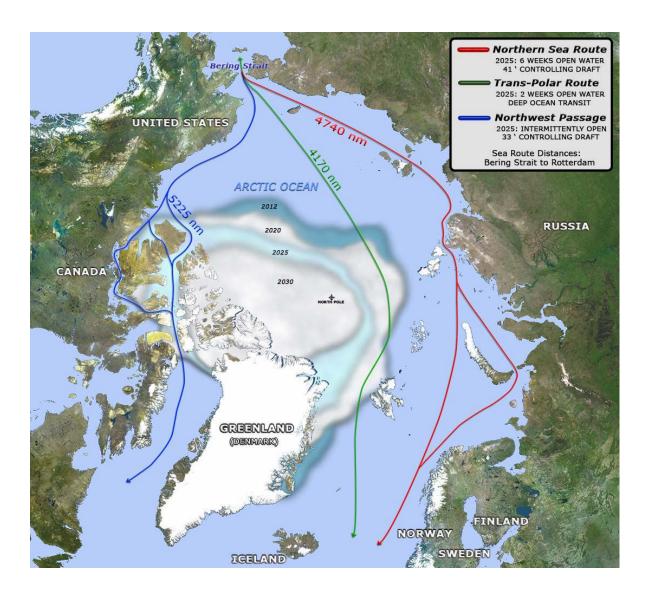


Figure 2. Anticipated future Arctic transit routes superimposed over Navy consensus assessment of sea ice extent minima. (United States Navy graphic)

From 2011 to 2013, transits through the NSR increased from forty-one to seventy-one. Vi While use in 2014 and 2015 decreased slightly vii, the opening of Arctic waterways is projected to rebound and increase. The driving force for the increased usage is the brevity of the transits through the Arctic. Both the NSR and the NWP are significantly shorter than their

² 2014 had fifty-five transits, and 2015 had 22. The Northern Sea Route Information Office attributes the decline in shipments with current trends in global economy, specifically China, which had been the biggest user in previous years.

alternatives. The 30% reduction in distance between Shanghai and Hamburg, for example, comes with an equal reduction in fuel consumption ultimately providing reduced cost. Additionally, the requirement for an icebreaker escort through the routes will become less necessary and high insurance costs should go down. With warming trends projected to continue past 2030, it is reasonable to anticipate Arctic trade routes competing with the conventional global traffic schemes currently in use.

In addition to opening international trade through the Arctic, access to abundant natural resources in the region carries its own strategic significance. According to a US Geological Survey, "The total mean undiscovered conventional oil and gas resources of the Arctic are estimated to be approximately 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids."viii This correlates to an estimated 13% of the world's undiscovered oil and 30% of its undiscovered natural gas. ix While Arctic oil and gas exploration has been temporarily stalled by the United States³, other countries continue to explore their regions. Exxon Mobil conducts explorative drilling in the Russian Arctic and struck oil in the Kara Sea region of the Arctic Ocean in September of 2014.x Russian state-run oil companies are actively exploring, while China's state-owned oil company, CNOOC, is licensed to explore Iceland's Arctic waters for oil and gas. xi If environmental trends continue, extraction of these resources will ease. Additionally, it is speculated that the world's current largest oil exporter, Saudi Arabia, will cease exporting oil in 2030. xii Just as access to Saudi Arabia's oil supply is a current strategic imperative for the US, access to and control of the Arctic oil supply requires the same gravitas.

³ Shell Oil Company ceased its explorative drilling in the Chukchi Sea in November of 2015. The Obama administration then terminated the sale of all leases for oil exploration in the Arctic through the end of 2016.

US Arctic Goals

Since 2009, the US Navy has turned a strategic eye toward the Arctic. The department recognizes the dramatically changing nature of the region and is developing lines of effort designed to ensure the Navy will be ready for operations in the Arctic as its strategic importance grows with the diminishment of sea ice. These efforts, outlined in the *Arctic Roadmap*, guide various naval commands, research organizations, and technical communities to develop Arctic capabilities, with a long-term goal of "routine" presence after 2030.

It was after the initial development of the Navy's guidance (first published in 2009) that higher level national authorities provided guidance to further shape efforts in the region. The *National Strategy for the Arctic Region*, released by the White House in 2013, outlined priorities as (1) advance US security interests, (2) pursue responsible Arctic region stewardship, and (3) strengthen international cooperation. The second priority is a testament to the environmental challenges associated with Arctic operations, while the third reduces the likelihood of military action in the region. The US actively pursues this priority through its involvement in the Arctic Council⁴, which seeks peaceful resolutions for the region. The top priority drives the Navy's Arctic development. However, when expounding on advancing US security interests, the national strategy states:

"We will enable our vessels and aircraft to operate, consistent with international law, through, under, and over the airspace and waters of the Arctic, support lawful commerce, achieve a greater awareness of activity in the region, and intelligently

⁴ The Arctic Council is an intergovernmental organization consisting of eight nations with territory north of the Arctic Circle (the United States, Canada, Denmark, Iceland, Norway, Sweden, Finland and Russia). Formed in 1996, the council is a diplomatic organization providing a forum for political discussion on matters affecting the region.

evolve our Arctic infrastructure and capabilities, including ice-capable platforms as needed."xiv

Essentially, this directive from the highest level of the government steers the Department of Defense (DoD) to enable operation in the Arctic, develop maritime domain awareness, and build infrastructure and capabilities. There is a lack of guidance for developing *warfighting* capabilities and for developing plans ensuring US national security.

The DoD's *Arctic Strategy*, issued in November of 2013, specifies the military's objectives that support the President's whole-of-government priorities. The first objective is to "Ensure security, support safety, and promote defense cooperation." **v* This objective is to be achieved by leveraging international relationships and collaboration with the interagency. Instead of taking the lead to ensure security for the Arctic region, the DoD places itself in a supporting role to the Department of State. Secondly, the DoD is to "Prepare for a wide range of challenges and contingencies." **w*i* While acknowledging that this encompasses the full scale of national security concerns, the strategic approach outlined in the remainder of the document merely nods to the need to "exercise sovereignty and protect the homeland" **x*v*i*. It stresses efforts for infrastructure development and building partner relationships but excludes the development of warfighting skills.

Flowing from the benign nature of the national guidance, the Navy's *Arctic Roadmap* mainly directs development of service-level capabilities and provides little focus on preparation for warfighting in the region. It lacks an operational imperative to ensure capabilities and training are developed and resourced on a timeline that will provide the US the ability to win any future conflicts in the Arctic. This may be because the guidance, from

the *National Strategy* to the *Arctic Roadmap*, is based on the assumption that in the nearterm, conflict is unlikely to break out in the region between Arctic nations.

This assumption brings about a significant amount of risk for two reasons. First, following the prescribed guidance, capabilities will not be developed and forces will not be trained for full-scale operations until *after* ice-free conditions in the region make it a strategic necessity. Operational abilities will be developed too late to ensure access to the region. Second, while armed conflict is unlikely to originate in the region, this ignores that the US is faced with threats from Russia and China which may lead to external conflicts that have every possibility of spilling into the Arctic region.

Russian Interests

Russia owns the largest Arctic coastline in the world and actively seeks dominance in the region. Planting a titanium Russian flag on the sea floor underneath the North Pole was a notable outward display of its interests in the region, deliberately challenging other nations with similar claims to the continental shelf on which the flag was placed.⁵ Russia's stated national interests fall in line with the overall analysis of the Arctic region and like the US, its published Arctic policy states national goals of maintaining peace, international cooperation and the Arctic ecology.^{xviii} In contrast to the vague US strategic goals, however, it also clearly states that its interests involve exploitation of the oil and gas resources in the region and development the NSR as a strategic line of communication. ^{xix}

While actively pursuing these interests across all sources of its national power, its military, in particular, is at the forefront of preparations for operations in the region. In the

⁵ Russia submitted a claim for the Lomonsov Ridge to the UN continental shelf commission to extend their Exclusive Economic Zone in accordance with UNCLOS. Denmark and Canada have submitted overlapping claims, and as of the writing of this paper, the North Pole sea floor is still considered the High Seas.

last two years, Russia has established their equivalent of a Geographic Combatant Commander for the Arctic Region, commenced construction on major military installations, and conducted numerous large-scale joint exercises in the region. When viewed in light of other actions in the international arena (Crimea and Syria, for example), this militarization is cause to take Russia's claims to seek a zone of peace and cooperation in the region with a grain of salt.** Furthermore, the Russian Arctic strategy directs their military

"to optimize the system of comprehensive control of the situation in the Arctic, including border controls at border entry points across the state border of the Russian Federation, the introduction of a border zone control system in the administrative territorial formations of the Arctic Zone of the Russian Federation, and the organization of effective technical controls for the bay zones, river entrances, and estuaries on the Northern Sea Route lines"xxi

Their efforts to control NSR entrances must necessarily include Russian planning for control of the Bering Strait.

Chinese Interests

While not an Arctic nation, China considers exploitation of the region to be in its national interest. Nearly half of China's economy is thought to be dependent on international trade.xxii While opening of Arctic sea routes benefits the international community in general, China in particular stands to benefit greatly from reduced transit times and costs to its major export markets: Europe by way of the NSR (see Figure 3), and the North American east coast by way of the NWP.



Figure 3. NSR compared to conventional Southern passage from Chinaxxiii

Additionally, the nation is increasingly dependent on oil imports as it continues to industrialize, with over 58% of its oil consumption obtained from overseas sources, up 4% from the previous year. *xxiv* China, therefore, seeks greater access to oil and gas, which are becoming increasingly available in the Artic.

To pursue these national interests, China has stepped up diplomatic activity in the Arctic. Strategic messaging is attempting to head off "dividing the Arctic melon" amongst the Arctic nations at the expense of the international community. According to the Chinese Arctic Policy paper issued by the Naval War College's China Maritime Studies Institute, "The mantra that the Arctic and its natural resource wealth belong to no one country or group of countries but constitute the common heritage of all humankind is virtually de rigueur in recent Chinese public commentary on Arctic affairs."** In defense of this stance, China obtained observer status in the Arctic Council. While unable to vote in policy matters, this

gives it an avenue to voice its strategic messaging. Additionally, the Chinese scientific community participates actively in Arctic Research projects.⁶ By increasing diplomatic and scientific presence, "China is taking concrete diplomatic steps to ensure that it becomes a player in the Arctic game and eventually will have what it regards as its fair share of access to Arctic resources and sea routes."xxvi

While Chinese statesman and academia continue to pursue efforts to establish the region as an area free from oversight by Arctic coastal nations, economic efforts are underway to begin exploiting the region. In 2014, China's state-run oil company CNOOC obtained a license for exploratory drilling in Iceland's Arctic region.xxvii Additionally, China is the most active non-Russian user of the NSR. A Chinese icebreaker, Snow Dragon, completed the first Chinese transit of the NSR in 2012.xxviii Since that time, statistics obtained from the NSR Information Office show many transits of commercial vessels to or from China. China's largest shipping company highlights recent Chinese Arctic shipping activity, "...recently sent a COSCO cargo vessel to Sweden from China via the Bering Strait and NSR in August 2015; the vessel will return to China through the NSR in October 2015."xxiix

While China's military is not actively pursuing preparations for operations in the Arctic, Chinese military experts are paying attention to the increased strategic importance of the region. The China Maritime Studies Institute notes, "That the Arctic might emerge in the future as the theater for regional and perhaps even global conflict is a possibility entertained with some seriousness in China today."xxx Furthermore, after analyzing Chinese interests in the region, the policy paper concludes:

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⁶China operates a dedicated research facility on Ny-Ålesund in Norway's Svalbard archipelago, conducted 4 research expeditions between 1999 and 2010, and has established dedicated Arctic research groups. (Linda Jakobson, "China Prepares for An Ice-Free Arctic", March 2010, SIPRI Insights on Peace and Security, p. 3)

"The United States should be prepared for the possibility that Beijing could someday conclude that developments or situations in the Arctic threaten China's economic prosperity, and thus Chinese social stability and ultimately the political power of the Communist Party of China. At a minimum it is in the interest of the United States and the other A5 NATO democracies to maintain defensive capabilities for safeguarding the security of the Arctic region."xxxi

US defensive capabilities must expand beyond mere operating capability. To heed this advice and safeguard the Arctic region, the US must be prepared to control the Bering Strait.

The Bering Strait – Strategic Choke Point

While access to the Arctic Ocean from the Atlantic yields multiple relatively wide points of entry, passage from the Arctic Ocean to the Pacific Ocean must traverse the Bering Strait, displayed in Figure 4. 51 miles wide at its narrowest point, the strait varies in depth between 30 and 50 meters xxxii. The entrance to the Strait from the Pacific is overlooked by St. Lawrence Island. Two small islands, Big and Little Diomedes, occupy the narrowest point of the channel, with just over two miles separating the US and Russian territories.

⁷ The Northwest Passage's eastern exit between Greenland and the Canadian Archipelago, and the Greenland-Iceland-United Kingdom gap at the western exit of the NSR



Figure 4. Bering Strait Area of Operations xxxiii

The narrow Strait represents a significant choke point on what will be a viable shipping route by 2030, and as sea ice continues to diminish, may challenge the Straits of Hormuz in strategic importance. This fact is acknowledged in the *Arctic Roadmap*, "The Bering Strait...will become a more important security planning consideration as maritime activity continues to increase...As the Pacific gateway for Russia's NSR, the Bering Strait will become increasingly important for seaborne trade between Europe and Asia."xxxiv

The *Roadmap* illustrates this as an opportunity for US cooperation with Russia. While this is consistent with national-level guidance, nowhere does acknowledgment of the Bering Strait's strategic importance lead to direction to prepare for control of the Strait. Yet it will be an important operational objective in a variety of possible scenarios. For example, in any military conflict with Russia, the strait is a vulnerable choke point for naval forces moving

between the Atlantic and Pacific. **xxxv* With increasing likelihood as the 21st-century progresses, potential conflicts exist where control of the Bering Strait may be an operational objective. Therefore, the US needs to develop operational initiatives to be prepared.

Operational Planning

The *Arctic Roadmap* is structured such that capabilities development will drive future operations. As a result, future Bering Strait operations will be limited by the energy and resources that the US expends at furthering Arctic capabilities. This adds significant risk, especially since "The Roadmap recognizes the need to guide investments by prudently balancing regional requirements with national goals." As the US faces significant security challenges around the world, coupled with the limited military budgets of the sequestration era, investments for Arctic capabilities are likely to fall on the short end of the balance.

Unless there is a specific need driving capability development, there will be nothing driving resource expenditure to adequately prepare for the Arctic on a timeframe that supports the required need. Operational planning for Bering Strait operations will fulfill that need. Consistent with guidance stemming from the *Arctic Roadmap*, the US should develop plans for near-term, mid-term, and far-term operations. Additionally, due to the geostrategic threats that may require a Bering Strait operation, separate plans are needed for defense of the Strait against Russia, and control of the Strait to interdict Chinese traffic.⁸

In the near and mid-term, any potential conflict between China and the US should not require planning for exploiting control of the Bering Strait. While China is increasing use of

⁸ It is unlikely that a Russian-Chinese entente will require planning for operations against both Russia AND China. Russia's continental shelf claims are the most significant threat to Chinese Arctic interests.

the NSR for European trade, the route will not support the required throughput to provide a viable Chinese SLOC to support Pacific operations until the Arctic reaches seasonal ice-free conditions. Contingency planning for Chinese conflicts should instead focus on the long-term.

By 2030, seasonal ice-free conditions will exist in the Arctic, and if the pace of development continues, it is entirely possible that infrastructure along the NSR will provide the necessary logistics to support a vital shipping route. Since China's economy is dependent on foreign trade, shutting down its international trade routes will be in US interests in the event of *any* potential conflict. After 2030, securing Chinese southern trade routes will not be sufficient. Operations will be required to interdict Chinese shipping at the Bering Strait. Joint planning is needed to identify specific needs to support sustained interdiction operations at the Strait.

Russia provides a more immediate problem. It already has a unified command structure, naval capabilities, and experience exceeding that of the US. Recent Russian activities in Ukraine and Syria highlight the potential for military conflict. Should that occur, Russia's Northern Fleet (supported by more than 40 icebreakers) from the Arctic Ocean, provides it flexibility to supplement units in the Atlantic or, by way of the Bering Strait, the Pacific. Therefore, the US must be prepared in the near-term for an operation to prevent the Northern Fleet from opening or reinforcing a potential Pacific theater of operations. Based on current US capabilities, near-term operations should leverage submarine and air operations. However, operational plans will identify risks and gaps that need to be addressed right now.

As Russian capabilities expand into mid-term and far-term phases, US operational plans will need to grow in scope. Planners should investigate the potential for full-scale major combat operations at the strait by 2030. This should identify the logistical requirements needed for such operations and will drive infrastructure and basing requirements. Operational plans should investigate requirements for (1) offensive operations onto the Chukchi Peninsula, Russia's territory on the west of Strait; (2) development of a layered coastal network; (3) utilization and/or defense of St. Lawrence and the Diomedes Islands; and (4) integration of Coast Guard icebreakers into a Naval Task Force. Planning for these operations will also aid in resolving issues for the Navy's regional chain of command.

Naval Chain of Command

The Bering Strait is at the nexus of three Geographic Combatant Commands. The western landmass of the Strait, Russia, falls under the purview of European Command (EUCOM), the southwestern Pacific approaches to the Strait are the responsibility of Pacific Command (PACOM), and the eastern landmass and northern Arctic approaches belong to Northern Command (NORTHCOM). This convergence has the potential to cause problems in the chain of command for the Bering Strait, especially for naval operations.

The Department of Defense took a significant step to clarify the chain of command when NORTHCOM was assigned responsibilities as the advocate for Arctic issues when the Unified Command Plan was revised in 2011. Defense and control of the Bering Strait, as a result, falls completely on NORTHCOM. PACOM and NORTHCOM took another step to resolve potential issues when sub-unified commands were consolidated. In 2014 PACOM's subordinate, ALASKA Command (ALCOM), was transferred to NORTHCOM. ALCOM then merged and replaced NORTHCOM's subordinate, Joint Task Force-Alaska. XXXVIII As a

result, Alaska as a whole, and therefore the Bering Strait, has a permanent sub-unified command structure in place with Army and Air Force components assigned.

Still unclear, however, is command and control of Navy units for a potential Bering Strait Operation. The Coast Guard's 17th District Commander is currently dual-hatted as ALCOM's Joint Force Maritime Component Commander (JFMCC). Unless submarines, surface combatants, amphibious ready groups and aircraft carriers are going to transfer to the operational control of a Coast Guard Commander, this command is insufficient to control the Bering Strait. However, NORTHCOM has limited options. NORTHCOM's Navy component commander is US Fleet Forces Command, co-located with their assigned forces on the east coast. Naval forces for a Bering Strait operation will be required to come from US Pacific Fleet, which is under PACOM's operational control.

The overlapping responsibilities leave a significant possibility for PACOM to run the naval battle in NORTHCOM's area of responsibility (AOR). This was evident in the last major joint exercise done in Alaska's AOR. In June 2015, ALCOM hosted Exercise NORTHERN EDGE. According to a press release from US Pacific Fleet regarding the exercise, "Major participating units this year include U.S. Pacific Command, Alaskan Command, U.S. Pacific Fleet..."xxxviiii Further confusing the chain of command issues, ALCOM's website states that "NORTHERN EDGE is one in a series of U.S. Pacific Command exercises that prepares joint forces to respond to crises in the Asia Pacific region."xxxiix

To clarify these issues, a standing arrangement should be made for Third Fleet to transfer operational control of Expeditionary Strike Group 3 (ESG-3) to ALCOM in the

event of contingency operations in the Bering Strait (see Figure 4). According to its mission statement, "ESG 3 provides regional and combatant commanders with an agile, tailorable, forward-postured and immediately employable force ...ESG 3's flexibility also allows it to be employed as a Joint Task Force or Joint Task Force Maritime Component Commander (JFMCC) to conduct multinational operations." ESG-3 is essentially a standing force waiting for a regional command to call on its service, as compared to Carrier Strike Group commanders who are routinely deployed in support of world-wide national interests.

Additionally, weather, sea states and ice provide technical challenges that still need to be overcome for fixed wing carrier air operations in the Bering Strait Region. The ESG provides more flexible capabilities that can be employed in the region, as well as the ability to command and control any variety of naval surface, subsurface, and air units. Its homeport of San Diego, CA, places it in a geographic position (especially when compared to ESG's under USFF's command) to be able to participate in Bering Strait operations.

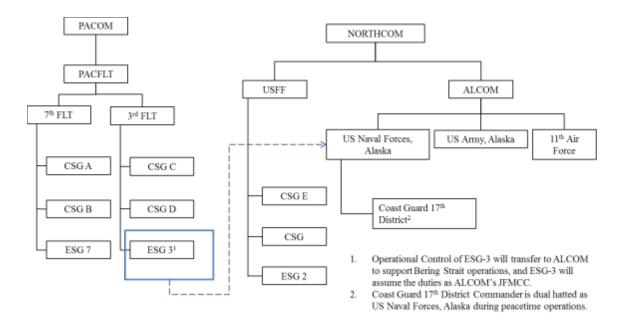


Figure 5. Proposed Bering Strait Naval Operational Chain of Command

ESG-3 provides an adequate level of command for combat operations in the Bering Strait for potential conflicts in the near and mid-term timeline (defined in the *Arctic Roadmap* as until 2020 and until 2030, respectively). As the Arctic opens and use of the Bering Strait increases, operations beyond 2030 may require Third Fleet to assume the duties as the JFMCC. Should projections for the strategic importance of the Arctic region in 2050 hold, the Navy may need to stand up a permanent naval staff specifically assigned to the region. Considerations should be made to establish a new Fleet Commander (8th Fleet, perhaps?) under the cognizance of USFF command.

Counterargument: "Zone of Peace"?

President Obama clearly lays out his vision for an Arctic region that is "peaceful, stable, and free of conflict. The United States and its Arctic allies and partners seek to sustain this spirit of trust, cooperation and collaboration, both internationally and domestically." Focusing military efforts to plan for an operation at the Bering Strait may be viewed as contrary to this spirit of international cooperation. Furthermore, increasing military presence and capabilities may present a dilemma that is counter-productive to the security of the region, as China and Russia may, in turn, increase their Arctic military capabilities. As a result, there is a strong argument to be made that the US should continue to focus on search-and-rescue and environmental disaster assistance as the main military efforts in the region.

However, national security leaders would be irresponsible *not* to plan for Bering Strait operations. Russia is building up Arctic capabilities regardless of our actions, and the US finds itself on the *opposite* end of the security dilemma. China has no capability to build up forces in the region, so the price for building US Arctic capabilities would potentially come at the detriment of US-China relations in other regions. But China's positions regarding

Arctic territorial control are contrary to similar territorial control disputes in the South China Sea (SCS). Building US Arctic capabilities is consistent with our overall policies regarding maritime legal disputes, will highlight Chinese contradictions, and aid our strategic messaging for dealing with SCS debates.

Military efforts to develop plans, build infrastructure and gain operational experience do not need to overwhelm the overall national strategic goal of international cooperation. In fact, with the right strategic messaging and integration of NATO partners, these efforts will contribute to national goals. Strategic messaging needs to ensure that the international community sees these efforts through a peaceful lens: development of infrastructure aids to the safe navigation of vessels through the Strait and increasing naval operational experience provides the nation with the ability to protect commerce and provide SAR capabilities.

Further Recommendations

The *Arctic Roadmap* provides a strong framework for improving capabilities in the region. ADM Gortney espoused the formation of the Arctic Capabilities Advocacy Working Group (ACAWG), to aid in identifying shortfalls across the spectrum of DoD operations in the Arctic. These efforts make it clear that national leaders are, in fact, driving progress. To improve this progress and ensure the US is prepared for military operations at the Bering Strait, operational plans must be developed and the Naval chain of command must be clarified. The following actions are also recommended:

⁹ Admiral Gortney, 2016 NORTHCOM Posture Statement, Mar 2016, : "Our Arctic Capabilities Advocacy Working Group (ACAWG) is a collaborative forum among DOD, interagency, and trusted international Arctic stakeholders, including geographic and functional combatant commands, the Joint Staff, the military departments and services, and DOD agencies that supports these actions."

1) Immediately commence the development of Port Clarence as a major naval base. ¹⁰ ADM Gortney highlights the challenge that today's fiscal environment brings to this task:

"Establishing a presence in the Arctic is an extremely costly proposition, with estimates running three to ten times the cost of building comparable facilities elsewhere. I believe that large fundamental infrastructure investments are not required to establish a large physical presence in the Arctic." xlii

This belief highlights that current US planning efforts are based on Arctic-presence-for-the-sake-Arctic-presence. Operational planning for defense of the Bering Strait may show, however, that infrastructure investments are required for a potential operation that is vital for the defense of the homeland.

- 2) Re-write DoD and Navy guidance to provide more attention to developing the Bering Strait AOR specifically, and to improving WARFIGHTING capabilities in the Arctic. While international cooperation and environmental stewardship are important, Defense and Navy Department guidance should not shy away from the core of their existence.
- 3) Increase training and operational deployments for surface combatants. Conduct a Bering Strait transit by September 2017. Between 2009 and 2014, the Navy operated five surface vessels north of the Arctic Circle. xliii The frequency of northern operations needs to increase to support required operational capabilities in the near and mid-term.

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¹⁰ Other possible choices for a Navy base in the Bering Strait region include Nome, Kotzebue, and the DeLong Mountain Terminal. Due to limited room for expansion and geological constraints, they are not viable for a major naval port.

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4) Speed up the timeline for additional icebreaker delivery to the USCG. Ice-breaker support will be required for extended operations in the Bering Strait region. Contingency planning needs to account for the possibility that operations will extend beyond the ice-free season.

Conclusion

To date, US efforts at building Arctic capabilities have been driven by a recognition that international trade and resource exploitation will eventually make operations in the region a strategic necessity. However, building these capabilities based on a generic idea that they will be important sometime in the future does not provide a necessity to expend waning resources to develop them in a realistic timeframe. By analyzing Russian and Chinese interests in the Arctic and evaluating the importance of the Bering Strait as a strategic choke point, it is clear that developing plans for the defense of the Strait provides the operational imperative to develop Arctic capabilities.

Endnotes

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