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**NAVAL WAR COLLEGE
Newport, R.I.**

**THE UNIFIED COMMAND PLAN: OPERATIONAL COMMAND AND CONTROL
IN THE ARCTIC**

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Maritime Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: _____

3 May 2010

Table of Contents

Introduction	1
Background	2
Northern Command, NORAD, and Canada Command	6
European Command, NATO, and Russia	10
Pacific Command and the Arctic	13
Why the Need for Change?	14
Recommendations	16
Conclusion	17
Bibliography	

List of Figures

Figure	Title	Page
1.	Unified Command Plan Areas of Responsibility	2
2.	Maritime Jurisdiction and Boundaries in the Arctic Region	4
3.	Arctic Sea Ice Age After 2009 Melt Season	5

Abstract

Arctic nations are paying more attention to their Arctic territories and in defining their respective boundaries. A more accessible Arctic opens the possibilities for shorter shipping routes, tourism, and industry through natural resource exploitation that appeals to non-Arctic nations as well. However, the Arctic poses its own set of challenges, including boundary disputes, overlapping continental shelf claims, environmental protection, and security. In order for the United States to protect its own interests, it needs a command and control structure that will encourage unified action and facilitate unity of effort. To achieve this, the boundaries as drawn by the Unified Command Plan should be revised to divide the Arctic between United States Northern Command and United States European Command.

INTRODUCTION

In August 2007, a Russian flag was planted on the seabed directly beneath the North Pole and the lead Russian explorer and Parliamentarian, Artur Chilingarov, declared in a statement that “the Arctic is ours.” Also during that same month Russia resumed its practice of conducting long-range bomber patrols over the entire Arctic.¹ Similarly, in 2007, the current Canadian Prime Minister Stephen Harper announced his desire to upgrade and procure additional Arctic patrol vessels and stated that “Canada has a choice when it comes to defending our sovereignty over the Arctic. We either use it or lose it.”² In addition to publicly denouncing Russia’s Arctic activities, Canada is taking a more confrontational stance regarding its Arctic territory after it discovered in 2005 that U.S. submarines were transiting Arctic waters off of Canada without notifying the Canadian government.³

In 2008, the National Snow and Ice Data Center recorded the second-lowest extent for the Arctic ice sheet since satellite measurements began in 1979. The lowest extent occurred in 2007.⁴ The trend continued for the September 2009 measurements, which were the third lowest extent on record.⁵ Due to the summer sea ice melt, the Arctic region has become more accessible for shipping, tourism, and resource exploitation. Not only does this

¹ Mark Galeotti, “Cold Calling—Competition Heats Up for Arctic Resources” *Jane’s Intelligence Review*, 18 September 2008 online at http://search.janes.com/Search/documentView.do?docId=/content1/janesdata/mags/jir/history/jir2008/jir10480.htm@current&pageSelected=allJanes&keyword=arctic&backPath=http://search.janes.com/Search&Prod_Name=JIR&. Accessed 20 Feb 2010.

² Jane’s Intelligence Review, “Cold Affront—Icy Reaction to Russia’s Arctic Exploration” 15 August 2007 online at http://search.janes.com/Search/documentView.do?docId=/content1/janesdata/mags/jir/history/jir2007/jir10217.htm@current&pageSelected=allJanes&keyword=arctic&backPath=http://search.janes.com/Search&Prod_Name=JIR&. Accessed 20 Feb 2010.

³ Galeotti, “Cold Calling.”

⁴ National Snow and Ice Data Center, “Arctic Sea Ice Settles at Second-Lowest, Underscores Accelerating Decline” 16 September 2008, online at <http://nsidc.org/arcticseaicenews/2008/091608.html>. Accessed 7 April 2010.

⁵ National Snow and Ice Data Center, “Arctic Report Card: Update for 2009” 19 October 2009, online at <http://www.arctic.noaa.gov/reportcard/seaice.html>. Accessed 7 April 2010.

have a strategic impact with regard to economics and diplomacy, it also has an operational impact specifically for search-and-rescue (SAR) response to support increased traffic, forward operational basing to support response efforts, environmental protection and disaster response, and security.

As the two examples above demonstrate, Arctic nations are paying more attention to their Arctic territories, especially in defining their respective boundaries. A more accessible Arctic opens the possibilities for shorter shipping routes and natural resource exploitation which appeals to even non-Arctic nations. The boundaries as drawn by the Unified Command Plan should be revised to divide the region between two combatant commanders vice three, as it is currently, in order to address emerging international tensions and to strengthen unified action and unity of effort.

BACKGROUND

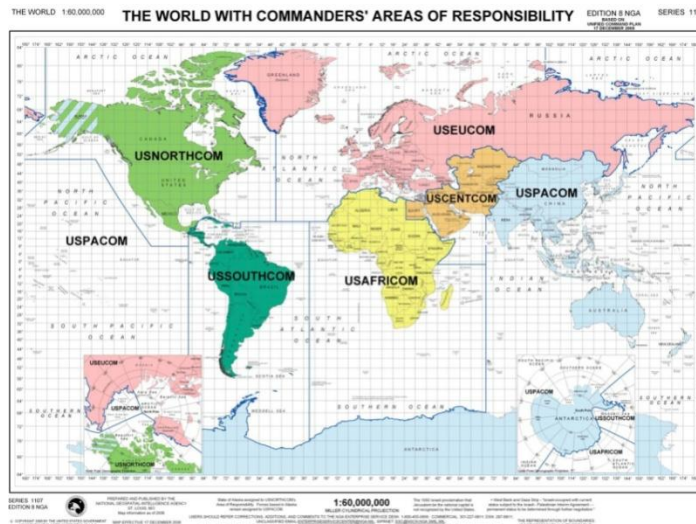


Figure 1: Unified Command Plan Areas of Responsibility⁶

⁶ United States Department of Defense, “Unified Command Plan 2008”, 17 December 2008, online at http://www.defense.gov/home/features/2009/0109_unifiedcommand/. Accessed 24 April 2010.

Figure 1 shows the Unified Command Plan (UCP) which divides the Arctic region between three combatant commands (COCOMs): United States Pacific Command (PACOM), United States European Command (EUCOM), and United States Northern Command (NORTHCOM). This arrangement prevents true unified action between the CCDRs because of resource constraints and could possibly hinder unity of effort due to competing or conflicting interests and responsibilities. For example, the EUCOM CCDR will have different Arctic concerns to manage than the NORTHCOM or PACOM CCDRs, and it could be difficult to maintain and coordinate between duplicate planning and coordinating structures at each COCOM. Additionally, Arctic operational capabilities are already limited, but are currently required to support three CCDRs. This arrangement can be remedied only to a certain extent, due to the geography and the existing relationships between the CCDRs and their respective areas of operations (AORs). These relationships will be discussed in greater detail.

In January 2009, the President of the United States issued National Security Presidential Directive-66/Homeland Security Presidential Directive-25 (NSPD-66/HSPD-25) detailing his Arctic Region Policy. The Department of Defense (DoD), with support from other federal agencies, was tasked with: 1) “developing greater capabilities and capacity” to protect Arctic borders; 2) “increase Arctic maritime domain awareness”; 3) “preserve the global mobility . . . throughout the Arctic region”; 4) “project a sovereign United States maritime presence” in the Arctic; and 5) “encourage peaceful resolution of disputes.”⁷ A national policy on the Arctic is a step forward, but the question remains: is Arctic security important enough to be mentioned in the upcoming National Security Strategy due to be

⁷ White House, *Arctic Region Policy*, National Security Presidential Directive-66/Homeland Security Presidential Directive-25, (Washington, D.C.: Office of the Press Secretary, 9 January 2009).

published shortly? If so, the President’s strategic guidance should also be filtered down through the National Defense Strategy and the National Military Strategy in order to assign priorities and responsibilities to the operational commanders. This is done through the Joint Strategic Capabilities Plan published by the Chairman of the Joint Chiefs of Staff.

Obviously, the CCDRs do not have to wait for published policy and guidance to begin research and planning. Executing the above listed tasks off the Alaska coastline within a limited focus on U.S. interests is not so complicated. However, the U.S. is pledged to cooperate with and protect our allies and partners. For this reason, it is imperative that the U.S. engage with the other Arctic nations in resolving boundary disputes, potential continental shelf claims, and establishing a maritime presence, especially for SAR, environmental protection, and homeland defense. Figure 2 shows the various boundaries, territorial waters, claims to the continental shelf, and international straits. The color codes



Figure 2: Maritime Jurisdiction and Boundaries in the Arctic Region⁸

show how complicated these are. Having the Arctic divided between three CCDRs also complicates the command structure not just for our own commanders, but for the other Arctic

⁸ Durham University, “Maritime Jurisdiction and Boundaries in the Arctic Region,” International Boundaries Research Unit, online at <http://www.dur.ac.uk/ibru/resources/arctic/>. Accessed 24 April 2010.

nations’ operational commanders as well. The division of the North Russian coastline is an excellent example to illustrate this point. Russia is divided into six military districts and one military district in particular, the Siberian military district, is divided between PACOM and EUCOM. If Russia desires to coordinate training or actual operations with the U.S., it is possible that coordination would have to take place between two CCDRs.

To address DoD operational responsibilities in the Presidential Directive, in late May 2009, the Chief of Naval Operations (CNO) directed the establishment of Task Force Climate Change (TFCC) in order to develop Arctic policy, strategy, and force structure for the Navy. The drawback is that TFCC is limited to an advisory role to the CNO and Maritime Component Commands (MCC) assigned to each COCOM. While there is value to having a central coordinating committee for the Navy, TFCC was organized to monitor the effects of climate change in general, not just the effects it has on the Arctic.

The measurements of the Arctic ice sheet over the last three years show a dramatic decline in both area coverage and thickness. Figure 3 shows the average summer coverage has retreated significantly from the period between 1981 to 2000 and 2009. Sea ice at the end of the 2009 melt season covered 2.07 million square miles. Data shows an average decline of 11.2 percent per decade. Additionally, more of the thicker, multi-year ice is melting and is being

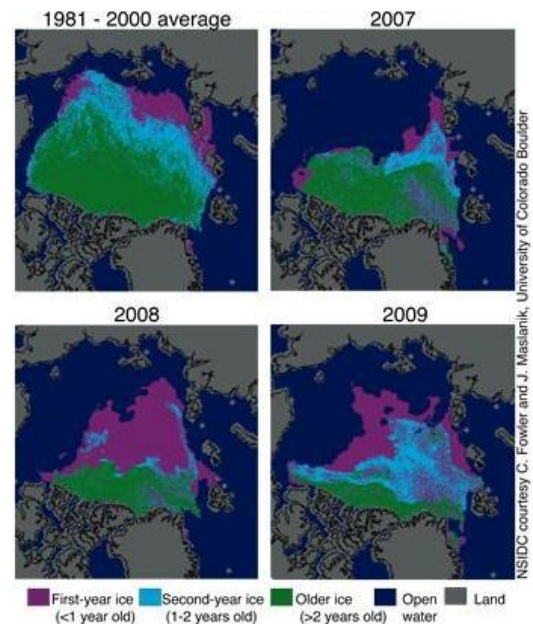


Figure 3: Arctic Sea Ice Age After 2009 Melt Season⁹

⁹ National Snow and Ice Data Center, “Arctic Sea Ice Extent Remains Low; 2009 Sees Third-Lowest Mark”, 6 October 2009, online at http://nsidc.org/news/press/20091005_minimumpr.html. Accessed 24 April 2010.

replaced by thinner, first- and second-year ice which accounted for 49 percent of the ice sheet at the end of 2009.¹⁰ This means that in the summer months a larger area is open to maritime traffic and the ice covered portion is becoming easier to clear by icebreakers. Additionally, the melting ice sheet has opened two possible international shipping routes during the minimum ice extent of the summer months: the Northwest Passage (NWP) and the Northern Sea Route (NSR).

NORTHERN COMMAND, NORAD, AND CANADA COMMAND

Northern Command will have to overcome three main challenges which will require close cooperation with our Canadian allies. The first challenge is in working through the current boundary dispute with Canada in the Beaufort Sea. Though this falls within the realm of strategic and diplomatic concerns, the effects of having this issue unresolved can impact cooperation at the operational level with our most important Arctic ally. To briefly explain, there is a triangular patch of area in the Beaufort Sea that has been proven to contain significant oil and gas reserves on the seabed beneath. Canada claims the area based on the boundaries as drawn by Russia before the U.S. purchased Alaska. The rights to the oil and gas reserves are not the only issue at stake, but fishing rights as well. This has the potential to become a contentious issue when it becomes economically feasible to extract the oil and gas from the seabed which will also require maritime transport to refineries and markets.

The second challenge involves the disagreement between the U.S. and Canada regarding the NWP, which extends from the Beaufort Sea of the north coast of Alaska through the North Canadian archipelago to Baffin Bay on the west coast of Greenland. What is at stake is a question of sovereignty and who “owns” the NWP which ultimately affects

¹⁰ Ibid.

freedom of navigation. The U.S. views the Passage as an international strait whereas Canada views it as internal waters. If Canada's position is correct, that means they have the right to monitor all shipping through the Passage and that any vessel who wishes to transit must notify the Canadian government. This impacts the operational commanders of both nations by either leaving the Passage open and relatively unrestricted or governed by Canadian regulations. This, in turn, affects how NORTHCOM and Canada will plan for SAR, environmental protection and disaster response, and security. Fortunately, the United States Coast Guard (USCG) and the Canadian Coast Guard (CCG) have a close working relationship and will continue to work together until this issue is resolved.

The third challenge is in procuring critical maritime, communication, and logistics capabilities to operate in the Arctic for both the U.S. and Canada. Neither have the capability to operate in the Arctic year-round. The icebreaker fleets of both nations are limited in numbers, many ships are reaching the end of their service lives, and, with the exception of the USCGC Healy, no new icebreaker construction is being funded or initiated. Although the Canadian Navy has some surface ships capable of operating in the Arctic waters, the United States Navy has none (excluding submarines).¹¹ A second concern is forward operating bases from which to operate. The USCG operates an air station in Kodiak which is on the southern coast of Alaska. During the summer months of 2008, the USCG was able to operate from temporary forward operating bases (FOBs) in Prudhoe Bay, Nome, and Barrow, Alaska (Prudhoe Bay and Barrow being located on what's called the North Slope, on the northern coast of Alaska). The USCG is well aware of the emerging importance of permanent FOBs

¹¹ Michael Byers, *Who Owns the Arctic? Understanding Sovereignty Disputes in the North*, (Vancouver: D&M Publishers, Inc., 2010), p. 62.

on the North Slope.¹² In considering just the lack of maritime resources and operating bases, the Arctic is left unmonitored for much of the year. Though there is a lack of military assets, the private sector has not lagged in developing ice-capable ships. The industry is being driven by both oil and gas companies as well as the tourism industry for cruise ships.¹³ Technology and industry can support providing the resources, but the U.S. government needs to provide the funding to procure the appropriate equipment.

On the Canadian side, as stated in Canada's two primary strategy documents, Canada is committed to effective stewardship of its Arctic resources. One of the main tenets in Canada's current defense strategy is to increase current defense spending from \$18 billion annually to \$30 billion by 2027-2028.¹⁴ One of Canada's main acquisition priorities is to procure up to eight patrol boats capable of operating along the Arctic shoreline which is relatively open or covered only with younger, thinner ice.

For Arctic issues specifically, the Canadian government published *Canada's Northern Strategy* that provides a holistic approach to its Arctic territory. The strategy's four main pillars are: "exercising our Arctic sovereignty; promoting social and economic development; protecting the North's environmental heritage; and improving and developing northern governance."¹⁵ To accomplish these objectives, the Canadian government will establish a training center in Resolute Bay in the NWP, expand its force of Canadian Rangers, build a deep-water fueling and maintenance facility in the NWP, and, in addition to

¹² United States Coast Guard, "Report to Congress: U.S. Coast Guard Polar Operations", online at http://www.uscg.mil/hq/cg5/cg513/docs/FY08_OMNIBUS_Polar_Ops_Report.pdf. Accessed 24 April 2010.

¹³ Scott G. Borgerson, "Arctic Meltdown: The Economic and Security Implications of Global Warming," *Foreign Affairs*, Vol. 87, Iss. 2, (Mar/Apr 2008), p. 3. Author states that as of 2005 there were "262 ice-class ships in service worldwide and 234 more on order."

¹⁴ Department of National Defence, *Canada First: Defence Strategy*, 18 June 2009 online at <http://www.forces.gc.ca/site/pri/first-premier/index-eng.asp>. Accessed 10 Apr 2010.

¹⁵ Government of Canada, *Canada's Northern Strategy: Our North, Our Heritage, Our Future*, (Ottawa: 2009) online at <http://www.northernstrategy.ca/cns/cns-eng.asp>. p. 2. Accessed 10 Apr 2010.

the patrol boats, procure a new heavy icebreaker.¹⁶ What this shows is Canada's desire to establish a military presence in its Arctic territory and to take a proactive role in meeting future challenges an open Arctic may present.

Canada demonstrated its willingness to cooperate with the U.S. by establishing Canada Command in February 2006 in response to the attacks of September 11, 2001 and the subsequent formation of NORTHCOM. Its purpose is to be a "single military command for domestic and continental operations" and, embedded in its mission statement, to be the "operational link with U.S. Northern Command." Instead of coordinating with three separate services (Army, Navy, and Air Force), the Canada Command commander is the single point of contact for the NORTHCOM CCDR. Most importantly, both commands are structured for homeland defense and civil support and complement each other in this regard.¹⁷

Northern Command and Canada Command are tied together by a third organization, the North American Aerospace Defense Command (NORAD), which was established in 1958 to provide aerospace warning and aerospace control over North America. NORAD is a bi-national command commanded by the NORTHCOM CCDR assisted by a Canadian Deputy. The NORAD agreement was recently renewed, in 2006, with the added mission of maritime warning.¹⁸

Given these three cooperative operational-level organizations, the Commander, NORTHCOM is poised to cooperate and coordinate with the Canadians in managing Arctic concerns. Rather than invest in resources and capabilities on a unilateral basis, the U.S. and Canada have an opportunity to combine efforts and operate in a bi-lateral relationship.

¹⁶ Ibid., 10.

¹⁷ Canada Command, "Background" and "Mission Statement" online at <http://www.canadacom.forces.gc.ca/site/mis-mis-eng.asp>. Accessed 29 April 2010.

¹⁸ North American Aerospace Command, "About NORAD" online at <http://www.norad.mil/about/index.html>. Accessed 29 April 2010.

EUROPEAN COMMAND, NATO, AND RUSSIA

Maintaining EUCOM engagement in the Arctic is necessary due to the habitual relationships established between EUCOM, NATO, and Russia. The European Union (EU) has also become engaged in Arctic issues since three of its members are Arctic states. Though the EUCOM CCDR does not deal with the EU directly, there are councils and organizations active within Europe that the CCDR is better positioned to consider while developing Arctic operational plans than either the PACOM or NORTHCOM CCDR.

Two of the Arctic states—Finland and Sweden—are EU member states along with Denmark, which governs Greenland. The EU Council stated the objective of establishing a “broader and more structured relationship with Greenland” within the EU-Greenland Partnership.¹⁹ Though Iceland and Norway are not members of the EU, they are members of the Arctic European Economic Area. Additionally, there is also a Northern Dimension Policy that involves the EU, Iceland, Norway, and Russia. The bottom line is that the EU is going to be an important Intra-governmental Organization (IGO) through which Arctic policy will be considered and with whom the EUCOM CCDR will have to cooperate.

The EUCOM CCDR will have considerable influence on Arctic security policy and planning through his assignment as Supreme Allied Commander Europe (SACEUR). Admiral James Stavridis went on record in October 2009 recognizing that the Arctic could become a “zone of conflict” while expressing the hope that it would be characterized as a “zone of cooperation.”²⁰ The EUCOM CCDR has an opportunity to leverage resources from

¹⁹ Council of the European Union, *Council Conclusions on Arctic Issues*, 8 December 2009, online at http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/EN/foraff/111814.pdf, p. 5. Accessed 16 April 2010.

²⁰ John Vandiver, “NATO Commander Sees Arctic Seabed as Cooperative Zone” *Stars and Stripes*, 10 October 2009, online at <http://www.stripes.com/article.asp?section=104&article=65289#>. Accessed 16 April 2010.

the European community in a multi-lateral cooperative endeavor in order to ensure Arctic security and freedom of navigation in the European theater.

Russia will provide the biggest challenge to the EUCOM CCDR in managing boundary disputes with other EU/NATO members and in using the trade routes through the NSR. The NSR runs along the northern coast of Russia, and is an open shipping route during the summer months. In comparison with the other Arctic nations, Russia is, by far, the most proactive in managing and developing its Arctic territory. Russia was the first Arctic state to file a claim to extend its continental shelf under the United Nations Convention on the Law of the Sea (UNCLOS) in 2001. Russia claims that an undersea mountain range called the Lomonosov Ridge, which extends from Russia, under the North Pole, to Greenland, is an extension of their continental shelf and conducted a mapping expedition and geological research to prove it.²¹ Their claim was originally denied, but if the appeal is determined in Russia's favor, Russia would have a claim over a significant portion of the Arctic Ocean up to the North Pole.

Of operational importance, Russia has the largest icebreaker fleet consisting of eighteen icebreakers, seven of which are nuclear powered.²² This type of icebreaker can operate year-round and Russia plans to add three more to its inventory by 2016.²³ Russia claims that the NSR, as well as the straits between the mainland and its archipelagos, are internal waters subject to their jurisdiction. This could become a point of contention where

²¹ Peter Brookes, "Polar Politics: Arctic Security Heats Up" *Armed Forces Journal*, November 2008, available at <http://proquest.umi.com/pqdweb?did=1778854371&sid=1&Fmt=3&clientId=18762&RQT=309&VName=PQD> Accessed 27 March 2010.

²² Claes Lykke Ragner, "The Northern Sea Route," *Norden Association Yearbook for 2008*, (Stockholm: 2008) online at <http://www.fni.no/doc&pdf/clar-norden-nsr-en.pdf>. Accessed 24 April 2010. Borgerson, p. 1.

²³ James Kraska, "Northern Exposures," *The American Interest Magazine*, (May/June 2010), online at <http://www.the-american-interest.com/article.cfm?piece=810>. Accessed 15 April 2010.

shipping is concerned since scientists predict the NSR will open before the NWP. Russia has been intensely interested in developing the NSR as a viable shipping lane since 1991.²⁴

Though Russia has been accused of posturing and using inflammatory rhetoric in asserting its Arctic sovereignty in the past, in recent years Russia has taken a more cooperative posture. In March 2009, Russia released its Arctic strategy (only available in Russian). Though the document stresses cooperation with the other Arctic nations, it also makes it clear that it intends to boost its search and rescue capability, support infrastructure, communications and surveillance, and defenses by forming a special purpose force to operate in the Arctic.²⁵

Another potential issue among the European Arctic nations is the condition of Greenland. Like Antarctica, most of Greenland (80 percent) is covered by ice, some of it thousands of years old.²⁶ However, like the Arctic ice sheet, the Greenland ice sheet has shown an accelerated rate of melting that corresponds to a rise in temperature observed since the 1980s.²⁷ Though it will be some time before the ice sheet melts significantly, a more accessible Greenland will lead to an increased population, access to more natural resources, and a change in its international importance. Greenland is currently governed by Denmark and receives subsidies through the EU-Greenland Partnership. However, already there is a rising independence movement by the Community of the People who ultimately seek independence from Denmark. The U.S. operates Thule Air Base, on the west coast of

²⁴ Ragner, "The Northern Sea Route," p.3.

²⁵ Katarzyna Zysk, "Russia's Arctic Strategy: Ambitions and Constraints," *Joint Forces Quarterly*, Issue 57 (2d Qtr 2010), p. 107.

²⁶ Arctic Monitoring and Assessment Programme, "Summary—The Greenland Ice Sheet in a Changing Climate," (Norway, 2009), p. 2.

²⁷ *Ibid.*, p. 5.

Greenland, close to the entrance to the NWP on the Canadian side of the Passage. Greenland independence will change both the strategic and operational dynamics in the Arctic region.²⁸

Because of these dynamics in place in the European theater, the EUCOM CCDR is best positioned to ensure North America's Arctic interests are not overlooked. Expecting one CCDR to oversee emerging Arctic issues within Europe and North America would be unrealistic. The DoD should continue to leverage the relationships already in place between the two COCOMs and their respective areas of responsibility.

PACIFIC COMMAND AND THE ARCTIC

Pacific Command is the third COCOM that has Arctic territory assigned to its AOR. However, PACOM's assignment of Arctic territory makes very little sense operationally because it facilitates a confusing command relationship. This arrangement splits activities between EUCOM, NORTHCOM, and PACOM and not only hinders unity of command but, possibly, unity of effort.

As currently drawn, PACOM is responsible for a significant portion of the Arctic Ocean and the Russian coastline, to include slicing through the middle of the Bering Strait (a choke-point between Alaska and Russia). Pacific Command's assignment clearly includes the NSR, but only a portion of it, up to the islands that separate the Kara Sea (within the EUCOM AOR) from the Laptev Sea (PACOM AOR). As stated above, this dividing line does not correspond with the boundaries of the Russian military districts.

Of particular interest, PACOM and NORTHCOM share a unique relationship in regard to Alaska. NORTHCOM is responsible for the territory of Alaska but the forces stationed there belong to PACOM, under one of its sub-unified commands, Alaskan

²⁸ STRATFOR Global Intelligence, "Greenland: An Opposition Victory and the Competition for the Arctic", 3 June 2009, online at http://www.stratfor.com/analysis/20090603_greenland_opposition_victory_and_competition_arctic. Accessed 29 April 2010.

Command.²⁹ However, the same staff for Alaskan Command dual-hats as the staff for Joint Task Force-Alaska (JTF-AK) under NORTHCOM. Commander, PACOM conducts an annual joint training exercise in Alaska called Operation Northern Edge, but NORTHCOM also conducts a training exercise called Alaska Shield/Arctic Edge with its own forces, the primary training audience being JTF-AK and NORAD. The issue at stake is not duplication of effort, but conducting training under two different command structures, when there is only one Commander responsible for the territory of Alaska and defense of the homeland.

The Commander, PACOM is responsible for a large AOR that contains the potential for high-intensity conflict based on the emerging importance of India and China and the recent posturing by North Korea. Monitoring the Arctic will not, understandably, be a priority for planning and resources for the PACOM CCDR. Therefore, the UCP should relieve him of this assignment so that his efforts will be better focused where they are most needed.

WHY THE NEED FOR CHANGE?

Whether one believes in climate change or global warming or not, data show a significant retreat of the Arctic ice sheet (see Figure 3). Unfortunately, the International Panel on Climate Change (IPCC), the leading body of scientists dedicated to determining the cause and extent of climate change, was surrounded by controversy in recent months regarding intentional withholding of data that may disprove climate change or at least weaken the argument that it is as dire as predicted.

Regardless of the data on warming trends from the IPCC, the National Snow and Ice Data Center (NSIDC) has recorded measurements of the Arctic ice sheet since 1979 and the

²⁹ USPACOM Website at http://www.pacom.mil/web/site_pages/uspacom/history.shtml. (Accessed 7 Apr 2010); DoD website at <http://www.defense.gov/news/newsarticle.aspx?id=44159>. (Accessed 7 Apr 2010).

ice sheet reached its lowest levels for three consecutive years between 2007 and 2009. The most notable measurements are in the multi-year ice which is the thicker ice that impedes maritime traffic. As shown in Figure 3, the multi-year ice is also retreating significantly and both the NWP and NSR are completely open during the summer months.

A second argument is that since China has taken an active interest in Arctic exploration and operates its own icebreaker, PACOM should remain engaged in the Arctic in order to influence China. China has, in fact, conducted three Arctic expeditions with another one planned for the summer of 2010. And, in 2009, the government authorized the building of a new icebreaker projected to be operational by 2013.³⁰ Though China is primarily interested in the environmental impact a warming Arctic might have, China would benefit greatly from the cost and time savings from shortened shipping routes that an ice-free Arctic could provide. Although China may be the most active competitor for Arctic exploration among non-Arctic nations, that alone does not necessarily mean that the PACOM CCDR cannot influence China without being assigned territory. The whole world is interested in the Arctic but it is not feasible to give every CCDR Arctic responsibilities.

Third, some may argue that the current command structure is not broken so there is no need to fix it. Africa Command (AFRICOM) is divided between two geographic CCDRs as well. However, AFRICOM is divided along cultural lines and geographic boundaries and the division is clear, unlike the sharing of Alaska between PACOM and NORTHCOM. For the significant issues the Arctic will generate, it is best to adjust now, before the system breaks.

³⁰ Linda Jakobson, "China Prepares for an Ice-Free Arctic," *SIPRI Insights on Peace and Security*, No. 2010/2 (March 2010), p.1.

CONCLUSION

The Arctic is changing and assuming the spotlight on the international stage. The U.S. can no longer ignore the strategic importance of the Arctic and the demands that will be placed on the operational commanders to ensure security and freedom of navigation as well as supporting ongoing scientific research. Now is the time to assuage the tensions caused by the rhetoric and posturing of some of the Arctic nations. The U.S. should take a leadership role and work with the international community to solve the boundary disputes, continue scientific research, and ensure freedom of navigation to all who wish to transit the Arctic as it becomes ice-free for longer periods of time throughout the year.

RECOMMENDATIONS

Based on the above discussion, the following recommendations will be made. First, to facilitate unified action and de-conflict operational planning, the Arctic region should be divided between EUCOM and NORTHCOM. Because of its role in homeland security and because it will oversee American interests in our own Arctic territory, NORTHCOM should be given priority in planning guidance and resources to further develop Arctic operational policy and assessing capabilities shortfalls and requirements.

Second, the division of forces and territory between NORTHCOM and PACOM in Alaska needs to be re-assessed for relevancy and practicality. National and state politics, if that is the driving factor behind the division, need to be set aside for the common goal of providing homeland security and managing our Arctic territory. Alaska should be assigned to one CCDR and it should be NORTHCOM.

Third, since TFCC is currently looking at all aspects of climate change, the NORTHCOM and EUCOM CCDR should establish their own JIACGs with full coordination

authority which should be composed of representatives that can advise on a range of issues that span the areas of diplomacy, environmental protection, science of climate change, maritime law, and disaster response and preparedness. As stated in the *Commander's Handbook for the Joint Interagency Coordination Group* issued by Joint Forces Command in March 2007, "the JIACG is a fully integrated participant on the CDR's staff with a daily focus on joint strategic planning with its three subsets: security cooperation planning, joint operation planning, and force planning."³¹ As it stands now, TFCC is led by a single service with no advisory role to any specific CDR.

Last, even in the absence of specific guidance, it is clear the USCG and the U.S. Navy has very limited Arctic operational capabilities. It is also clear that the potential for conflict exists not only among the Arctic nations but among non-Arctic nations who want to reap the benefits of an accessible Arctic rich in natural resources. Therefore, NORTHCOM should initiate a capabilities assessment in coordination with the USCG and CCG to determine how to best leverage the partnership between the U.S. and Canada in sharing monitoring and policing responsibilities. Combatant Commanders as well as Service Component Commanders can plan on working with shrinking budgets in the coming years but without the corresponding decrease in responsibilities. The best way to manage the lack of capability and long lead-times for procurement of assets such as icebreakers is to share the resource burden with Canada under a mutual agreement that they also will invest in Arctic operational assets.

³¹ Joint Forces Command, *Commander's Handbook for the Joint Interagency Coordination Group*, 1 March 2007, online at http://www.dtic.mil/doctrine/doctrine/jwfc/jiacg_hanbook.pdf, p. vi. Accessed 24 April 2010.

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