



CANADIAN NAVAL REVIEW

VOLUME 21, NUMBER 2 (2025)

CANADIAN COAST GUARD THEME ISSUE

The Canadian Coast Guard: A New Era?

The Canadian Coast Guard in the Arctic

**The Canadian Coast Guard and
National Security**

**Canada's Coast Guard at a
Crossroads: Safeguarding
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**The Cost of Success:
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Assistant Editor: Douglas S. Thomas

Photo Editor: Tim Choi

Subscriptions/Administration: Mark Sloan

Graphic Design: Kim Snider, Kim Squared Inc.

Operations Manager: Adam Lajeunesse

Assistant Manager: Cate Belbin

Printing: Advocate Printing and Publishing

The administrative offices of *CNR* are located at the Brian Mulroney Institute of Government, St. Francis Xavier University in Antigonish, Nova Scotia. The mailing address is: Canadian Naval Review, C/O Adam Lajeunesse, Lane Hall, St. Francis Xavier University, 2330 Notre Dame Ave., Antigonish, Nova Scotia, Canada, B2G 2W5.

Email: info@navalreview.ca

Website: www.navalreview.ca

LinkedIn: [linkedin.com/company/canadian-naval-review](https://www.linkedin.com/company/canadian-naval-review)

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Canadian Naval Review is a professional journal examining a wide range of maritime security issues from a Canadian perspective. In particular it focuses on strategic concepts, policies, operations, history and procurement of the Royal Canadian Navy, plus national security in general and marine/ocean affairs. This initiative brings together members of the Canadian defence and academic communities. *CNR* is published by the Brian Mulroney Institute of Government at St. Francis Xavier University.

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- provide a source for the public examination of Canadian naval and maritime history and for the development of lessons learned.

The material included in *CNR* is presented for the professional and general education of the readers. Articles, commentaries and opinion pieces are invited from the widest possible spectrum for the purpose of informing, stimulating debate and generally challenging readers. **The opinions expressed by the authors do not necessarily reflect the opinions of the Editor, Editorial Board, Brian Mulroney Institute, the Department of National Defence, the Royal Canadian Navy or *CNR* sponsors.**

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Credit: Petty Officer Patrick Kelley, US Coast Guard



The Canadian Coast Guard icebreaker CCGS *Louis S. St-Laurent* sails in the Arctic Ocean, September 2009, while conducting continental shelf surveys along with the US Coast Guard Cutter *Healey* (not pictured).

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Introduction to this Theme Issue

This issue of *Canadian Naval Review* (CNR) is dedicated to the Canadian Coast Guard (CCG). As the country's largest federal fleet and a cornerstone of domestic safety and security, the CCG plays a vital role in the control and monitoring of the country's maritime domain. Despite its importance, the CCG has suffered from chronic underinvestment while being largely overlooked by Canada's community of strategic analysts.

In 2025, that disconnect seems to be correcting itself. Climate change and growing great power competition have created new threats in Canada's domestic waters. To counter these, the government of Canada has announced the CCG's move from the Department of Fisheries and Oceans to the Department of National Defence (DND). The CCG will remain a civilian agency, preserving its core responsibilities – such as search and rescue, icebreaking, marine traffic services, environmental response and ocean science – while acquiring a new (if still somewhat unclear) security mandate.

As the CCG gains this new mission, it is also expanding and recapitalizing. Under the National Shipbuilding Strategy (NSS), the fleet is undergoing a sweeping modernization. Over the next 20 years, the CCG will take possession of more than 100 new vessels, including two Polar Class 2 icebreakers that will enable a year-round maritime presence in the Canadian Arctic for the first time in the country's history.

This edition of *CNR* brings together academics and practitioners to examine this shift in mandate and capabilities. Authors study the purpose and effectiveness of the CCG's transfer to DND and the potential implications for information sharing and maritime domain awareness. They also examine the continuing importance of the Canadian Coast Guard's vital commercial and safety tasks. From search and rescue and sustaining northern communities to icebreaking and resupply, the CCG's red ships are not just symbols of Canadian presence and authority in the Arctic but vital to the day-to-day lives of many Canadians.

Fleet renewal is another important theme. Massive investments in shipbuilding are accepted as long overdue, but authors warn that 'boom-and-bust' procurement cycles risk inefficiencies, crewing challenges and future vulnerabilities. Of course, these problems are not unique to Canada, and lessons from the United States may offer guidance as the CCG expands its fleet and work force.

Taken together, this edition shows that the Canadian Coast Guard is at a crossroads. Despite its move to DND, it remains a civilian service, although one that will be increasingly tied into Canada's security architecture. The challenge on the



Aerial view of the base of the Canadian Coast Guard in Quebec City, October 2022.

Credit: P. Dionne, Fisheries and Oceans Canada

horizon is therefore to ensure that the CCG's new roles do not dilute its traditional missions, while harnessing new resources to strengthen national security across Canada's vast maritime domain. 🇨🇦

Adam Lajeunesse, PhD

About the Canadian Maritime Security Network (CMSN)



This issue is sponsored by the Canadian Maritime Security Network (CMSN). The CMSN is a dispersed research organization, tying together Canadian and international academic and professional organizations engaged in maritime security research. Funded by the DND MINDS program, its purpose is to provide the government of Canada with timely and relevant policy advice while advancing public understanding of maritime security issues.

The Canadian Coast Guard: A New Era?

Jody Thomas



The Arctic and Offshore Patrol Vessel HMCS William Hall from the Royal Canadian Navy and the medium icebreaker CCGS Pierre Radisson from the Canadian Coast Guard sit at anchor together during Operation Nanook-Nunakput in Pond Inlet, Nunavut, on 7 September 2025.

The Canadian Coast Guard (CCG) stands at a critical moment in its history. Having evolved over more than 60 years, the organization now faces another major transformation. When Prime Minister Mark Carney recently announced the transfer of the CCG to the Department of National Defence (DND) as a Special Operating Agency, reactions were mixed. The Canadian Coast Guard, which has always been a civilian institution, carries a broad mandate to ensure safety on Canada's waterways. While its iconic icebreakers are familiar to most Canadians – and indispensable to mariners – the CCG also delivers equally vital services such as search and rescue (SAR), aids to navigation, marine communication and vessel traffic management.

The CCG's responsibilities are vast. It oversees Canada's 202,080-kilometre-long coastline (approximately 125,567 miles), operating ships and aircraft across an expanse of 2.3 million square nautical miles of ocean and inland waters. The key questions now are how this transition to DND will address Canadian security requirements, whether it will meaningfully contribute to the country's 5% NATO spending benchmark, and how it will affect the delivery of critical civilian services.

History is a useful guide to some of these questions. The CCG was created in 1962 under Transport Canada, before being transferred to the Department of Fisheries and Oceans (DFO) in 1995. Many within the CCG viewed that move negatively. At the time, the intent was to achieve cost savings by merging Canada's two largest civilian fleets. However, the fisheries fleet was larger, older and absorbed into the CCG without additional funding; in fact, budgets were ultimately reduced. This compromised the CCG's

autonomy, as DFO's mission was often prioritized. Operations and morale suffered as Regional Directors General of DFO assumed control over coast guard activities.

In 2005, the CCG regained some independence when it was designated a Special Operating Agency within DFO, a reform introduced by then-Deputy Minister and former Vice Admiral Larry Murray. This structure gave it greater control over its budget and operations. By 2010, the CCG had grown into the largest entity within DFO. Despite this, it remained a secondary program within a department primarily focused on fish stocks, fisheries science and enforcement. Coast guard operations and policy only received attention during times of crisis.

Today's geopolitical environment has opened the door to reconsidering the CCG's role in Canadian sovereignty and security. Its core programs remain SAR, icebreaking, aids to navigation and environmental response. While it also serves as a platform for science, those programs can be conducted regardless of departmental alignment. The expanded mandate announced in 2025 – encompassing enforcement, intelligence and data collection – underscores the need for a policy home more closely aligned with national security.

Rather than being viewed simply as a science platform, the coast guard must now be recognized as a critical component of Canada's safety, security and economic foundation. For the first time, the CCG will be equipped with a purpose-built fleet designed for future needs. Although the fleet is currently sized to meet existing programs, new demands, such as the reopening of Churchill, Manitoba, as a northern port, necessitate a re-evaluation of icebreaking capacity. Because the same ships serve both northern



CCGS *Samuel Risley*, along with American counterparts, breaks ice to free the commercial vessel *Manitoulin* on 25 January 2025 in Lake Erie.

operations in summer and southern operations in winter, additional capabilities will be required to sustain expanded responsibilities.

The Canadian Coast Guard College in Cape Breton is another crucial asset. As a professional, degree-granting institution, it educates and trains mariners while growing steadily in size and gender balance. Repeatedly saved from DFO cuts, the college now merits investment to expand its offerings, potentially in partnership with the Royal Canadian Navy (RCN). Notably, current Commissioner Mario Pelletier is the first Commissioner to have graduated from this college.

This new recognition of the CCG's importance, including its move to DND, is not about NATO's 2% target. At its core, it is about Canada's sovereignty and security. With the world's longest coastline, Canada must have persistent and expansive reach into the Arctic. It must understand its waters, both the water column and seabed, better than its adversaries. Deterrence, the protection of sea lanes and the assurance of safe passage for goods are all critical. Ice-breaking, in particular, is the foundation of Canada's economic system. The flow of goods through the St. Lawrence Seaway and Great Lakes for eight to nine months each year depends entirely on coast guard services. And, while this critical function is normally the concern of a small group of ship owners, it should be of interest to all Canadians. This vital function links economic security directly to national security. These have always been factors in Canada's national security, however climate change and growing great power politics have now made them impossible to ignore or downplay.

The Canadian Coast Guard could logically have been placed under either DND or Public Safety Canada, but the Arctic enforcement and security mandate aligns most naturally with DND. The RCN and CCG are complementary

forces that converge at the intersection of security and defence. The National Shipbuilding Strategy offers an opportunity for economies of scale, knowledge sharing and even cross-service training and personnel exchanges in an increasingly competitive labour market. Their day-to-day cooperation, managed informally since Vice Admiral Mark Norman and I began a biannual series of senior staff talks, is now run through Joint Rescue Coordination Centres, Marine Security Operations Centres and Arctic training. This healthy and respectful cooperation demonstrates a strong foundation on which to build. For years, the CCG has assisted the RCN in preparing for Arctic and Offshore Patrol Vessels (AOPVs). This collaboration, while useful, remains tactical. Now is the time for strategic integration.

The red-and-white CCG fleet working alongside Canada's navy to protect sea lanes, Arctic sovereignty and maritime resources represents a bold vision. The challenge lies in ensuring that policy translates into real operational effectiveness. Importantly, this transition does not militarize the CCG. It instead 'securitizes' the organization, embedding it as a key participant in sovereignty protection, surveillance and national resilience.

As Canada invests more robustly in defence and national security than at any time in its post-war history, the Canadian Coast Guard must be included in those efforts. It must be grown, funded and fully integrated into Canada's defence and security architecture. 🇨🇦

Jody Thomas worked for over 40 years in the federal public service. She was the first woman to serve as Commissioner of the Canadian Coast Guard. She went on to serve as Deputy Minister of the Department of National Defence and then served as National Security and Intelligence Advisor to the Prime Minister until her retirement in 2024. She is currently a member of the Prime Minister's Council on Canada-US Relations.

The Canadian Coast Guard in the Arctic: Securing Supplies, Sovereignty and Response

Youssef Mani

Credit: Canadian Coast Guard



CCGS *Des Groseilliers* is seen in the background during operations to assist the grounded cargo ship MV *Thamesborg* in the Franklin Strait, Nunavut, in September 2025. Two other CCG icebreakers, *Jean Goodwill* and *Sir Wilfrid Laurier*, were also on scene.

The Arctic is a dynamic, strategically significant and increasingly active region that lies at the heart of Canada's national identity and sovereignty. As the effects of climate change accelerate ice melt and open new maritime corridors, the Canadian Arctic is experiencing unprecedented levels of activity – including commercial shipping, natural resource development, scientific research and growing international interest. In this evolving landscape, the Canadian Coast Guard (CCG) plays a pivotal role in maintaining presence, ensuring maritime safety and supporting the well-being of northern communities.

As Assistant Commissioner of the CCG Arctic Region, I have the honour of leading a dedicated team working at the intersection of maritime safety, environmental protection and community service. Our mandate extends beyond safeguarding Canada's Arctic waters, it also includes strengthening relationships with Inuit, First Nations and Métis, and supporting communities to remain connected and protected and supported. This article explores the CCG's contribution to Arctic resupply, and environmental and economic security – three pillars of a secure and resilient North.

Security in the Canadian Arctic is not just about borders or patrols, it is lived daily through reliable access to supplies and food, safe transportation and strong community infrastructure. As climate change reshapes the North, the CCG plays a vital role in maintaining safe navigation, responding to maritime incidents and partnering with northerners to deliver services that matter.

Security: A Maritime Lifeline

In the Arctic, security is deeply tied to maritime transportation. Most northern communities are not connected by road networks and rely on seasonal sealift operations for the delivery of essential goods, including food, fuel and medical supplies. The CCG plays a critical role in ensuring these shipments reach their destinations safely and on schedule.

Our icebreaking program is essential to keeping key marine corridors open during the short navigation season. Without this service, communities would face delays, shortages or disruptions with serious consequences for health and well-being. The CCG also supports marine safety for traditional harvesting activities. This supports Inuit, First Nations and Métis communities' continued hunting, fishing and gathering in accordance with their cultural practices and food sovereignty.

Security in the North also hinges on the ability of communities to prepare for and withstand disruptions. Through our work in maintaining safe navigation and emergency response, the CCG helps communities withstand the impacts of climate change and supply chain disruptions. Our services are not only operational, they are foundational to long-term community health, self-reliance, security and sovereignty.

Response in the Arctic: Beyond Search and Rescue

The CCG's responsibilities in Arctic response extend far beyond search and rescue (SAR). As a federal maritime first responder, the CCG leads or supports a wide range of incident responses, including environmental emergencies, vessel groundings and humanitarian evacuations. In each case, our actions are guided by a commitment to protect mariners, the environment and the communities we serve.

Response in the Arctic presents unique challenges including vast distances, unpredictable weather, limited infrastructure and a growing volume of marine traffic. Our seasonal Arctic Marine Response Station has significantly improved local response capacity. This station not only saves lives, it also builds skills, creates jobs and strengthens community ties.

Environmental response is a core component of our mandate. As maritime traffic increases, so does the risk of marine pollution. The CCG is the lead federal agency for marine environmental response, and we work closely with



On 3 April 2025, the first cut is made during the steel-cutting ceremony for the polar icebreaker being built by Seaspan Vancouver Shipyards.

communities to ensure readiness. Our training programs and joint exercises help build local capacity to respond quickly and effectively to spills or other incidents.

Whether responding to a SAR emergency, a marine fuel spill, or coming to the aid of a distressed vessel, the CCG is often the first – and sometimes only – federal presence on scene in the Arctic. Our ability to respond quickly and deliver critical services is a key pillar of Canada's Arctic safety and security.

Respecting Inuit Qaujimajatuqangit in CCG Operations

The Canadian Coast Guard's effectiveness in the Arctic depends on more than just our equipment and training – it depends on relationships. We are committed to working in partnership with Inuit, First Nations and Métis, whose knowledge and stewardship of the land and waters are essential to safe and sustainable operations in the region.

Inuit Qaujimajatuqangit (IQ), or Inuit knowledge, is increasingly incorporated into our operational planning, marine navigation and response strategies. Local community members provide real-time information on sea ice conditions, wildlife patterns and environmental changes. Community engagement also informs our seasonal deployment planning and helps identify local priorities and areas of concern.

This incorporation of IQ is not symbolic – it is operational and ongoing. By combining traditional knowledge with modern technology, we improve our situational awareness, strengthen safety and reduce risks. This approach also reflects the CCG's broader commitment to reconciliation efforts and respect for Indigenous rights and self-determination.

Supporting Operation Nanook

Sovereignty in the Arctic is demonstrated through sustained maritime presence, strong partnerships and operational readiness. The CCG plays a central role in all three. Our participation in *Operation Nanook*, Canada's premier Arctic security exercise, is a key example of how

we contribute to national security and advance collaboration with domestic and international partners.

Each year, *Operation Nanook* brings together the Canadian Armed Forces, federal departments, territorial governments and international allies to exercise and improve our collective ability to respond to real-world emergencies in the North. The CCG provides vessels, logistical support and operational leadership during these exercises, which simulate scenarios ranging from SAR to environmental response and vessel activity in Canadian waters.

In addition to participating in interdepartmental exercises, our regular patrols and seasonal deployments reinforce Canada's jurisdiction and support maritime domain awareness in Arctic waters. Our vessels are visible symbols of Canada's Arctic presence. Our sustained presence is essential to upholding Canadian law, supporting environmental protection and ensuring safe navigation.

Building the Future of Arctic Maritime Security

The CCG Arctic Region was established in 2018 to provide a dedicated, regionally focused approach to operations in the North. Since its inception, we have worked to expand our presence, deepen partnerships and support long-term solutions for Arctic maritime safety and security. Increasing our presence in the region is enhancing our ability to carry out operations and provide timely support to northern communities. Fleet renewal efforts, including the construction of new Arctic and Offshore Patrol Ships and the construction of Canada's next generation of polar icebreakers, will ensure that we have the right tools required to meet emerging needs in the Arctic.

We are also investing in people. Through recruitment and training programs for Indigenous youth, women and northerners, we are building a diverse and skilled workforce that reflects the communities we serve. A coast guard that understands and reflects the North is better equipped to serve it.

Conclusion

The Canadian Coast Guard is a vital part of Canada's Arctic. Through our work in maritime safety and environmental response we help support safety, security and resiliency in the North. Our operations are grounded in partnership – with Inuit, First Nations and Métis communities, federal agencies, territorial governments and partners and international allies – and guided by a deep respect for the land, the people and the future of the Arctic. As Assistant Commissioner of CCG's Arctic Region, I am proud of the work we do and the people behind it. The challenges are immense, but so is our commitment. In a changing Arctic, the Canadian Coast Guard stands ready – not just to respond, but to lead. 🇨🇦

Youssef Mani is Assistant Commissioner – Canadian Coast Guard, Arctic Region.

The Canadian Coast Guard and National Security

Chris Henderson



This 2008 photo shows the icebreaker CCGS *Pierre Radisson*. The ship is based in Quebec and in winter it is assigned to icebreaking and ship escort operations in and around the St. Lawrence River.

Seapower runs the gamut from relatively benign regulatory power to the use of lethal force to stop an invasion. This spectrum requires subtle management and the smooth hand-off of responsibility to appropriate authorities as the needle moves from side to side. That function is complicated dramatically by the nature of the maritime domain – and, in Canada’s case – by its extreme climate, small population and enormous distances, especially of the Arctic environment.

The federal government has maintained two fleets to manage this operational spectrum: the Royal Canadian Navy (RCN) for war-fighting; and the Canadian Coast Guard (CCG) for everything else. Recognizing the exclusive jurisdiction of the RCN to provide the lethality and firepower needed to ensure the maritime defence of Canada, this article will limit its examination to the improvement of the CCG’s toolkit necessary to deal with the enormous range of activities, challenges and threats that are ‘left of bang’ on that spectrum.

The CCG was created in 1962 to bolster marine safety in response to growing oceanic trade and the opening of the St. Lawrence Seaway in 1959. In its initial manifestation, the CCG was part of the Department of Transport,¹ but was transferred to the Department of Fisheries and Oceans (DFO) in the 1990s as a cost-saving measure.

The CCG derives its mission and mandate from a variety of statutes.² These include the *Oceans Act*, the *Canada Shipping Act, 2001*, the *Marine Liability Act*, the *Arctic Waters Pollution Prevention Act*, and the *Wrecked, Abandoned or Hazardous Vessels Act* (WAHVA). The last was written specifically to confer new enforcement authorities on the CCG.

While seemingly precise in their articulation of the CCG’s missions, these enabling statutes (with the notable exception of WAHVA) are mostly silent on *how* the CCG is to do its job. For example, within the *Oceans Act* there is a single section of exactly 175 words (including the title) that defines the entirety of the CCG. A single sub-section, 41(1)(e), allows the Minister to “... support ... departments, boards and agencies of the Government of Canada through the provision of ships, aircraft and other marine services” – in essence a blank cheque that allows the coast guard to do practically anything asked of it by another federal department. This generality provides beneficial operational flexibility but does not facilitate policy innovation or capability development as the CCG’s operating environment evolves rapidly.

The CCG has remained at DFO until this year as a ‘Special Operating Agency’ – an organizational category that in all practical respects is a distinction without a difference.



A CCG Bell 429 helicopter approaches an unspecified lighthouse in this 2015 photo.

It is an important marine safety organization subordinated within DFO and entirely dependent on that department's corporate enablers for connection to the rest of the federal government. Its many responsibilities include, *inter alia*, marine search and rescue, pollution response, vessel traffic management, icebreaking, maintaining 'aids to navigation' (more commonly understood as buoys and lighthouses), supporting scientific research, and ferrying around various law enforcement agencies. The CCG is the unsung 'rent-a-ship' company of the federal government, and it impressively and perennially meets or exceeds all the expectations placed on it by Canadians and their elected leaders. The iconic red-and-white hulls of its ships are a familiar and comforting sight on all of Canada's coasts and waterways, and it is often the only federal maritime presence in Canada's vast Arctic.

In the face of irresistible international pressure to invest in Canada's defence over the past few years, one of Prime Minister Mark Carney's early decisions in the spring of 2025 prompted a sea change in the CCG's fortunes. The Liberal government introduced Bill C-2. Ostensibly a proposal to thicken the Canada-US border, the legislation includes an important first step toward the codification of a national security mandate for the CCG. The proposed bill directs the CCG to assume new responsibilities for "security, including security patrols and the collection, analysis and disclosure of information or intelligence."³ The intent is to capitalize on the presence and presumed capabilities of the CCG fleet to contribute to what is known as 'maritime domain awareness' – the ability for the government to understand who is in or approaching Canadian waters and what they are doing there.

The Prime Minister followed up quickly with a defence spending announcement on 9 June 2025, which elaborated on Bill C-2 and, importantly, included a machinery of government change for the coast guard. The plan included

"expanding the reach, security mandate, and abilities of the CCG and integrating it into our NATO defence capabilities – to better secure our sovereignty and expand maritime surveillance."⁴ The details of how that change will unfold remain to be seen, however, the new mandate includes conducting surveillance and collecting intelligence in support of national security, and moving the CCG from DFO to the Department of National Defence (DND). In the meantime, the CCG's mission set remains as impressive and daunting as its budget is small and its ships and infrastructure are aging.

The Bill C-2 legislative proposal is necessary but not sufficient. The size and ubiquity of the CCG fleet suggest that it can and should be employed much more deliberately in aid of Canada's national security without infringing on the monopoly of force that must reside with the RCN. But this welcome attention being paid to the coast guard raises some important questions. Is DND the correct home for the CCG? Second, is there more the CCG could be enabled to do to strengthen its contribution to the safety and security of the country?

Moving the CCG to DND added a minimal amount of national treasure to Canada's NATO defence spending, and there is a superficial alignment with respect to intelligence and surveillance. Also, there is a logic to strengthening the pre-existing operational bonds between the Canadian Armed Forces (CAF) and the CCG through joint operation of the federal search-and-rescue system and co-management of the Marine Security Operation Centres. However, the two services have fundamentally different roles that can be distilled to the basic issue of lethality or the monopoly on the use of force of the CAF. The CCG's current role – and any additional future roles – therefore, are and must remain objectively civilian.

The CCG's traditional missions include support to law enforcement along with its wide-ranging and complex



Prime Minister Mark Carney makes a defence announcement, including that of expanding the security mandate for the Canadian Coast Guard, at a Toronto military base on 9 June 2025.

marine safety roles. Combined with the proposed new mandate for surveillance and intelligence collection in support of national security, there is an argument that the CCG would be better aligned within the Department of Public Safety's stable alongside the Royal Canadian Mounted Police (RCMP), Canada Border Services Agency (CBSA), and Canadian Security and Intelligence Service (CSIS). That alignment would not diminish the benefits of joint operations with the CAF, but it would simplify and accelerate the coordination of CCG activities with national law enforcement agencies, the intelligence service and the rest of the national security apparatus. It would also leverage the 'portfolio' approach that has existed and matured within Public Safety for more than 20 years whereby separate agencies have their own Deputy Heads and corporate enablers and contribute on a level playing field to the pursuit of policy objectives and the resolution of crises.

While there is a 'defence portfolio' of sorts, the only other player on that team other than DND/CAF is the Communications Security Establishment (CSE), which has carefully carved out its highly specialized niche and bureaucratic independence from DND. The alignment within Public Safety would also not prevent a larger portion of the CCG budget from being counted as a NATO contribution, nor would it prevent the integration of relevant CCG capabilities into the country's defence system. It would, however, protect the CCG from the bureaucratic predation that has prevented the realization of its operational potential since its inception.

A constructive and more aggressive approach would be to enshrine the CCG as a robust instrument of national power and an equal partner in Canada's defence and security apparatus through completely new enabling legislation – *Canadian Coast Guard Act*. That new statute should create the CCG as a discrete department of the federal government with the Commissioner as its own Deputy Head reporting directly to a Minister with responsibility for securing Canadians, as opposed to remaining in an economic department such as DFO. It would also require the full suite of corporate enabling functions and internal services (e.g., policy, human resources, legal services, real property, information technology, etc.) to allow it to operate autonomously and effectively in accordance with government priorities, request funding and formulate its own policies and strategies.

Such a change would mean the CCG would become responsible for a wide range of federal functions from intelligence, surveillance and reconnaissance (ISR) to law enforcement to its traditional marine safety programs. It would also safeguard the principle of a civilian coast guard with a constabulary and national security role, while counter-balancing any retrograde impulse to militarize the CCG. A discrete coast guard statute would replace the current pastiche of legislation and the important work of resolving decades of ambiguity and equivocation about the authority and reach of Canada's civilian fleet could begin.



Crew and inspectors from CCGS *Sir Wilfrid Laurier* (far background) board a fishing vessel from their RHIB in summer 2025 as part of **Operation North Pacific Guard**, a counter-illegal, unreported and unregulated fishing operation led by Canada.



The **Hero**-class mid-shore patrol ship CCGS **Private Robertson V.C.** is seen with its **POLICE** boards displayed to indicate its constabulary authority in this undated photo at an unspecified location.

Among many things COVID taught us about governance in Canada in the summer of 2020 was that this country suffers from a fundamental misalignment of authorities and resources for law enforcement at sea. Two examples serve to illustrate the point. The first was that among many federal government measures intended to protect Canada and Canadians was the diktat from the Minister of Transport that “[a] passenger vessel must not navigate, moor or berth in Canadian waters.”⁵ When issued in the first week of April 2020 this ministerial direction hardly caused a ripple given the convulsions reshaping the day-to-day lives of Canadians. As the weather warmed, however, and recreational boaters looked to the water to escape the grip of the pandemic, the unprecedented nature of the directive came into focus. While not exclusively directed at Americans, the practical impact was that it became, for the first time in history, illegal for recreational boaters from the United States to enter Canadian waters. US boaters had always been required to clear customs upon entry, but there had never been an outright ban.

While enforcement of such a prohibition might appear superficially straightforward to Canadians, it soon became obvious to operational authorities in the CCG that there was a problem. While the CCG might have the vessels necessary to patrol boundary waters, its personnel lack any authority to enforce the laws of Canada. Incidentally, the CAF also lacks that law enforcement authority and so found itself in the same scenario of mismatched resources and authorities. Those enforcement powers currently reside with several agencies whose officers must be embarked on CCG or RCN vessels for those ships to be used in enforcement actions but who were otherwise occupied during the pandemic. In a word, the federal agencies with the enforcement authority did not have the operational resources, and the agencies with the marine resources lacked the authority. Coordination, good

will and the phenomenon that most people will comply with the law meant that the prohibition was, by and large, respected.

But not everyone respects the law. In August of 2020, with the prohibition on entering Canadian waters well publicized among mariners, a solo sailor from New Zealand chose to ignore the direction and sailed his yacht eastward through the Northwest Passage.⁶ Given that there had not yet been any COVID cases reported in Nunavut, the federal and territorial governments were acutely concerned about all potential vectors for the disease. But rather than stop the sailboat and force it to turn back, the government defaulted to investing significant resources including CCG icebreakers, Royal Canadian Air Force (RCAF) long-range maritime patrol aircraft, RCMP detachments, and Inuit marine monitors into tracking the sailboat’s progress. In a word, Canada watched its law flagrantly broken for a vanity project during an international public health meltdown by one bellicose, stubborn sailor from a like-minded country, and effectively did nothing. COVID laid bare the fragility of Canada’s ability to exercise effective, sovereign control of its maritime domain.

While the foregoing examples underscore a specific law enforcement gap in the maritime domain, there are similar weaknesses relating to surveillance of national waters, maritime security coordination, aviation roles and support, hydrography, marine safety, and the ‘machinery of government.’ These challenges are not unique to Canada although many of the factors with which Canadian authorities must contend are extreme. So how do other countries solve these problems? An important consideration for Canadian policy-makers is that virtually every littoral state guards its coasts differently. What does begin to appear as a common denominator among coast guards is whether they have a constabulary role. With the

notable exception of His Majesty's Coastguard, which is the closest analogue to the CCG from an operational program point of view, most useful comparator coast guards possess law enforcement authority. Good models exist to help inform a Canadian solution that is sustainable and consistent with national interests, but there is no perfect model that can or should be carbon copied to the Canadian context.

Thus, a strong first outcome of the proposed *Canadian Coast Guard Act* would be to confer on the CCG a mandate and the authority for law enforcement at sea. In this manner, the CCG fleet would adopt a constabulary role and be able to respond to potential or actual violations of Canadian law whenever and wherever they happen to come upon them. It would increase the government's options and flexibility to deal with the unexpected when the CCG is conducting its regular programming without embarked police, when exigent circumstances demand a rapid response, and when coordination with law enforcement agencies prevents a timely or effective response. This is particularly true in the Arctic where the CCG is often the only federal presence. Furthermore, such authorities – and their visible execution – would increase the deterrent effect of government of Canada vessels in the eyes of all mariners.

The granting of such authorities to the CCG need not be at the expense of existing authorities or operational practices. To operate effectively, federal law enforcement agencies need at least all the powers they currently have. Granting additional powers to the CCG to act in the absence of the

RCMP, CBSA, or DFO would augment the overall capacity and effectiveness of Canadian law enforcement at sea. And the excellent joint work conducted by those agencies with the CCG under the current rubric of Section 41 of the *Oceans Act* would continue under the auspices of the *Canadian Coast Guard Act*.

The establishment of a constabulary role for the CCG would necessitate *inter alia* significant new training structures and routines, regular exercise planning and execution, professional development of all ranks, and the adoption of intelligence capabilities and enforcement tools, techniques and procedures. Undoubtedly such a change would require leadership, careful management and close collaboration with bargaining agents – not to mention a considerable runway to get it off the ground. As the creation and subsequent arming of the Canada Border Services Agency amply demonstrate, one does not create an effective organization overnight, but the precedent exists.

Royal Assent of the *Canadian Coast Guard Act* would be necessary but not sufficient. The core of a new constabulary force would need to be developed. In this regard, the CCG is blessed by the existence of the Conservation and Protection (C&P) Branch of DFO. Armed peace officers with an operational role buried in the policy sector responsible for juggling the kaleidoscopic dynamics of multiple fisheries are already an awkward fit. The CCG and C&P have been planning and executing operations together for decades and a strong argument could be made for the transfer today of C&P to the CCG. As the CCG already provides crews and maintains the patrol ships used by C&P – including the crew-served weapons used to protect boarding parties of Fishery Officers – the relatively straightforward, zero-to-low-cost transfer of the Director General Conservation and Protection to the CCG from DFO would initiate the evolution of a constabulary coast guard.

CCG Navigation Officers would need to be recruited, educated and trained to become Maritime Law Enforcement Officers. Thus, every ship in the CCG would have an inherent law enforcement capability vested in the authority of its crew when a Fishery Officer was not on board, as is most often the case. As is the case within the RCN where there is always more than one command-qualified Naval Warfare Officer on board a warship but only one Captain, there would only ever be one Commanding Officer on a coast guard ship whose authorities would enable fishery enforcement at sea. Enabling fisheries enforcement would be a useful first step but there are many other statutes requiring enforcement in domestic waters.

At this point, another useful analogue can be found within the CBSA. Border Services Officers are trained and delegated the authority to apply “more than 100 acts and regulations”⁷ at Canadian ports of entry. While they



Transport Canada's National Aerial Surveillance Program operates aircraft, such as these Dash 8s, in support of other government departments/agencies like the Canadian Coast Guard.



Credit: Master Corporal Antoine Brochu, Canadian Armed Forces Combat Camera

Members of HMCS William Hall and CCGS Pierre Radisson from the Canadian Coast Guard operate rigid-hull inflatable boats during Operation Nanook-Nunakput in Pond Inlet, Nunavut, on 7 September 2025.

are expected to enforce multiple laws, they can only do so within strictly prescribed limits. Overreach and excessive enthusiasm for law enforcement are easily constrained, which would become the case for CCG Navigation Officers vested with law enforcement authority. Over time, an argument could be made for CCG Commanding Officers to assume enforcement responsibilities at sea for customs and immigration offences, as well as criminal matters. Again, such a capability would be in addition to the authorities and capabilities that already exist, and must remain, within the RCMP and CBSA.

There are, however, many other authorities and capabilities that pertain to the maritime domain – and would reside ideally in a coherent, operational marine safety and security agency based in law – that are, unfortunately, currently spread throughout the bureaucracy for reasons that are long forgotten. A quick scan includes: the Canadian Hydrographic Service within DFO; the Canadian Ice Service of Environment and Climate Change Canada; the Office of Boating Safety; and the Aircraft Services Division of Transport Canada. All are primarily focused on the maritime domain, so the *Canadian Coast Guard Act* should concentrate these disparate resources on making a stronger, better coordinated contribution to Canada's maritime safety and security.

Five years after the COVID-19 pandemic focused everyone's attention on our collective vulnerability, some of the lessons learned remain unabsorbed and feasible remediations remain untried. Resources and authority remain

misaligned and, short of the use of military assets, which are not intended for law enforcement purposes, Canada still has no effective means of asserting its authority in Canadian waters. Alternately, the articulation of the *Canadian Coast Guard Act* would be an opportune moment to rectify this and increase the effectiveness and flexibility of the CCG as an instrument of national power. If pursued diligently, the government of Canada would be able to maximize the already tremendous utility of the CCG. The CCG would be infused with 'guard power' and the synergy between it and the RCN would be magnified to provide more meaningful options to respond to threats from across the spectrum of conflict, and ultimately to protect Canada and Canadians better. ⚓

Notes

1. Government of Canada, "History of the Canadian Coast Guard," Canadian Coast Guard.
2. Government of Canada, "Our Mandate," Canadian Coast Guard.
3. Parliament of Canada, "Bill C-2," House of Commons of Canada, 3 June 2025.
4. Prime Minister of Canada, "Canada's New Government is Rebuilding, Re-arming, and Reinvesting in the Canadian Armed Forces," News Release, 9 June 2025.
5. Government of Canada, "Repealed – Interim Order Respecting Passenger Vessel Restrictions Due to the Coronavirus Disease 2019 (COVID-19)," Transport Canada, 4 April 2020.
6. See Jane George, "Nunavut Spotter Sees New Zealand Yacht Heading East into the Northwest Passage," *Nunatsiaq News*, 24 August 2020.
7. Government of Canada, "Canada Border Services Agency," CBSA.

Chris Henderson is a retired senior executive with 37 years of military and public service. Recently, he was Deputy Commissioner of Operations at the CCG for four years and, prior to that, was Assistant Deputy Minister of Public Affairs at DND.

Canada's Coast Guard at a Crossroads: Safeguarding Shores and Security

Adam Lajeunesse



Credit: Master Corporal Antoine Brochu, Canadian Armed Forces Combat Camera

HMCS William Hall from the Royal Canadian Navy and CCGS Pierre Radisson sit at anchor together during Operation Nanook-Nunakput in Pond Inlet, Nunavut, on 7 September 2025.

In June 2025 the government of Canada announced a significant shift in the administration of the Canadian Coast Guard (CCG), moving the agency from the Department of Fisheries and Oceans (DFO) to the Department of National Defence (DND). Prime Minister Mark Carney described this move as part of Canada's efforts to meet its NATO spending contribution; however, it is more than a political manoeuvre. At its heart, this evolution is about building a smarter and more streamlined defence of Canada and the continent by leveraging the CCG's assets and capabilities to close gaps in the country's common operating picture and deliver a more holistic national defence.

The move provoked some concern over the coast guard's future, prompting the Vice Chief of the Defence Staff to offer explicit reassurances that the agency would not be absorbed into the Canadian Armed Forces (CAF) and that it would not lead to a militarized force akin to the US Coast Guard.¹ Indeed, the move is not nearly as dramatic as some fear. First and foremost, it is an effort to streamline reporting and information sharing to remove many of the institutional barriers that have historically limited cooperation.

At the heart of this shift is the need to improve maritime domain awareness (MDA), particularly in the Arctic. As Canada faces new great power challenges and hybrid

threats, an accurate picture of its ocean spaces is critical. Traditionally this task has fallen to the Royal Canadian Navy (RCN), which has both a blue-water focus and a security mandate – as well as the sensors geared to MDA. This capability is limited, however, by the navy's small (and declining²) footprint. The CCG's fleet of 125 ships – as well as its helicopters and sensors – offers to fill some of this gap.

Despite this clear requirement, the coast guard's ability to contribute to the security mission has always been limited by its administrative separation from DND. As a separate agency under DFO, the coast guard is restricted by the *Privacy Act* from collecting 'security' information or sharing 'safety' information for 'security' purposes. For instance, under section 4 of the act, personal information may only be collected if it relates directly to the mandate of the agency collecting it. Section 7 stipulates that collected information can only be used for (or consistent with) the original purpose for which the information was obtained or compiled.³

These provisions limit smooth information sharing with DND since a great deal of data collected by the CCG relates to safety and therefore cannot be shared for security purposes. Likewise, the coast guard cannot receive security intelligence from its federal partners in DND/CAF.

In practice, this means that the CCG's ability to share data seamlessly with the navy – as well as other security partners like, for example, the RCMP and the Canadian Border Services Agency (CBSA) – is limited. Likewise, its ability to receive critical data and engage in a full discussion on developing security threats is hindered by its lack of a security mandate.

How does that work in practice? Hypothetically, if the CCG gathered intelligence on a possible act of maritime sabotage, sharing that data would be limited by section 7 of the *Privacy Act*, which restricts personal information sharing without consent. That could be bypassed by relying on section 8(2)(m) to share information with DND, since this would be in the 'public interest' or as a national security requirement authorized under other federal laws, like the *National Defence Act* or *Oceans Act*. Information sharing could be also undertaken quickly through existing memorandums of understanding, but the paperwork would still come later with approvals needed to justify the disclosure. Relying on those systems also assumes that the national security threat is obvious and that the information sharing would be justified on national security grounds.

For instance, the coast guard may detect a vessel of interest which it suspects of smuggling weapons. That suspicion may not be enough to justify sharing certain information on the ship – which may be purely civilian data and unrelated to the CAF's security mandate. In that instance, the coast guard may have to filter the data before sharing. In the Arctic, an emerging concern is foreign state marine scientific research with military applications. If a CCG icebreaker suspected a Chinese ship of intelligence-gathering, it would not have the authority to proactively conduct surveillance activities. Its ability to share crew identities, equipment lists and data with the CAF or other security agencies would also be limited since this would be an interdepartmental disclosure triggering the *Privacy*

Act, where section 8(2) requirements require an exception (such as national security) and may require information redaction or laborious approvals. This slows real-time operational intelligence sharing if the operation is not covered by a pre-existing operational agreement with DND.

As mentioned earlier, the *Privacy Act* is not a straight-jacket and there are paths to sharing important information. In addition to the exceptions built into that act, the *Security of Canada Information Disclosure Act* enables the sharing of national security-related data, yet this sharing remains discretionary and limited to the recipient's mandate. Because the CCG is civilian it is allowed to disclose threat information but not receive it. There are also significant hoops to jump through to make this happen. Co-operating must be legally justified, documented via formal agreements, and accompanied by audit and oversight protocols. This process works, but it is slow and labour intensive.

Merging the coast guard into DND is less about militarizing the agency than it is about eliminating the gaps and seams between it and the security forces. Once the organization is housed within DND, internal information sharing becomes far easier and subject to less interdepartmental legal friction. For instance, under the *Privacy Act*, moving personal information within the same department is considered 'use' rather than 'disclosure,' so section 8 restrictions do not apply in the same way. Within DND, internal security directives also govern the flow of information more flexibly than statutory inter-agency constraints. As part of the same department, CCG boarding reports, vessel logs and sensor data would be part of a single system, just as CAF intelligence would be available to coast guard operators.

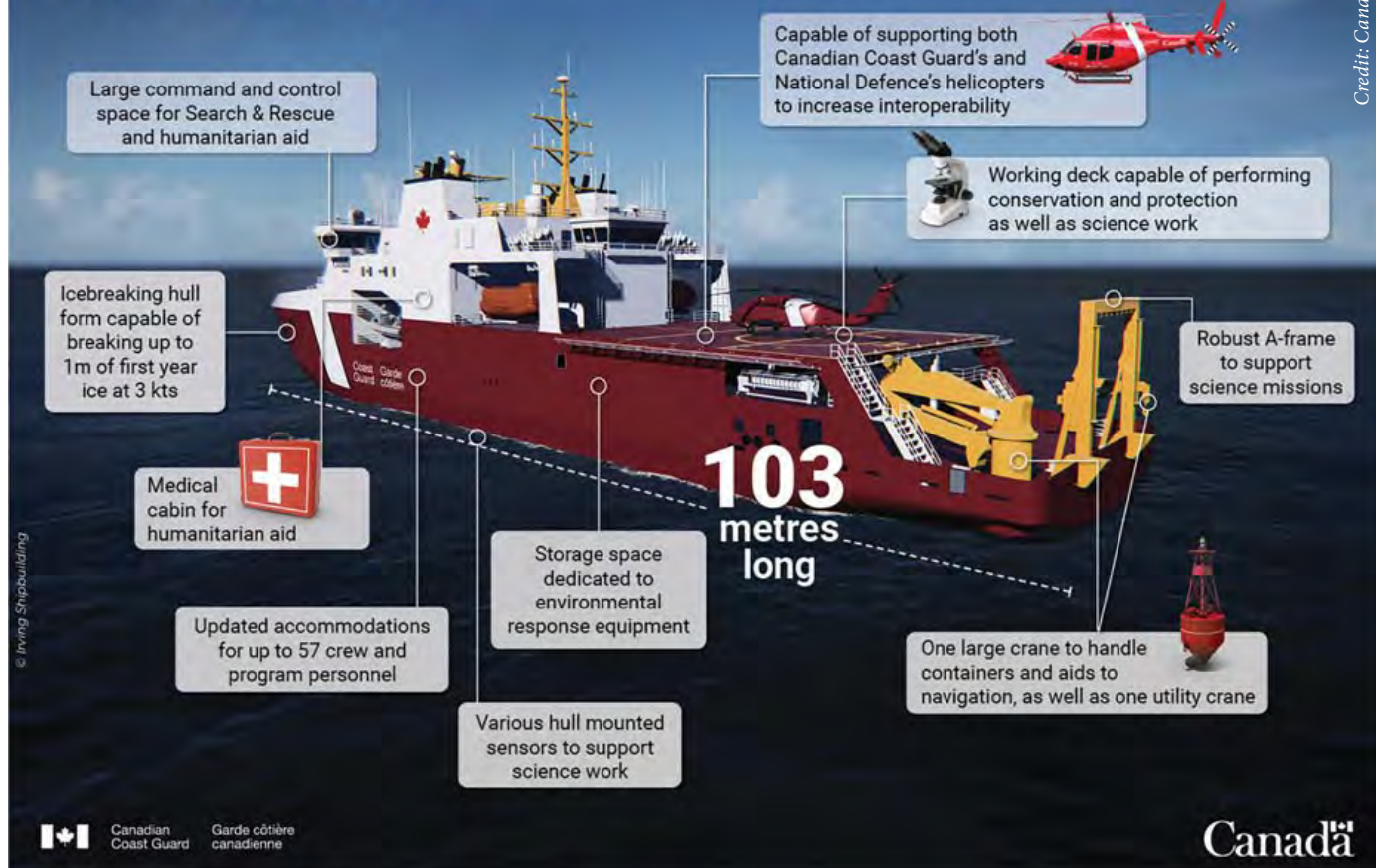
This bureaucratic streamlining is less dramatic than visions of a militarized coast guard but it is an important step towards harmonizing Canada's large civilian fleet with its security apparatus. With a common reporting chain and operational picture, this harmonization is likely to extend to tools and systems as well. Moving to DND will simplify the process of adding new sensors to CCG ships, which will allow them to feed military grade data into the Marine Security Operation Centres (MSOCs) – and receive it in return. As a Senate Committee was recently told, the coast guard is going to receive new "detecting equipment" for intelligence gathering.⁴ The precise nature of this equipment remains to be determined, however it will certainly create new opportunities to build common systems with the navy, allowing for streamlined operating procedures and maintenance, as well as improved system integration overall. While adding a clear security capability, new equipment will also enrich the coast guard's traditional tasks, from search and rescue to environmental

Credit: Canadian Coast Guard



Employees at an unspecified Marine Security Operation Centre at their stations, undated.

ARCTIC AND OFFSHORE PATROL SHIP



A graphic accompanying the Canadian Coast Guard's 2023 media release announcing the steel-cutting of its Arctic and Offshore Patrol Ship shows key features of the ship. There are differences between the CCG version and the version operated by the Royal Canadian Navy.

research. Naturally, sensors that can monitor security threats can be dual purposed for civilian tasks.

Working on common systems, with information feeding back into a common operating picture, has become increasingly important. Canada's coastal waters are busier than ever and the security dynamic more complex. Tracking adversary warships is a simple enough proposition, however Canada now faces a new breed of proxy and hybrid threats. Illegal fishing is proliferating and state-sponsored sabotage has become a serious concern. Telecommunications and power cables are now being deliberately cut in Europe while Canada itself has experienced three such cables severed in the last 18 months.⁵ Whether this was malicious or accidental remains uncertain, however, data collection and analysis now need to take place faster while barriers to sharing and responding can no longer be accepted.

This improved integration is needed across Canada's maritime space, although the need is clearest in the Arctic.⁶ While the navy now has six ice-capable patrol ships to operate in the region, the CCG remains the most visible federal presence in the North. The agency currently operates 19 icebreakers – including 10 heavy or medium vessels

well suited to the Arctic. Over the next several years, the National Shipbuilding Strategy will bring an additional eight ships into the Arctic fleet, including two massive Polar Class (PC2) heavy icebreakers. Building an improved situational awareness in the region means strengthening the connections between these platforms and RCN and CAF assets – supporting a more robust common operating picture and facilitating common equipment and processes.

In the Arctic, the coast guard will also be Canada's only sustained maritime presence. The two new PC2s will be in the region year-round, ranging from the High Arctic to the Davis Strait, depending on season and requirements. This presence will become increasingly crucial as Canada's adversaries expand their operations in the region. Chinese research voyages in the western Arctic have expanded in size and scope over the past several years and have been identified by the government of Canada as potential security threats.⁷ Monitoring this activity and ensuring that Chinese operations do not exceed their rights under the law of the sea will invariably require both navy and coast guard assets. With the navy's new Arctic and Offshore Patrol Vessels (AOPVs) now operating across the region, a common

set of procedures, equipment and communications channels is more essential than ever before.

Operating in the western Arctic may also mean working with the US Navy and US Coast Guard. As China's presence in the region increases and commercial activity grows, Canada may expand its information sharing and even deployment coordination with the Americans. For the CCG, this means building smooth operating synergies not only with the RCN but also the Americans, something easier to achieve if a broader government of Canada approach is taken when strategically opportune. While such cooperation could be derailed at any time by the White House's routine and unpredictable policy tantrums, the trend towards greater integration remains clear for the time being. An early preview of this kind of hybrid security operation can be seen in CCGS *Sir Wilfrid Laurier's* coincidental shadowing of the Chinese icebreaker *Xue Long 2* as it moved through the North Pacific towards the Bering Sea in July 2025. Contrary to some reporting, the icebreaker's parallel path was unintentional; however, it offers a useful example of what the coast guard could offer as Chinese Arctic activities become more routine. Here, a smooth internal and allied information-sharing system will become essential.

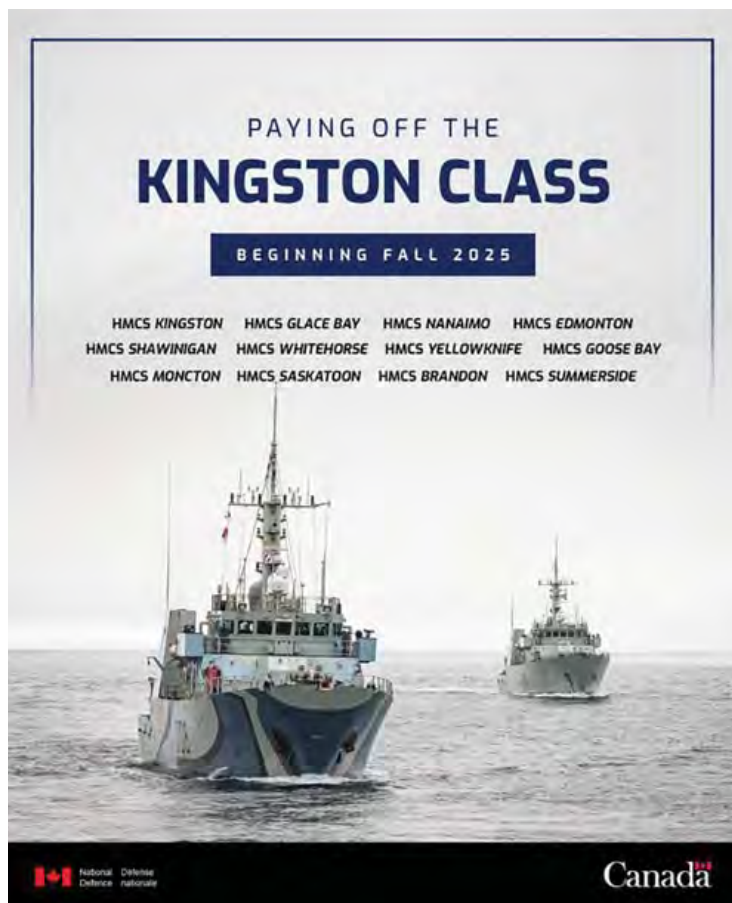
Sharing procurement processes also becomes easier when the federal fleets are combined. Both the navy and coast guard will require long-range aerial drones in the years ahead, as well as new helicopters. The new PC2 icebreakers will carry heavy aircraft while the navy may also need new helicopters in the face of its ongoing difficulties with the Cyclones. Common purchases of systems, aircraft and sensors may allow for larger bundled procurement and maintenance contracts, creating economies of scale and cost savings. As Rob Huebert points out in this edition of *Canadian Naval Review*, building multiple unique icebreaker designs at different locations is an extremely inefficient approach to construction.

The reverse example would be the combined AOPV built by Irving Shipbuilding in Halifax. While the decision to deliver two AOPVs to the CCG may have owed more to political and industrial considerations than true coast guard requirements, the efficiencies are hard to dispute. Having built six AOPVs for the navy, Irving has achieved significant efficiencies over the life of the program. Measuring from first steel cut to delivery, AOPV 5 (*Frédéric Rolette*) was completed 598 days faster than AOPV 1 (*Harry DeWolf*). *Rolette* was also delivered more than a year faster than its immediate predecessor (*William Hall*) demonstrating a continuous, iterative improvement.

Working within DND, shipbuilding and procurement can be combined to provide shipyards and other manufacturers with large batch orders, which offer the time and scale to develop critical efficiencies. Those cost savings and improved timelines will benefit the CAF and the coast guard alike.

There are also likely to be new opportunities to leverage CCG assets to achieve dual effects. Across Canada's ocean spaces the coast guard maintains 17,000 buoys and short-range aids to navigation.⁸ It also operates shore-based radar and radio stations on every coast, and autonomous data collection platforms to monitor environmental conditions and collect data in the Arctic. While these are civilian tools, there are clear security applications as well. For instance, tools designed to measure ice and ocean conditions could carry passive hydrophones or active sonar for submarine detection. Larger platforms or buoys could be modified to carry compact surface-search radars and infrared cameras for ship tracking, and radio frequency or AIS spoof-detection receivers for signals intelligence. Magnetometers, chemical detectors and meteorological instruments could provide dual-use environmental and security data, while secure satellite uplinks networks allowing real-time integration into NORAD and CAF command systems could get broader use. These are hypothetical combinations, although easy to imagine as the government looks for efficiencies in MDA systems.

Credit: Royal Canadian Navy



Despite the construction of new ships, the Royal Canadian Navy is currently shrinking. This graphic posted in July 2025 announces the decommissioning of the *Kingston*-class Maritime Coastal Defence Vessels.

While efficiencies and economies of scale are important, so too are the optics of spending. Canada has committed to spending 5% of its Gross Domestic Product (GDP) on defence (and defence-related infrastructure) and the coast guard is a part of reaching that politically and diplomatically important goal. Currently, the government counts all expenditures that meet NATO's definition of defence spending.⁹ In Canada, DND makes up \$45 billion of that claimed \$62.7 billion in total spending. The coast guard is also a major contributor, largely through its construction of ships.¹⁰ Despite this, only 60% of the CCG's budget is included as a 'defence' expenditure. NATO guidelines allow spending to be counted from civilian agencies "when the military component can be specifically accounted for or estimated." Specific examples include meteorological services, aids to navigation, joint procurement services, and research and development.¹¹ Within DFO, many of these civilian tasks are too separate from security missions to be counted, however, as the CCG expands its security role and its safety mandate feeds into security MDA, that percentage will expand.¹² While this may seem like little more than the shuffling of figures on a spreadsheet, it may provide Canadian diplomats with valuable ammunition in dealing with the increasingly capricious government in the United States.

The government of Canada has been clear that it is not looking to militarize the Canadian Coast Guard or detract from its core civilian and scientific responsibilities. This is certainly clear from its decision not to change the agency's basic mandate. For decades governments have toyed with the idea of adding law enforcement and defence mandates but have always backed away from that more dramatic step.¹³ Bill C-2 moves the coast guard further down that path. By amending the *Oceans Act*, the government has shifted the mandate from "marine services" to "services," explicitly including security patrols and law enforcement support functions.¹⁴ More explicitly, section 41.1 of the *Oceans Act* authorizes the Minister to collect, analyze and disclose security-related information and intelligence – removing many of the seams that limited CCG cooperation with the other government departments that used its ships to enforce security mandates. While the coast guard still does not have that mandate for itself, this shift certainly smooths the road to an even greater expansion of the mandate in the future.

As Canada's security dynamic becomes more complex, a more flexible and robust CCG mandate may be needed. Illegal, unreported and unregulated fishing is a more serious concern than ever before while activity in the Canadian Arctic is growing. As a civilian agency, the coast guard relies on other departments and agencies to enforce Canadian law and regulations, with its ships and

crews providing support. That arrangement has generally worked, but places a heavy reliance on RCMP, CBSA and DFO ship riders. It is not certain that these partners will always be available when needed. Tied into national security information-sharing systems, the coast guard could evolve to take on these tasks directly. This could include arresting trespassing ships, intervening to stop and fine maritime polluters, and policing illegal fishing. None of these are defence considerations *per se*, but access to defence networks and new tools, such as long-range surveillance equipment and integrated data centres, would certainly make it easier to assume these mandates.



An automated Viking science buoy part of Fisheries and Oceans Canada's Online Scientific Buoy Network, undated.

The most dramatic expansion of CCG responsibilities would be to support the navy in times of conflict. While such responsibilities are not a part of the agency's move to DND, the exigencies of war tend to demolish mandates as states are pushed to use every available tool. While hardly suited for combat, the coast guard would still make a useful auxiliary during war-time. Civilian vessels can lay



A US Coast Guard cutter crew evacuates a man suffering from a broken arm from the Chinese icebreaker *Xue Long*, 15 nautical miles from Nome, Alaska, on 23 September 2017.

mines and surveillance buoys or operate long-range maritime or aerial surveillance drones. When armed with 50 calibre machines guns – or even containerized weapons systems – larger craft could interdict suspected surveillance craft or enemy maritime drones along Canada's coast. With added surveillance capabilities, CCG ships could also tie into a broader network to expand Canada's MDA on all three coasts. This is an extreme scenario but a possible requirement that should be considered. As great power competition intensifies, these operational ties with the CAF will only become more important.

Even in the face of that worst case scenario, the Canadian Coast Guard's move into DND is not an attempt to alter the nature of the agency or to downplay its civilian functions. Rather, it is a smart move to leverage its significant maritime footprint to feed vital information more effectively into a holistic national surveillance picture. The coast guard's broad presence, and its Arctic capabilities in particular, make it an invaluable component in the government's efforts to fill obvious holes in national and continental surveillance.¹⁵ Working within DND offers to smooth these efforts and provide the agency with the tools and resources needed not only to fulfill its mandate, but to expand in useful new directions. In an increasingly complex and dangerous world, it is a good pairing. ⚓

Notes

1. Lieutenant-General Stephen Kelsey quoted in "Coast Guard Vessels Won't be Armed Under Defence Plan: Military Vice-Chief," Global News, 17 June 2025.

2. In July 2025 the RCN announced the paying off of most of its *Kingston*-class patrol fleet.
3. Canada, *Privacy Act* (R.S.C., 1985, c. P-21).
4. Senate of Canada, Standing Senate Committee on National Finance, "Evidence, 45th Parl., 1st Sess. (45th Parliament, 1st Session)," 2025.
5. This statistic comes from discussions with a government of Canada employee authorized to speak on the subject.
6. This focus is clear from government statements. See Lieutenant-General Stephen Kelsey's comments at Senate of Canada, Standing Senate Committee on National Finance, "Evidence, 45th Parl., 1st Sess., Meeting No. 3," 11 June 2025.
7. See Government of Canada, "Canada's Arctic Foreign Policy," 2024, p. 14.
8. Canada, Department of Fisheries and Oceans, "Canadian Coast Guard Aids to Navigation Program," last modified 9 December 2022.
9. North Atlantic Treaty Organization (NATO), *Defence Expenditures and NATO's 2 % Guideline*, NATO, 27 June 2025.
10. Senate of Canada, Standing Senate Committee on National Finance, "Evidence, 45th Parl., 1st Sess., Meeting No. 3," 17 June 2025.
11. NATO, *Defence Expenditures and NATO's 2 % Guideline*.
12. Arty Sarkisian, "The Explainer: What does Coast Guard's Move to New 'Team' Mean?" *Nunatsiaq News*, 18 June 2025.
13. See for instance Senate of Canada, Standing Committee on National Security and Defence, "Canada's Coastlines: The Longest Under-Defended Borders in the World," October 2003; and House of Commons Standing Committee on Fisheries and Oceans, "Reinventing the Canadian Coast Guard" (2004).
14. Parliament of Canada, Library of Parliament, "Legislative Summary of Bill C-2: An Act Respecting Certain Measures Relating to the Security of the Border between Canada and the United States and Respecting Other Related Security Measures," Publication No. 45-1-C2-E, Ottawa: Library of Parliament, 19 June 2025.
15. See Reports of the Auditor General of Canada, Report 6, "Arctic Waters Surveillance," 2022.

Adam Lajeunesse, PhD, is an Associate Professor and Chair of the Public Policy and Governance program at St. Francis Xavier University. Dr. Lajeunesse is also the Arctic and Maritime Security Chair at the Brian Mulroney Institute of Government, A Fulbright Arctic Scholar, and the Director of the Canadian Maritime Security Network (CMSN).

The Cost of Success: Rebuilding the Coast Guard's Arctic Capabilities

Rob Huebert

Credit: Seaspan



A rendering of the polar icebreaker being built by Seaspan Vancouver Shipyards.

The Canadian Coast Guard (CCG) has traditionally been the neglected marine service within Canada.¹ It plays an essential role for Canada in a vast area of maritime safety and security functions, and it is best known as one of the Canadian government's most important means of providing stewardship over the Arctic – as evidenced by the appearance of the icebreaker CCGS *Amundsen* on Canada's \$50 bill. However, while the CCG plays such a crucial role for Canada, it remains underfunded and ignored by Canadian governments, forced to operate an aging fleet.

This is about to change with the long-promised fleet recapitalization finally occurring under the National Shipbuilding Strategy.² Specific to the Arctic, the actual construction of two large Polar Class icebreakers began at Seaspan Shipyards in Vancouver on 3 April 2025 and at Helsinki Shipyard in Finland on 20 August 2025.³ In addition, on 8 August 2023, Irving Shipbuilding began the construction of one of the two Arctic and Offshore Patrol Vessels (AOPVs) that the CCG will receive. Such an explosion in the construction of vessels needed for operations in the Canadian Arctic would seemingly be only good news; however, unfortunately, while the ships are all needed, the manner and timing of their construction will create significant difficulties and inefficiencies in the future. The frustrating element of this is that the

government of Canada fully understands what it is doing but is still proceeding in this manner.

The current urgency to act is based on the recognition of two core threats to Canadian Arctic security and sovereignty.⁴ The first is the long-term recognition of the impact of climate change. Specifically, the warming of the polar regions means that waterways that have been previously frozen and therefore inaccessible are now expected to be navigable as the ice melts, leading to increasing ship traffic. There is disagreement as to when this will occur and how the melting will take shape, but the political realization that it is occurring is now driving much of Canadian policy, as evidenced in both *Our North Strong and Free* and *Canada's Arctic Foreign Policy*. The second major threat comes from the rapidly devolving international security environment. While many Arctic scholars had seen the Arctic as a region of exceptional peace and cooperation, events since the Russian invasion of Ukraine in 2014 have now led to circumstances in which the Arctic is increasingly recognized as a region of escalating tension.⁵ Unlike the Cold War era, when the two belligerents were the United States and its North Atlantic Treaty Organization (NATO) allies against the Soviet Union, the growing tension between the NATO alliance and Russia is compounded by an increasingly Arctic-oriented China.

There is considerable debate as to the actual intentions of China and whether it poses a security threat as opposed to a political/economic threat, but there is little dispute that China's involvement in the region is growing.

The net effect of the recognition that the Arctic waterways will become more navigable in the future, combined with the growing military tension in the region, has finally focused Canadian policy-makers' attention on the need to respond to the requirements of the Canadian Coast Guard.

This has resulted in the current building of a new fleet of icebreakers. Once the new ships are constructed, they will fill a growing deficit in Canada's Arctic capabilities, and the CCG will make excellent use of the vessels. But the way they will have been built underlines the unwillingness and inability of Canadian governments to manage the country's Arctic assets rationally, and especially those the CCG needs. Canadian governments may say they prioritize the protection of Canadian Arctic sovereignty and security, but the way the CCG Arctic fleet is being rebuilt demonstrates that this is not the case. Governments also say they understand the problems that a boom-and-bust building cycle creates,⁶ but the construction of the two polar icebreakers and two AOPVs at the same time and in different shipyards demonstrates that they either do not know how to solve the problem or really do not care to do so.

Successive Liberal and Conservative governments have had a long time to come up with a rational plan to break the

historical boom-and-bust cycle. Canadian governments have known for over 40 years that they needed to begin construction on a new large icebreaker. The decision only now to build all the ships needed will leave the CCG with an overly complex and ineffective means of maintaining and crewing them. Thus, despite acknowledging that the boom-and-bust cycles have been the core problem facing Canadian shipbuilding, the Canadian Coast Guard – after waiting 40 years – will have two Polar Class icebreakers, two AOPVs and the six smaller program icebreakers almost all built at the same time. The CCG will need to figure out how to service and maintain these vessels for a long time without any economies of scale. They will all have different service requirements, will demand different maintenance regimes, and will have different crewing needs. If the CCG had a history of being given an abundance of resources, this might not be a huge problem. But it has traditionally been starved of resources and, as such, the future will be challenging.

Canadian governments have understood the need to build icebreakers for a long time. Following the voyage of the American icebreaker USCGC *Polar Sea* through the Northwest Passage in 1985, the Brian Mulroney government undertook an extensive review, under the leadership of Joe Clark, of what Canada needed to defend its Arctic sovereignty.⁷ One of its more important findings was that it needed to build a Polar 8-class icebreaker.⁸ This was announced to great fanfare in Parliament on 10 September



A close-up of the prototype block built by Seaspan in early 2024 using the 60 mm-thick steel that will be on the polar icebreaker. The official first steel-cutting for the ship was in April 2025.



Canadian government and Davie Shipbuilding officials at the 20 August 2025 steel-cutting ceremony for the 'Polar Max' polar icebreaker being built by Davie in its Helsinki and Quebec yards.

1985. This decision was cancelled by 1988 but successive governments have re-asserted the need to build the replacement for CCGS *Louis S. St-Laurent*, which was built in 1969 and is still being operated in 2025. Likewise, the existing fleet of medium icebreakers – built or acquired between 1978 and 1987, with the purchase of an additional vessel in 1991 – also need replacement.⁹ In effect, Canada last built an icebreaker specifically designed for the Canadian Coast Guard 38 years ago. Both Liberal and Conservative governments have stated their intentions to build new vessels but seemed more interested in determining the names of the vessels than building them (e.g., *Diefenbaker* vs. *Arpatuuq* and *Imnaryuaq*). Both the Harper and Trudeau governments announced names well in advance of building them. There have also been numerous reports recognizing this problem, beginning with the 1990 *Osbaldeston Report*, which focused on better managing Canada's various fleets.¹⁰ The Harper government promised to build three armed icebreakers when it was elected in 2005, but it later changed these to the six AOPVs built for the navy that have just been completed, and two to be built for the CCG.

Successive Canadian governments have also understood the problem that historically has plagued Canadian shipbuilding. Canada tends to build its ships in short

time-frames. This boom-and-bust practice means that it has not been able to sustain the shipyards that build these vessels. When the government decides to build new vessels, there is inevitably the need to build a large number and to rebuild the shipbuilding capacity – often from scratch. Recognizing this problem in 2008, the Harper government decided to act and undertook an examination of the problems that Canada has faced in building vessels for its navy and coast guard.¹¹ This study resulted in the creation and release of the National Shipbuilding Procurement Strategy (later renamed by the Trudeau government as the National Shipbuilding Strategy). It is based on three pillars: (1) the construction of large vessels (more than 1,000 tonnes of displacement); (2) the construction of small vessels (less than 1,000 tonnes of displacement); and (3) vessel repair, refit and maintenance projects.¹² To implement this strategy, the government of Canada selected two shipyards to build the large vessels: Seaspan in Vancouver; and Irving Shipbuilding in Halifax. The government later decided that Halifax would be responsible for building warships, while Vancouver would build the large non-combatant vessels.

As an aside, the reluctance of Canadian governments to assess this problem publicly is demonstrated by the fact that once the strategy was created, it was never actually

The Arctic: People, Resources and Capabilities

EEZs and Territorial Claims: Source: Flanders Marine Institute, *World EEZ*, v. 12; and *World Extended Continental Shelves*, v. 2.

Oil and Gas Facilities: Current oil and gas production areas and probability of the presence of at least one undiscovered oil and/or gas field with recoverable resources greater than 50 million barrels of oil equivalent map. Source: "Marine Conservation in the Norwegian Arctic." Nicole Wienrich, 2022/08/31.

Oil Reserves and Pipelines: Source: "Resources in the Arctic," Nordregio.

Military Sites: Source: "Arctic Competition Part Two: Military Buildup and Great Power Competition," *Foreign Policy Magazine*, 14 December 2020.

Arctic Sea Routes: Arctic Sea Routes with main ports and EEZ map. Source: Arctic Portal. Updated August 2023.

Inuit Settlement Area Boundaries and Inuit Owned Lands: Source: Aboriginal Affairs and Northern Development Canada, Open Government Licence – Canada.



OIL AND GAS IN THE ARCTIC

Probability of significant oil and gas deposits

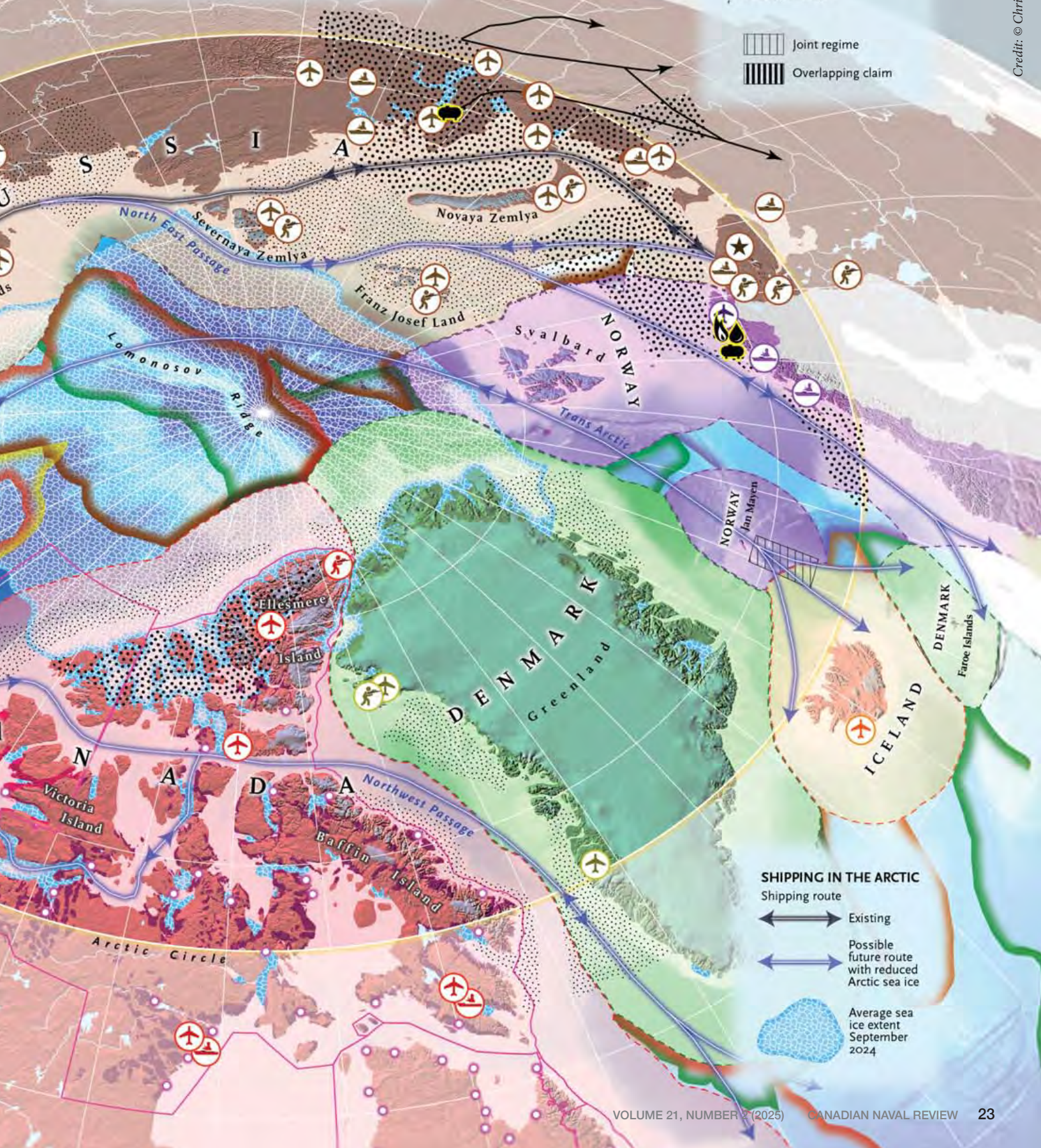
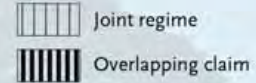


- Oil facility
- Gas and condensate
- LNG Terminal
- Pipeline

ARCTIC OCEAN BOUNDARIES

Official submission to extend territorial boundaries based on the continental shelf by country

Limit of Exclusive Economic Zone



SHIPPING IN THE ARCTIC

Shipping route

Existing

Possible future route with reduced Arctic sea ice

Average sea ice extent September 2024

released to the public. The government released a summary of the strategy's findings,¹³ and there have been annual reports,¹⁴ but the actual strategy has never been released.

The strategy was based on the premise that such an approach would allow companies both to build up the necessary expertise and have an ongoing flow of contracts to ensure that they remain sustainable over time. This would also mean that both the Canadian Coast Guard and the Royal Canadian Navy (RCN) would receive new vessels on an ongoing basis, allowing for a more easily managed acceptance process. Not unexpectedly, efforts to implement the shipbuilding strategy ran into several challenges, and some of the contracts developed delays. The Auditor General noted that these delays meant that many of the necessary vessels were not going to reach either the CCG or the RCN within the time-frame in which they were needed.¹⁵

Responding to these challenges, the Trudeau government made the decision to add a third shipyard to the National Shipbuilding Strategy in order to speed up the construction of the vessels. In August 2019, Public Services and Procurement Canada (PSPC) announced that there would be a competitive process to select a third shipyard to build icebreakers for the CCG. In December 2019, the government announced that Chantier Davie Canada Inc. in Levis, Quebec, was to become the third shipyard.¹⁶

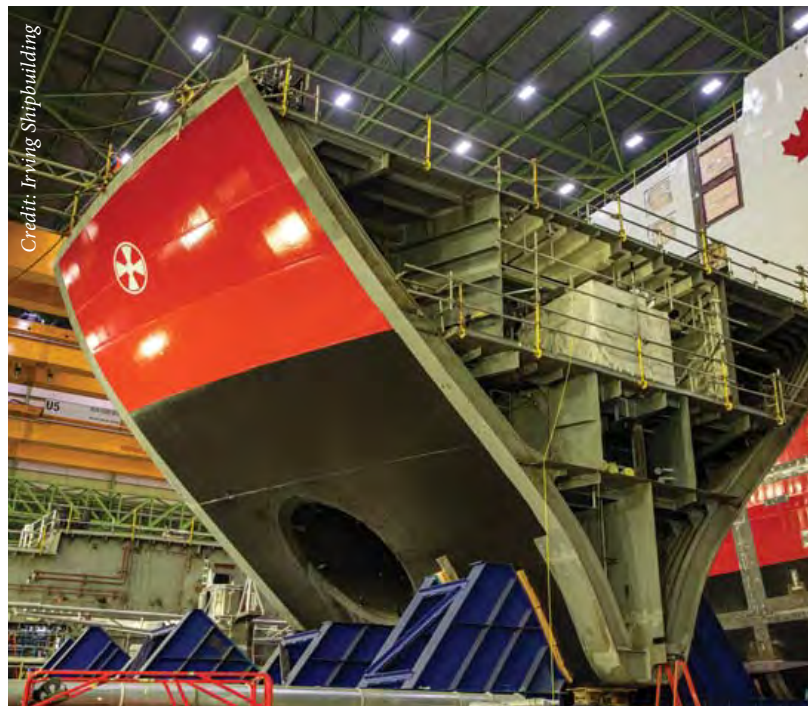
The recognition that the aging fleet cannot meet the growing threats of climate change and a deteriorating geopolitical environment has compelled the Canadian government to act. Both the Conservative Harper government and the Liberal Trudeau governments acted on rebuilding the CCG's Arctic capability, as is the Carney government. But they have done so in a manner that guarantees the continuation of the boom-and-bust cycle. All the new icebreakers are now being built at the same time. This is despite knowing, since 1985, that there was a need to build new large icebreakers. Furthermore, because recent governments came to feel such an urgency, they are building the icebreakers in four separate yards. 'Polar Max' – the icebreaker that Davie is building – is itself being constructed in two different yards. The hull will be constructed in Finland and will then be brought over to the shipyard in Quebec for completion.¹⁷

Future scholars now have the exact dates of when the current boom-and-bust cycle for Canadian icebreakers commenced: 8 August 2023 to 20 August 2025. It is within this time period that Canada began building two polar icebreakers and the first of two AOPVs for the CCG. These will soon be followed by the six program icebreakers that Davie will build. This procurement timeline has also provided the answer as to whether Canada can solve the boom-and-bust cycle that it has historically faced.

Evidently, the answer is no – when it comes to icebreakers. All these vessels will come into operation in the early 2030s. Per tradition, Canada will use these vessels for a long time, so it is not unreasonable to assume that all of them will require replacement at the same time – probably between 2070 and 2080. During that time period, the future Canadian government will again face this problem.

But coming back to the current time, what are the ramifications for the Canadian Coast Guard as these vessels come into operation in the early 2030s? First, it must be assumed that the challenges Canada will face will not diminish. In other words, we must assume that the instability and danger posed by Russia, China, and increasingly the United States, will remain below the threshold of armed conflict. Should war break out with Russia or China, all such concerns about icebreakers will be fundamentally altered. Likewise, a Donald Trump administration that makes good on its threat to assimilate part or all of Canada would render the concern over icebreakers meaningless. But assuming these dire predictions do not occur, what are the issues that the Canadian Coast Guard will face as it accepts all these vessels in a relatively condensed time-frame?

First, the CCG will welcome the addition of two Polar Class icebreakers, two AOPVs and, subsequently, the six program icebreakers. Maintaining the aging fleet has always been demanding. The existing vessels require a tremendous amount of repair and upkeep to meet the rigours of operating in the Arctic. The new vessels will not face such issues, while also providing the coast guard



This August 2025 photo shows painted blocks for the first Canadian Coast Guard Arctic and Offshore Patrol Vessel at Irving Shipbuilding's Halifax Shipyard.



A 2022 graphic shows a program icebreaker being built at Davie Shipbuilding.

with much-needed technical advancements, as all of them will be built with state-of-the-art equipment.

However, several problems will arise that the CCG will need to manage. First, as noted earlier, is that the timing of the build means that the boom-and-bust shipbuilding cycle will be repeated. This will not be a problem at first, but in time, it will require the same effort that is now being made to maintain the existing fleet. As the years advance, the CCG will need to figure out how to deal with the aging of the entire fleet. If it is well funded, such problems could be manageable, but the Canadian government's historical record is not promising on this point.

Second, the choice to build the two polar icebreakers and the AOPVs in four different shipyards will exacerbate what the Auditor General calls "the first-in-class problem."¹⁸ This is a problem all countries face when they build a new warship or specialized government vessel such as an icebreaker. Building these vessels is very challenging, and there are often lessons learned from such efforts. For example, the Americans are facing very significant problems with their new *Ford*-class aircraft carriers and *Columbia*-class ballistic missile submarines (SSBNs).¹⁹ As time progresses, the shipyards building these ships will learn how to address these problems, but they will need to learn how to do this. By having the polar icebreakers built in three yards, instead of the one yard that the National Shipbuilding Strategy originally called for, the government ensures that the first-in-class problem will be experienced twice. Presumably, most of the first-in-class problems that the AOPVs faced have been resolved, so at least the construction of those two vessels should proceed with fewer problems.²⁰

Third, there will be extended problems with maintenance and upkeep. The greater the variety that exists among any fleet, the more challenging it is to maintain each different ship. For the same class of vessels, there can be a commonality in spare parts, and the training of the crew who repair and maintain the vessels can be better organized. Different ships will require different repair capabilities. This is one of the main reasons why the Royal Canadian Air Force (RCAF) opposes operating a mixed fleet of fighters and prefers to have one class of aircraft.²¹

Fourth, there will be additional pressures with respect to training CCG personnel to operate the vessels. While there will be commonalities between the various classes of vessels that can provide for some overlap, there will also be specific elements that require specialized training on each vessel.

There is no question that Canada needs new icebreakers. Its current fleet is aging and has a limited time left before most ships need to be retired. The twin threats of climate change and a deteriorating geopolitical Arctic environment do not allow Canada to be without icebreakers. Thus, the decision to rebuild the fleet is welcome. But the government's determination to build the new vessels in different shipyards and at the same time ensures that the problems associated with boom-and-bust building cycles will remain. In 2070, when the next fleet will be needed, these problems that the CCG now faces will return.

Undoubtedly, the current government will contend that it had no choice, since it needs to have the new icebreakers now, and that the fault lies in the inaction of previous governments. It is right in this regard. The sense of urgency



A sailor on USS **Gerald R. Ford** operates one of the ship's advanced weapons elevators during a post-delivery test and trial period in April 2021. **Ford's** elevators have required extensive troubleshooting as they utilize new technology and are emblematic of the first-of-class issues with the **Ford**-class.

is understood and real. Canada does need an icebreaker fleet to meet the new Arctic demands and threats. But this is a problem that has been understood to exist for almost 40 years. Furthermore, the determination to break the boom-and-bust shipbuilding cycle was part of the motivation behind the formulation of the National Shipbuilding Strategy.

Two questions therefore remain. First, why, despite having time to act and knowledge of the problem, have successive Canadian governments been unable to break the boom-and-bust cycle when it comes to building icebreakers? Why is Canada repeating the decisions that lock itself into this system? Second, how can the Canadian Coast Guard best prepare to respond to the problems that this will create for itself? How can it ensure that it is able to take the best advantage of what will be a very powerful new presence in the Canadian Arctic, while best remedying the challenges that come from receiving all of these different ships at once? These questions are not easy to answer but will require careful consideration. ⚓

Notes

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4. Both sets of threats are identified in Government of Canada, Global Affairs Canada, *Canada's Arctic Foreign Policy*, 2024; and Government of Canada, Department of National Defence, *Our North, Strong and Free: A Renewed Vision for Canada's Defence*, 2024.
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6. Boom-and-bust cycles refer to when a large number of ships are built in a short period, meaning that the shipyard that builds them will have a

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8. See Adam Lajeunesse and Rob Huebert, *From the Polar Sea to Straight Baselines: Arctic Policy in the Mulroney Era*, Documents on Canadian Arctic Sovereignty and Security (Calgary and Waterloo: Centre for Military, Security and Strategic Studies/Arctic Institute of North America/Centre on Foreign Policy and Federalism, 2017).
9. CCGS *Pierre Radisson*, 1978; CCGS *Sir John Franklin/Amundsen*, 1979; CCGS *Des Groseilliers*, 1982; CCGS *Henry Larsen*, 1987; CCGS *Terry Fox*, 1991. See Charles D. Maginley and Bernard Collin, *The Ships of Canada's Marine Services* (St. Catharines: Vanwell Publishing, 2001), pp. 154-158.
10. Government of Canada, Treasury Board, *All the Ships that Sail: A Study of Canada's Fleets, Report of the Study on the Utilization of the Federal Government's Marine Fleets (Osbaldeston Report)*, 15 October 1990.
11. See Dave Perry, "A Narrative History of the NSS from Conception to the CSC RFP," Naval Association of Canada, March 2021.
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13. Government of Canada, Media Release, "Government of Canada Announces National Shipbuilding Procurement Strategy," 3 June 2010.
14. Government of Canada, Public Services and Procurement Canada, *Canada's National Shipbuilding Strategy: 2020 Annual Report*, 2021.
15. Office of the Auditor General of Canada, *Reports of the Auditor General of Canada to the Parliament of Canada, Report 2: National Shipbuilding Strategy*, 2021, pp. 4-14.
16. House of Commons, *National Shipbuilding Strategy: Report of the Standing Committee on Public Accounts*, June 2021, 43rd Parliament, 2nd Session, p. 2.
17. Davie, Media Release, "Polar Max Steel Cutting Launches Construction Phase for Canada's Flagship Polar Max Icebreaker," 20 August 2025.
18. Office of the Auditor General of Canada, *Reports of the Auditor General of Canada to the Parliament of Canada, Report 6: Arctic Waters Surveillance*, p. 2.
19. See Hope Hodge Seck, "First Columbia-Class Sub, Two Aircraft Carriers Face Delivery Delays, Navy Officials Tell Senate," USNI News, 9 April 2025.
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21. Defence Research and Development Canada, "A Comparative Analysis of Minimum Resource Requirements for Single and Mixed Fleets for the National Fighter Procurement Evaluation of Options," no date.

Dr. Rob Huebert is at the University of Calgary. He is Network Coordinator, North American and Arctic Defence and Security Network and a well-known writer/commentator on the Arctic and defence policy.

The Canadian Coast Guard Arctic Region: Transforming Arctic Search and Rescue

Peter Kikkert and P. Whitney Lackenbauer



Canadian Coast Guard Auxiliary members from Tasiujaq, Kuujjuaq, and Kangiqsualujjuaq, Canadian Coast Guard Arctic search and rescue officers, and Kativik Civil Security personnel take part in Nunavik Search and Rescue (SAR) Exercise 2025.

On Monday, 23 June 2025, five tourists and their guide returning by boat from a fishing trip in Ungava Bay went ashore on an island at the mouth of the Koksoak River, north of the community of Kuujjuaq. They were settling down to brew tea on a camping stove when it exploded, killing one of the tourists and severely injuring the others. The guide had set up his Starlink before the accident and managed to send out an emergency alert. As it happened on land, the incident was a humanitarian or ground search-and-rescue (SAR) case falling under the jurisdiction of the Nunavik Police Service. With no marine capability, the police requested assistance from Joint Rescue Coordination Centre (JRCC) Halifax. Within minutes, the JRCC had tasked the Canadian Coast Guard Auxiliary (CCGA) units from Tasiujaq, Kuujjuaq and Kangiqsualujjuaq, which raced to the scene in their fast rescue boats.

The Nunavimmiut responders spotted the accident site, landed and made their way up the slopes of the rocky island. They were confronted by the screams of the injured and immediately started treating shrapnel wounds, severe burns, compound fractures and shock. George Kauki, Kuujjuaq's unit leader, ably served as the on-scene coordinator, organizing the evacuation of the injured onto the waiting rescue boats. The responders made it back to Kuujjuaq in under an hour, where medical assistance awaited.

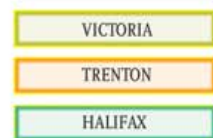
"That was great. It felt so real," exclaimed one of the responders at the debrief conducted at the community's marina. The scenario was one of several prepared by Erin

Pigott, the Deputy Superintendent for maritime search and rescue with the Canadian Coast Guard (CCG) Arctic Region, and her team. For weeks, they had worked with their partners in the Kativik Regional Government's Department of Civil Security to put together the multi-unit SAR exercise, designed to practise skills and strengthen the ability of the different units to work together and collaborate with JRCC Halifax. After the exercise, one veteran Nunavimmiut responder explained, "You know, for us, the Coast Guard used to be just an icebreaker a few days away. That's it. We didn't know them. We didn't work with them. We didn't ask them for help." Gesturing to the CCG Auxiliary crews and the CCG SAR officers chatting alongside the Kuujjuaq marina, the responder said "Now, look at us." Pigott understands this very well – the advanced training is important, but the relationships "are everything."¹

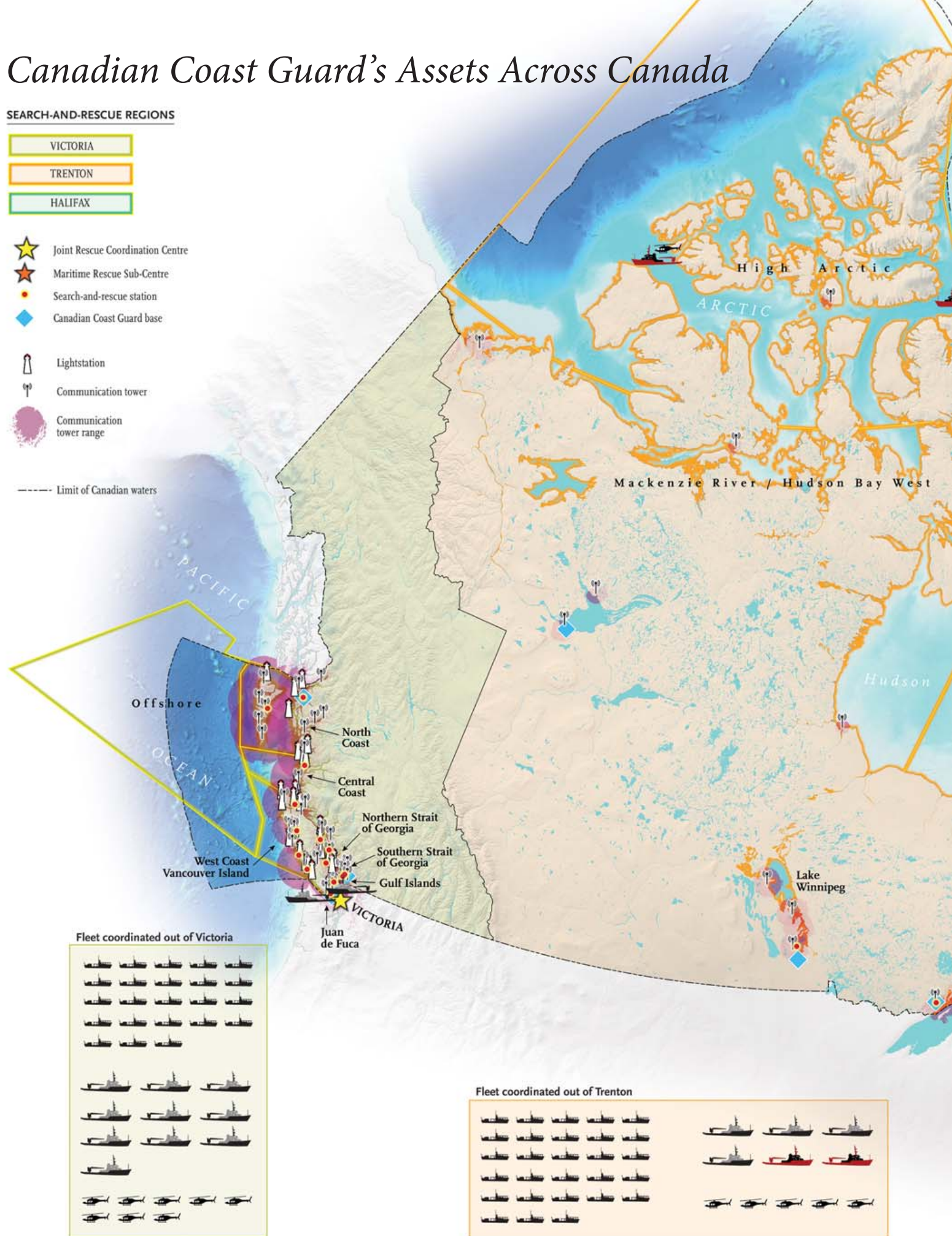
This exercise is a good example of how the CCG has transformed its approach to Arctic SAR over the last decade. The civilian agency has developed a better understanding of the marine risks facing the region and its SAR requirements, which has guided new investments in equipment, capabilities and people. It has worked to stitch Arctic responders, with their particular knowledge and skills, into the broader SAR system. Developing the kind of relationships that allow partners in this system to operate at the speed of trust – a critical requirement in marine SAR, particularly in the austere environmental conditions of the Arctic – lies at the heart of these efforts.

Canadian Coast Guard's Assets Across Canada

SEARCH-AND-RESCUE REGIONS



----- Limit of Canadian waters

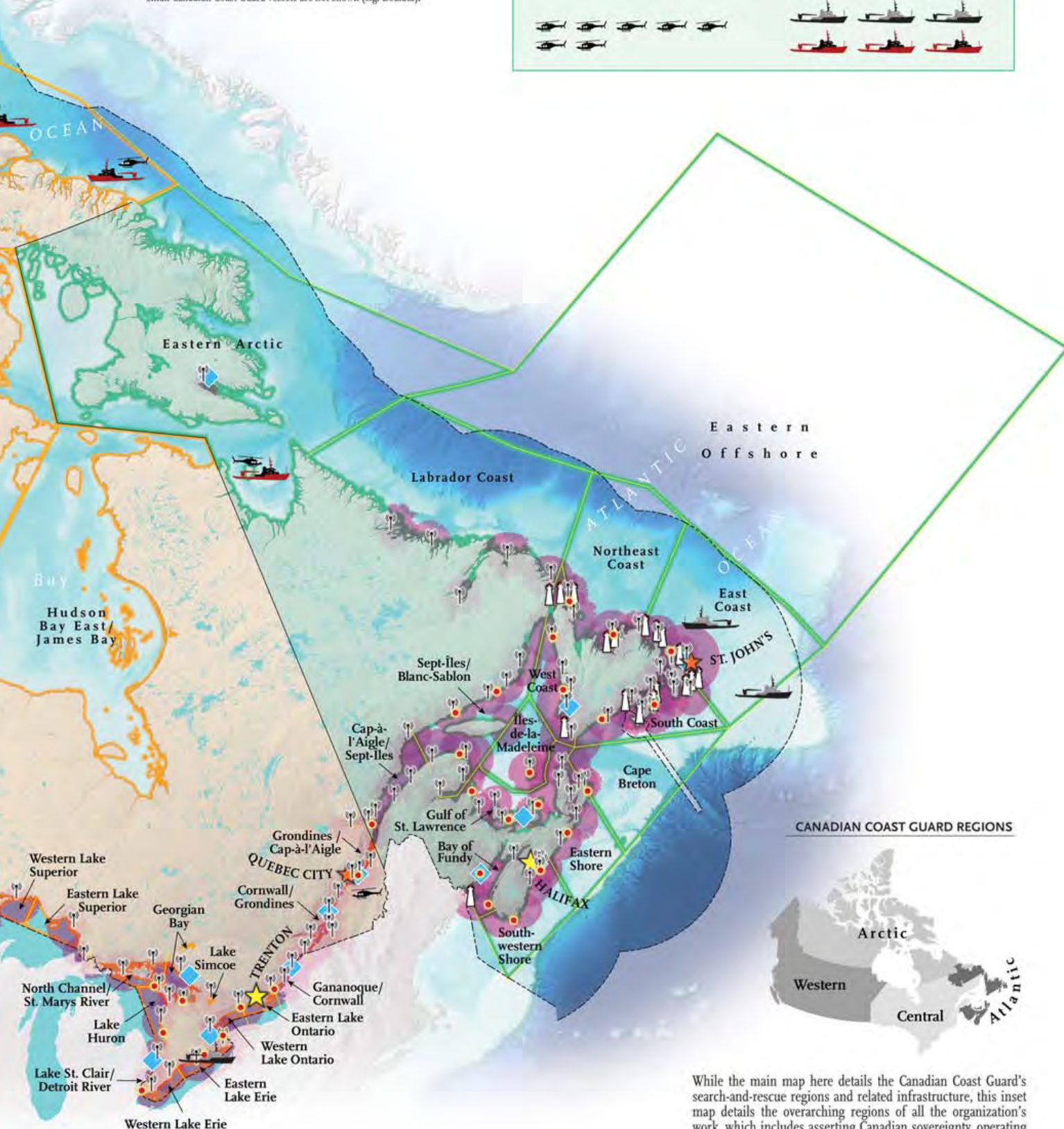
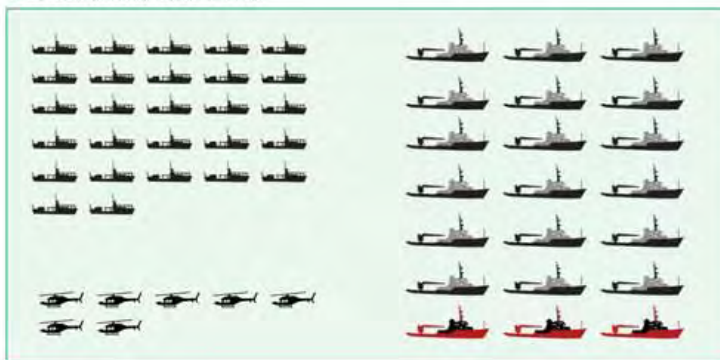


CANADIAN COAST GUARD VESSELS*

-  Small vessel (no sleeping quarters)
-  Large vessel (with sleeping quarters)
-  Icebreaker (with sleeping quarters)
-  Helicopter

*Vessels shown on the map were at sea on Oct. 4, 2021, while those in the fleet diagrams were docked, dry docked or parked. Some small Canadian Coast Guard vessels are not shown (e.g. Zodiacs).

Fleet coordinated out of Halifax



While the main map here details the Canadian Coast Guard's search-and-rescue regions and related infrastructure, this inset map details the overarching regions of all the organization's work, which includes asserting Canadian sovereignty, operating fisheries patrols, mounting scientific expeditions, responding to oil spills, overseeing marine traffic, clearing ice and managing 17,000 lighthouses, daymarks, foghorns and buoys.

Several of the Nunavimmiut participating in the June 2025 Kuujuaq exercise had been involved in the extensive search for Martha Kauki, a well-known interpreter and political leader, as well as her husband, Joanassie Epoo, and their two teenage children, who went missing on Ungava Bay in their freighter canoe in August 2003. The operation highlighted many of the issues that continue to challenge SAR operations in the Arctic: CCG icebreakers and primary SAR aircraft being located hours and days away; the presence of fewer vessels of opportunity; the severe weather and sea state; and the limited availability of hydrographic information for the region. All of these factors slowed down the response. Despite repeated calls in the 1990s for more marine SAR training and equipment for Nunavik's responders, they still found themselves without the boats, equipment and training required to take part in the operation effectively and safely. Worst of all was the breakdown in communications between military and CCG officials and the Nunavimmiut responders. The Inuit felt that the federal practitioners did not respect or use their knowledge of the family and of the currents, winds and weather of Ungava Bay, particularly in the modeling that guided the search area determination. In short, the search – and others that preceded and followed it – made Nunavimmiut feel like “third-class citizens.”

The Ungava Bay tragedy forced Nunavimmiut to “go their own way and look after themselves.” The Kativik Regional Government and Makivvik Corporation partnered up and spent over \$3 million on fast rescue boats for each of Nunavik's 14 communities, and they have spent millions on their upkeep and training the crews since that time. It is a remarkable example of regional resiliency and self-sufficiency, but one that left these entities bearing more than their fair share of the burden for search and rescue. The fast rescue fleet effectively fulfilled the marine SAR mandate of the CCG in Nunavik, but it rarely worked with federal actors.²

A series of tragic multi-fatality marine SAR cases across Inuit Nunangat in the 1990s and early 2000s highlighted many of these recurring issues, particularly the lack of local capacity and the poor collaboration and weak relationships among local, regional and federal authorities, leading to delayed responses and limiting cooperation.³ Despite these challenges, SAR volunteers continued to provide their communities and outsiders visiting the region with the safety net that they required to travel, harvest and work on Arctic waters, albeit with limited to no support. One internal CCG report from 2000 noted that, while the Arctic SAR system depended exclusively on volunteers – more heavily than any other part of the country – “they have not received a comparable level of support to the remainder of Canada, especially when one considers the absence of other SAR resources.”⁴

In the early 2000s, a series of government reports called on the CCG to strengthen marine SAR capabilities in the Arctic and expand the CCGA in the region. The auxiliary first expanded into the Canadian North in the 1990s, with official units established in Yellowknife (1992) and Hay River (1997). A concerted effort to expand the CCGA started in 2001, but a lack of funding, community engagement and training opportunities, coupled with crew and vessel standards that were unachievable in and inappropriate for the realities of northern communities, hampered these efforts.⁵

By 2015, only nine CCG Auxiliary units had been established north of 55, and several of these struggled to remain operational on a consistent basis. The CCG had stationed no primary SAR resources in the region, and the team dedicated to SAR programming for the entire Arctic amounted to three overworked individuals. Northern outreach activities by the coast guard and JRCCs still tended to be rooted in a crisis-response approach following problematic cases. These efforts proved fleeting and



Nunavimmiut responders evacuate injured ‘tourists’ during a SAR exercise in Nunavik in June 2025.



Exercise participants conduct a debrief at Kuujuaq's marina.

did little to strengthen the relationships required to improve SAR in the Arctic.

Although these years saw little external investment in community-level efforts, CCG personnel continued to work closely with their international partners on Arctic SAR. This cooperation was codified in the 2011 Arctic Search and Rescue Agreement and advanced through the 2015 launch of the independent, informal, operationally driven Arctic Coast Guard Forum, both of which were spurred on by increased maritime traffic in the region.

The effects of climate change have increased the risk of maritime incidents across the Canadian North, particularly in the waters of Inuit Nunangat. Sea ice reduction has led to longer boating seasons, with boaters travelling earlier in the spring and later in the fall, risking exposure to more severe environmental conditions. The longer boating season also means that Inuit are operating in dangerous waters before CCG icebreakers deploy to the Arctic in June and after they leave in November. Across the North, more powerful boats also mean that people are travelling further, with increased risks of running out of fuel or experiencing mechanical failure. The pressures of food insecurity often force harvesters to travel greater distances and in poor conditions, increasing their risk. These drivers, combined with a range of other factors (severe weather, unsafe vessels, limited safety equipment, drug and alcohol abuse), have increased the number of accidents involving community vessels. Outside marine traffic, including from cruise ships, bulk carriers, fishing vessels, pleasure craft and adventurers, has also grown significantly, leading to new SAR requirements across the region.⁶

In the face of increasing risks, the CCG launched the Arctic Search and Rescue Project in 2015 to address the “unique challenges of SAR in the Arctic.” The project team focused on studying the marine risks and SAR requirements in the Canadian Arctic, while laying the

groundwork required to strengthen and expand the CCGA in the region.⁷ Visiting 45 northern communities over the next two years, the team developed a better understanding of local challenges and needs. It found that many communities dealt with marine cases on their own, never reporting them to the CCG or JRCCs. Consequently, the SAR data for the region, which guides planning and is used to justify the allocation of resources at the federal level, was incomplete and inaccurate.

The project team also determined that, while many communities would welcome and support a CCG Auxiliary unit, most would struggle to find a suitable SAR vessel that met all applicable regulatory requirements. As a result, the CCG used funding from the Oceans Protection Plan to launch the Indigenous Community Boat Volunteer Program in 2017. Through this budget, communities can purchase a new SAR vessel, required equipment and/or storage facilities. The CCG also launched its Arctic Community Engagement and Exercise Teams (ACEETs) to provide support to and training for communities as they sustained existing auxiliary units and developed new ones.

The Arctic SAR Project provided the structure, knowledge, energy and funding required to jump-start improvements to the region's SAR system and laid a firm foundation for a range of ambitious initiatives – efforts bolstered by the creation of the CCG Arctic Region in 2018.⁸ Under the direction of Steve Thompson, the Arctic Region's Superintendent for maritime SAR, the last six years have brought transformative change to the Arctic SAR system, with a range of initiatives enhancing local and regional capacity.⁹

The most important success has been the sustained effort to improve community-based marine SAR capabilities through the rapid expansion and strengthening of the CCGA. Across the Arctic Region, there are now 41 CCGA units, with over 500 members and 60 vessels, including



Cambridge Bay Coast Guard Auxiliary Unit after participation in a coast guard SAR exercise in August 2022.

Nunavik's fast rescue fleet. Through these units, Arctic responders enjoy more support from federal partners, while the infusion of their skill, knowledge and energy has strengthened the entire SAR system.

These investments have paid dividends, with units delivering fast and effective marine SAR responses and regularly providing life-saving assistance to their fellow community members and to visitors to the region. They have been busy: the number of official maritime SAR cases in the Arctic Region has increased from 64 in 2020 to 121 in 2024, the complex result of increased risks, the greater availability of units that can respond, effective reporting procedures, and more requests for assistance from northerners who know there are skilled responders nearby. In general, enhanced local capacity means there is less reliance on CCG icebreakers and Royal Canadian Air Force (RCAF) aircraft, providing for more immediate responses, ensuring that these resources can be used for other SAR cases, and saving considerable money compared to JRCC operations using fixed- or rotary-wing aircraft based in southern Canada.

CCGA personnel also play a critical role as SAR detectives, feeding knowledge of local conditions, marine spaces and the marine activities of their fellow community members to the JRCCs to assist with search planning and modelling. Such detective work can also identify false alarms and prevent the JRCCs from unnecessarily deploying additional resources. Other crucial activities that benefit the broader marine safety system in the Arctic include educating their communities about boating safety, assisting with aids to navigation and very high frequency (VHF) systems, and reporting unfamiliar vessels and other suspicious activities.

Through their community engagement, CCG personnel quickly realized that an auxiliary unit is not the answer in every community that requires an improved marine SAR capability. The Guardians programs across the North provide another answer. Through the Marine Protected Area Training (MPAT) Project, CCG personnel have worked with the Foxe Basin Kivalliq North Sapuiyit Society (Chesterfield Inlet, Coral Harbour and Nauyasat, Nunavut) and the Aviqtuuq Inuit stewardship program (Taloyoak, Nunavut) to identify community training needs and deliver training in small vessel operations, marine first aid and collaborative SAR response. By the time the program ended in early 2024, dozens of Guardians had engaged in training opportunities that expanded their operational competencies and brought greater safety to their communities.¹⁰

In 2018, the CCG established another community-based SAR asset when it launched the first primary SAR resource ever stationed in the Canadian North: the Inshore Rescue Boat Station in Rankin Inlet. At the start of the 2023 season, the CCG upgraded the station into an Arctic Marine Response Station, which included the hiring and training of additional crew from local communities, the extension of the station's operational season by one month, the procurement of an additional SAR vessel, and other infrastructure improvements. The CCG regularly employs northern Indigenous people to work at the station, where they learn SAR skills that they can take back to their home communities or to careers in the CCG.

CCG Arctic SAR officers have also been instrumental in better preparing for mass rescue operations in the region. These low-probability, high-consequence scenarios would

seriously test the SAR system, while the sudden influx of hundreds of evacuees would challenge the infrastructure and essential services of most communities in the Arctic. CCG personnel have worked with their counterparts in the military and in civilian emergency management to plan and prepare for such incidents. They regularly practise these plans with domestic and international partners in the Canadian Arctic, including through large-scale multinational exercises such as the one conducted around Herschel Island in 2023.

In support of these efforts, the CCG Arctic Region launched an innovative Training and Exercising Program in 2019, providing expert guidance to industry partners (particularly cruise operators) on marine risks, how the SAR system functions, and how a mass rescue would work in the region. This program has helped smooth out some of the complexity involved in mass rescues and ensures that participating cruise ships are ready to assist during SAR incidents in the region as vessels of opportunity. The connections made through the program have heightened the CCG's awareness of the industry players involved in the marine spaces of the Canadian Arctic, bolstering its understanding of their risk profiles.

Behind the scenes, CCG Arctic SAR personnel have been working to address longstanding jurisdictional issues in

the broader SAR system. For example, they have worked closely with the JRCCs, regional and provincial authorities, and Nunavimmiut responders to clarify the boundaries between inland and federal waters on several key rivers in Nunavik, thus helping to establish when SAR cases are a provincial responsibility and when they are federal. They are also working with the National SAR Secretariat and other partners to work through the complex issues around the land-ice interface. If a hunter goes out to the floe edge on a skidoo, and it breaks away as an ice floe, this is considered a ground search-and-rescue (GSAR) case. This is a situation in which capabilities do not align with mandate, given that such a case would best be handled as a marine SAR case by the JRCCs and coast guard.

Finally, new CCG vessel construction will eventually provide a welcome boost to marine SAR capabilities in the region. Currently, the CCG generally deploys eight icebreakers to the Arctic each summer. The vessels are aging but capable. When not undertaking icebreaking operations, they are deployed to areas of increased risk – such as where cruise ships are operating. The planned construction of two polar icebreakers, six program icebreakers and two Arctic and Offshore Patrol Vessels for the CCG will provide new capabilities and greater reach for SAR operations.



Canadian Coast Guard Arctic members Stuart Thibert and Jeffrey Gordon participating in small group discussions at Nunavik SAR Roundtable 2022.



Responders from Nunatsiavut and Nunavik participating in advanced training in Parry Sound, Ontario, in 2024.

By necessity, the CCG began its efforts to improve marine SAR in the Arctic in Nunavut, which had the fewest resources available. This meant that other regions had to wait longer for improvements. At the Nunavik Search and Rescue Roundtable in December 2022, veteran responders raised a litany of concerns and criticisms with Superintendent Thompson. Why had they received so little support from the coast guard over the years? Where was the outreach? Why had their local expertise been ignored in past SAR cases? Rather than responding with excuses and explanations to each question, Thompson said, “Thanks for sharing. I hear you, I agree, and I’m sorry. We want to work with you on this.” This exemplifies why the CCG Arctic Region’s initiatives have been successful in recent years: its personnel have listened, learned, built and sustained relationships. Through these relationships, they have co-developed and delivered flexible programming that reflects the unique contexts of Arctic communities, fully embracing and operationalizing the Coast Guard Arctic Strategy’s “bedrock principle” of “in the North, by the North, and for the North.”

Strong Relationships: Since the CCG launched its Arctic SAR Project, the agency has prioritized community engagement, relationship building and maintaining long-lasting partnerships with responders, communities, and territorial and regional governments. CCG Arctic SAR personnel have also helped to strengthen relationships between northern responders and other federal partners, particularly the JRCCs. Having the same personnel carrying out these activities throughout the year (not only during the summer months), and for extended periods of time, has bolstered CCG relationship-building efforts.¹¹

Deeper Understanding: CCG personnel have spent a lot of time listening to and learning from northerners and the other mariners that operate in Arctic waters. They have developed a much deeper understanding of community and industry marine activity, risks and requirements. This learning process has been formalized in the Risk-Based Analysis of Maritime Search and Rescue Delivery (RAMSARD) Program, through which CCG personnel visit every community in the Arctic Region over a five-year cycle to update risk assessments and review SAR services.

Sustained Access to Training and Equipment: Through the Indigenous Community Boat Volunteer Program, 27 Arctic Indigenous communities have been awarded the community boats and equipment required to operate CCG Auxiliary units. While the new vessels bolster community marine SAR capabilities, they would have limited value without the training required to use them effectively. To support these units, the Coast Guard Arctic Region and its CCG Auxiliary partners engage in a robust training and exercise cycle, often in-community and on the water, with materials and approaches co-developed by Arctic responders. Auxiliary members and Guardians have also been brought to the CCG base in Parry Sound, Ontario, for advanced operational training.

Support to Responders: Finding a group of 15-20 CCG Auxiliary members in small communities can be challenging, and volunteer burnout remains a major challenge. In some units, the same people are always on call and respond to every search. This tempo of activity can inhibit their ability to go out on the land and hunt and fish for their families, contributing to food insecurity issues.

Many of these responders also wear multiple responder hats – GSAR, fire department, ambulance and Canadian Rangers (with approximately 24% of all CCGA members in the territorial North also serving as Rangers). Recognizing these difficulties, the CCG Arctic personnel have continued to work with their CCGA partners to support in-community recruitment efforts.

CCG Arctic SAR personnel also understand a defining feature of SAR in the Arctic: the responders almost always know for whom they are searching. SAR in the Arctic is searches for family, best friends, neighbours and Elders. Almost every responder has found someone close to them deceased from the cold, from accidents, or from self-harm. The toll of this trauma and tragedy on the mental health of community responders is extreme. In response, the CCG has embedded mental and psychological health training for emergency responders into its Indigenous SAR training program to assist with Critical Incident Stress Management (CISM), with the Arctic Region thus becoming the first region of the CCG to offer this service to responders. The support that CCG Arctic SAR personnel provide to the volunteers goes beyond the training and includes regular, informal check-ins and CISM support following difficult cases.

Staffing: The CCG Arctic Region has increased the number of full-time equivalent positions (from the three CCG personnel focused on Arctic SAR in 2015 to 17 in 2025). In particular, it has made a deliberate effort to hire northern Indigenous SAR officers, such as Brenda Panipakoocho (Iqaluit), Angulalik Pedersen (Cambridge Bay) and Jeffrey Gordon (Kuujuaq) – all of whom are also CCG Auxiliary members in their communities. Together, these personnel keep in frequent communication with auxiliary members, conduct training and exercise activities, and assist with equipment and vessel maintenance.

Sustaining Progress

The initiatives developed by CCG Arctic personnel, particularly the expansion of the CCGA, have proven highly successful. These efforts have yielded several best practices that could shape resilience-building measures in other northern and Indigenous communities, as well as guiding the work of other federal departments involved in safety and security. The most fundamental is the importance of sustained, face-to-face relationship building.

Success is fragile and must be sustained. Northern responders regularly express concern that the latest wave of CCG support will prove fleeting, with the initiatives waylaid by shifting priorities, shrinking budgets and personnel cuts. If CCG personnel become less engaged, with fewer training and relationship-building opportunities, responders worry that auxiliary units will fail and the

newfound partnerships with the JRCCs and other partners will be lost.

The recent cancellation of the successful MPAT Program has fueled such concerns. So has the recent decline in the number of CCG Arctic SAR positions in recent years, from a high of 35 to the 28 current full-time equivalent roles. The unit's travel budget has also shrunk. In 2025, its overall operating budget is \$2.2 million, with a hard travel cap set at \$757,000, down from \$1,193,715 in 2022-2023 and \$992,430 in 2023-2024. This is to cover all the communities between Nunatsiavut and the Labrador Sea to the Yukon North Slope and the Beaufort Sea, including James Bay and Hudson Bay, and to operate the Arctic Marine Response Station in Rankin Inlet.



Credit: Peter Kikkert

Nunavimmiut responders practice cold water immersion skills during Nunavik SAR Exercise 2025.



Craig Lingard, Director of Kativik Civil Security, and Erin Pigott, Deputy Superintendent for maritime SAR with CCG Arctic Region, recognized the service of long-time responder Willie Annanack of Kangihsualujuaq during Nunavik SAR Exercise 2025.

To sustain the transformation it has started, CCG Arctic SAR requires secure funding and the personnel required to operate in and with the North. Here, perhaps, the CCG shift to the military could help. It may also help with recruitment into the Arctic Auxiliary units if new avenues can be opened to incentivize members (such as pay, akin to that provided to Canadian Rangers for training and operations).

With better funding and support for CCG Arctic SAR, its members could continue to facilitate exercises like the multi-community one held in Nunavik in June. During one of the scenarios drawn up by Deputy Superintendent Pigott's team, a young unit member from Tasiujaq was taught how to place a call to JRCC Halifax, what information to provide, and how to act on any search patterns provided by the coordinators. Initially nervous to call this unfamiliar authority in the South, the young responder grew more confident and soon relayed essential information with ease. Just a few weeks later, that same responder placed a call to the JRCC during a real mission, securing air support for the search efforts.

On the last night of the exercise, Craig Lingard, the Director of the Kativik Regional Government's Civil Security

Section, hosted a gathering to celebrate the bridges between the CCG and his region. Sharing caribou jerky and stories, Pigott and her team already knew the Nunavimmiut responders from previous training and regional SAR roundtables. They talked about family, life in the North and past SAR cases. "This is why we like working with the Coast Guard more than most," Lingard explained. "A few years ago, it was different. But they've really listened. They get it in now." The laughter in the room sent a clear message: this comfort, mutual respect and confidence are what allow partners to operate at the speed of trust. Together, these responders are creating a SAR system that will operate at the speed of empathy.¹² That is Arctic SAR transformed. ⚓

Notes

1. Peter Kikkert participated in the exercise as an observer. He recorded all observations and comments regarding the exercise that are shared in this article. Other information was gathered through Kikkert and Lackenbauer's participation in the Nunavut and Nunavik SAR Roundtables and the Arctic SAR Exchange.
2. Comments shared by a Nunavimmiut responder at the Nunavik Roundtable on SAR, 11-13 December 2022. For more information on the case and on Nunavik's fast rescue fleet, see Peter Kikkert and P. Whitney Lackenbauer, *The State of Search and Rescue in Nunavik: A Report for the Kativik Civil Security Department* (Kuujuuaq and Peterborough: Kativik Regional Government and North American and Arctic Defence and Security Network, June 2023).
3. These incidents include seven lost in a boating accident near Sanirajak in 1991, eight when *Qasaaq* sank in Frobisher Bay in 1994, eight when two freighter canoes were swamped in James Bay in 1999, four when *Avataq* sank near Arviat in 2000, four lost in Ungava Bay in 2003, and four lost out of Tuktoyaktuk in 2004.
4. CCG Central and Arctic Region, *Arctic Auxiliary Study*, 31 January 2000, prepared by Canadian Marine Safety Services Inc., p. 9.
5. The CCGA is the all-volunteer organization that provides SAR services and promotes boating safety. CCGA members receive specialized training, insurance coverage and reimbursement for certain operational costs. Until 1997, the CCGA was called the Canadian Marine Rescue Auxiliary.
6. For a more detailed review of SAR risks in the Canadian Arctic, see Peter Kikkert, Calvin Pedersen, P. Whitney Lackenbauer, Ian Belton, John Quigley and Ronald Pelot, *The State of Search and Rescue in Nunavut* (Peterborough: North American and Arctic Defence and Security Network, June 2024), pp. 37-44.
7. Canadian Coast Guard, "Draft Report: Canadian Coast Guard Arctic Search and Rescue Project," no date, Access to Information and Privacy (ATIP) Request A-2019-00023-DQ-Final.
8. For an assessment of the Arctic SAR Project, see Peter Kikkert and P. Whitney Lackenbauer, "Search and Rescue, Climate Change, and the Expansion of the Coast Guard Auxiliary in Inuit Nunangat/the Canadian Arctic," *Canadian Journal of Emergency Management*, Vol. 1, No. 2 (July 2021), pp. 26-62.
9. CCG personnel and northern responders shared details about these initiatives through several Nunavut and Nunavik SAR Roundtables between 2020 and 2025, and at Arctic SAR Exchange 2023 and 2025, events organized and facilitated by the authors.
10. For more on the Guardians, see Peter Kikkert and P. Whitney Lackenbauer, "Bolstering Community-Based Marine Capabilities in the Canadian Arctic," *Canadian Naval Review*, Vol. 15, No. 2 (2019), pp. 11-16.
11. Nunavummiut community responders, interviewed by Peter Kikkert, Belleville, Ontario, 3-5 November 2023.
12. Inuit leader Sheila Watt-Cloutier has consistently emphasized that change takes place at the speed of empathy. So, too, should SAR operations.

Dr. Peter Kikkert is an Associate Professor in the Public Policy and Governance program at St. Francis Xavier University.

Dr. P. Whitney Lackenbauer is a Canada Research Chair (Tier 1) in the Study of the Canadian North at Trent University's School for the Study of Canada and honorary Lieutenant-Colonel of the 1st Canadian Ranger Patrol Group.

How US Coast Guard Failures can Inform Canadian Success

James Dillard



US Coast Guard Cutter *Waesche* receiving fuel during a replenishment at sea with Naval Replenishment Unit *Asterix* during *Operation Latitude* on 9 September 2025.

After a long period of decline, the Canadian Coast Guard (CCG) is entering an era of rebirth, with a significant building program now underway. This stems from the clear recognition that both climate change and the transforming geopolitical reality of the Arctic will place significant new demands on the CCG. In the North, the melting first-year sea ice is allowing older, thicker, multi-year ice to float southward and pose a hazard to navigation.¹ There is also growing geopolitical instability, driven by renewed great power competition which has spread to the Arctic. There, concerns over energy reserves, security issues and access to more direct shipping routes have brought new challenges into Canada's backyard. All of this has created a clear need for a modernization of the CCG.

In the United States, the US Coast Guard (USCG) has been engaged in its own efforts to modernize a rapidly aging fleet while simultaneously struggling with staffing issues owing to recruiting shortfalls. In the process, it has faced budgetary uncertainties and public failures and missteps. Canada can benefit from some of these hard-won lessons

and this analysis focuses on two main areas – fleet recapitalization and personnel recruitment – where the USCG has had both successes and failures over the more than 20 years it has been struggling to rebuild its own forces.

At the turn of the century, the USCG was the 12th largest 'navy' on Earth. Yet, its ships were decaying – older than most of the world's fleets. To solve this issue, the service elected to pursue the Integrated Deepwater System (IDS) program.² This (USD) \$20 billion program was awarded to Lockheed Martin and Northrop Grumman to modernize or replace USCG assets on a capabilities basis, with an emphasis on mission performance and the ability to integrate seamlessly with US Navy (USN) forces. The IDS program planned for the acquisition of necessary assets before the end of the service lives of many USCG cutters over the next 15 years.³

By 2004, asset obsolescence had accelerated, with vessel and aircraft failures becoming more serious and frequent. As the IDS program was planned and implemented prior to the September 11th attacks, a revision was required to

allow these new assets to fulfill the homeland security mission, now a critical part of USCG operations. A significant capability gap became evident between what was planned in 1998 and what was needed in 2004. Taking into account the drastically declining capability of the current USCG fleet, it was clear that something had to be done quickly. Without the new IDS assets, the service would be unable to meet the requirements that the newly formed Department of Homeland Security (DHS) – of which the USCG is a division – had placed upon it.⁴

By September 2006, there was concern among legislative observers that the IDS program was becoming too expensive, particularly following the 2004 capabilities reassessment. Observers questioned whether the quantity of vessels and aircraft planned under the IDS program, even following the 2004 re-evaluation, would be sufficient to meet the needs of the United States in the post-9/11 world.⁵ In the end, the IDS program fell considerably short of expectations, which would have seen it modernize the USCG through the design and acquisition of 91 cutters, more than 100 small surface craft, and more than 244 new or modernized aircraft, including fixed-wing air assets and helicopters.

Learning from the overall mismanagement of the IDS program, the USCG decided to handle the acquisitions process completely in-house by creating the Acquisitions Directorate (CG-9) to provide direct oversight over, and control of, fleet modernization and recapitalization.⁶ As the solicitation and design processes for new cutters began to take shape, the USCG received criticism for its lack of capital investment plans (CIP) to allow for the incorporation of future fleet modernization planning into the Congressional budget planning. The Government Accountability Office (GAO) recommended – with DHS in full agreement – that the USCG develop a 20-year plan

to identify the needed acquisitions of cutters and aircraft and the cost associated with obtaining these new assets.⁷

The failure of the IDS system was an expensive learning experience for the USCG. Previous vessel acquisitions occurred on an at-need basis, typically one class of cutters at a time. This resulted in little need for integrated programs requiring significant governmental oversight. Following the seismic technology shift that has occurred in the 21st century, with the computer revolution and improvements in communications technology, the aging vessels of the USCG fleet were insufficient to perform the tasks required of a modern coast guard. The impact of an aging USCG fleet became especially relevant in the aftermath of the 9/11 attacks. These venerable cutters, which had served for decades, had to be modernized or replaced. The Canadian Coast Guard finds itself at this very crossroad.

The expensive failures of the IDS program, along with inadequate budgetary planning in the years following the new recapitalization efforts, should demonstrate to the CCG that gaining and sustaining the support of Parliament is a critical step in rebuilding the fleet. Providing detailed long-range plans and obtaining support from political decision-makers early in the process is a crucial step in any recapitalization effort. The USCG also discovered that early planning for interoperability with the navy was vital. Lastly, it discovered that retaining direct oversight throughout the entire process, from initial design to vessel acceptance, was a critical and non-negotiable part of fleet recapitalization. Had the USCG instituted, at the inception of the IDS program, the degree of direct oversight that it later adopted, the outcome may have been different.

Recapitalizing a modern force such as the CCG is a massive task and it is probable that mistakes will be made in this long-overdue process. Those may be lessened however if the CCG can use USCG experiences to avoid the pitfalls



US Coast Guard Cutter *Spencer* conducts flight operations with an Air Station Elizabeth City MH-60 Jayhawk helicopter aircrew while underway in Chesapeake Bay, 26 June 2025.

Credit: Petty Officer 1st Class
Richard Stewart, US Coast Guard



The icebreaker USCGC Storis, recently purchased from commercial owners, is seen underway in Mobile, Alabama, 23 May 2025. Storis conducted sea trials 20 miles off Petit Bois in the Gulf of Mexico.

and failures suffered by its sister service from the South. However, building new vessels is only half the solution. There must also be service personnel to operate the vessels, and that requires recruiting efforts in an unfavourable environment.

According to a 2023 GAO report, the USCG is currently falling 4,800 personnel short of its 55,000-personnel goal. This is an 8.7% shortfall in recruiting and retention.⁸ Yet any recruiting shortfall affects the USCG more severely than other services, due to its smaller size. In 2022, USCG Commandant Admiral Linda Fagan discussed some of the challenges plaguing the service in its recruiting efforts. She explained that the USCG fell short of the 2024 goal of 4,200 new recruits by 1,000 people. During the period of 2018-2021, the USCG had missed its recruiting goals by 20% each year and Fagan called for a shift in the USCG's overall management to resolve this crisis.⁹

Along with educating potential recruits on the benefits of USCG service, Commandant Fagan explained how the service was responding to the potential needs, concerns and expectations of the current generation. She promoted, for instance, the USCG's commitment to equipping the newest ships with integrated internet connectivity – thus allowing for communication with friends and family ashore, even while at sea – and the development of a sea readiness council to lessen the challenges and difficulties associated with serving aboard underway units.¹⁰

The GAO provided a summary of its findings, concluding that competition from the private sector (which tends to offer higher rates of pay for similar tasks), limited possibilities for promotion, and long work hours were all factors affecting the USCG's recruiting.¹¹ Quality-of-life factors, such as health care access and the availability

and affordability of adequate housing, were significant concerns the GAO also uncovered. The areas hardest hit by recruiting and retention shortfalls included marine inspectors, cyberspace operators and other Deployable Specialized Forces.¹²

In a separate assessment, the RAND Corporation cited two key factors having an impact on current recruiting challenges. The first issue was general disinterest in USCG service, while the second was the small number of individuals of the target demographic who could meet the eligibility requirements, even if they were interested. The RAND Corporation offered both short- and long-term solutions. Possible short-term solutions included offering more and larger signing bonuses, boosting the quantity of USCG recruiters and the advertising reach of USCG recruitment efforts, and elevating the overall percentage of recruits allowed to enlist without having obtained high school diplomas.¹³

Prospective long-term solutions, according to the RAND Corporation, included re-evaluating the USCG's eligibility standards and requirements to determine if they reflected the social and operational realities of today's world, as well as ensuring that the standards and requirements were not excluding applicants. Second, the RAND Corporation suggested that the USCG revise its recruiting efforts, particularly in advertising through social media. Third, it recommended that the USCG evaluate the US labour market – both civilian and military – as a whole, to attempt to determine why the target demographic's overall participation in the labour market had decreased and how this decrease subsequently affected USCG recruiting. Finally, the USCG was advised to dig into the root causes of the declining trust that was having an impact on recruitment.¹⁴



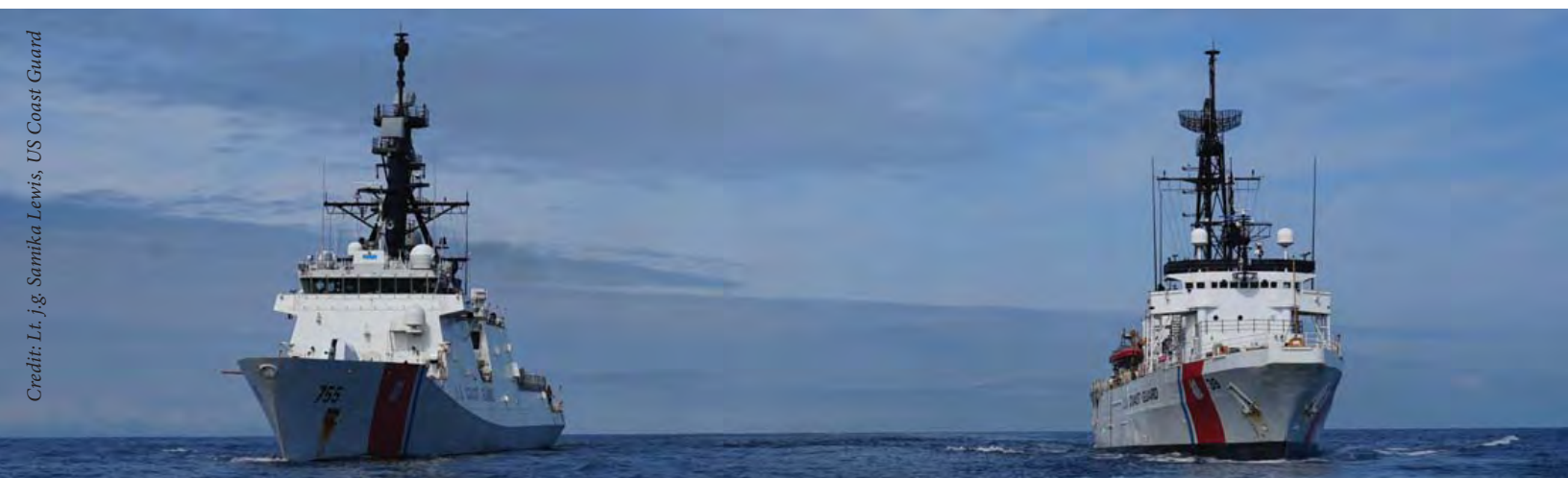
U.S. Coast Guard Cutter *Healy* ice rescue team members relax while awaiting training as *Healy* operates in the Arctic Ocean, 29 July 2025.

To address the recruiting issues, the USCG implemented a new occupational specialty (known in the service as a rating), designated as Talent Acquisition (TA) specialists.¹⁵ Prior to the development of the TA rating, a recruiter was an enlisted member of the USCG, temporarily transferred from their job in another occupational rating for a tour of duty as a recruiter. This previous system of recruiting removed trained personnel from other ratings and placed them in a recruitment office. With this new TA rating, the USCG developed dedicated recruiters to train specialists specifically for the task. TAs have their own advancement protocols and do not suffer any disadvantage to promotions, as they may have under the previous system.

The USCG is also developing technology to streamline the recruiting experience. In place of the previous system, which consisted of an 82-page application questionnaire, a mobile app is under development that is expected to resonate better with younger applicants. The service has also implemented several measures in the wake of the 2023 GAO report, including using virtual recruiters coupled with a dedicated call centre, allowing single parents to join

the service, easing restrictions on green card holders, marketing on social media sites, opening new recruiting offices, partnering with maritime training schools, and expanding into previously underserved areas of the country.¹⁶

An analysis of the recruiting problem reveals a military service that had an outdated and inefficient system. As the paper-based application for enlistment indicates, the USCG seems to operate under the assumption that if a system worked in the past, there was no need for change. Given that the target demographic of current recruiting efforts is the group born since 2000, the USCG must embrace the fact that these individuals have grown up with digital technology and that changing the recruiting system is unavoidable. The technology-related skills that these potential recruits possess both necessitate a technology-based approach to recruiting and are the same skills that are in high demand in the USCG, CCG and other agencies – both civilian and military. The digital and technological literacy of these potential recruits is a key component in the modernization of the fleet.



US Coast Guard Cutter *Munro* (left) and the US Coast Guard Cutter *Alex Haley* (right) steam alongside while patrolling the Gulf of Alaska, 5 July 2025. *Alex Haley* relieved *Munro* as the Bering Sea cutter in early July.



Canadian Coast Guard Ship *Griffon* in Montreal during 2023 Great Lakes Career Expo, Montreal, on 14 October 2023.

Credit: Corporal Konstantin Botsiev, 8 WING IMAGING

To reach the recruiting target demographic, coast guards must make an effort to accommodate potential recruits' concerns and desires. Embracing technology as part of the recruiting process and ensuring that new vessels are equipped with internet to allow for connectivity to friends and family ashore are only two of the methods the USCG is currently using to reverse the downward recruiting trend. The CCG could similarly implement these measures. Specialized recruiters are another tool the CCG could use to ensure recruiting efforts are met with success.

The CCG can also work to make inroads in its social media and technology-based advertising. Recruiters must strive to meet potential recruits on their home ground. Traditionally, this was – and still is – the local senior high school, where the recruiter would invite questions from interested youth on serving their country. In the modern world, such meetings might take place in virtual conferences, chat rooms, discussion forums, or other virtual locations and options. The CCG has an opportunity to use technology to its advantage in the search for tech-savvy recruits to help the service modernize and grow to meet the challenges of the 21st century.

Cooperation with other military branches, coupled with direct discussions with the target demographics, to understand the concerns and issues would help to identify problem areas for the CCG. If some of these problem areas rest at the national level, such as concerns surrounding citizenship status (as the USCG found), the support of Members of Parliament (MPs) would be invaluable to address and remedy these issues. By understanding the mindset of the potential recruits, and their desires, goals, concerns and fears, the CCG can take steps early in the overall service modernization process to remedy any problems so that when the CCG accepts new vessels into its fleet, there are ample crews standing ready to serve.

Many of these recommendations may seem self-evident, yet the USCG spent hundreds of millions of dollars – and more than two decades – to learn these lessons. Given the

rapid environmental and geopolitical change now facing the CCG, Canada cannot afford to spend that kind of time and money. By learning from the missteps of the USCG, the CCG can embark on its own fleet recapitalization, coupled with an enhanced series of recruiting efforts, and produce more immediate success, while avoiding costly setbacks. However, like the Arctic ice, this opportunity can vanish quickly. Once it is gone, disaster, tragedy and loss might be what takes its place. ⚓

Notes

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James Dillard is a retired US Coast Guard public affairs specialist second class. He holds a Master's in history and strategic studies and a Doctorate in education. He is currently pursuing a second Doctorate in strategic studies at the University of Calgary.

Dollars and Sense: Giving the Canadian Coast Guard a Larger National Security Role

Dave Perry

During the 2025 federal election the Liberal Party of Canada committed to giving the Canadian Coast Guard (CCG) a more meaningful role in Canada's national security. Specifically, the party platform promised to "expand the reach and abilities of the Canadian Coast Guard and integrate them into our NATO defence capabilities."¹ At the time of writing, the complete implications of the move remain to be fully fleshed out. Prime Minister Mark Carney's government has, however, already moved the organization to sit under a new department, as it is now operating as a Special Operating Agency under the Department of National Defence (DND). Further, senior CCG leadership began participating in DND governance meetings over the summer of 2025.

These swift initial moves, without waiting on a fully specified revised mandate, represent timely, much-needed and long-overdue reorientation of the organization's role and mandate. As one former senior CCG official noted, given the unique role for the organization, it has always been a bit of an orphan in the federal government, as its mix of transportation safety, scientific and security activity left it an uneasy fit under the Department of Fisheries and Oceans. While the CCG may still be somewhat of an orphan, clearer direction on its national security role and having it report to the Department of National Defence may ensure it now has a better foster home.

Since the publication of the 2004 National Security Policy, the Canadian Coast Guard has operated with a vaguely defined national security mandate and little guidance as to how it could meaningfully contribute to the actual guarding of Canada's coasts. The CCG was identified as

one of the organizations (alongside the Canadian Armed Forces and RCMP) tasked with providing enhanced marine security through a six-point plan that included increased on-water presence, better coordinated action with Canadian and American partners, enhanced secure communications, and establishing a Marine Security Operation Centre.² Aside from this, the organization lacked formal direction on how it might be a more meaningful security partner, a situation exacerbated by a lack of funds to recapitalize its aging fleet until the creation of the National Shipbuilding Procurement Strategy in 2010 under the Stephen Harper government, and the expansion of CCG fleet plans under Prime Minister Justin Trudeau.

Nonetheless, albeit aged, the CCG still possesses the largest number of Canadian assets on the water and, through its fleet of icebreakers, the only government vessels capable of transiting some Canadian waters during ice season. This practical on-water presence therefore presented a meaningful opportunity to make a significant improvement to Canada's marine security posture by changing the organization's mandate and providing it with the supporting equipment to deliver on it. In recent years there were calls for exactly this type of change to both role and equipment, which could relatively quickly make a significant enhancement to Canadian operational maritime capability.³

This discussion took on a new tone in private conversations in Ottawa as 2024 approached. This is the year by which all NATO allies pledged at the 2014 Wales Summit to reach the NATO investment target of spending 2% of Gross Domestic Product (GDP) on defence. As the



Coast guard vessels from Iceland, Denmark, Canada, the United States and Norway sail together during the 2017 Arctic Guardian Exercise under the auspices of the Arctic Coast Guard Forum in Iceland.

Credit: US Coast Guard Academy



A graphic of the Multi-Purpose Icebreaker (formerly Multi-Purpose Vessel) currently being designed and to be built at Seaspan Vancouver Shipyards.

deadline and the alliance's 75th anniversary beckoned, Canada remained nowhere close to the target, and moving the CCG under the purview of the Minister of National Defence was viewed by some as a means of reaching the NATO benchmark. Indeed, Prime Minister Trudeau himself made this suggestion while defending his decision to make only a verbal commitment to reaching the 2% of GDP mark by 2030, after publishing a new defence policy that committed to reach the 1.76% spending mark during a press conference at the very end of the 2025 NATO Summit in Washington. Canada was focused only on making meaningful defence investments, he claimed, and he was not prepared to hit an arbitrary target by undertaking accounting tricks "or giv[ing] every Coast Guard member a handgun."⁴ Trudeau's comment was at once wrong mathematically and substantively. Mathematically, adding every dollar of the roughly \$2 billion a year in spending on the CCG would not have remotely closed the gap to Canada spending 2% of GDP on defence. Substantively, giving every CCG member a pistol would not on its own have made each dollar count towards the NATO expenditure target, as under the commonly agreed NATO formula to determine spending eligibility, simply equipping members with a sidearm would not have met the definition for defence expenditures.

What would make a significant portion of the CCG's annual spending, which will increase significantly as icebreaker construction at both Seaspan and Davie ramps up, count towards Canada's defence expenditures under the NATO formula is the change outlined in the 2025 Liberal platform. It specified an intent to "update their mission to face changing realities to protect our sovereignty and counter criminal activity, like the trafficking of illicit drugs. That's why we will give the Canadian Coast Guard a new mandate – and the right equipment – to conduct maritime surveillance operations to secure our coasts."⁵

This move is sensible. The greater value of the organization is in taking on an enhanced role in contributing to maritime domain awareness and helping to provide a more comprehensive surveillance picture by embarking additional sensors and communication equipment. This would ensure that it can provide enhanced collection and contribute the information as seamlessly as possible to the wider government of Canada. The addition of autonomous assets to CCG vessels could enhance this effort.

The key problem to implementing these changes will be to find the right balance between introducing as much enhanced capability as possible without affecting operational activity or introducing excessive delay in existing new build projects. Introducing new capability immediately would provide the quickest increase in maritime domain awareness, but only once it can actually be deployed operationally, and finding the right balance for both existing and future vessels will be tricky. These are good problems to work through on a path to a major enhancement of Canada's marine security and maritime defence, as well as a modest increase in Canada's eligible defence expenditures for NATO reporting. 🚢

Notes

1. Liberal Party of Canada, "Liberals Release Plan to Rebuild, Reinvest, and Rearm the Canadian Armed Forces," 25 March 2025.
2. Canada, *Securing an Open Society: Canada's National Security Policy*, Ottawa: Privy Council of Canada, April 2004.
3. Chris Henderson, "A Constabulary Role for the Canadian Coast Guard?" Canadian Global Affairs Institute, 2025; Mark McWhinney, "Connecting Icebreakers to C4ISR: Ensuring the Canadian Coast Guard Doesn't 'Miss the Boat,'" Canadian Global Affairs Institute, April 2023.
4. Prime Minister Justin Trudeau, NATO Summit Press Conference, Washington DC, 11 July 2025.
5. Liberal Party of Canada, "Liberals Release Plan to Rebuild, Reinvest, and Rearm the Canadian Armed Forces."

Dave Perry is the President and CEO of the Canadian Global Affairs Institute, a co-director of the Triple Helix MINDS collaborative network and host of the Defence Deconstructed podcast.

Book Reviews

Silent Partners. The Origins and Influence of Canada's Military-Industrial Complex, edited by Alex Souchen and Matthew S. Wiseman, Vancouver: UBC Press, 2023, 226 pages, index, ISBN 978-0-7748-6896-9

Reviewed by Robert Dienesch

The 'military-industrial complex' (MIC) is a term loaded with meaning. It is often thrown around by the media and armchair historians with little concern for its meaning. But this is not a new issue. It has been a problem since the term was originally utilized by President Dwight D. Eisenhower in his 1961 farewell address. President Eisenhower was not talking about an actual thing but rather something that could potentially develop unless the United States was diligent in protecting against it. At the time, there was no MIC and the argument can be made that it never existed. But that doesn't deny the value of the concept as a means of understanding military procurement in the modern period.

Alex Souchen and Matthew Wiseman have decided to use the idea of the military-industrial complex as an avenue into understanding Canada's military spending post-World War Two. With a number of well-known scholars contributing to the anthology, they have produced a truly fascinating look into military spending in Canada. Each author brings a unique and distinctive perspective to the subject. The text is composed of seven distinct chapters, supported by an introduction and a conclusion that re-examines the subject under the unique title of "Insurance for Peace."

The chapters are grouped into three sections. After an introduction that questions if a Canadian military-industrial complex exists, the text examines the 'Origins and Environmental' aspects of the MIC in two chapters. The first looks at Canada's war-time munitions industry and the environment during the Second World War. The second chapter looks at Alberta's Suffield Experimental Station, 1939-1947. Section two focuses on the issues of 'Ethics and Experts' by first looking at military research in Toronto and then looking at the sensory deprivation research in the 1950s-1970s. The final section, composed of three chapters, examines the issue of 'Politics and Procurement.' The first chapter in this section examines the MIC during what Asa McKercher describes as the "Golden Age of Canadian Foreign Policy." The next chapter looks at the General Dynamics Land Systems in Canada and the LAV system. The final chapter in the section discusses the Royal Canadian Air Force and the MIC.

Collectively, the text presents some fascinating material for the reader to ponder. The discussion of war-time procurement gives the reader a sense of the scale of war-time

industrial development under the stresses of war. The result was a vast network of war industries and a pronounced environmental impact that we are still suffering through today. The scale of political investment into Cold War procurement was startling. As McKercher indicates in chapter 5, "The Honest (Arms) Broker," the political implications of providing arms to a variety of countries were significant and the Canadian government walked a fine line between providing for allies and supporting military industry in Canada on the one hand and not providing munitions to potential belligerents on the other. The most fascinating chapter outside of the one on war-time procurement was Frank Maas' "This Seems Pie in the Sky and Most Unlikely," an examination of the origins of General Dynamics Land Systems in Canada. This eventually produced the LAV fighting vehicles, a very lucrative and important weapon system used by not just Canada but many countries.

Silent Partners produces a unique look into Cold War military spending and procurement in Canada and its repercussions not just for industry but for Canada as a whole. It also provides a lot of food for thought that readers will appreciate. The greatest value of the text is not just what it is telling the reader but the questions it raises. It is not meant to be a definitive text on the subject. Rather it opens the door to new avenues of inquiry. An understanding of General Dynamics Land Systems and their development in Canada is useful, but certainly they are not unique in Canadian military and defence spending. Examining the foreign policy implications of the Cold War MIC is interesting but surely it could be expanded upon significantly by looking at, say, naval procurement decisions, etc. The list goes on.

On the whole I strongly recommend the book to any academic working in Canadian history whether political, economic, or military. Indeed, I would also recommend the text to anyone with an interest in Canadian history. This book is an excellent and dynamic piece and one well worth the reader's time and effort. ⚓

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Winner

2025 Canadian Naval Memorial Trust Essay Competition

We are pleased to announce the winner of the 2025 CNMT Essay Competition. **Edward Khitab** is our winner with his essay “Pirates and Partnerships: The Sea Shepherd Conservation Society: An Examination of Maritime Non-State Actors.” The essay will appear in the winter issue of *CNR*. Stay tuned.



2026 Canadian Naval Memorial Trust Essay Competition

Canadian Naval Review will be hosting the CNMT’s annual essay competition again in 2026. There will be a prize of \$1,000 for the best essay, provided by the **Canadian Naval Memorial Trust**. The winning essay will be published in *CNR*. (Other non-winning essays will also be considered for publication, subject to editorial review.)

Essays submitted to the contest should relate to the following topics:

- Canadian maritime security;
- Canadian naval policy;
- Canadian naval issues;
- Canadian naval operations;
- History/historical operations of the Canadian Navy;
- Global maritime issues (such as piracy, smuggling, fishing, environment);
- Canadian oceans policy and issues;
- Arctic maritime issues;
- Maritime transport and shipping.

If you have any questions about a particular topic, contact cnrcoord@icloud.com.

Contest Guidelines and Judging

- Submissions for the 2026 *CNR* essay competition must be received by **Friday, 29 May 2026**, at cnrcoord@icloud.com.
- Submissions are not to exceed 3,000 words (excluding references). Longer submissions will be penalized in the adjudication process.
- **Submissions cannot have been published elsewhere.**
- The use of generative Artificial Intelligence tools or apps in submissions, including ChatGPT and other AI writing assistants, is prohibited.
- All submissions must be in electronic format and any accompanying photographs, images, or other graphics and tables must also be included as a separate file.

..... The essays will be assessed by a panel of judges on the basis of a number of criteria including readability, breadth, importance, accessibility and relevance. The decision of the judges is final. All authors will be notified of the judges’ decision within two months of the submission deadline.





The icebreaker CCGS *Terry Fox* assists the US Coast Guard Cutter *Maple* through the Franklin Strait, Nunavut, on 12 August 2017 as the latter transited through the Northwest Passage.

Credit: Petty Officer 2nd Class Nate Littlejohn, US Coast Guard