

# High Latitudes, Higher Tension: Ice-Diminished Arctic Does Not Extend a Warm Welcome



Members of the Coast Guard Cutter Polar Star participate in various activities on the ice about 13 miles from McMurdo Station, Antarctica, in January 2018. U.S. Coast Guard/Fireman John Pelzel

Less ice in the Arctic is inviting more human activity. While the environmental changes in the far north have opened the previously fully frozen ocean and its coastline to opportunity, the Arctic is naturally a cold and inhospitable place that is unforgiving for the unprepared.

As the access, interest and presence in the Arctic has grown, new icebreakers and ice-capable ships are being built, and policies and strategies have been updated. International research efforts are studying the changing environment, and military exercise programs are learning and practicing how to operate there.

**Check out the full digital edition of *Seapower* magazine [here](#).**

Speaking at the Navy League's Sea-Air-Space exposition in May, Commandant of the Coast Guard Adm. Karl Schultz announced that the service had just contracted for its new Polar Security Cutter (PSC), calling it the "first recapitalization of the heavy icebreaker capability in the nation in more than

40 years.” Simultaneously, and what Schultz said was no coincidence, the Coast Guard issued its new “Arctic Strategic Outlook.”

The U.S. Navy released “Strategic Outlook for the Arctic” in January, which outlines the objectives of defending U.S. sovereignty and the homeland from attack, ensuring that the Arctic remains a stable and conflict-free region, preserving freedom of the seas, and promoting partnerships within the U.S. Government and with allies and partners to achieve these objectives.

According to the Danish “Defence Agreement 2018-2023,” “Climate change brings not only better accessibility, but also an increased attention to the extraction of natural resources as well as intensified commercial and scientific activity. There is also increased military activity in the area.”

According to the document, the Danish Defence presence and tasks are based on close relationships with the populations and local authorities of both Greenland and the Faroe Islands. “Although climate change and increased activity in the region necessitate increased presence and monitoring, Denmark continues to strengthen surveillance, command, control and communication, and operational efforts in the Arctic.”

All of these documents and action underscore concerns about presence, sovereignty, safety and security, environmental, economic, and world power competition in the Arctic. Russia has been open about its massive military buildup in the Arctic, but Russia has a vested

interest in extracting resources and building access to markets. In fact, Russia gets 20 percent of its gross domestic product from the north – not the situation in North America. In 2018, China announced in its official Arctic strategy a \$1 trillion program to develop polar regions economically, declaring itself a “Near-Arctic State.” Russia’s military expansion and China’s attempts to invest in a ports on Baffin Island and airports in Greenland have alarmed the West. However, all the nations have a goal to maintain the Arctic as a low-tension area, stressing cooperation and collaboration.

### **Prepared for the High Latitudes**

The Coast Guard conducts annual the Arctic Shield exercise to familiarize themselves with Arctic operations and evaluate new equipment. In addition to the Navy’s long-running series of undersea Ice Exercises, the Navy and Marine Corps also conducted major exercises in the high latitudes like NATO’s Trident Juncture in and around Norway last fall, and is demonstrating expeditionary maneuvers up in Alaska during the Arctic Expeditionary Capabilities Exercise in September.

There are many challenges in conducting military exercises in the Arctic, but they help warfighters to better understand and deal with the lack of infrastructure, communications, logistics, medical response capability

and vastness of the region. For starters, they require ships designed and equipped for high latitudes.

The Royal Danish Navy has operated in the waters off Greenland for many years, and currently has Thetis-class frigates and Knud Rasmussen-class arctic offshore patrol vessels that are optimized for the icy waters.

The Royal Canadian Navy has commissioned the first of six Harry DeWolf Arctic and offshore patrol vessels, and two more are planned for the Canadian Coast Guard. The CCG is also modifying three icebreakers procured from Sweden for use in Canadian waters and is building at least two new icebreakers as part of the National Shipbuilding Strategy. And the Canadian Armed Forces continue to exercise and operate in the extreme north, and even conducting diving operations with partner nations beneath the Arctic Ocean, as part of its continuing Operation NANOOK series of training exercises.

There has been an increase in traffic in Canada's Northwest Passage, including transits by the Crystal Serenity cruise ship in 2016 and 2017. But the ice is unpredictable and prevented ships from getting through last year. The 27 rural communities in Canada's Nunavut territory are not connect by roads, but must be resupplied once a year by ship or barge, and are dependent on the capability to operate in the Arctic in the summer. Both the Royal

Canadian Navy and Coast Guard hope their new ships will allow them to work farther north, and upgrading a former mining pier at Nanasivik to be used as a refueling port will let them stay longer.

## **Cooperation**

Also speaking at Sea-Air-Space, U.S. Coast Guard Deputy Commandant for Operations Vice Adm. Daniel B. Abel talked about profound partnerships and native knowledge. He served previously in command of the 17th Coast Guard District in Juneau, Alaska, where he learned to “Listen to those who live there, who are impacted by the Arctic.”

The Alaskan coastline is more than 6,600 miles long, Abel said – more than the entire coastline for the lower 48 states. So cooperation is an absolute necessity.

“We work closely with our partners in the Arctic, including our neighbors in Canada, who are the best partners we could ever have,” Abel said.

But that includes all the players in the Arctic. “The distance across the Bering Strait is 44 miles, the same distance as Washington is to Baltimore. That’s how close the United States is to Russia,” Abel said. “Clearly, we have to cooperate.”

Commissioner of the Canadian Coast Guard Jeffery Hutchinson, speaking at the Sea-Air-Space, said the Arctic is “not as frozen as it once was, but from where we sit, there’s still lots of ice.”

The U.S. and Canada work closely with the other Arctic nations, as members of the Arctic Coast Guard Forum. "We all understand the vastness in the Arctic, in the ice, on the seas and on the land. It requires everyone to pull together," Hutchinson said. "There isn't an Arctic nation that hasn't had to rely on another Arctic nation, at some point – and I say that with pride and humility.

One important way nations cooperate is through scientific research and environmental data collection. This fall the German research icebreaker Polarstern will get stuck in the Arctic ice on purpose, and drift for a year as teams of 600 scientists and researchers from 17 countries rotate on and off the ship to collect data that would otherwise be impractical or impossible. The Multidisciplinary drifting Observatory for the Study of Arctic Climate (MOSAIC) will study the Arctic climate system and how it relates to global climate models. The U.S., Canada, Denmark, Finland, Iceland, New Zealand, Norway and Sweden are participating in the International Cooperative Engagement Program for Polar Research (ICE-PPR), which shares in the development and use of polar sensors and remote sensing techniques, data collection, environmental modeling and prediction, and associated human factors involved in operating in the extreme latitudes. The Canadian Armed Forces are leading the multinational Joint Arctic Experiment.

## Survival Gets Personal

While the places of the far north – like Alaska, Greenland, or Nunavut – are enormous, and major the research efforts being conducted there require many people working together, the bottom line for any military operation or scientific project there comes down to personal survival.

The real enemy is the Arctic itself. In 2015, two experienced polar explorers, Marc Cornelissen and Philip de Roo, fell through the ice while on an expedition to measure sea ice thickness.

Maj. Gary Johnson from the Canadian Army Doctrine and Training Mobility command runs the Canadian Arctic Training Center in Resolute, which served as a base for Operation NANOOK-NUNALIVUT 2019 and the Joint Arctic Experiment. As a logistician, he said any military activity in the far north must address mobility, sustainability and survivability. “Whatever we do, it has to be deliberate; it has to be planned. It’s an environment that can take your life if you don’t respect it.”

Johnson looks at it as a crawl-walk-run situation. “Up here, crawl means survive. The next phase is to operate, and the end goal is to thrive.

During NANOOK-NUNALIVUT, platoons traveled by snowmobile to secure a landing zone while other soldiers built ice shelters and igloos. As part of the Joint Arctic Experiment, researchers monitored the soldiers for frostbite, which in the -60 degree Celsius temperatures can

affect exposed skin  
in two minutes.

## **Eyes, ears and voice of the North**

The vast majority of the people in the Canadian North are indigenous, which has implications for Canadian Armed Forces operations in the North. In fact, the face of the Canadian Armed Forces in the north is indigenous.

Canada has 1,800 Canadian Rangers, a component of the Reserve, most of whom are indigenous.

The Canadian Armed Forces are represented in every community through the Ranger program. They are not only Canadian Armed Forces Reservists, but they're also selected by their communities. So within their communities, they're seen as leaders and examples to the young people, respected by their peers and the people in their villages. "That level of connection is invaluable, because they're the eyes and ears and voice of the North," said Brig. Gen. Patrick Carpentier, commander, Joint Task Force North. "They connect to us on a constant basis. So it's a sensor that we wouldn't otherwise have for what is going on in different communities in the north. Our expectations are that they will be masters of the terrain around their own communities and they will be able to spot anything that changes, and pass word back to the 1<sup>st</sup>

Canadian Rangers Patrol Group headquarters, and on to Joint Task Force North headquarters in Yellowknife.

“We are on the land of the Inuit,” said Carpentier. “We look to them to bring their traditional knowledge to us as we conduct operations in the North. Nothing we do here would be possible without the Rangers.”

“It’s not a matter of they need our support,” said Hutchinson. “Rather we need their support, their knowledge and understanding.”

*Edward Lundquist traveled to Yellowknife and Tukoyoyaktuk, Northwest Territories, and Resolute, Nunavut, to report this story.*

---