



THE RCN IN THE ARCTIC

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The Royal Canadian Navy (RCN) established a presence in the Arctic in the late 1940s, as the emerging Cold War with the Soviet Union raised the strategic value of the region, and an increasing American presence appeared to threaten Canada’s national sovereignty.¹ This Canadian naval presence was sporadic and largely abandoned with the transfer of HMCS *Labrador* – the RCN’s sole icebreaker – to the Department of Transport in 1957.² A renewed presence in the 1970s included semi-annual northern deployments (NORPLOYS), sparked by new fears surrounding sovereignty and growing concerns over Soviet submarine activity.³ Historically, this presence has been defined by its sporadic nature, rising and falling with perceived need. This Briefing Note examines the Canadian navy’s presence and capabilities in Arctic waters. It excludes detailed discussion of the Arctic and Offshore Patrol Ships (AOPS) which are examined in a separate Briefing Note (Briefing Note #14).

In the early 2000s Canada broke with the tradition of sporadic attention and began regular Arctic deployments, with the long-term vision of establishing a sustainable and capable Arctic presence. In 2000, the RCN published *Leadmark: The Navy’s Strategy for 2020*, outlining its strategy for the next two decades. The focus was naturally on the Atlantic and Pacific Oceans; however the strategy highlighted the need to maintain a presence in the Arctic as well.⁴ This was acted upon two years later when HMCS *Goose Bay* and *Summerside* sailed into the Canadian Arctic for the RCN’s first northern deployment since 1989, kicking off the first of two Narwhal series exercises. These combined exercises were followed by more elaborate deployments in 2005 (*Hudson Sentinel*) and 2006 (*Operation Lancaster*). In 2007, in the first iteration of *Operation Nanook*, HMCS *Corner Brook*, *Fredericton* and *Summerside* traveled to the eastern Arctic, beginning the annual Arctic training operations that continue today.

Canadian naval vessels are not designed for year-round operations and can only access the Arctic during the short ice-free window from August to September. But over nearly two decades the RCN has steadily improved its processes and equipment, slowly rebuilding the capabilities and corporate knowledge of the Arctic that were lost over the years. The most important lesson learned from these missions, however, is the difficulty of working in the North. The distances involved in Arctic operations and the lack of infrastructure in the region limit operations and mean that any exercises or operations there require careful advanced planning. Experience has shown that logistics and supply are the most daunting problems. The distance by sea from St. John’s, Newfoundland, to Lancaster Sound between Devon Island and Baffin Island is 3,700 km – roughly the distance from Nova Scotia to British Columbia – and there is little to

¹ Elizabeth Elliot-Meisel, “Arctic Focus: The Royal Canadian Navy in Arctic Waters, 1946-1949,” *The Northern Mariner*, Vol. 9, No. 2 (April 1999).

² Adam Lajeunesse, Whitney Lackenbauer and Jason Delaney (eds), *HMCS Labrador: An Operational History, Arctic Operational Histories* (Antigonish: Mulroney Institute of Government, 2017).

³ Adam Lajeunesse, “Symbolism and Substance: Northern Deployments in the Late Cold War,” in Adam Lajeunesse and P. Whitney Lackenbauer (eds), *Canadian Armed Forces Arctic Operations, 1941-2015: Lessons Learned, Lost, and Re-Learned* (Fredericton: Gregg Centre, University of New Brunswick, 2017).

⁴ Department of National Defence, *Leadmark: The Navy’s Strategy for 2020* (Ottawa: Directorate of Maritime Strategy, 2001), p. 66.

support a ship once it arrives in the Arctic. Broken or missing parts, or unexpected necessities, have to be transported from thousands of kilometres away through limited shipping infrastructure. Fuel must be conserved en route and refueling carefully planned.

Problems with communications and weather have also proven to have serious effects on operations.⁵ Navigation in the Arctic has always been a tricky proposition, given the unreliability of the magnetic compass and poor accuracy of many hydrographic charts. Radio and satellite communication have, likewise, been unreliable – hindered by the eastern Arctic’s high mountains, ionospheric interference and the geostationary orbits of most satellites. New technologies provide some solutions; for example, GPS has improved navigation and satellite phones offer semi-reliable communication. Still, reliance on these technologies presents new problems as well. GPS systems can be off by a number of degrees in the far North, internet and data transfer is slow, cell services are often non-existent, and batteries are quickly depleted by the cold. For many of the problems of northern operations there is (as yet) no obvious technical solution.

An answer to some of Canada’s Arctic capability gaps has been new equipment and basing facilities. The AOPS currently being built provide the RCN with ships that have the ice-strengthened hulls needed to access more of the region for longer periods of time. The AOPS are already increasing the RCN’s presence and capability in the North. The first ship of the class, HMCS *Harry DeWolf*, was handed over to the navy on 31 July 2020, underwent RCN sea trials, and was commissioned into the navy in June 2021. In winter 2021 *Harry DeWolf* made its first voyage to the North for cold weather and ice trials – apparently performing very well. The ship began its first major operation starting in August 2021. After participating in *Operation Nanook 2021*, the ship continued its four-month deployment by transiting through the Northwest Passage, then south along the West Coast, participating in *Operation Caribbe*, and traveling through the Panama Canal and back to Halifax. This is a big deal for RCN operations in the North – *Harry DeWolf* was the first RCN ship to go through the Northwest Passage since HMCS *Labrador* in 1954. The second of the AOPS, HMCS *Margaret Brooke*, was launched on 10 November 2019, and handed over to the RCN in July 2021. *Margaret Brooke* too has traveled to the far North and continues to increase the RCN presence there.

To alleviate some of the logistical and supply issues, the small port of Nanisivik is being refurbished into a refueling centre. The Nanisivik facility is based at a closed lead-zinc mine on Baffin Island. On 10 August 2007, then Prime Minister Stephen Harper announced its renovation as a means of refueling government vessels in the North – both RCN and Canadian Coast Guard – and expanding their capabilities and operational radius. The choice of Nanisivik as a site was based on its location at the eastern entrance to the Northwest Passage, its pre-existing infrastructure, the fact that it is relatively ice-free in the summer, and the location of a nearby airport at Arctic Bay. Construction delays typical of Arctic projects have slowed development and increased the budget, and the size of the facility has been reduced. Nanisivik has taken more than 15 years since its initial announcement and has cost an estimated \$130 million as of 2017.⁶ In September 2019, there was an initial test of the facility, and full operational capability had been expected to be achieved by mid-2020. However, in March 2022 it was confirmed that work on the facility would not be completed until 2023. Once in operation, the combination of the

⁵ Adam Lajeunesse, “The CAF Returns to the Arctic, 2000-2006,” in Lajeunesse and Lackenbauer (eds), *Canadian Armed Forces Arctic Operations, 1941-2015*.

⁶ Sara Frizzel, “Nanisivik Naval Refueling Facility in Nunavut on Track and on Budget for Fall 2018 Opening,” CBC, 10 June 2017.

AOPS and the Nanisivik facility will greatly expand Canada's capabilities in the region and relieve the RCN frigates and *Kingston*-class patrol ships of Arctic duties, for which they are ill-suited.

The AOPS are designed to operate in the Arctic based upon a specific understanding of regional security requirements and likely future developments. While fears of circumpolar conflict and Russian remilitarization of the Arctic dominate media discussions of northern security, Canadian policy has consistently stated that conventional military threats are unlikely to emerge (although this may change following the Russian invasion of Ukraine in February 2022). Canadian policy has focused instead on the unconventional safety and security challenges created by increased shipping, resource development and human activity in the Arctic. The RCN's Arctic training has, therefore, focused less on combat scenarios and more on oil spill response, interdiction of criminal activities, surveillance and aid to civilian partners.⁷

Many of the roles that will be played in the Arctic are not navy responsibilities, and this means that the RCN will often play a support role. For instance, the RCN has no law enforcement mandate. Instead, it plays a support role to other government departments, such as the RCMP or Environment Canada or the Canadian Coast Guard.

Future roles in the Arctic for all actors will be complex and evolving, driven as much by climate change and global shipping and development trends as by federal policy. Despite this uncertainty and the difficulties surrounding Arctic operations, the RCN has made considerable headway in building the assets and capabilities needed to extend its presence into Canada's ice-covered waters.

⁷ See for instance the Canadian Armed Forces list of training objectives at [Operation NANOOK - Canada.ca](https://www.crest.ca/operation-nanook).