Shifting Currents in the Arctic

Perspectives from Three Arctic Littoral States

The Arctic is a beautiful but demanding region. The sun sets in October and does not return until March; temperatures average 32 degrees Fahrenheit in the summer and -40 degrees Fahrenheit in winter; and infrastructure is limited or absent. It is a place of many contradictions, no more so than now, when economic activity is increasing and national, geostrategic interests are confronting established practices of international cooperation and rules and norms.

Russian president Vladimir Putin’s speech at the Arctic International Forum in St. Petersburg earlier this month foreshadowed this confrontation. He portrayed Russia as a facilitator in the making the Northern Sea Route (NSR) “safe and commercially feasible” for all nations, even as Russia is acting in contravention of international law by charging application fees and harbor/navigation costs. (Russia views the NSR as an internal passage; the international community views it as an international passage.) Equally, though Putin has denied any military tension in the Arctic, Russia is sending new units and capabilities to the region, including a new Arctic rifle brigade and S-400 missile systems, and conducting live-fire naval drills.

Three Arctic coastal nations and NATO members represented in the essays below—Canada, the Kingdom of Denmark, and the United States—are well aware of the contradictions, challenges, and opportunities presented by increased economic and military activity in the Arctic and are adjusting their strategies and resources accordingly. While each approach is unique, there are several common elements. These include an increased focus on maritime surveillance and situational awareness, investment in more sustainable, survivable platforms, and a doubling down on joint and whole-of-government approaches to reflect the multiple missions in the Arctic. Where there are differences, they mainly concern whether and how to address actions that challenge established norms and international law.
In this edition of *Northern Connections*, CSIS brings you three experienced and distinguished practitioners on the topic of “Shifting Currents in the Arctic.”

The first is Admiral Paul Zukunft (ret.), former commandant of the U.S. Coast Guard. In “Navigating the Fourth Coast,” Admiral Zukunft explains that, although advancing U.S. security interests in the Arctic has been a priority since 2013, the necessary U.S. investments have not followed. The 2017 U.S. Arctic Strategy is in need of an update, and it is only this year that the U.S. Navy received an appropriation to build a heavy icebreaker. It would require extensive planning and operational creativity for the United States to successfully conduct a freedom of navigation exercise through the NSR. Nevertheless, Admiral Zukunft argues the United States should conduct such an exercise now before the window of opportunity to ensure international norms is closed.

Our second contributor is Major General Kim J. Jørgensen, commander of Denmark’s Joint Arctic Command in Nuuk, Greenland. He explains that, uniquely, the Kingdom of Denmark consists of Denmark, Greenland, and the Faroe Islands, located at the center of the Arctic. While Greenland and the Faroe Islands have considerable autonomy within the Kingdom, a number of tasks, including defense, are a Danish responsibility. Denmark works in close cooperation with the Greenlanders and Faroese as well as international partners to ensure the Arctic remains a peaceful, secure, and collaborative space. Major General Jørgensen highlights how the Kingdom of Denmark is expanding its capabilities and reach in the Arctic. This year, its two classes of frigates—equipped with new sensors, command and control, and weapons capabilities—will join its specialized Arctic naval vessels in operating as part of Joint Arctic Command for the first time. Maritime surveillance will also be enhanced by satellites and maritime surveillance aircraft from the Royal Danish Air Force, specially modified for the harsh Arctic environment.

Our final voice is Rear-Admiral Craig Baines, commander of Canada’s Maritime Forces Atlantic. With more than 75 percent of its coastline in the Arctic region, Canada remains focused on ensuring maritime safety and security in the Arctic. Rear-Admiral Baines lays out Canada’s cooperative approach to the region, which involves working with indigenous peoples, across government departments, and with other nations through NATO. He highlights investments Canada is making to increase its sustainability and reach in the Arctic, such as the establishment of a new fueling facility in the north and deployment of Arctic and offshore patrol vessels fitted with ice-strengthened hulls, advanced communications networks, and sealift capability.

The focus of all three former and current practitioners is to ensure that the Arctic remains a cooperative as opposed to competitive space, but it is clear that an increased focus and investment by Arctic coastal nations is required to meet this level of ambition.

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In mid-winter 2016, as commandant of the U.S. Coast Guard, the White House’s Arctic Executive Steering Committee asked me what milestones had been achieved regarding the implementation of the 2013 National Strategy for the Arctic Region. One of the strategy’s top priorities was advancing U.S. security interests in the Arctic with an emphasis on preservation of freedom of the seas. Unfortunately, I had to report that no tangible progress in this area had been made. To rectify this, a concept of operations was developed to deploy the nation’s only heavy ice breaker, Coast Guard cutter Polar Star, on a freedom of navigation operation (FONOP) through the Northern Sea Route (NSR).

The United States and most of the international community, including the European Union, recognize the NSR as an international strait. Russia views the route as internal waters. There is a similar challenge with the Northwest Passage (NWP): the United States and the international community view the passage as an international strait, but Canada views the passage as internal waters. When the United States conducted its last freedom of navigation operation (FONOP) in the Arctic in 1988 through the NWP, the United States notified and received the consent of the Canadian government. The United States has not conducted a FONOP through the NSR since the earliest days of the Cold War when scientific vessels were deployed. In the mid-1960s, the United States tested the NSR but was turned back by the Soviet Union.

Could the United States attempt to conduct a FONOP today through the NSR? Back in 2016, the Polar Star was entering its 40th year of service, was operating mostly in the Antarctic, and was mission capable only by virtue of cannibalizing obsolete parts from her sister ship, Polar Sea. The potential of the Polar Star experiencing a catastrophic engineering casualty while in transit through the NSR was a valid concern, as was the specter of having to call upon Russia to render assistance. It was with this in mind that I weighed the White House’s request but ultimately decided it was not feasible.

To date, the United States has yet to demonstrate freedom of navigation through the NSR, although the secretary of the Navy announced in January 2019 that the United States will conduct a limited FONOP off the Aleutian Islands later this year. This would be the first time the U.S. Navy has conducted such an operation in the Arctic. The effort is still in the planning phase, with ports and ships yet to be identified, but it is an important step in improving the Navy’s ability to operate in the far north.
Why is it important for the United States to ensure freedom of navigation in the Arctic? Sea ice continues to recede to the point where scientists project seasonal periods of an entirely ice-free Arctic Ocean. Ice capable vessels and China’s medium icebreaker, Xue Long, are already transiting the NSR during the relatively ice-free season (late summer to early fall), albeit under Russian icebreaker escort. Liquified natural gas tank ships from multiple flag states are transporting this product from the Russian Arctic to international markets. Through its Northern Sea Route Administration, Russia charges application fees and associated harbor and navigation costs, which contradicts the UN Law of the Sea Convention without consequences. By doing so, Russia is gradually setting a pattern of behavior designed to codify by customary practice the internal nature of and its sovereign control over the NSR.

Given these developments, what, if anything, should the United States and other like-minded countries do to respond? The United States has limited options. The Navy does not have ice capable ships in its inventory. Although there is now an appropriation for $675 million for a heavy ice breaker for fiscal year 2019, there is not a contract among the competing shipyards nor the cutting of steel necessary to recapitalize the United States’ heavy icebreaker fleet within the next several years (the earliest delivery being 2024). Nevertheless, with some creativity and careful planning, the United States could feasibly conduct a FONOP in the Arctic, but it will require four elements: platforms, planning, command and control, and crew.

In terms of a platform, the United States’ medium ice breaker, Healy, is a viable candidate for a FONOP, provided a few modifications are made. She can operate in temperatures as low as -50 degrees Fahrenheit, and she can break 4.5 feet of ice at a speed of 3 knots and 10 feet of ice by backing and ramming. In fact, she sailed to the North Pole unescorted on September 5, 2015. Healy was designed as a scientific research vessel and is outfitted with state-of-the-art laboratories, deck handling equipment, and scientific-related sensors to include unmanned aerial systems. She can hangar two HH-65 helicopters. That aside, Healy is not equipped with offensive and defensive armament systems and, as with all ships operating in the extreme high latitudes, has limited bandwidth that will impede real-time exchange of data and information absent either a dedicated space-based or fixed-wing relay station. If Healy were to be used for FONOP operations, it would be prudent to retrofit her with an array, augmented with technicians as well as watch standers to detect land, air, and maritime electronic emissions.

The second element is command and control. Under the 2011 Unified Campaign Plan, U.S. Northern Command and U.S. European Command share command and control authorities in the Arctic, but for this particular exercise, primacy would likely reside with Northern Command. Additionally, engagement from a number of government agencies, including the Department of Commerce, the National Oceanic and Atmospheric Administration, the Department of Homeland Security, the U.S. Coast Guard, the National Science Foundation, tribal liaisons, the State of Alaska, and the Department of State is needed. Joint Task Force Alaska, a subcomponent of Northern
Command that is headquartered at Joint Base Elmendorf-Richardson in Anchorage, is the logical command and control repository. It would need to be expanded into a joint interagency task force (JIATF) and, ideally, be retitled JIATF-Arctic.

Third, there needs to be a focus on planning. A successful FONOP in the Arctic will require detailed planning to include a concept of operations, C4ISR, and clear rules of engagement. It should also incorporate branches and sequels to account for escalatory resistance and/or aggression from Russia. The United States should clarify in the plan and in official notifications that the FONOP would exercise a right of transit passage (as opposed to innocent passage). The United States views the NSR as an international strait (and not Russian internal waters) and maintains that the use of straight baselines by Russia to close these international straights is inconsistent with the UN Convention on the Law of the Sea. Transit passage, which cannot be suspended, allows for “the exercise of freedom of navigation and overflight solely for the purpose of continuous and expeditious transit in normal modes of operation.” Importantly, this allows U.S. surface warships to transit in a manner necessary for their security, to include formation steaming and launch and recovery of aircraft.

Finally, there is the matter of crewing to include those augmentation detachments. In addition to Healy’s complement of 19 officers and 66 crew members, she can accommodate up to 51 additional personnel as dictated by the mission. To be successful, the United States needs to train the next generation of mariners to manage polar waters. The Navy’s renewed focus on surface navigation and the U.S. Marine Corps’ expanded cold-weather training are steps in the right direction. There is also an opportunity here for the Coast Guard to transfer its extensive experience in these areas to the Navy through training and mentoring arrangements; augmenting the Healy crew with U.S. naval personnel would provide valuable exposure to surface operations in ice conditions, something the Navy hasn’t done in over five decades.

The above elements provide a rough checklist for the National Security Council and other stakeholders to consider when weighing the merits and costs of conducting a FONOP in the Arctic. What is certain is that the landscape has changed dramatically since the release of the National Strategy for the Arctic Region in 2013. As the sea ice retreats at unprecedented rates, more of the Arctic Ocean is open to seafarers. The window of opportunity to ensure international norms are protected could be rapidly closing while Russia shapes customary practices and norms by exerting sovereignty over the NSR. The United States can either assert now or abdicate later.

Admiral Paul Zukunft (retired) served as the 25th Commandant of the United States Coast Guard from 2014-2018. He currently serves on the Advisory Board of The Center for Climate and Security.
The Kingdom of Denmark, which consists of Denmark, Greenland, and the Faroe Islands, is located at the center of the Arctic. While Greenland and the Faroe Islands have considerable autonomy within the kingdom, Denmark is responsible for defense.

The majority of Greenland lies above the Arctic Circle. Its area is vast and corresponds to one and a half times the area of Alaska. The conditions in Greenland are characterized by a challenging climate, extreme distances, limited population, and a lack of infrastructure that one must experience firsthand to fully understand the operational challenges. More than 80 percent of Greenland is covered by a permanent icecap up to three kilometers thick. Major parts of northern and eastern Greenland are uninhabited save the occasional military patrol or scientist and the U.S. Air Base at Thule in the northwest.

Today, significant changes are taking place in the Arctic, from climate change to technological developments. While these can bring new economic and development opportunities to the region, they also present new challenges. It is the objective of the Kingdom of Denmark – working within the Kingdom and with international partners – to ensure the Arctic remains a peaceful, secure, and collaborative space.

**Danish Defense Priorities**

The 2019-2020 Danish Foreign and Security Policy Strategy states that ensuring a peaceful Arctic with sustainable economic development is a priority for the Kingdom of Denmark. The Arctic features prominently both in the Defence Agreement (2018-2023) and Strategy for the Arctic (2011-2020).

The current Defence Agreement, which covers 2018-2023, substantially increases defense spending to bolster the capabilities of the Danish armed forces, with a particular emphasis on increasing Denmark’s contribution to the North Atlantic Treaty Organization’s collective defense, including in the Arctic. The agreement provides funding for programs to add area air defense capabilities to Royal Danish Navy (RDN) frigates and anti-submarine warfare sensors and weapons to a number of maritime and airborne platforms, establish a deployable mechanized brigade, continue funding for acquisition of modern combat aircraft (F-35) as replacement for the current F-16s, substantially increase cyber capabilities, and continue the process of strengthening the Danish Joint Arctic Command.

**The Joint Arctic Command**

The Joint Arctic Command is the Danish operational theater command for the Greenland and Faroe Islands areas. Our mission is to protect the kingdom in the Arctic. The command
headquarters is in Nuuk, Greenland with units and installations spanning five time zones from western Greenland to the Faroe Islands. The Joint Arctic Command conducts operations year-round at sea, in the air, and on land (or on the ice). The majority of the units are dedicated to Arctic operations and have special skill sets needed in order to survive and operate in the Arctic environment. For example, the naval units are specially designed Arctic patrol frigates and vessels constructed for icy conditions, and they regularly assist civilian shipping with breaking the ice.

The Joint Arctic Command is a truly joint command directing maritime, air, and land units. The headquarters is staffed with personnel from the RDN, the Royal Danish Air Force (RDAF), the Royal Danish Army, the Danish Home Guard (equivalent of the U.S. National Guard), the Danish Emergency Management Agency, and civilian employees recruited locally in Greenland and the Faroe Islands. Reserves play an important role in daily and emergency manning. This joint approach reflects the diverse tasks of the Joint Arctic Command, which include upholding Danish sovereignty, conducting search and rescue, combating oil spills, policing the resources in the exclusive economic zone, supporting police and civilian authorities, and, ultimately, defense of Greenland and the Faroe Islands.

The Joint Arctic Command is in the process of expanding its capabilities and reach based on recent political decisions to improve Danish military presence and capability in the Arctic. A major part of the command’s daily operations is focused on maritime surveillance and establishing the best possible domain awareness in the area. Beginning this year, the specialized Arctic naval vessels will be joined by Denmark’s Iver Huitfeld-class and Absalon-class ships, which for the first time will operate as part of Joint Arctic Command. The ships will bring a host of new sensor, command and control, and weapon capabilities to the area and will herald a new chapter in Danish Arctic operations. These vessels are equipped with MH-60R Seahawk helicopters. Maritime surveillance is further enhanced by satellite surveillance and Challenger maritime surveillance aircraft from the RDAF, which are equipped with advanced sensors and modified for operations from snow, ice, or gravel strips in Greenland.

Denmark also has a formidable land capability in Greenland, where land operations are primarily conducted by special forces trained in Arctic operations. The primary unit is the Sirius Patrol, whose mobility is based on dog sleds—the traditional Greenlandic means of transportation that has proven best suited for the conditions in Greenland, where logistical support is often absent. After Arctic training, the Sirius Patrol soldiers are inserted into the uninhabited northeastern Greenland by air and patrol the area continuously for two years.

Recently, the Joint Arctic Command has begun focusing on improving interoperability with allies and partners. This often takes the form of exercises with the United States, Canada, Iceland, and, increasingly, France. In April 2019, the Joint Arctic Command for the first time participated in an exercise in the eastern Baltic Sea—far from Greenland and the Faroe Islands—offering an opportunity to exercise search and rescue operations with the
The Kingdom of Denmark is prepared to meet both its national and international obligations in the Arctic to ensure it remains a region characterized by peace and cooperation. In this regard, the Joint Arctic Command will improve its ability to contribute to Arctic security.

Major General Kim J. Jørgensen is an Air Force officer and commander of the Danish Joint Arctic Command since 2016. He is the Danish minister of defense's primary advisor on affairs with Greenland and the Faroe Islands as well as general Arctic affairs related to defense.

Strong, Secure, and Engaged in the Canadian North

Rear Admiral Craig A. Baines, Commander, Maritime Forces Atlantic

The Arctic is relevant to all three of Canada’s core national security interests as defined in its national security policy: protecting Canada and Canadians at home and abroad, ensuring Canada is not a base for threats to its allies, and contributing to international security. The Canadian Arctic region encompasses more than 182,000 kilometers (or 75 percent), of the country’s national coastline with 36,563 islands. Not surprisingly, Canada is also home to the second largest search and rescue zone among all Arctic states. This region is a fundamental part of Canada, though its harsh climate and limited infrastructure present a challenge. Canada’s government is mandated to preserve the long-standing peace in the region in the face of growing global interests, and the Royal Canadian Navy (RCN) is well positioned to meet new demands critical to the safety and stability of the region.

Many government departments are responsible for providing essential services to northern communities and the Arctic region; however, they are limited in their resources and capacity, especially given the challenges of operating in the region. Canada’s defense
policy, *Strong, Secure and Engaged*, recognizes that keeping the Canadian north secure requires cooperation with the peoples of the north, other government partners, and allies in order to advance shared interests on safety and security in the region. This includes cooperation with the North Atlantic Treaty Organization (NATO).

With that in mind, the RCN is in the process of launching six Harry DeWolf-class (HDW) Arctic patrol vessels in the next 6 years, with the first being brought to service in 2019. HDW vessels have a range of 6,800 nm with 120 days of logistical endurance. The ships are fitted with a Polar Class 5 ice-strengthened hull, which allows for year-round operations in one-meter-thick first-year ice with multi-year ice inclusions. The communications on board these ships are designed to provide robust and consistent connection to classified and unclassified networks. HDW vessels can operate and maintain 1 helicopter for up to 120 days and embark 22 mission-specific personnel and 4 small boats. Additionally, it is fitted with a vehicle bay and a laydown area to support a 70-ton sealift capability.

To enable sustained presence and shipping operations in the north, the RCN has gone further to establish a new fueling facility repurposed from an iron ore mining site in Nanisivik. With that said, Canada’s goal is not to militarize the Arctic. The Arctic is a region of low tension, and Canada’s defense policy seeks to maintain this. However, given the transnational nature of the threats Canada faces, it is difficult to separate security in Europe and the North Atlantic from security in our north.

The HDW vessels are designed specifically for the Canadian Arctic and to support a whole of government approach to ensuring Arctic sovereignty as the top priority. The high endurance and utility features of HDW vessels will aid the Canadian government in dealing with the increasing Arctic traffic in multiple ways. First, the ice-strengthened hull will enable these ships to study the ocean floor of sparsely surveyed Arctic waters and report ice observations to assist the Canadian Hydrographic Service and the Canadian Ice Service—both of which are essential for maritime safety and navigation in Canada’s Arctic. Second, HDW vessels will work with the Canadian Coast Guard and various international partners to conduct search and rescue, as well as disaster relief, with its helicopter, enhanced communication technology, and utility capacities. In the event of a larger scale operation, HDW vessels can act as the on-scene commander and as a “command” platform to direct and inform other participating units. HDW vessels will work with domestic partners for law enforcement in the region, especially for shipping safety and environmental stewardship. These ships will serve as a platform for science and research in order to strengthen Canada’s position as a leader in polar science and technology and to promote the development and distribution of knowledge of other circumpolar regions, including Antarctica. HDW vessels will serve as an alternate platform to support important scientific work aimed at upholding Canada’s claims that the waters of the Canadian Arctic Archipelago are internal waters to Canada and the Canadian Arctic continental shelf extends to the North Pole. Last but not least, HDW vessels will help address critical gaps in situational awareness in the Arctic and provide
technology that can exploit tactical data while employing unmanned aircraft and service systems. This includes contributing to the Recognized Maritime Picture and Common Operating Picture to support mission-critical decisionmaking and strategic planning in the region for domestic and international partners.

Canada has both domestic and international obligations to fulfill in the Arctic. Increased shipping, resource development, tourism, and human activity concerns will lead to security and safety issues, which will require the Canadian Armed Forces’ to support civilian agencies. Notwithstanding, there are many milestones to be achieved before Canada’s Arctic can be perceived as less austere than it is today. In time, a whole of government approach to the Arctic will develop new models and partnerships with private enterprise to meet domestic and international obligations.

Rear Admiral Craig Alan Baines is a Royal Canadian Navy officer. He was appointed Commander Canadian Fleet Atlantic in July 2014 before being promoted to Commander Maritime Forces Atlantic in 2017.

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