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Cover Image: HMCS William Hall from the Royal Canadian Navy and CCGS Pierre Radisson from the Canadian Coast Guard sit at anchor together during Operation NANOOK-NUNAKPUT in Pond Inlet, Nunavut, on September 7, 2025. Photo by: Master Corporal Antoine Brochu, Canadian Armed Forces Combat Camera)

USCGC Waesche prepares to conduct a boarding exercise aboard HMCS Regina during Operation LATITUDE (Photo: William Gosse, CAF)

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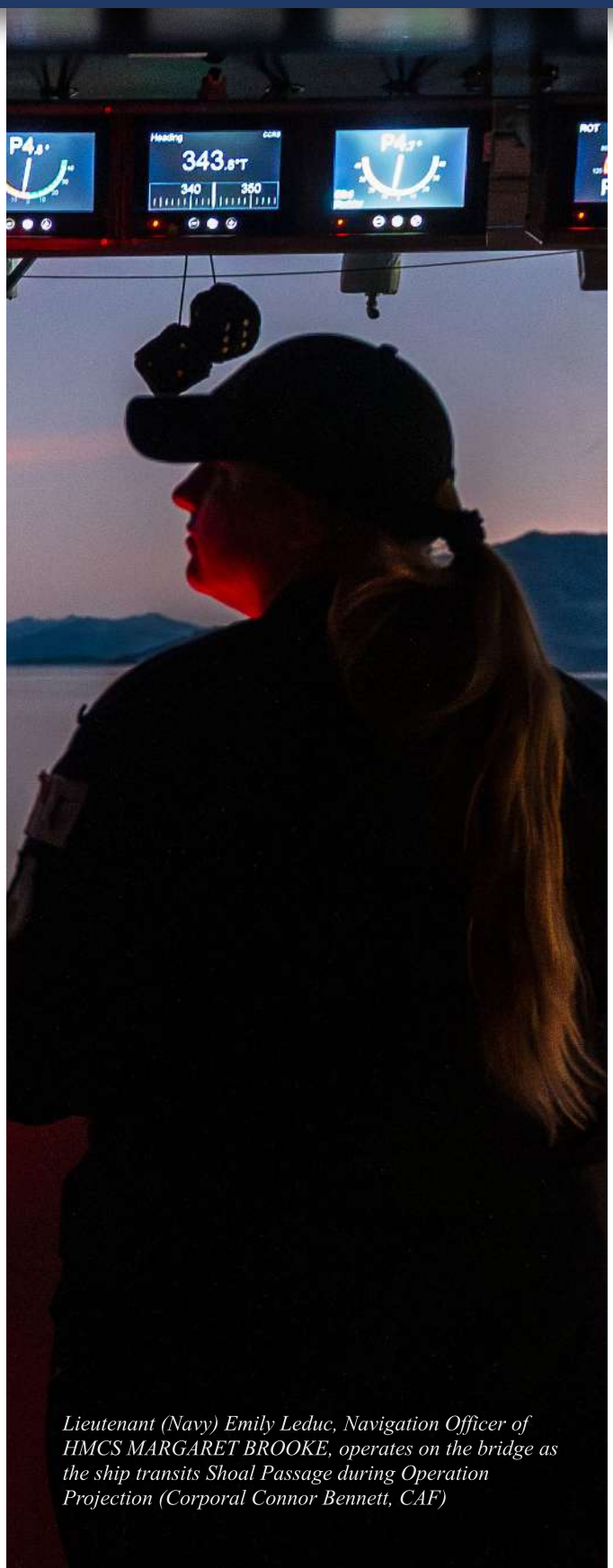

Lieutenant (Navy) Emily Leduc, Navigation Officer of HMCS MARGARET BROOKE, operates on the bridge as the ship transits Shoal Passage during Operation Projection (Corporal Connor Bennett, CAF)

WHEN FLEET COMMONALITY DEFINES OUTCOMES,
CMS 330 ADAPTS TO YOUR MISSION.

AHEAD OF READY

LOCKHEED MARTIN

From the Bridge

Steve White
President (NAC)

D'Ye Hear There!

As usual, the weather is changing now that summer is behind us. Also changing is the structure of the NAC. Based on an initiative formed by my predecessor, Bruce Belliveau, our National Board of Directors is now composed of a representative from each active local branch. From that group, elected at our AGM, a slate of officers has been selected within the board to fill principal positions, such as president, vice-president and the treasurer, along with various committee chairs. My current priority is to activate this change as quickly and as efficiently as possible. The majority of duties and responsibilities of the previous Executive Director position are now being shared by myself, the National Treasurer and NAC Coordinator. More details will be promulgated over the next few months as the new structure is "set to work."

There are a myriad of other changes happening in areas such as our defense budget, relationships with allies, global trade and economy, local wars, territorial disputes, drug smuggling, ideological differences … the list keeps getting bigger. One area closer to home, expansion and improvement of the Canadian Fleet, is continuing to be addressed in this issue.

Changes to the NATO alliance are also in the offing. While in command in the early 90's, I had the privilege of deploying twice with the Standing Naval Force Atlantic and was impressed how well that organization worked on the "sharp end." Up until recently, my opinion was that the system was not understood by lesser informed people who spent several years focussed on Article Five (collective defense) and ignored the other 13 articles. Specifically, Article Three, which addresses the national readiness of individual signatory countries. Thankfully, it looks like that oversight may have changed. Canadians should also recognize that the western and northern flanks of NATO include the coasts of BC and the Canadian Arctic Archipelago respectively. With modern weapons, the relative safety from attack offered by our geographic distance from the fighting fronts of the Second World War is now non-existent.

I am finalizing the draft of this article as the government is presenting its national budget on the TV in the background. I am wondering what other changes can be expected before the next issue of Starshell.

Yours aye,

Steve

Commander K. Steven White, BSc, CD, CAF/RCN (Retired)

National President

PS: As a pre-teen, I became enamoured with reading science fiction novels and sea stories, a hobby that continues to this day. I remember that the Ship's (Boat's?) Motto for Nautilus in Jules Verne's Twenty Thousand Leagues Under the Sea was "Mobilis in Mobili." One of several similar translations is "Changing with Change." This catchphrase reflects the idea of adapting to a constantly shifting environment…. keep it in mind!

From the Ops Room

Tim Addison, Naval Affairs

First off, I'd like to open with a comment on the state of international peace and security for those of you who may not track this kind of thing on a daily basis. The world continues to spiral towards serious confrontation between global powers. The Russia – Ukraine war drags on. In the heart of Europe and after decades of neglect regarding its defensive capabilities, Germany is spending billions on its armed forces. Norway is doing much the same. A few details…

In late October as reported in the UK Telegraph, Russia is amassing nuclear weapons and attack submarines in the Arctic Circle, perhaps as a precursor for war with NATO. Norway has detected increased weapons development on Russia's Kola peninsula, where its prized Northern Fleet and parts of its nuclear stockpile are based. It appears that Russia is positioning to gain full naval control over the Arctic region and block NATO allies' access to two key shipping routes that would be used to resupply Western forces in wartime. The first is the Bear Gap, the stretch of water between mainland Norway and the island of Svalbard, which Russian ships must pass through to reach the Atlantic Ocean. The second is the well known GIUK Gap, the naval choke points between Greenland, Iceland and the United Kingdom.

Western sanctions on Russia are achieving little as Russia continues to avoid sanctions by contracting Baltic companies to secretly fuel its shadow fleet. Reportedly, two tankers, Rina and Zircone, have refuelled 159 shadow fleet vessels in the past 10 months. The shadow fleet sails with disabled tracking systems, no insurance, and hidden ownership. Mid-sea transfers let Russian oil reach ports around the world while staying off the radar of authorities. Since 2022, Russia's shadow fleet has tripled in size.

In the Pacific, Japan recently used civilian airports and seaports for military training drills during a large-scale war game as it prepares for a potential conflict with China. Japan has designated 14 airports and 26 seaports for use by its military and coast guard during a contingency. The Japan Self-Defense Forces said it and the Japanese coast guard must be able to use civilian facilities smoothly when required to respond effectively in challenging situations.

In late October it was reported that the United States and the Philippines have formed a new joint task force to strengthen cooperation and increase military readiness in areas including the South China Sea. In early November Canada's Minister of National Defence signed an agreement with the Philippines government to boost combat drills and expand security alliances to deter Chinese aggression. Actions like this and the increased spending on defence in the budget announced on 4 November tell me that our leaders are now fully seized of the global security situation. Good news.

Indeed, in Canada there has been a lot of activity related to maritime defence and security recently. Although I did not attend, I am advised that the Sea Power Conference in Calgary in late September was a great success and will contribute to keeping the Association in the midst of the dialogue on important subjects like the bringing the Canadian Coast Guard under National Defence, the strategic importance of the Arctic and the potential for maritime conflict in the Asia-Pacific. This event was organized and led by our Editor, Adam Lajeunesse and attended by a tremendous cast of characters with deep roots in naval affairs, including Vice-Admiral Angus Topshee. You will find reports of the proceedings of the Conference later in this STARSHELL.

Around the time of the Conference, I was contacted by the Clerk of the House of Commons' Standing Committee on National Defence and asked to provide testimony on 2 October as a witness for the Committee's study on the integration of the Canadian Coast Guard into the Department of National Defence. Regrettably, I wasn't able to attend that event either as I was in Halifax at DEFSEC. More on that later. However, Adam was available, and he attended, representing both the Canadian Maritime Security Network (CMSN) at St. Francis Xavier University and the NAC. That statement is found in this edition of STARSHELL.

A big BZ and thank you to Adam for stepping to the breech and doing an admirable job of representing the NAC and the CMSN.

My focus in the last STARSHELL was the Continental Defence Corvette (CDC), which as I said could be named the Spikenard Class, in honour of HMCS SPIKENARD, a Second World War corvette which regrettably was lost in February 1942. I stand by that declaration. Furthermore, I suggest that the replacement of the Orca Class training vessels should be called the Bay Class, to honour and carry forward the names of the 1950's vintage minesweepers, (also known to many as PFLs and PBs), many of which possessed Battle Honours from their WW II Bangor Class predecessors. If my numbers are correct there were 14 Bay Class minesweepers whose names could be adopted.

At the moment the Government is fully consumed with submarine acquisition. However, I am sure that the CDC will be next in line for consideration as a necessity to bolster Canada's maritime defenses. The CDC should be followed quickly by the Orca Class replacements as a means of addressing the maritime component of the commitment to spend up to 3.5 percent of GDP on defense going forward. Spending 9 billion dollars before 31 March 2026 (and 84 Billion dollars over the next 5 years as per the Budget) is a tall order which will entail some significant contractual undertakings in the short and medium term.

Speaking of submarine acquisition, on 4 November I attended the Deep Blue Forum here in Ottawa, where the focus was on the Canadian Patrol Submarine Project (CPSP), one of the big-ticket items included in that increased spend on defence. In his keynote

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remarks Jason Armstrong, recently promoted to Rear-Admiral and now in the appointment of Chief of Naval Capability with oversight on all naval major crown projects, provided an update on CPSP, noting that the competition has been narrowed by down-selection to 2 contenders, namely Hanwha Ocean's KSS III and ThyssenKrupp Maritime Systems' Type 212CD. The chosen platform will have under the ice capability, carry heavy torpedoes, cruise missiles and be capable of deploying to the north, 21 days on patrol and return to port, all submerged. The CPSP will be the first project to come under the oversight of the newly created Defence Investment Agency (DIA), which is being stood up in Public Services and Procurement Canada under Secretary of State for Defence Procurement, MP Stephen Fuhr. Jason didn't give too many specifics, but he did say that the government will make a decision in 2026, and one can assume that a contract will be negotiated and signed with one of the two companies soon thereafter. This is in keeping with delivery of the first submarine by 2035 or earlier. Key to the decision will be the ability of the winning bidder to generate employment in Canada, primarily through in service support over the life of the submarines. So, Canada's stated plan to acquire 12 conventional submarines is moving quickly. One of the main focuses of discussion throughout the Deep Blue Forum is the importance of the human resources component (see my comments below on Occupation Analysis) and infrastructure to the success of the overall project.

Some will know that on 8 Oct I was interviewed by CBC's Ryan Cooke on the issue of the US attacks on supposed drug smuggling boats off the coast of Venezuela. Although the article contains an accurate representation of what I said, I will emphasize that the intent was not to speak on behalf of the RCN, but to press the Government of Canada to get informed with respect to the United States' recent and ongoing actions in the Caribbean and eastern Pacific over the past 8 weeks, where they have been attacking and sinking vessels being operated by what they refer to as "narco-terrorists", and the drug cartels as "unlawful combatants", two terms that do not appear anywhere in what are known as the Laws of Armed Conflict. While the operators of these vessels may indeed be drug-traffickers, they should be arrested and tried in a court of law, not summarily executed. This point has been made in the UN General Assembly and widely across the media.

The US penchant for gunboat diplomacy is well known, having been used many times before going back to the blockade of Cuba and waterborne operations against Haiti, Nicaragua, and the Dominican Republic as a method of "stabilizing" the local governments and protecting US corporate interests. When the interview was conducted it was just becoming known that the US was about to commence operations against Venezuela, and that these actions may be linked. However, it was unclear as to whether the US actions supported by surveillance operations and or intelligence gathered in support of OP CARIBBE, in which the RCN participates in regularly, as we know. The point being made was the Government of Canada should seek an explanation and get an understanding of the rationale for these attacks before undertaking further support to what could be an illegal activity under the Laws of Armed Conflict. Ryan's article is available HERE if you care to read it. By Remembrance Day the US will have moved the USS Ford Carrier Battle Group into Caribbean Waters for what is expected to be hostile action against Venezuela in support of an attempt at regime change.

Going back to what's happening in Canada, I am advised that the RCN has undertaken a major Occupation Analysis (OA) effort that will reshape eight core naval occupations to better support today's operational demands and the demands of the future. The team conducting this OA has been visiting the coasts to socialize the way ahead with the sailors affected by these changes. The eight occupations under review include:

- Naval Warfare Officer,
- Marine Systems Engineering Officer,
- Naval Combat Systems Engineering Officer,
- Naval Communicator,
- Naval Electronic Sensor Operator,
- Naval Combat Information Operator,
- SONAR Operator, and
- Weapons Engineering Technician.

A key focus of this activity is to prepare sailors for the complex Aegis Combat System which will be a critical feature of the RCD. Earlier this year the OA team conducted engagements with the Royal Australian Navy and United States Navy onboard Hobart-class, and Arleigh Burke-class ships equipped with this system. These onsite visits are critical as they offer firsthand insights from operators, maintainers, and command teams on how the systems function and how personnel structures are optimized to maximize operational effectiveness.

The OA team and Occupation Managers were to have started direct engagements with the Formations in late July, following Commander RCN's endorsement of the proposed structure options. Stay tuned for further communication on the details of this major HR undertaking within the RCN. Engagements with Naval Reserve Divisions (NRDs) are also being explored, and in fact may have already commenced.

Speaking of the River Class Destroyers, I attended the DEFSEC trade show on 1 and 2 October and I learned that good progress is being made on finalizing the design for RCD Batch 1, the first three ships. I also heard that Irving Shipbuilding has made significant progress in process improvement during the builds of the Arctic Offshore Patrol Vessels such that the final two hulls being built for the Canadian Coast Guard are being built at a significantly faster rate than the early AOPV (HARRY DEWOLF Class) built for the RCN. I am hoping to have more information and metrics on this subject for a future STARSHELL.

Another minor and perhaps not that well known success story is the announcement in mid-October that DND has purchased a 37-unit apartment building near CFB Esquimalt. This four-storey apartment complex constructed by a private developer and then purchased by the federal government for $23.3 million is part of an alternative housing model for the Canadian Armed Forces. It will house sailors and their families starting in January 2026. Bravo Zulu to those at DND for taking action to support our sailors and their families.

A final comment on mentoring. I recently read an article published by the US Naval Institute which mentions mentoring as a means of addressing the negative impact of social media on the mental health of young US marines. For the past three years the NAC has been helping the RCN establish a formal mentoring program. Recently I was advised that the RCN is putting its mentoring pilot project on ice because a larger program is being looked at by the CAF. I think this outcome is unfortunate as the larger program will likely take years to stand up, whereas the Pilot project was very close to launch and it's needed sooner rather than later.

The Canadian Seapower Conference

The Canadian Seapower 2025 Conference took place on 26–27 September 2025 at the University of Calgary, hosted by the Canadian Maritime Security Network (CMSN) in partnership with the Naval Association of Canada.

The gathering brought together academics, defence practitioners, serving and retired Royal Canadian Navy and Coast Guard officers, policy analysts, and maritime security experts. Over two days, it explored the evolving maritime security landscape, especially in light of strategic competition, hybrid threats, and pressures on rules-based international order.

The conference underscored that Canada stands at a pivotal strategic inflection point, facing heightened complexity in maritime security. It aimed to stimulate policy-relevant thinking, deepen maritime strategic discourse, and strengthen links between academic research and defence policy communities.

Conference Report by David H. Gray and Ian Wood

This September the Canadian Maritime Security Network (CMSN) hosted a major conference entitled Seapower Conference 2025. This event was made possible with support from DND's MINDS Program, The Canada Company, and the Naval Association of Canada. CMSN is a MINDS defence network housed at StFX University's Brian Mulroney Institute of Government, led by NAC Research Director Dr. Adam Lajeunesse. It was co-hosted by the University of Calgary's Centre for Military, Security and Strategic Studies (CMSS), led by Dr. Rob Huebert.

The largest such even since 2008, it hosted approximately 250 participants, including senior members of the Royal Canadian Navy (RCN) and Canadian Coast Guard (CCG), leading academics, industry experts, graduate students, naval reservists, retirees, and members of the Naval Association of Canada. The full program is available at cmsn.ca/seapower.

A major highlight was the keynote address by Vice-Admiral Angus Topshee, Commander of the RCN. In his speech, "The Navy Canada Needs," VAdm Topshee outlined the Navy's evolving mandate and future equipment requirements to strengthen Canada's maritime security. He introduced potential new capabilities, including Continental Defence Corvettes and an Arctic-capable Amphibious Seabasing ship, aimed at enhancing both surface and sub-surface operations in the High North. He noted that these ship concepts are in their early stages and are expected to become official projects once objectives are finalized. VAdm Topshee expressed satisfaction with the government's recent submarine down-selection to two choices, though he did not indicate a preference. He underscored the importance of integrating uncrewed vessels across all domains and reiterated that his Fleet Mix Study continues to support the acquisition of up to five Auxiliary Oiler Replenishment (AOR) ships. Rear-Admiral Casper Donovan (Ret'd) expanded on these themes, stressing the importance of coherent force development to align

ambitious capability requirements with long-term strategy.

Canadian Coast Guard Commissioner Mario Pelletier, joined by five senior leaders, outlined the CCG's preparedness to take on an expanded mandate following its recent move under the Minister of National Defence. This conference marked the first public joint appearance of the Commanders of the RCN and CCG since that transition, signaling a strong partnership and a promising foundation for future joint operations.

The conference featured a series of distinguished speakers who addressed strategic, operational, and policy challenges. Rear-Admiral Brian Santarpia (Ret'd) examined the intersection of security and economics, lingering inter-service rivalries, and concerns over U.S. confidence in Canada's North American defence posture. He argued that Canada lacks a coherent naval strategy in the absence of a broader national strategy. Dr. James Boutilier provided a comprehensive overview of Indo-Pacific political, maritime, shipbuilding, and illegal fishing dynamics, cautioning against complacency in the face of potential conflict. Captain(N) Rob Watt of the RCN Strategy team observed that Indo-Pacific states facing Chinese aggression typically operate under bilateral agreements with the United States, rather than within a NATO-like multilateral structure, complicating coordinated responses. Captain William Woityra, U.S. Coast Guard Attaché and the sole U.S. representative, revealed that the United States intends to spend up to $24 billion on new icebreakers, including replacements for the aging *Healy* and *Polar Star*. Commander Corey Gleason (Ret'd), the first Commanding Officer of HMCS *Harry DeWolf*, shared operational insights from Arctic deployments, complemented by perspectives from Madeleine Redfern, former Mayor of Iqaluit.

Dr. Siobhan Harty, Senior Assistant Deputy Minister of Defence and Marine Procurement at Public Service Procurement Canada, discussed procurement

challenges, the evaluation of RFP submissions, and potential partnerships on major projects. She outlined ongoing reforms that could shape the creation of a new Defence Investment Agency within DND. Chris Henderson (Ret'd), former Deputy Commissioner of the CCG, advocated for the Coast Guard to be governed by its own Act of Parliament rather than remain a Special Operating Agency. He highlighted operational complexities resulting from multiple agencies working aboard CCG vessels and proposed integrating the Canadian Hydrographic Service into the CCG. Charlotte Duval-Lantoine of the Canadian Global Affairs Institute addressed Navy understaffing, while Rear-Admiral Chris Sutherland (Ret'd) emphasized tackling substance abuse, sexual misconduct, and discrimination. These themes were strongly reinforced by VAdm Topshee and Jody Thomas, former Deputy Minister of DND.

Academic perspectives enriched the discussions, with presentations by Dr. Dave Perry and Drs. Collins, Csenky, Ferguson, Mayne, Mitchell, Salt, and Senior Macdonald-Laurier Fellow Shimooka, whose research complemented the operational and policy sessions. The conference as a whole reinforced the growing strategic importance of the world's maritime domain and highlighted how maritime affairs will shape global dynamics over the coming decades. Competition for marine resources and intensified geopolitical activity in oceanic regions, particularly the Arctic and Indo-Pacific, will define many of the challenges ahead. Speakers emphasized that developments in the world's oceans are no longer remote from daily life, and that platforms like Seapower 2025 are essential for sharing risks, identifying opportunities, and preparing Canada and its allies for an uncertain maritime future.

A modest consensus emerged on two key points: first, that DND must pivot from a resource-scarce mindset to managing relative abundance effectively, and second, that the Navy's role must be articulated more clearly as a pillar of national resilience and sovereignty. Members of the Naval Association of Canada are encouraged to participate in these capstone conferences to contribute to vital dialogue, research, and advocacy.

Ships of Standing NATO Mine Countermeasures Group 1 (PHoto: Class Mckayla Ryce, CAF)

The Navy Canada Needs

Vice Admiral Angus Topshee

This article was compiled from Vice Admiral Angus Topshee's address to the Canadian Seapower 2025 Conference, held in Calgary in September 2025. It is not a verbatim transcription but an attempt to capture the main points and vision presented by the Admiral in a more condensed narrative form.

Admiral Angus Topshee, Commander of the Royal Canadian Navy (RCN), opened the Canadian Seapower Conference with a sweeping and candid keynote outlining his vision for what the RCN could and should be. In light of the government's recent commitments to defence spending – which has seen it pledging to increase defence spending to 2% of GDP this fiscal year, with a prospective further increase to 3.5% – Admiral Topshee emphasized that, in such an environment, "we in uniform owe government and owe Canadians an actual vision of what it is we are building, as opposed to just the usual laundry list of equipment that we want to buy." The Admiral's presentation thus summed Canada's naval present and his vision for its future, as Canada seeks to grapple with an era of renewed great power competition, rapidly evolving technologies, and simmering concerns over the Arctic's vulnerabilities.

The Strategic Maritime Context: The Shifting Security Situation

As Admiral Topshee explained to the assembled conference, there are several reasons why Canada needs a navy. Of course, Canada is bordered by three oceans and boasts the longest coastline – some 244,000 kilometres – in the world. Much of this coastline, too, is located in the Arctic, which constitutes "a distant and difficult theatre" in which to operate. The extent of Canada's coastline and thus maritime domain becomes clear when one considers that transiting from Halifax to Victoria via the Northwest Passage represents a longer journey than crossing the Pacific Ocean.

Moreover, it is undeniable that world's security situation has fundamentally shifted. "We've always counted on the three oceans to protect us," he observed, "but oceans only defend us with a navy to defend those oceans." Indeed, these oceans, once a source of protection, are now a vector for threats, as the Arctic becomes increasingly accessible and contested and as both Russia and China expand their undersea capabilities. Threats have come to Canada through its maritime domain before. While the Second World War is often conceptualized as a war that "happened over there in Europe and in the Pacific," Admiral Topshee noted that war had also found its way into Canadian waters. Submarines ventured as far

up the St. Lawrence as Rimouski, landing spies, bombarding Canada's shores, and attacking 28 vessels in the St. Lawrence River and Gulf of St. Lawrence. More Canadians were killed in the St. Lawrence than on Juno Beach in 1944. Not only do Canada's oceans thus serve as a prospective vector of attack but the proliferation of long-range weapons means that there are also threats capable of passing over the oceans and bringing war "to our shores." With Canada's geography no longer guaranteeing its safety, it is thus imperative that Canada is able to protect itself.

Historically, there has been a sense in Canada that its dependable southern ally could be relied upon to come to its aid and protection, if the need arose. Now, as Admiral Topshee cautioned, invoking Frederick Rolette's capture of Cuyahoga Packet at the beginning of the War of 1812, "if we're going to defend ourselves and our interests, we have to have the capacity to do so within our own means."

The Maritime Domain: Awareness, Integration, and Technological Reach

Key to Admiral Topshee's vision of the Canadian Navy is the imperative of persistent maritime domain awareness. The defence of Canada's tremendous expanse, he argued, is contingent on such awareness, since "a Navy needs to understand and be aware of everything that is happening on and under our waters at all times." Not only must a navy be aware of all activities within its nation's exclusive economic zones, but its "area of knowledge has to go beyond that to make sure we can see the threats coming before they enter our waters." The Navy that Canada is building, he noted, includes that capability, through its development of a network of sensors, both mobile and fixed, enabled by autonomous and uncrewed vessels and systems. The modernization of the North American Aerospace Defense Command (NORAD), according to Admiral Topshee, will be "a big part of this" maritime domain awareness, enhancing the ability of the Navy and the Canadian Armed Forces (CAF) more broadly "to understand what's going on" by "tak[ing] care of everything from the surface of the oceans all the way into space."

However, detecting a threat is merely one component of this maritime domain awareness. It must be

accompanied by means to assess and discuss that threat. He thus called for "a secure cloud architecture that allows us to have a single picture of the maritime domain of Canada all the time, one that we can share" not just within the Navy but with allies and with other federal agencies and departments with a mandate for Canadian security, including the Canadian Coast Guard, the Royal Canadian Mounted Police, Public Safety, and the Canada Border Services Agency. Admiral Topshee linked this to the CAF's pursuit of the Pan-Domain Command Control system, as well as to the CAF and naval communications modernizations and the satellite modernization projects currently underway. Combined, these elements – and the collaboration of the CAF with Canadian special forces, space assets, cyber assets, etc. – will allow for the development of the domain awareness and picture that are needed to both identify and respond to threats and challenges in Canadian waters. As the Admiral explained, "This will always be done in the context of a CAF that is joint and dedicated to operating in a pan-domain manner."

Force Structure: Current Capabilities and Future Needs

Turning to an overview of the RCN's evolving force composition, Admiral Topshee noted that today, Canada's response capability commences with its Halifax-class frigates. Despite being constructed 30 years ago, and being "a bit old, a bit tired," they remain – courtesy of their ongoing underwater suite upgrades – "a world-leading platform for the conduct of anti-submarine warfare." Maritime aviation is critical in this task as well, manifested in the CH-148 Cyclones, the CP-140 Auroras (soon to be replaced by the P-8), and, recently, the RCN's ISTAR program, which is delivering an uncrewed system that expands the vessels' horizon range and can be weaponized.

The Navy must maintain the Halifax class's operationality through to 2035, which is when the River-class destroyers are expected to undertake their initial operational deployment. The River-class will enable the Navy to "stay on the cutting edge," serving as a "purpose-built anti-submarine warfare ship" that also offers "a really capable anti-air platform, surface capability, strike capability" with its suite of aerial, surface, and subsurface uncrewed systems. It is, according to Admiral Topshee, "a true destroyer" and "a front-line combatant that can go anywhere Canada needs it to, anywhere in the world." The sole difficulty, he lamented, is that the Navy simply cannot acquire the River-class vessels with sufficient speed. Even still, he remains "confident" that the Navy can extend the Halifax-class's operationality until the River-class comes online in a decade.

For Admiral Topshee, it is submarines that constitute the centrepiece of maritime deterrence and sovereignty. "The most effective deterrent in our waters," he said, "is something that brings the stealth, persistence, and, most importantly, the lethality to make sure that we always control what happens in our waters." Reflecting upon HMCS *Ojibwa's* instrumentality in the Turbot War and the subsequent establishment of sustainable fisheries in North America, he argued that it is the submarine that will ensure Canada's control over its maritime domain. He underscored the speed of progress of Canada's ongoing efforts to procure replacements for the aging Victoria-class, noting how rapidly the government has narrowed its procurement options to a "shortlist of two likely suppliers." He expects a contract to be solidified for this procurement "within the next 12 to 18 months."

In response to a question from the audience on the government's decision to pursue the procurement of conventional submarines over their nuclear-powered alternative, Admiral Topshee pointed to the "tremendous cost" of nuclear submarines with respect to securing the requisite reactors, the extensive shore infrastructure that would be required, and the associated likely need to construct new bases on each coast. The crewing requirements for nuclear submarines, which demand crews three to five times larger than those of conventionally powered submarines, would also present a challenge. While such nuclear submarines have traditionally "offered a dramatic advantage" with respect to their under-ice capabilities, the Admiral noted that technological evolutions mean that both submarines now under consideration have lithium-ion batteries that charge faster and discharge at a lower rate. Also equipped with air-independent propulsion systems, the

conventional submarines currently under consideration for Canada's fleet boast submerged endurances – without exposure – that amount to weeks, rather than days. He has "confidence that we would be able to operate either submarine under the ice."

Admiral Topshee also discussed Canada's most recent new capability, the Harry DeWolf-class Arctic and Offshore Patrol Vessels (AOPVs), which he identified as being "fantastic ships." Citing HMCS *Margaret Brooke*'s recent voyage from the Arctic to Antarctica, and HMCS *Harry DeWolf's* circumnavigation of North America via the Northwest Passage, he identified these vessels as "the icebreakers we need to make sure we can patrol anywhere in our Arctic in the navigation season, and anywhere around our Arctic" during the winter months. However, he also stressed their limits: "They're not combatants. That 25mm cannon is impressive and useful, but you can put a LAV on the flight deck and you'd get the same combat power."

What the RCN thus needs is "something that brings the war fight to the ice edge," especially given that the thin hulls of both the Halifax- and River-class are unable to withstand much ice. To fill this gap in Arctic capabilities, Admiral Topshee proposed a new Continental Defence Corvette – a smaller, ice-capable combat vessel that would bridge the gap between patrol vessel and destroyer and reflect the nation's "unique Canadian requirements" by combining the endurance, range, and hull strength that are so imperative for Arctic operations. While he acknowledged that it would be a "stretch" to refer to the 2,500- to 4,000-ton vessels the RCN has in mind as corvettes, he argued that possessing "a surface presence that has real capability" is integral to deter and defend as other actors like China increase their Arctic presence. A fleet of between eight and 20 corvettes would offer this presence and capability. They would allow the RCN to bring the fight "right to the ice edge, into the ice," marrying combat power with ice capability and an extensive range to enable the Navy to operate, for instance, throughout the Gulf of St. Lawrence at any time of year.

Of course, combat power is of little value without the ability to sustain it. Currently, Canada is constructing two Protecteur-class ships in Vancouver's Seaspan Shipyards. However, as Admiral Topshee insisted, the RCN effectively needs four – potentially five, according to its latest fleet mix study, if the RCN were tasked with defending both coasts while also sustaining a screen of destroyers and frigates to protect against submarine activity. Given the RCN's current budget for only two such vessels, he suggested there is "some work to do there."

This fleet composition, Admiral Topshee argued, would be critical if Canada needed to patrol and protect against surface action groups and submarines and ensure they remained out of missile range on the coasts. The Corvettes would hunt the submarines to the ice edge, the River-class destroyers would offer the air defence to protect those Corvettes, and the Protecteur-class would sustain both. That, the Admiral insisted, "is the threat we're looking at, where there is a clear and present challenge to our waters, and we need to be able to maintain that screen out there all of the time. And if you don't think that's real," he cautioned, the Russians currently possess the ability to deploy submarines off both coasts at once, and the Chinese – in compensation for their support for Russia's illegal war in Ukraine – are acquiring advanced submarine quieting technology that could severely complicate efforts to locate Chinese submarines. In such an environment, and given the Chinese proclivity for rapidly building submarines and warships, "we need to be ready and build the fleet that will defend our shores and make it meaningful."

Returning to the RCN's Arctic capabilities, Admiral Topshee also revived the concept of a heavy icebreaking Polar Class 2 amphibious vessel – a heavy icebreaker capable of disaster response and power projection in the High North. "Maybe it's time for us to think seriously about a heavy icebreaking amphibious ship," he mused, acknowledging that it currently has "no policy cover and no funding whatsoever, and not even a project title." Referencing recent discussions on Arctic basing, he noted that the only ice-free port in northern North America is Nuuk, Greenland, and that both Canada and the US lack useful Arctic ports. All of Canada's northern ports possess "serious flaws" and do not constitute effective

military facilities "except for [during] a brief period of time in summer." For instance, Iqaluit's deep-water port freezes in the winter and has a 10-metre tidal range. This effectively leaves St. John's and Prince Rupert as Canada's most northerly ice-free ports. Therefore, if the RCN needed to operate in the North or deliver aid to a community in distress, it "would need something that could break ice to get up there and then deliver that assistance over the … shore, over the ice, without port infrastructure" – effectively, an amphibious ship. Two such vessels, stationed in Halifax, would represent "game-changing capabilities" for the CAF and Government of Canada. They would offer "a capability that would bring relief and aid and enable whatever the Government of Canada needed to do in the Arctic by mobile basing any time of the year."

Canada's Industrial Base and National Capability: Building Ships, Building Sovereignty

Reflecting upon Canadians' history as shipbuilders, including their domestic construction of 123 corvettes during the Second World War, Admiral Topshee noted that Canada has been a world leader in ship design and innovation, particularly with respect to anti-submarine warfare, throughout its history. Canada has historically possessed the capacity and capability to construct ships domestically, and the Admiral defended the National Shipbuilding Strategy (NSS) and the Government of Canada's enduring commitment to shipbuilding as clearly "paying off." Canada's current yards are building an "impressive list of ships" for both the Navy and the Canadian Coast Guard, "and that's a genuine sovereign capability for Canada that makes sure we have the ability to defend our waters and to build the ships that we need to do that." Admiral Topshee also stressed the economic dividends – both nationally and locally – of this sovereignty capability. Noting the $38.7 billion that NSS projects have injected into the economy, and the 21,400 jobs it has sustained between 2012 and 2025, he reflected upon shipbuilding's delivery of "real jobs for us in Canada," particularly with its "commitment to use Canadian products, Canadian manufacturers, wherever we can."

Human Capital: The Greatest Challenge

However, as the Admiral stressed, ships are of little utility without the people to crew and operate them. This remains the Navy's "number one challenge." The RCN does not have the sailors it needs. However, innovative recruitment pipelines, such as the Naval Experience Program, are yielding results, contributing "one out of every three new entrants to the Royal Canadian Navy" last year. Though only 55% of those who complete the program tend to remain in the Navy in the hard sea trades, other graduates of the program shift to the Canadian Army and Royal Canadian Air Force, still benefiting the CAF as a whole. This program, Admiral Topshee insisted, is worthy of growth and expansion.

Reflecting upon the Navy's physical capital, Admiral Topshee noted that the funding was there for infrastructure expansion at its major bases in Esquimalt and Halifax. Beyond those bases, he pointed to the 24 Naval Reserve divisions, spread across Canada, that comprise the RCN's "recruiting engine" and which continue "to recruit and grow." His vision for the Naval Reserves would see them growing even further. He envisages each of the Reserve divisions becoming "a hub for recruiting, enrolling, and training" sailors, and foresees expanding its footprint to new locations across Canada, including by transforming existing detachments into complete Naval Reserve divisions. He lauded the ability of these divisions to enable Canadians to join the Navy "close to home, to ease the transition to service," by allowing them to work where they live. There is also the potential for the Reserves to leverage nearby post-secondary institutions to expedite training.

Admiral Topshee envisages further enabling these Naval Reserve divisions through the acquisition of a training fleet of between 24 and 30 Orca-like vessels (with, he optomistially noted, would have an improved black-water capacity compared to the Navy's current Orca fleet). Each Naval Reserve division "that touches water," he proposed, could host one such vessel, to "put people to sea early in their training" and "build a cadre of experienced sailors." In addition to training Canadians, the commissioning

of this fleet would enhance the Navy's sovereignty enforcement and surveillance along the nation's coasts, along the St. Lawrence Seaway, and in the Great Lakes.

Culture, Leadership, and the Ethos of Readiness

In addition to being trained and equipped, the Navy also must be "ready to fight." This, the Admiral remarked, includes creating a culture in the RCN that is reflective of the team spirit and meritocracy that are so integral to the Navy. "The oceans don't care where you come from, who you are, or how much money you have, what your background is, what your beliefs are" he said. "They only care if you're an effective mariner – and for us, an effective warrior." The Navy must develop a culture centred on that, on "expertise at sea, innovation, the determination to win, no matter what." Leadership and trust are imperative for that. Admiral Topshee's vision of readiness is therefore not merely technological or organizational, but it is also cultural: "We need to demand the best of our sailors, and we need to create an environment that fosters innovation and initiative at every turn."

Toward a Navy That Can Defend Our Oceans

Admiral Topshee's vision for the Royal Canadian Navy is one that links maritime domain awareness, fleet recapitalization and modernization, Arctic sovereignty, allied interoperability, and human capital under an overarching theme of national self-reliance. Of course, this vision remains bounded by policy and fiscal realities. While some of his proposals have policy cover and funding, others have only the policy cover. A few are "not even to that point," and remain blue sky thinking. Overall, his remarks underscored the seriousness of the threats surrounding Canada and the fact that geography alone can no longer guarantee Canadian security. Only an RCN that embodies awareness, readiness, and resolve can do that.

HMCS Edmonton during Operation Reassurance (Photo: Mckayla Ryce, CAF)

A CP-140, NRU Asterix and HMCS Regina of Canadia (Photo: Stuart Evans, CAF)

Preparing for the Fight Tonight and the Fight Tomorrow

Commodore Scott Robinson

This article was compiled from Commodore Robinson's address to the Canadian Seapower 2025 Conference, held in Calgary in September 2025. It is not a verbatim transcription but an attempt to capture the main points and vision presented by the Commodore in a more condensed narrative form.

In the third presentation of the Canadian Seapower Conference, Commodore Scott Robinson, newly appointed Director General of Naval Force Development, delivered an overview of the RCN's ongoing force development, including its modernization and capability planning efforts as it seeks to ensure that the Navy can continue to perform its core mandates. As the Commodore intoned, "there's a ton of work to do in the force development community to make sure that our fleet and our sailors have the right equipment to fight tonight and to fight tomorrow."

Three other teams in the Navy directly support these efforts: the Directorate of Naval Strategy, under Captain Rob Watt, which bears responsibility for the concepts of operations (CONOPS); Canadian Forces Maritime Warfare Centre, under Captain Adrian Armitage, which focuses on operational tests, evaluations, and refining naval tactics, procedures, and techniques to ensure preparedness; and the Directorate of Naval Requirements, under Captain Drew Graham, which currently is managing "about 500 projects" associated with the Navy's future requirements. Given the team of around 43 staff tasked with managing these hundreds of projects (not all of which have policy coverage), the Commodore acknowledged that "obviously we don't have the people to actually execute everything." As a result, the RCN must "be rigorous in our prioritization of what we need to deliver to the fleet to make sure it can fight tonight and fight tomorrow."

From his remarks emerge the image of a Navy that is grappling with profound structural and technological transformation in the face of finite human and financial resources.

Capability Transition and Fleet Renewal

Commodore Robinson opened his presentation with an overview of the RCN fleet's current platforms, including its 12 Halifax-class multi-role frigates, six Harry DeWolf–class Arctic and Offshore Patrol Vessels (AOPVs), four Victoria-class patrol submarines, one leased replenishment ship, and 12 Kingston-class Maritime Coastal Defence Vessels. The Kingston class is currently being divested, with the Commodore noting that eight were set to be paid off the week following the conference, with ceremonies in Esquimalt and Halifax. This would leave four vessels of that class operational – and with a mine countermeasures mandate – until approximately 2028, to fulfill Canada's "obligation to force generate this capability for NATO, as well as at home."

The RCN, through its current process of recapitalization, will be welcoming a series of new vessels into its fleet. Incoming additions include 15

River-class destroyers, two Protecteur-class auxiliary oiler replenishment ships, a yet-undetermined number of Canadian Continental Defence Corvettes (the specificities of which remain under definition), and up to 12 conventionally powered submarines from the Canadian Patrol Submarine Project (CPSP), which will be able to operate on each of Canada's coasts and near, in, and under the ice. The challenge for the RCN and Force Development, then, is bridging "the gap in capabilities as we pay off ships and introduce new capability into the fleet." Iterative upgrades to the Victoria class are ongoing to ensure the platform remains relevant, capable, and able to "fight tonight" until the CPSP delivers its new submarines. However, Commodore Robinson noted the inherent delicacy of balancing upgrades to the current legacy vessels with the procurement of new platforms. Referencing the Government of Canada's selection of two OEMs (original equipment manufacturers) for the submarines, he indicated that "there will be a cut-off point" – as there will be for any existing platform or system, including the Halifax class – at which the Navy must decide whether "it makes sense to put more capability into a legacy system." A balance must be struck between ensuring sailors remain able "to do what they need to do" and not sinking inordinate sums of funding into systems and platforms that will ultimately become obsolete.

Emerging Technologies, Autonomy, and the Challenge of Integration

A core consideration of Force Development, in today's era of rapidly emerging and evolving technologies, is the development and integration into the fleet of uncrewed systems that operate in the air, on the surface, and below the waves. Such systems, the Commodore identified, are pivotal areas for growth and development for the RCN as it strives to maintain its relevancy, operational readiness, and effectiveness. Indeed, such technologies have rapidly become core to the modern battlespace. Drawing on his observations from his recent attendance of the Defence and Security Equipment International (DSEI) exhibition in London, Commodore Robinson estimated that "at least 50% of the exhibitors" were displaying "a drone or some sort of autonomous system" or remotely crewed system. And as the war in Ukraine continues to show, the iteration of these technologies occurs at a tremendous pace, as versions become obsolete "within a week or two" and demand upgrades and updates to retain their capacity to be effective in a denied environment.

Commodore Robinson thus detailed that the RCN currently has "several projects underway" to attempt to "harness what's happening in the uncrewed realm," particularly with the objective of enhancing the Navy's maritime domain awareness. As it contemplates new builds like the Continental Defence Corvette, the RCN is paying close attention to the incorporation of autonomous systems, envisioning the platform becoming essentially "a mothership" for uncrewed systems to extend its sensor coverage and reach. Other efforts focus on modernizing existing vessels, such as the ongoing enhancements to the AOPVs' flight decks to enable them to take the anti-submarine warfare (ASW)–capable CH-148 helicopter (or a future maritime helicopter) into the Arctic, or the replacement of the Halifax class's

legacy underwater warfare (UWW) suite with updated acoustic processing software and sensors, the upgrades to which are currently being fielded by HMCS *Ville de Québec*. Work is also ongoing on the COBRA (Containerized Onboard Reelable Array) sensor suite, comprised of a containerized ASW sensor that could be deployed on naval platforms like the AOPV to expand the Navy's underwater maritime domain awareness and thus supplement both its active and passive ASW capabilities. With the capacity of these sensors to be deployed on other hull types – including, perhaps, a Canadian Coast Guard vessel, given the service's new surveillance and security mandate – the Commodore foresaw significant implications of the COBRA system for operations along all three of Canada's coast, including in the Arctic.

Commodore Robinson highlighted a variety of other projects that are aiming to modernize the naval fleet and ensure its relevance in the modern technological era. In addition to the ongoing development of a USV roadmap, his presentation noted efforts related to the Uncrewed Underwater Surveillance System (UUSS, previously UEA), to provide long-duration uncrewed vehicles that can employ and deploy sensors to ensure continuous sensor coverage in expeditionary operations, along the coasts, and in the North. Similarly, the Canadian Arctic Suite of Sensors (CASS, previously RDFAS) aims to provide both self-propelled and stationary sensors to modernize cartographic data, enhance environmental data, and expand domain awareness. Exploration is underway into uncrewed subsurface vessels like Excalibur that could operate along any of Canada's three oceans and utilize remote sensors to feed information back to the fleet. The Commodore also reflected upon the existence of other technologies like remote arrays and sonobuoy systems that can embed into the seabed and, upon its detection of subsurface contacts, effectively awaken, resurface, and send radio signals to direct an aircraft or ship to investigate. There is a wealth of "exciting technology," Commodore Robinson commented, and his remarks convey a clear understanding in Force Development and the RCN that the incorporation of such technologies into Canada's existing and future fleet is not a luxury but rather a requirement for relevance, efficiency, and effectiveness.

Communications, Command, and the "Fight Tonight" Imperative

"Whoever has … situational awareness," the Commodore cautioned, who "knows what's happening in their water space and can actually effect the fight and strikes first, will generally have a one-up and win." Uncrewed and autonomous systems are core components in efforts to establish and expand the domain awareness that will, therefore, enable sailors to "be informed of what the fight will be in the future." Though, as his remarks made clear, the Navy is pursuing a host of exciting and promising technologies, he also conceded that these systems are contributing to one of the Navy's "biggest problems" currently: "how do you fuse and integrate all that information into one place?"

Indeed, command and control (C2) is at the heart of naval combat effectiveness. A force lacking the ability to share information and communicate becomes effectively "paralyzed" and unable to effect any action itself, whether kinetic or non-kinetic. In addition to the rapid iteration of autonomous and uncrewed technologies, ensuring that forces have assured communications and C2, even in contested or denied environments, and as a sovereign capability, emerged as a core theme of his discussion. Regarding surveillance and domain awareness in today's world, that is "really going to be a system of systems," linked to broader RCN and indeed CAF C2 systems. He explained that the RCN is exploring the idea of "fighting from the MOC" – the Maritime Operations Centre. Equipped with such emerging technologies and systems of systems, "you need to have an ability to get that information, send it to decision makers so they can actually take action and effect a change on whatever is in our waters." Currently, he admitted, "that's a very difficult thing." It is especially challenging given Canada's historic participation, primarily, in "contribution warfare," deploying its assets and platforms as part of larger alliance constructs, under allied command, rather than exercising its own C2 over multi-domain operations. "But now," Commodore Robinson warned, "when we're looking at the defence of Canada and North America, we have to have that sovereign capability to be able to do that." He thus invoked Programme

NORTHWATCH – which falls under the Five Eyes Project OVERMATCH and involves expanding and modernizing Canadian capabilities in assured C2 alongside its Five Eyes partners – as just one component of the Navy's efforts to ensure that the data gathered by its autonomous systems and sensors can be diffused into domain awareness. This is the only way, he indicated, "to make sure we know what's going on below the ice, on the surface, and in the air."

The "Buy-to-Test" Philosophy, Procurement Reform, and the Centrality of Industry

Many of the 500 projects that the Navy has underway are minor capital projects, for which the funding envelope was recently increased from $10 million to $25 million. This, Commodore Robinson lauded, has offered the Navy "a bit more flexibility to spend" and a way to update and upgrade platforms and systems outside of more sweeping lifecycle initiatives. Given the plethora of projects underway under the minor capital project, the Navy is examining a "buy-to-test" practice, of purchasing and putting to sea small batches of emerging systems "to see how well they work" and how they fit within naval warfighting and operational concepts, before committing to larger orders.

Even these projects, he noted, still require policy coverage and still need to advance through a process that includes project management boards and defence capability boards. The Commodore thus stated the need to speed up the process. With the creation of the Defence Investment Agency, he sees an opportunity to examine Canada's procurement system and "how we actually get things approved," as well as the potential to streamline acquisition and enable the more rapid delivery of capabilities into sailors' hands.

Otherwise, Canada seems well poised to embrace the new technological era given its domestic industry, which the Commodore identified as possessing "a huge role" in the Navy's force development. He sees, at present, the opportunity "to work with industry, to be open and transparent on what our actual requirements are and what you can deliver to us." There are "a lot of good Canadian companies that are, I would say, world-leading in certain areas, in the defence world," identifying, in particular, sonars and UAV companies. The potential for broader Navy-industry collaboration seems even more promising given the current political appetite to "buy in Canada," and the Navy, the Commodore insisted, will be relying upon Canadian industry "to try to deliver as quickly as possible." There was clear optimism in the promise of technological innovation, combined with the opportunity to collaborate with industry.

The Challenge of Resilience and Robust Digital Infrastructure

The fleet's transition to modern technologies and a data-centric, networked force design inherently raise concerns regarding communication and redundancy. Questions from the audience prompted Commodore Robinson to zero in on these concerns as they relate to the Navy's force development. For instance, one question expressed concern about the vulnerability of modern naval electronic architecture – and its likely attractiveness as a target for adversarial attack. Acknowledging the threat of electronic warfare and cyber activities like jamming, the Commodore concurred that redundancy is critical, noting the importance of PACE (primary, alternate, contingency, and emergency) plans to ensure Canadian forces remain able to coordinate and communicate. He also cited the Navy's examination of secure cloud infrastructure and reincorporation into readiness training of, for instance, the use of sextants for navigation and "old technologies like HF" as backup capabilities. Though there remain concerns about the vulnerability of communications to enemy attack or interference, Commodore Robinson noted that the proliferation of satellite constellations (for instance, Starlink and the new military-oriented Starshield version) could complicate adversarial targeting by integrating, already, "a built-in redundancy." However, the Commodore also suggested that adversaries possess the same issues and concerns. Canada, he insisted, "has a "gap to fill," both in terms of "defending ourselves" and "also taking the fight to them, so we get to complicate their picture as well. We can't just play defensive all the time."

Another audience member queried the extent to which

the Navy's force development plans – particularly with respect to intelligence, surveillance, and reconnaissance (ISR) sensors – are contingent upon the CAF's broader digital modernization efforts and cloud infrastructure. Noting that communication and the sharing of data between the services constitutes the "backbone of the … digital enterprise itself," and that the Navy's Assistant Deputy Minister Digital Services is examining issues like assured CAF C2 and communication pathways, the Commodore conceded that integrating the CAF's various systems of systems – and the ISR data they produce – will present "a wicked issue." Numerous questions arise, including how the collected data will be transmitted, where it will go and come into, how it will be processed, and who will analyze it and subsequently decide that action is warranted before advancing that recommendation up the chain of command. This will demand the development of robust cloud architecture that will "last for the long term." In the absence of such architecture that will "stand the test of time" without simply going obsolete, "we're going to be no further ahead than at the get-go."

Another question linked naval readiness and national defence more broadly to the resiliency – or, alternatively, the susceptibility and fragility – of civilian infrastructure like water and electricity. Recalling the 2021 Lower Mainland floods on the West Coast, and how it impacted transportation and communication nodes, such as fibre optic lines, Commodore Robinson conceded that vulnerability does exist with respect to Canada's physical civilian-defence infrastructure. The recent drone incursions in Denmark, which forced airports and bases to close as drones flew overhead and rendered operations unsafe, has only reinforced this point. This represents, for the Commodore, "a bigger issue" of identifying Canada's critical nodes, to enable their subsequent defence. He noted that CAF and policy authorities are examining the critical infrastructure from the perspective of defence, but this is also a Whole of Government issue, to ensure that the nation's critical infrastructure and assets are identified so that they can be defended. However, a broader conversation needs to occur, the Commodore cautioned: "We ought to have a serious conversation on how we look at those critical nodes and infrastructure one-ofs, and then what do we do about it? Do you build redundancy and resiliency? How do you defend it, as well?" This, he insisted, is a discussion that is not only occurring in the CAF and DND, but actively within the Government of Canada more broadly.

It is integral that the Government of Canada engages in such a discussion because the resiliency of Canada's physical defence-civilian infrastructure – in addition to Force Development's efforts in fleet renewal and modernization, incorporating autonomous and uncrewed technologies, ensuring effective and assured C2, and enhancing maritime domain awareness – is key to ensuring that Canada's fleet can "fight tonight and fight tomorrow." Commodore Robinson's frequent use of this phrase throughout his address to the Conference invokes a certain urgency in the RCN's naval force development. However, it is an urgency that Force Development, under his leadership, is keeping at the forefront of mind as it continues the modernization and rejuvenation of the RCN's fleet.

Ships apart of Standing NATO Mine Countermeasures Group 1 conduct ship manoeuvres while at sea during Operation REASSURANCE on 1 September 2025. (Photo: Mckayla Ryce, CAF)

Canada's Need for a Grand Strategy

This article was compiled from Rear Admiral [ret'd] Brian Santarpia's address to the Canadian Seapower 2025 Conference, held in Calgary in September 2025. It is not a verbatim transcription but an attempt to capture the main points and vision presented by the Admiral in a more condensed narrative form.

Rear Admiral [Ret'd] Brian Santarpia

One of the great requirements that Canadian defence policymakers face today is a lack of a clear grand strategy. The country has long enjoyed the rare privilege of geography: bordered by oceans and a superpower, its survival has seldom depended on deliberate choices about war or peace. This geographic security has fostered a bureaucratic and political culture oriented toward management rather than direction. Governments plan in increments; departments defend budgets; consensus is prized over contestation.

During his time as Director General Plans at the Strategic Joint Staff, Admiral Santarpia observed how this culture manifests. The staff's work was to coordinate military advice and ensure alignment with government policy, not to articulate an overarching theory of national purpose. Decisions were reactive, calibrated to events rather than guided by a unifying framework. That pattern persists across the national security enterprise.

Canada has therefore never institutionalized the process of strategy-making. The United States, United Kingdom, France, and Australia all possess interdepartmental structures dedicated to continuous strategic assessment. Canada does not. Its defense and foreign policies operate in parallel, often with compatible rhetoric but rarely with integrated planning. The result is a state that manages security competently but without vision, a "policy state" rather than a "strategic state."

True strategy is not a collection of initiatives. It is the art of relating ends, ways, and means: defining what a nation seeks to achieve, how it will pursue those goals, and with what resources. The logic is deceptively simple but demands intellectual discipline. Strategy is also inherently political. It involves prioritization, trade-offs, and the acceptance of risk. To define ends is to admit limits.

Modern discourse has diluted the term. Governments routinely label any long-term plan a "strategy": an innovation strategy, a communications strategy, a climate strategy. These are useful policies but not strategy in the classical sense. They lack the integrative quality that binds statecraft together.

Historically, "strategy" was purely military. It referred to the maneuver of forces to achieve victory in battle. The notion of grand strategy, namely the orchestration of all instruments of national power, emerged only in the late nineteenth and early twentieth centuries, largely through naval thinkers. Alfred Thayer Mahan and Julian Corbett recognized that maritime power, trade, and industrial capacity formed a single system of influence. Their insights transformed strategy from battlefield art to statecraft.

For Canada, the lesson is clear. As a maritime trading nation dependent on global commerce and continental defense, its prosperity and sovereignty are inseparable from the sea. The logic of grand strategy is therefore inherently maritime.

The end of the Cold War ushered in a period of unipolar stability that allowed Canada and many Western states to drift strategically. Under the protective canopy of U.S. hegemony, Canada could afford to treat foreign and defense policy as an extension of domestic values. The language of "rules-based order" and "responsibility to protect" replaced the language of national interest.

This posture was comfortable but deceptive. It obscured the material foundations of stability: American military preponderance, global trade liberalization, and the absence of peer competitors. While those conditions endured, Canada's lack of strategy seemed a virtue, proof of moral clarity rather than geopolitical dependence.

That world is gone. The return of great-power competition has exposed the fragility of a system built on assumption rather than design. The United States, China, and Russia are now engaged in multidimensional rivalry that fuses economics, technology, and ideology. The notion that trade automatically promotes peace has proven false. Interdependence has become a weapon.

The relationship between economics and security has always existed but is now explicit. The global economy has become an arena of coercion rather than cooperation. The U.S. CHIPS and Science Act

restricts semiconductor exports to China and Beijing retaliates with bans on critical mineral exports essential to Western industries. Russia uses energy supply as leverage over Europe, while the United States itself increasingly employs financial instruments as tools of strategic denial.

For Canada, a nation built on resource wealth and export trade, this merging of economics and security poses unique challenges. The country's prosperity depends on open sea lanes and reliable access to markets. Its defense, however, depends on alliance credibility and the ability to secure North America's approaches. When these spheres merge, as they now have, Canada must think holistically.

The absence of a coherent economic-security framework leaves the country vulnerable to both coercion and neglect. Allies expect contributions that demonstrate seriousness of purpose and adversaries exploit indecision. Without clear priorities, Canada risks being treated not as a partner but as a passenger.

Historical analogies are imperfect but instructive. After 1815, Britain emerged as the world's dominant power. Its navy guaranteed freedom of the seas; its industries fueled global trade. The period of Pax Britannica was one of immense prosperity, but also of complacency. By the late nineteenth century, Germany and the United States had surpassed Britain industrially, while France and Russia refused to accept permanent subordination. The system that seemed eternal unraveled within decades, ending in global war.

The United States followed a similar trajectory after 1991. Victorious in the Cold War, it presided over an unprecedented expansion of global liberal order. Yet structural factors such as debt, deindustrialization, and political polarization eroded its ability to sustain hegemony. Today, America remains powerful but overstretched, its leadership contested and its credibility tested.

For middle powers like Canada, these transitions are

perilous. The decline of a hegemon creates space for competition and demands strategic self-reliance. As the guarantor of order falters, states must define their interests anew. Canada's continued assumption of benign continuity is therefore the most dangerous illusion of all.

Canada's geography ensures that its fate is bound to the United States, but not identical to it. The two nations share defense obligations through NORAD and NATO, yet their threat perceptions diverge. For Washington, Canada is a security partner; for Ottawa, the United States is simultaneously protector and potential source of strategic dependency.

The real danger is not invasion but marginalization. If the United States loses confidence in Canada's capacity to defend its northern and maritime approaches, it will act unilaterally. That would amount to a loss of sovereignty by default, the quiet erosion of control over one's own territory.

The Royal Canadian Navy is central to preventing this outcome. A credible maritime capability demonstrates commitment to collective defense and asserts sovereignty in Canada's vast maritime estate. It also enables meaningful participation in global operations that uphold the principles from which Canada's prosperity derives: freedom of navigation, secure trade routes, and deterrence of coercion at sea.

The ends of naval strategy flow directly from national interests. Canada must deny adversaries the ability to operate within its maritime approaches; enforce sovereignty against non-military incursions such as illegal fishing, smuggling, and environmental violations; and contribute to the maintenance of international order through alliance operations. These are not theoretical goals, they are the practical expression of sovereignty and credibility.

The means to achieve them are limited but potent. Anti-submarine warfare remains essential as Russia and China expand undersea capabilities. Persistent surveillance and domain awareness are indispensable for both defense and constabulary enforcement. Partnership with the Coast Guard and other federal agencies must evolve toward seamless integration.

Beyond defense, maritime power supports diplomacy. Naval presence signals commitment, deters aggression, and reassures allies. Even small deployments carry disproportionate political weight. The Navy's ability to operate globally through task groups, humanitarian missions, and freedom-of-navigation patrols constitutes one of Canada's most visible contributions to international security.

Developing such a naval strategy would be an important step, but it cannot substitute for grand strategy. The deeper problem is cultural. Canada lacks a tradition of strategic debate. The public discourse on defense is episodic and reactive, focused on procurement controversies or specific missions but rarely on the relationship between power and purpose.

A strategic culture is not simply awareness of military matters. It is the collective willingness of political leaders, officials, scholars, and citizens to think in terms of ends, ways, and means. It demands that choices be debated openly and that interests be defined explicitly. Nations that possess such cultures, such as Britain, France, and Australia, are able to adapt to changing environments without losing coherence. Canada must join them.

Building this culture requires deliberate effort. Professional military education should emphasize strategic theory alongside operations. Universities and think tanks should foster sustained dialogue between scholars and practitioners. Parliament must institutionalize strategic review, ensuring that defense and foreign policies are debated as integrated instruments rather than separate portfolios. Most importantly, Canadians must learn to see security not as a distant abstraction but as the precondition of prosperity and autonomy.

Developing a grand strategy will not be achieved through a single document or commission. It must evolve through sustained practice. Yet several steps could begin the process. First, Canada should establish a National Security Strategy Secretariat responsible for integrating defense, foreign, and economic policy planning. Such a body would provide continuity across governments and ensure that

national objectives inform departmental programs. Second, the government should mandate a comprehensive maritime strategy that connects Arctic sovereignty, trade resilience, and alliance commitments into a single framework. The Navy, Coast Guard, and commercial shipping sectors must be treated as parts of one ecosystem of national power. Third, Canada should develop a National Industrial Mobilization Plan linking defense procurement, technological innovation, and energy security. Economic resilience is strategic resilience.

Finally, strategic education must be institutionalized. Senior public servants and military officers should undergo joint training in strategic analysis, ensuring a shared vocabulary of power and purpose. These steps are not revolutionary. They are the routine practices of mature powers. What is revolutionary for Canada is the willingness to think strategically at all.

For generations, Canada's security rested on fortunate geography and benevolent hegemony. Those conditions no longer guarantee safety or influence. The world that allowed Canada to drift without strategy has disappeared, replaced by one in which deliberate choice and credible power determine survival and prosperity.

The Royal Canadian Navy stands at the forefront of this national adjustment. Its mission: defending sovereignty, contributing to deterrence, and maintaining global stability embodies the link between prosperity and power. But the larger task extends beyond any single service. It requires a transformation in how Canadians conceive of their place in the world.

To act strategically is to accept responsibility for one's future. Canada must learn once again to connect its ideals to its interests, its ambitions to its means. Only by cultivating a genuine strategic culture rooted in history, informed by debate, and expressed through maritime strength can the nation move from reacting to events toward shaping its destiny.

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HMCS William Hall and CCGS Pierre Radisson sit at anchor together during Operation NANOOK-NUNAKPUT (Photo: Antoine Brochu, CAF)

NAC Statement to the House of Commons Standing Committee On National Defence on the Canadian Coast Guard's Transfer to DND

Douglas L. Theodore

Delivered by Adam Lajeunesse

Good Morning and, to begin, I applaud the government's decision to move the Coast Guard to DND and I intend to focus on areas where greater integration of training, operations, and capability development can address current challenges and enhance Canada's maritime effectiveness.

First, an opportunity. Today, many of the RCN's junior officers are not receiving meaningful exposure to life at sea during the first 12 to 18 months of their commission. There is simply a lack of ship space. This lack of early sea time represents a missed opportunity both for professional development, retention and personal advancement, and for facilitating operational readiness.

The Coast Guard operates year-round including in demanding Arctic environments. Embedding RCN junior officers aboard Coast Guard vessels during their initial training period would allow these officers to gain valuable real-world experience. At the same time, the Coast Guard would benefit from their presence and skills – since the Coast Guard is, itself, short of personnel. Such an arrangement would be mutually advantageous and would help build a generation of naval officers with a broader understanding of Canada's maritime operational landscape.

To formalize this collaboration, I propose the creation of a combined officer and sailor training program between the RCN and the CCG. This could include:

- Establishing a single "schoolhouse" for core elements of officer training, ensuring that both organizations receive consistent foundational instruction.
- Standardizing qualifications, especially in

areas like marine engineering, which would make personnel more interchangeable and enable smoother collaboration during joint operations.
- Coordinated training deployments would give junior officers and sailors exposure to a wider variety of vessels, operational environments, and mission types. As a secondary benefit, it would also establish in the formative years of service, a better understanding of each other's challenges and work environments thereby, hopefully, fostering lasting personal professional relationships.

Such integration would not only improve individual competency but would also strengthen institutional ties between the Navy and the Coast Guard.

Second, the Canadian Coast Guard's fleet could also play a larger role in supporting national defence operations, particularly in the Arctic. For example:

- CCG vessels could conduct expanded hydrographic and survey missions in northern waters, generating data that would directly support RCN operational planning and navigation. The growth in the CCG fleet will, hopefully, provide that spare capacity.

Outfitting selected CCG vessels with appropriate communications systems and possibly electronic support mechanisms capabilities would enable them to operate effectively in combined task groups, when forming such groups makes sense. This will require ensuring that CCG personnel receive the necessary training and familiarity with some new equipment, and be granted security clearances to handle classified information and safeguard such systems in CCG vessels.

- Deploying UAVs from Coast Guard vessels for coastal surveillance and intelligence gathering would significantly augment Canada's maritime domain awareness. A joint

UAV procurement and training program with the Navy offers obvious economies of scale.

These measures would enhance both surveillance and response capacity without requiring the immediate acquisition of new naval platforms.

We should also consider reallocating certain Maritime Coastal Defence Vessel (MCDV) roles to the Coast Guard where appropriate. By leveraging the Coast Guard's existing infrastructure and expertise in areas like coastal patrol and surveillance, the RCN could focus its limited resources on higher-end warfighting capabilities.

In tandem, Canada could explore arming selected CCG vessels and establishing procedures for the carriage of ammunition, allowing them to undertake limited defensive or enforcement tasks where appropriate and authorized. Such changes would be significant and must be accompanied by appropriate training, policy development, and legal frameworks, but they are worth examining as part of a comprehensive maritime strategy.

There are also important communications issues at play. The CCG workforce is very anxious, at present about how this move changes their employment terms, career progression, and tasks. This change arrived suddenly and I think better communication is needed about what this means at the HR and operational level.

A second critical issue is how the Coast Guard's current command and control model would fit within a more hierarchical, centralized military structure.

The CCG currently operates with strong and independent regional organizations, and for very good reasons. Over many decades, the Coast Guard has refined a structure that reflects the vast diversity of Canada's maritime environments and the distinct

operational requirements of each region.

This decentralized model is not a historical accident, it is a deliberate and proven structure, built to meet Canada's extraordinarily varied maritime challenges.

Imposing a top-down, deferential hierarchy, characteristic of military and naval command structures driven from Ottawa, onto this system without careful planning would risk undermining the effectiveness that these regional organizations have built over decades. I recommend a strong voice from Coast Guard in how this move is affected and how new chains of command are built.

In summary, greater integration between the Royal Canadian Navy and the Canadian Coast Guard offers tangible benefits in training, capability development, and operational effectiveness. By combining training programs, aligning qualifications, enhancing Coast Guard platforms with modern surveillance and communication systems, and strategically reallocating roles, Canada can achieve more resilient and flexible maritime operations.

If communications remain vague or absent, workforce anxiety will deepen, morale will deteriorate, and operational effectiveness will suffer. If command and control arrangements are imposed without fully respecting the Coast Guard's regional diversity and operational logic, the result will be confusion and inefficiency, not enhanced capability.

I urge the Committee to pay close attention to workforce engagement, communication strategy, and organizational design as part of any future integration discussions.

Critically, this is an immense undertaking that will be generational in nature and will only succeed with collaborative leadership across the two organizations. A means of oversight should be established to report progress, successes, failures and areas where adjustments may have to be implemented to achieve success.

A member of HMCS William Hall observes CCGS Pierre Radisson from the Canadian Coast Guard as the ships part ways during Operation NANOOK-NUNAKPUT in Pond Inlet, Nunavut, on September 7, 2025 (Photo: Antoine Brochu, CAF)

The RCN's UAV Future

In Conversation with Cdr Ryan Bell

Commander Ryan Bell is a Naval Warfare Officer who currently serves as DNR 2, the Section Head for Remote and Autonomous Systems within the Directorate of Naval Requirements on the Naval Staff in Ottawa. His team is responsible for all requirements and projects related to UAVs, UUVs, and USVs for the RCN, as well as diving requirements for the CAF.

The Royal Canadian Navy is accelerating its adoption of remotely piloted and autonomous systems, reshaping its capabilities for surveillance, reconnaissance, and even combat. In a wide-ranging interview, Commander Bell detailed the Navy's progress, challenges, and vision, from early experiments to NATO partnerships and weaponized drones. This article is a summary of that discussion and its key take-aways.

The Navy's work with uncrewed aerial vehicles (UAVs) began in 2011, when it inherited platforms from the Canadian Army after its withdrawal from Afghanistan. Those systems were operated under a contractor-owned, contractor-operated model. While useful in the short term, the Navy needed an in-house capability.

This need gave birth to the RCN ISTAR project, designed to provide an organic UAV system that would extend surveillance and targeting capacity from the fleet itself. Interim measures included the purchase of RQ-20B Puma UAVs (still used on Kingston-class ships and occasionally deployed from Halifax-class frigates) and a collaborative project with Canadian Special Operations Forces Command (CANSOFCOM). The latter effort, called CAF UPS, did not succeed, but it reinforced the need for a fully Navy-run program.

From the start, the ultimate aim was to acquire a long-range, over-the-horizon UAV for Halifax-class frigates to enhance situational awareness, reconnaissance, and targeting. The chosen platform, the Schiebel S-100, is, in Bell's words, "a fantastic product" that will revolutionize persistent intelligence, surveillance, and reconnaissance (ISR) at sea.

Despite this, the UAV itself is only part of the achievement. The project forced the Navy to build the infrastructure, namely the policies, personnel training, safety programs, and certified maintenance structures needed to sustain a new generation of autonomous systems. Importantly, the RCN has established its own flight safety program, built a certified maintenance organization, and created policies to streamline the integration of small and medium UAVs.

This institutional maturity led the RCAF to delegate authority for maritime UAVs directly to the Navy. That was a crucial step, allowing the RCN to move at its own pace instead of waiting in the Air Force's queue, especially as the RCAF is consumed with recapitalizing all its major fleets.

A Puma UAV launch off HMCS Harry DeWolf (CAF)

Procurement at the "Speed of Relevance"

Traditional procurement cycles can stretch for a decade or more, far too slow for UAV technology, which evolves in months. To address this, the Navy launched the General Purpose UAS (GPUAS) project two and a half years ago. Instead of finalizing exhaustive requirements, GPUAS is deliberately iterative.

Under the model, the Navy sets a handful of guiding principles, acquires small numbers of UAVs, and rapidly pushes them into the fleet for testing. Feedback is then used to shape the next procurement spiral.

By March 2023, the Navy had received its first 150 Class 1 mini-UAVs, small quadcopters with half-hour flight times. Within 18 months, the GPUAS project had already spiraled through five iterations, acquiring over 350 UAVs of various sizes, payloads, and sensor configurations. Each cycle builds on the lessons of the last.

Early models, such as TL2 UAVs, are now being distributed to Naval Reserve divisions. There, they will be used both for training and for humanitarian assistance and disaster relief missions, giving reservists real-world experience while ensuring no purchase goes to waste.

The Navy aims for four or five procurements of Class 1 UAVs per year, supported by procurement standing offers through the Director General Land Equipment Program Management (DGLEPM). This flexible approach allows the RCN to surge acquisitions quickly and adapt to technology changes in months, not decades

Creating a Dedicated Home: The Advanced Naval Capabilities Unit

Recognizing the unique challenges of integrating autonomous systems, the RCN stood up the Advanced Naval Capabilities Unit (ANCU) in 2022. Unlike traditional shipboard systems, UAVs are "bolt-on" capabilities that require their own maintenance, safety certifications, and operator training pipelines. ANCU fills the gap between project managers and the fleet, serving as the dedicated end-user. The unit consolidates specialized capabilities from across the Navy and serves triple duty: a training schoolhouse, maintenance depot, and deployable operational asset. In its first year, it trained over 300 sailors in Class 1 UAV operations. As a result, nearly every major warship now has at least one trained drone operator on board.

This approach ensures institutional memory and allows scarce skilled personnel to cycle between operations, training, and maintenance roles. It also gives the Navy flexibility amid ongoing personnel shortages. Operators who develop a passion and aptitude for UAVs can later join ANCU full-time to work on larger Class 2 UAVs, underwater vehicles, or surface drones as those systems enter service.

Working with Allies: NATO and Beyond

Canada's efforts are tightly woven into NATO's broader push to integrate uncrewed systems. In 2017, NATO created the Joint Capability Group on Maritime Uncrewed Systems (JCGMUS), bringing together robotics leads from across allied navies. The

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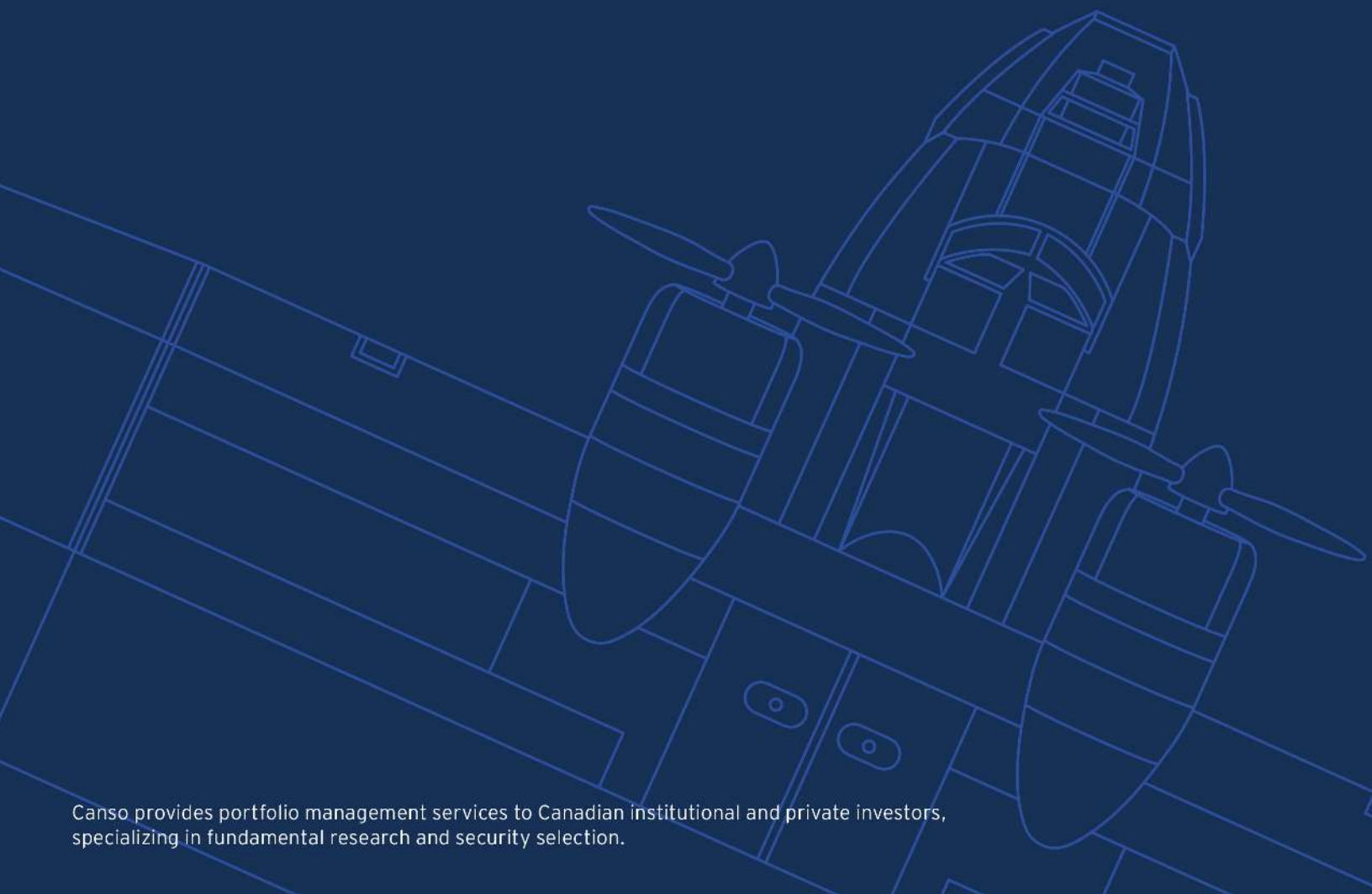

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group focuses on standardization of communications and operational protocols, as well as collaborative experimentation. Canada also works closely with Portugal to host REP(MUS), the annual robotic experimentation exercise held in September. There, allied navies and industry test emerging technologies in a live operational environment. In total, five Canadian companies will participate in this year's event.

NATO is also developing STANAG 4817, a standardization agreement for communication and operational assignment protocols for uncrewed surface and underwater vehicles. A parallel effort is underway for uncrewed airborne systems. The goal is interoperability: so that robots from different nations can communicate, coordinate, and even autonomously divide tasks during missions such as mine clearance.

Canada also maintains bilateral engagements with the UK, US, and France. For example, a Canadian team will visit the UK to study operational lessons from its deployment of the Schiebel S-100, giving Canada access to tactical documents, training practices, and real-world experience before deploying the system itself.

Ukraine, too, plays a role. A Ukrainian observer sits on JCGMUS, and Defence Research and Development Canada (DRDC) has embedded a science and technology advisor in Kyiv to capture frontline lessons from Ukrainian innovation in naval drones.

Beyond Surveillance: Weaponizing Drones

While surveillance has been the RCN's first priority, Canada is actively exploring armed drone applications. The MAKO experiment, which converted a Hammerhead target drone into a strike platform, was a "fantastic success." The trial revealed technical and policy hurdles, but more importantly, it exposed "unknown unknowns" the Navy needed to address before operationalizing such systems. An

A Hammerhead drone (Photo: U.S. Navy photo by Lt. Cmdr. Corey Barker)

Drone deployment en route to Korea (Photo: Jacob Saunders, CAF)

after-action report is now guiding the next steps toward weaponization.

Weaponization aligns with the Navy's "dull, dirty, and dangerous" doctrine for autonomous systems. Areas under study include:

- One-way munitions launched from surface vessels or UAVs.
- Loitering munitions deployed from Halifax-class frigates.
- Air-launched effects, such as defensive drones launched from ship decks to intercept hostile systems.

A key lesson from Ukraine is cost-effectiveness. Firing a $1.3 million missile at a $75,000 drone may succeed tactically but is a strategic dead end. Canada is therefore exploring ways to "fight cheap with cheap" to defend against swarms and low-cost threats.

Defending the Fleet Against Drones

Weaponizing drones is only one side of the equation, the Navy must also defend against them. The Navy is now working with DRDC and industry partners, testing systems at exercises like the Counter-UXS Sandbox in Alberta and the Urban Counter-UXS Sandbox in Ottawa. Two systems have even been fielded aboard internationally deploying ships. The first is BEAM, a portable protocol manipulator and signal identifier. This system can detect drone control signals, hack into them, and either crash the drone or redirect it. The second is ORION, an active beam jammer resembling the iconic rifle from Starship Troopers. It overwhelms drone control bands, forcing UAVs to crash.

While not effective against every type of drone (such as fiber-optic tethered systems) these tools are effective against the majority of small, actively controlled UAVs. Compact and lightweight, they can be integrated into Halifax-, Harry DeWolf-, and Protector-class vessels, as well as the upcoming River-class destroyers, without significant redesigns.

Future defensive systems may also include quad-packs of tube-launched micro-UAVs for intercept missions. These could cheaply and effectively neutralize incoming one-way drone attacks, adding a flexible, layered defense.

Building a Navy for the Next Era

For the RCN, the UAV revolution is about more than acquiring drones. It is about transforming the culture, institutions, and processes to keep pace with rapid technological change. Through projects like I-STAR and GPUAS, the establishment of ANCU, collaboration with NATO allies, and experimentation with both weaponized and counter-drone systems, the RCN is laying the groundwork for a fleet that can adapt quickly and operate alongside global partners in a contested environment.

"Our work with UAVs has built not just a capability," Bell emphasized, "but the infrastructure, policy base, and personnel foundation for every remote autonomous system the Navy will bring online." In other words, UAVs are the spearhead, but the larger transformation they drive may prove to be their greatest legacy.

Vice-Admiral Nigel Brodeur
A Life of Service to the RCN and Canada

This article is an in-depth interview, conducted by Tim Addison with Vice-Admiral Nigel Brodeur in 2025. Broken into four parts, it will appear in the Fall 2025 edition of *Salty Dips*. It is also being printed in *Starshell*, serialized into four parts.

In this interview with 'Old Salt' (OS), Vice-Admiral Nigel Brodeur reflects on his family's three generations of service to the Royal Canadian Navy and his own Cold War-era naval career. He discusses his role in shaping the Canadian Patrol Frigate program, his involvement in deep submergence projects, and NATO operations. Brodeur also offers his assessments on Canada's naval procurement and strategic planning, advocating for shipbuilding capabilities and increased defense spending.

Interview with Tim Addison (Part 2)

OS: On the East Coast. You spent a lot of time between the two coasts, back-and-forth. What was life like in those days for a young officer, with family and moving?

Well, it was tougher on the wives, I'll tell you. It was hard on the wives. We lost a son, a baby, an infant, and I made it back from sea two days before he died.

OS: Oh, what a shame for you and your wife.

But later on, we had a daughter. Then we had another daughter and then a third daughter, so my poor wife had to put up with a rough time.

OS: Unfortunately, life was not easy back in those days, particularly for the wives. I heard enough about that from my own mother. You were promoted and were in command of Terra Nova. Can you tell me a bit about your time in Terra Nova and what life was like in a relatively new ship in those days?

Vice-Admiral Nigel Brodeur

Well, there's an interesting aspect you see, because when I was first promoted to commander, I went to the Maritime Command staff and Naval Headquarters for an officer training study and then I was appointed to CANMARCOM [Canadian Forces Maritime Command], Senior Staff Officer Personnel and the Officer in Command of the Halifax Port Division Manning Depot. That was about the time of unification.

OS: Interesting and I never thought to pose a question about unification, but please go ahead. Tell me what things were like in those days as well.

Well, one of the things that happened with unification was [that] over one weekend, we were required to promote 1200 able seamen to leading seamen and the balance, which was about 40-60% between leading seaman and ordinary seaman, that balance reversed almost immediately. And of course, with the leading seaman as the supervisory person, and the able and ordinary seamen the workers, that caused a huge amount of disruption in the Fleet. You suddenly had a situation where a lot of promotions and these leading seamen were promoted based on time [in rank] because that was the army and air force way [of doing business]. It was all implemented in the same way. They became known in the Navy as Hellyer's Hookeys.

OS: Yes, I've heard that term. In fact, I've heard the term, 3 badge Hookey, which was somebody who pre-unification would have been perhaps an Able Seaman for life career-wise. So, then along comes unification and they all get promoted, or virtually all of them.

All got promoted – and total disruption in the Fleet. Then there was a meeting. Mr. Hellyer came down to Halifax to brief the command or to talk to the commanding officers, army, navy and air force in the Wardroom, Stadacona. Towards the end I got up and asked him a couple of questions. My first question, I noted that six flag officers and one general officer had resigned over unification and had stated that unification would have a very serious effect on the armed forces. Mr. Hellyer said that well if I had read this book by David Devine, which I never did read until just a few years ago, it was about the Royal Navy actually - he said that I would learn that you can't always trust what your senior officers had to say to you. At that comment by Hellyer there was a little bit of a rumbling in the audience, and then I said, "Oh Mr. Minister, I have a second question, and the second question is, you have stated that there is no intention to abolish worthwhile traditions." And I said, "What traditions do the Army, the Navy and Air Force have that are more worthwhile than their names, the names of their units and the uniforms they wear, in common with people who gave their lives for the country?" And his answer was, "Well you talk as though your uniforms were ordained by God" at which point nearly the whole audience stood up and shook (there was a tremendous uproar).

So, a few minutes later, Admiral O'Brien attempted to restore order. You might recollect, he had been promoted from commodore to vice-admiral, because the intervening ranks had resigned or been fired. And so, he restored order.

OS: That whole event of unification, that must have been tremendous upheaval and Admiral O'Brien, Scruffy O'Brien, he was an amazing and highly regarded leader.

Scruffy O'Brien, he was tremendous. Yes, and it wasn't too long after that he called me up to his office and he said, well Nigel, we'd like to appoint you commanding officer of Terra Nova which was on this [the West] coast, and I realized he was getting me out of the way and out of Hellyer's hooks.

OS: Ahh, getting you out of Stadacona, and back here to the [West] coast. I didn't realize that Terra Nova - when I read your career history - that Terra Nova was on this coast at the time. At first, I thought she might have been East Coast.

No, no, she was out here.

OS: So you are back here in Esquimalt, in Naden as

CO of Terra Nova, that must have been nice in a way to come home because I know you've got great links to what we now call CFB Esquimalt, ...

Yes, and by then my parents lived in Vancouver too, so that was nice … I went to Terra Nova and then from there, in 1969 I attended the Canadian Forces Staff College in Toronto, and then I came back to Ottawa, in an unusual position for an executive [branch] officer. I was appointed Director Maritime Systems Engineering 3, which was in the engineering division, and our job was preliminary design of warships.

OS: Yes, and I definitely want to ask you a few questions about that period of time in your life.

First, I got involved in deep submergence, and came to know a lot of people in the US naval community. Partly, it was as Director Maritime Systems Engineering (DMSE) and partly as the Program Manager for our deep diving submersible. We didn't have enough money in the navy to really get into submarines, or to do something new in submarines at that time, but we did have enough money to get involved in deep submergence, and the divers felt that they needed something to assist them in order to do deep diving work like that. What had happened is the United States Navy had commissioned North American Rockwell to build two barbell shaped hulls out of HY 100 spun steel. One hull, one ball at the front was large enough to hold three people. The ball at the back would be able to hold two divers, and they were connected by a tunnel, with a hatch in between.

The front would stay at normal one atmosphere pressure. The stern would be pressurized. We had pressurized, and then when you came to the depths that you wanted to do diver lockout, you pressurized to that depth and the hatch would open at the back and the diver could go out and do various things. So, anyhow, that was the USN's scheme for what they called the Beaver Mark 4.

OS: And what happened in Canada?

Well surprisingly, both hulls passed the American Bureau of Shipping standards tests. So, I went and got the second hull for - I think it was pretty cheap. I think it was about $250,000 and in Canada we built SDL 1 for $750,000-$760,000, and the American Navy built their Beaver Mark 4 for two and a 1/2 million dollars … (chuckle) … and they were virtually identical. (chuckle). Anyway, through all this I came to know some people in the deep submergence community in the United States as well.

OS: I'm sure you must have. Whatever happened to that submersible project?

It went through. She operated on both coasts for a while, and then I think she's, my goodness, she's in a museum. I'm not sure where the museum is, but she's in one of our Naval Museums or Base Museums. I did get to go down in it once. By then I was the Commanding Officer of the Maritime Warfare School, and SDL1 was alongside in Halifax, not far from the school, and the divers asked me if I'd like to go down. I didn’t go down [too deep], it was shallow water, it wasn't the maximum 2000 feet, but what it was calibrated for. But at least I did get to go down [in it].

OS: So, what was the reason for the demise of the capability in the project? Was it that there was just no funding for future development?

Oh, there wasn't adequate funding at that time for a submarine project, and there was only preliminary design funding available, and I hate to tell you this, the money ended up going into the budget for the general purpose frigate, what we've got today.

OS: So, what you're saying is, the money was diverted over into the Canadian Patrol Frigate (CPF) program, is that what happened?

Preliminary design was under the engineers in DMSE 3. They produced the design and then the executive people would look at it. A couple of small ship designs were proposed. One was the FFG 7 - the United States Navy ship, it was about 2700 tons, I

think, but it was only a single screw. I shot that one down as DMSE 3 - no go to a single screw ship. I always wondered why the Americans built the OHP [Oliver Hazard Perry]. In Canadian waters, single screw not a good idea. You can forget that.

OS: Exactly. But eventually that design evolved into what we know as the Canadian Patrol Frigate, right? So, you were setting the requirement?

Yes. We went on to propose our own ship design, which was a bit smaller than the General Purpose Frigate, the technical requirements, the hull construction, the equipment, et cetera. So, for some reason the powers that be in Ottawa decided that I was the father of the General Purpose Frigate, I don't know.

OS: Do you recall who was part of the team in those days?

The brilliant guy in the team was a fellow named Huntley Keefe. He was an electronics technologist, and he was damn good. Huntley Keefe. The President of ISE - International Submarine Engineering, Jim McFarlane, was my project officer. I had a staff of two naval architects and one systems engineer and one engineering guy, and that, I think, was the staff in DMSE 3.

OS: (chuckle) Pretty small staff to take on a project that size. I know the actual project became hundreds of people. This was the early requirement phase?

It was the early design, the early general ship design.

OS: And what was the process like to take that early requirement and push it up the ladder into the higher levels?

That was an engineering responsibility in the headquarters. It was Tom Maxwell, who was an engineer, a four striper at that time. Great fellow was Tom Maxwell. So, I was with the project, I was with

the Director of Maritime Systems Engineering and there were several departments in DMSE, I was the DMSE 3, and I think DMSE 1, DMSE 2 …

OS: Right. So, you were on the engineering technical side. Was there a similar community on the naval requirements? What they call today the Director Naval Requirements side?

There were complete communications, liaison, [and] general meetings between the two organizations. But we never got into much of the weaponry business. That was primarily the weapons division in Stadacona, but we got, certainly into the ship construction, ship design side of things and we just liaised with the operators.

OS: Yes, and who was in that group?

I think I had a couple of seamen in DMSE 3, but I can't remember exactly - unfortunately all my papers of that are in the Base Museum.

OS: Well, I'm pleased to hear that your papers from that era have actually been archived. So we were talking about project definition, the CPF came to evolve and eventually steel was cut and ships were built. Did your early work, did you see it in the eventual end-product? Were you happy with the result?

Well, first of all, I was happy with the end result. Second, I've never served on them, of course. The first one, I seem to think it was commissioned in 1990, but from everything I've heard about them, they were good. I also got involved with DDH 280 conversion as well at that time.

OS: The Tribal Class Update and Modernization Project (TRUMP) (280) project?

Yes. I got involved with the TRUMP of the DDH 280s. I do recall a bit more about that because I visited them several times and was more closely involved with them. The DDH 280, first of all, had a decent gun, a 5-inch gun, then they had the Sea Sparrow missile system. Then they had the Mortar Mark 10 ASW system, and they had torpedoes. They had a good burst of speed and a good range of nautical miles and a good displacement, so they handled well. I personally think they were almost ahead of their time. They were really good.

OS: Yes, they certainly gave Canada great service, the four of them.

They certainly did.

OS: In those days there must have been talks, I mean, those ships going through the Tribal Update Modernization Program, everybody would be recognizing we've got to replace these ships eventually. Was there much discussion about that?

Yes, but again, I cannot remember to much of the details. Oh, by the way, I forgot to mention when I was DMSE 3 I was involved with ship preliminary design, deep submergence programs and also cushion vehicles. I forgot to mention the air cushion vehicles.

OS: Air cushion vehicles, yes. I didn't know that we had much of an interest. We did have Bras D'Or if we're talking about that kind of an air cushion vehicle.

Well, I attempted to get an air cushion vehicle, a Mark 4 for the Navy, but I got shot down at the last minute. I don't think there was quite enough money. But at that time, we were doing trials with air cushion vehicles and well, I forget who the trials officer was, but I knew him well. We thought that we could get an air cushion vehicle for certain naval uses where you needed speed but could also work on the surface, but this didn't go any further.

OS: We're talking the 1971 time frame? What was the status of Bras D'Or? She had been built-in the mid to late '60s.

The Bras D'Or was still being used and I think Bras D'Or got involved somehow in the Olympics and supporting the Olympics.

OS: The Olympics in Montreal was in '76 - I thought she'd been decommissioned by then?

Yes, when I had the Fifth Destroyer Squadron, which was 1974, I think she was operational, but she was out of commission by the end of '74 or '75.

OS: So can you give me a bit of a sense of the air cushion vehicles that you were talking about the navy acquiring? You were trying to push that thread. What were they all about? I have no concept of what they would have been. Were they like an LCAC [Landing Craft Air Cushion] or one of those amphibious craft?

No, not an LCAC because that was [a vessel] more for the Marines. These were just large air cushion vehicles with a small cabin and an after deck for transporting. I think it probably could transport quite a bit [of] heavy equipment on the after deck. There were some trials done. It's a little vague you see because the air cushion vehicle project came under me in DMSE in order for it to have a "daddy", but really the guy who ran it was not from my group, but they were affiliated with my group. So, I didn't dictate exactly what their trials would be at all. I was more the officer in charge, so I still had to keep an eye on them.

OS: Yes, of course. Part of your directorate, I guess.

Yes, part of DMSE 3.

OS: So, then you were appointed Commandant of the Maritime Warfare School, and then Commander of the Fifth Destroyer Squadron [D5]. Any additional recollections from that time period?

Okay, we had three major jobs while I was D5. One was Ocean Safari 1975, where I headed the enemy force. Ocean Safari '75 was one of the major set of exercises that were developed in SACLANT [Supreme Allied Command Atlantic] and largely SACLANT really owes it to Vice-Admiral Dan Mainguy. Mainguy was my predecessor as DCOS

Ops [Deputy Chief of Staff Operations] in SACLANT and Chief of Staff of CINCWESTLANT [Commander-in-Chief Western Atlantic Area]. He developed the whole pattern of exercises. He formalized the exercises for SACLANT from NATO Atlantic, and there's a large number of them.

OS: I recall reading a comment that you made about being assigned to be the Orange Force [Commander]. Could you explain your concern?

Well quite frankly the Canadian ships were obsolete vis-à-vis the equipment capabilities in the attacking force. We had difficulty just doing exercises with HMS Hermes, which was the British carrier, which always ended up in the Maritime Warfare School exercises (MARCOTs). We managed to get along with that, but when it came to American carrier forces, American destroyers, we did not have up-to-date equipment. As D5 I did not have any of the 280s, and obviously not the CPFs, so we were the old destroyers. I had the five of them for Ocean Safari '75, and after some consultation, the Americans decided to provide two destroyers - USS Farragut and USS Lawrence. The Brits would provide one destroyer HMS Juno. Now the interesting thing is the commanding officer [of] USS Lawrence ended up as a lifelong friend. I just got a letter from him yesterday.

OS: Oh, nice, excellent.

Our wives were friends. He ended up working for me later on when I was at SACLANT. But the other commanding officer of USS Farragut was Commander Mike Boorda. Boorda went on to

become the Chief of Naval Operations for the United States [Navy]. You may remember that he died tragically. He was a great guy.

So that was a good exercise. It all worked out. But I had one slight problem for that exercise. Prior to the exercise the admiral on the East Coast, who was Dougie Boyle, called me to his office and he said Nigel, you will have an Auxiliary Oiler Replenishment (AOR) for the exercise, but you are not to buy one drop of offshore oil.

OS: In other words, from a US tanker or anybody else?

Or anybody else. And I said Admiral, the plan of the exercise, it's a transatlantic exercise and there are going to be times when I'm going to be 500 miles away from my tanker and only have an American tanker, and Boyle said, I don't care, that's your problem.

OS: Interesting.

So, I got on the phone, to Flag Officer Home Fleet in the UK, and I said I would like to I propose that we trade fuel barrel for barrel. The British ships can keep track of the barrels of oil you get from our AOR and we will keep track of the barrels we get from the USN replenishment ships and they are to match identically. Do you agree with that, Sir? And he said yes, and I explained the problem … (chuckles)

OS: Well, in the end it made good sense.

Well, in the end it did make good sense, but there was a bit of a laugh to the end of it, because after I'd left the Squadron all the bills came in and the Brits discovered they paid a lot more for fuel than we did. So, they came after us for the difference, but by then, I'd left the squadron (chuckles).

OS: Ha! Boyle must have been livid.

I can't remember. I never heard anything after that.

OS: Do you remember who your relief was, was it Harwood perhaps, or ...?

I think it might have been John [Harwood]. After Ocean Safari ’75 we headed on a deployment to Hudson's Bay. I think we are the first Canadian destroyers to go [to] Fort Churchill. So we went to Churchill, and that was very interesting because I found looking at our processes, procedures, formations and everything else, that wasn't going to be quite good enough for potentially ice filled waters. So, I decided that we would put the ships in formation open order in order to have adequate warning and coverage for ice. But not only that, the lead ship would be responsible for the navigation and the lead ship was to have the commanding officer on the bridge all the time, and the lead ship would rotate, so this would let everybody get some experience and not get worn out.

OS: Sound plan. Yeah, otherwise you'd wear out your senior skipper pretty quick.

So then we went to went to Churchill, and I got that carving there …

OS: Oh, yes, very nice.

There was the museum and church, and the poor old priest came on board and he said, my museum is having awful trouble with financials. Can your people help out? And I said, well I'd like to buy something, so I bought that [carving] from him. The third thing that we did in D5 was the Canadian Water Olympics, in the Great Lakes. I had to take a couple of ships down to that as well, so that made for a fairly busy time as D5.

OS: You mentioned Boyle - did you have any previous interaction with Boyle, perhaps when he might have been C4 [Commander 4th Canadian Destroyer Squadron] on the West Coast?

Yes, I encountered him several times and he was a tough nut, but he was very professional, but once he made his mind up, oh boy. It was (chuckle) his way or the deep way.

OS: (Chuckle) Yes, I never was in direct contact with him, but I've heard the stories - you didn't want to cross him, for sure.

HMCS Antigonish (Photo: Naval Museum of Manitoba)

Extend Asterix - Canada's Proven Replenishment at Sea Capability

Canada's Combat Support Ship Asterix continues to deliver for the Royal Canadian Navy and our allies around the world. The ship has performed flawlessly since entering service to the RCN in January 2018. With over 750 replenishment operations, 125,000 cu meters of fuel transferred to the RCN and 20 other allied navies, supporting over 30 missions around the World, the ship has become not just a Canadian asset but an international success story. Asterix is also capable of so much more than she has done to date; equipped for full helicopter operations, humanitarian aid, training future mariners and the only Canadian commercially registered supply vessel fitted with an anti-drone defense system. The ship is operated by a Canadian crew of 72 men and women who are highly trained and dedicated to contributing to Canada. Like the thousands of Canadians who fought the Battle of Atlantic, our sailors carry on the Merchant Marine tradition of commitment and to helping meet our naval needs. Let's not see this great Canadian success story end prematurely, while NATO and our allies need more supply ship capability, not less.

As the ship nears her 10 year mark Asterix was designed to continue to serve for at least another 15-20 years. With no degradation to the hull and all machinery and equipment maintained to the highest performance level, Asterix remains fully capable for use by either Canada, or our allies, for the foreseeable future. We look for your support to help us extend Asterix service, either with our Navy or under one of the defense sharing agreements that we have with NATO or one of our allies. Extension of Asterix service will also count toward our promised increased commitments to NATO and allow this shining example of Canadian capability continue to contribute to our defense needs.

If you agree and would like to see this cost effective and highly efficient Canadian defense capability continue, please send us your thoughts by writing to info@federalfleet.ca and join the campaign to **EXTEND ASTERIX.**

Serving the Royal Canadian Navy and our Allies Around the World

CSS ASTERIX

FEDERAL

www.federalfleet.ca

HMCS Ontario (image:State Library of Victoria)

HMCS Charlottetown's in the Mediterranean Sea while deployed on Operation Reassurance (Image: Aviator Gregory Cole, CAF)

OPS Update

Every month the RCN produces a handy "Ops Update" to keep the public informed of the Navy's major deployments and other significant events. This section is a quick summary of the most important ship news. Stay up to date with *Your Navy Today* by subscribing to receive these updates directly. To subscribe email:

navypublicaffairs.affaires@forces.gc.ca

Since May 2025, the RCN has maintained a high operational tempo at home and abroad, balancing global deployments, domestic training, and a major fleet modernization effort. Canada's contribution to NATO's maritime security in Europe has continued through Operation *Reassurance*, where the RCN has played a central role in collective defence.

In late spring, HMCS *Montréal* completed its deployment as part of Standing NATO Maritime Group 1 after participating in Exercise *Formidable Shield* 25. During the exercise, conducted off Scotland and Norway, *Montréal* successfully launched two Block II Enhanced Sea Sparrow Missiles in rapid sequence against a subsonic aerial drone, demonstrating the frigate's readiness and interoperability.

In early July, two Kingston-class vessels, HMCS *Edmonton* and HMCS *Yellowknife*, departed Halifax to join Standing NATO Mine Countermeasures

Group 1, where they were tasked with finding and neutralizing historic sea mines using REMUS 100 autonomous underwater vehicles and clearance diving teams. Shortly after, HMCS St. *John's* sailed to join Standing NATO Maritime Group 2 in the Mediterranean. These sustained deployments reflect Canada's deepening contribution to allied maritime security and its continuing commitment to NATO deterrence.

Beyond the Atlantic, the RCN expanded its footprint in the Indo-Pacific through Operation *Horizon*. The most visible element was Canada's participation in Exercise *Talisman Sabre* 2025, a large multinational exercise hosted by Australia. Roughly 600 Canadian Armed Forces personnel joined nearly 19 allied nations in joint training across land, sea, air, cyber, and space domains. HMCS *Ville de Québec* represented the Navy, conducting a live-fire and forward rearmament of Block II Harpoon missiles in Darwin alongside the Australian Defence Force, the first such rearmament performed by a Canadian warship abroad. This deployment underscored Canada's commitment to Indo-Pacific partnerships and demonstrated its ability to operate far from home waters with allied forces.

Closer to the Americas, the Navy continued its long-standing participation in counter-narcotics operations under Operation *Caribbe*. HMCS *William Hall*, one of the Navy's new Harry DeWolf-class Arctic and Offshore Patrol Vessels, spent 55 days at sea in the Caribbean and eastern Pacific, working alongside the US Coast Guard to intercept drug-running vessels. The deployment led to the seizure of more than 1,500 kilograms of cocaine and disrupted several trafficking routes. Operations like *Caribbe* show the RCN's versatility, shifting smoothly from high-end combat missions to law-enforcement and cooperative security roles that enhance regional

stability.

Domestically, 2025 has also been a year of intensive training and experimentation. Exercise *Trident Fury* 2025, conducted off Vancouver Island in June, involved over a thousand personnel from Canada, the United States, and Mexico. The exercise marked a technological milestone when HMCS *Vancouver* launched and remotely controlled, armed uncrewed surface vessel, the Hammerhead, which successfully struck another target Hammerhead during the scenario. It was the first armed deployment of an uncrewed maritime platform by the RCN, signalling the service's push toward integrating autonomous systems into fleet operations.

Around the same time, Exercise *Cutlass Fury* 2025, led by the Atlantic Fleet, strengthened anti-submarine warfare and interoperability skills with Denmark, the UK, and the US. The Navy also held Halifax Fleet Week in June and Vancouver Fleet Week in July, opening ships for tours and public events to foster connections between Canadians and their naval service.

Fleet modernization advanced rapidly during this period. The first River-class destroyer, the future HMCS *Fraser*, entered full-rate production in spring 2025, marking a key step in the National Shipbuilding Strategy. The sixth and final Arctic and Offshore Patrol Vessel, *Robert Hampton Gray*, was nearing launch by summer, completing the AOPS program. At the same time, the Navy confirmed the beginning of a major transition: the retirement of its Kingston-class Maritime Coastal Defence Vessels, which have served since the mid-1990s. Eight of the twelve ships: *Shawinigan, Summerside, Goose Bay, Glace Bay, Kingston, Saskatoon, Whitehorse*, and *Brandon* are now scheduled for decommissioning in late 2025, with the remainder to follow by 2028. Their withdrawal closes a chapter in coastal defence but clears the way for more capable, multi-mission replacements.

HMCS Ville de Québec conducts a PassEx with HMS Prince of Wales in the Sea of Japan (Photo by: Corporal Brendan Gamache)

From the Branches

Sub-Lieutenant Solstice Morrell is presented with the Chisholm Sword

From the Vancouver Island Branch

Sub-Lieutenant Solstice Morrell is presented with the Merritt Chisholm Sword for Esprit de Corps and Perseverance by retired commander Rod Hughes of the Vancouver Island Branch of the Naval Association of Canada on August 29. Also in the photo is Commodore Beth Vallis, the reviewing officer, the recently appointed Commanding Officer, Naval Reserve. The Sword, with a Naval Association of Canada book prize, is presented at the Naval Warfare Officer Basic Course graduation.

(Photo Gerald Pash)

Nominated by their peers, the recipient of the sword is determined to have contributed to their fellow trainees by generating course moral, team support, comradery, inclusion, conflict resolution, perseverance, adaptability and resilience.

A student at the University of Regina, Sub-Lieutenant Morrell in 2022 enrolled in the Royal Canadian Navy at HMCS Queen, Regina's Naval Reserve Division. After completing Basic Training at Valcartier, Quebec during the summer of 2022 he has spent the summers of 2023 in Halifax, N.S. and then 2024 and 2025 at the Naval Officer Training Centre in Esquimalt to qualify as a Naval Warfare Officer. He is student at the University of Regina.

Sub-Lieutenant Bradley Petrie is presented with the Chisholm Sword

From The Vancouver Branch

Sub-Lieutenant Bradley Petrie is presented with the Merritt Chisholm Sword for Esprit de Corps and Perseverance by retired commander Rod Hughes, of the Vancouver Island Branch of the Naval Association of Canada. The Sword, with a Naval Association of Canada book prize, is presented at the Naval Warfare Officer Basic Course graduation. Nominated by their peers, the recipient of the sword is determined to have contributed to their fellow trainees by generating course moral, team support, comradery, inclusion, conflict resolution, perseverance, adaptability and resilience.Sub-Lieutenant Petrie enrolled in the Royal Canadian Navy after graduating with a Bachelor of Commerce Degree from St. Mary's University in Halifax.

He is he son of Warren and Lorraine Petrie of Halifax, Nova Scotia. Sub-Lieut. Petrie, having graduated from the Naval Officer Training Centre, HMCS *Venture*, in Esquimalt he returns to Halifax to serve in HMCS *Montreal*. He remarked that his father retired from the Canadian Navy as a chief petty officer 2nd Class Marine Technician.

(Photo Gerald Pash)

Sub-Lieutenant Kevin Abey presented with the Chisholm Sword

From The Vancouver Island Branch

Sub-Lieutenant Kevin Abey is presented with the Merritt Chisholm Sword for Esprit de Corps and Perseverance by retired commander Rod Hughes of the Vancouver Island Branch of the Naval Association of Canada on September 16 at HMCS *Venture*, the Royal Canadian Navy's leadership training centre.

A graduate of the University of Windsor, Sub-Lieutenant Abey enrolled in the Royal Canadian Navy in October 2022. After completing Basic Training at St. Jean, Quebec he began Naval Warfare Officer training HMCS Venture in Esquimalt in March 2023. Between training phases, he served in HMCS *Vancouver* and at the administration section at Canadian Forces Fleet School Esquimalt.

Sub-Lieutenant David Gilmore is presented with the Chisholm Sword

From The Vancouver Island Branch

Sub-Lieutenant David Gilmore is presented with the Merritt Chisholm Sword for Esprit de Corps and Perseverance by retired commander Steve White, National President of the Naval Association of Canada and the Vancouver Island Branch. Also in the photo is Commander, Justin Simmons, the reviewing officer, Commanding Officer, HMCS *Ottawa*.

Sub-Lieutenant Gilmore enrolled in the Royal Canadian Navy after graduating with a Bachelor of Science in Kinesiology from the University of Ottawa. In addition to under undergoing training in Victoria, B.C. he served as the Vice President of a civilian rowing club. He is he son of Walter and Lucy Gilmore of Brampton, Ontario.

(Photo: Gerald Pash)

NAC Endowment Fund Presentations

(Photo: Doug Struthers)

Bruce Belliveau, President of NSNAC and former President of NAC made several NAC Endowment Fund presentations during a Friday weepers on board HMCS *Sackville* at the iconic corvette's summer berth on the Halifax waterfront in early September. A cheque for $5000 was presented to Greg Cottingham, Chair of the Canadian Naval Memorial Trust to support public awareness of Canada's Naval Memorial. A second presentation was made to Korean War Veterans Tom Estabrooks and Graham McBride for their Korean War 75th anniversary remembrance project. Gary Reddy, CO of Sackville extended a welcome to Graham and Tom on behalf of the ship's crew.Bruce introduced Cdr Greg Gillis, CO of HMCS *Scotian* and announced $4500 NAC Endowment Fund grant had been received for NSNAC Bursary Trust fund. The Bursary Trust has been repurposed to provide financial support for reservists on strength of Naval Reserve Divisions in Halifax, Charlottetown and Saint John who are attending post-secondary institutions.

On July 31, 2025, in Calgary, at the Commodore Laraine Orthlieb Naval Training Centre, the Calgary Branch president, Scott Hausberg, presented a cheque for $10,000 to Al Mulawyshyn, Executive Director of Veterans' House Canada. This donation comes from the NAC Endowment Fund and will go towards the construction of Veterans' House Edmonton.

Korean Veterans Honored at Recognition Reception

Len Canfield

The Nova Scotia Branch of NAC proposed and the Royal United Services Institute-NS agreed to jointly host a reception in July to recognize and thank Korean Veterans in observance of the 75th anniversary of the Korean War and the signing of the Korean Armistice Agreement July 27, 1953.

A number of Korean veterans residing in Halifax-Dartmouth area were identified, including several residing at Camp Hill Veterans Memorial Building, and those able were transported to the gathering at Royal Artillery Park Offices Mess. The Veterans ranged in age from 93 to 105 and were welcomed by Vice Admiral Duncan (Dusty) Miller (ret'd), president of RUSI-NS, and Commodore Bruce Belliveau (ret'd), chair of NSNAC

Captain (N) Tony Goode (ret'd), a Director of RUSI-NS and NSNAC, introduced the attending Veterans and outlined their Korean service: Elias Gaudet, 3rd Canadian Horse Regiment (Armoured); Allen Hopkins, Corps of Signals; Reginald Borden, Royal Canadian Regiment; Harold Munro, Royal Canadian Regiment; Graham McBride, HMCS *Iroquois* and HMCS *Haida*; Tom Estabrooks, HMCS *Haida*, and Ronald Prime, HMCS *Iroquois*.

Heather Ryman, on behalf of Veterans Affairs Canada, thanked the Veterans for their service, and Joanne Geddes, vice president of RCL NS-Nunavut Command brought greetings on behalf of Legion members.

Duncan Miller reminded the gathering of the significant participation and contribution of Canada's land, sea and air forces in the UN's multinational force to protect South Korea from invading North Korean and Chinese forces. This included the army's defence and standing fast during the crucial Battle of Kapyong in April 1951, the shore bombardment actions of RCN ships in disabling rail lines, tunnels and supply trains, and the RCAF's timely transport of personnel and materiel.

Bruce Belliveau pointed out that 27,000 Canadians served in Korean operations in 1950s, suffering 516 fatalities and more than 1500 casualties. "We must never forget their service and sacrifice," he explained.

A highlight of the gathering was Belliveau announcing that two of the attending veterans, Graham McBride and Tom Estabrooks, had been awarded a Naval Association of Canada endowment fund grant for their Korean War 75th anniversary remembrance project.

Cmdre Bruce Belliveau (ret'd) congratulates Korean Veteran Tom Estabrooks, on sharing a NAC endowment fund award with fellow Korean Veteran Graham McBride.

Commemorating the Centenary of the RCNVR

From The Montreal Branch

On September 8th, there was on the grounds next to Montreal City Hall a ceremony to commemorate the Centenary of the RCNVR (1923-2023) and Centenary of the establishment of the RCNVR in Montreal in that same time frame. The ceremony was presided by Valerie Plante, Mayoress of the City of Montreal and many other municipal government dignitaries, Kevin Deer of the Iroquois Confederacy representing our regional First Nations, Cdr Louis-Phillippe Trudel, CO of HMCS *Donnacona*, Capt.(N) Matthieu Leroux, Regional Commander - Eastern Naval Reserve HQ, as well as many members of the Donnacona contingent and many members of the Montreal Branch of NAC. I am proud to state that the event was grand and the weather was a late summer classic and that the crests of the Navy, the City of Montreal and NAC-Montreal have been engraved on this commemorative plaque for the public to see for a very long time. A big thank you to all involved; the list is very long and deserving.

Kevin Deer of the Iroquois Confederacy representing our regional First Nations

Left to right: LCdr Francois Marquette (HMCS Donnacona & MNAC), Cdr Louis-Phillippe (CO, HMCS Donnacona), Bruce Bonnema (MNAC), Charles O'Leary (MNAC), Capt (N) Matthieu (Regional Commander, Eastern Naval Reserve HQ), Sterling Downey (City of Montreal Councillor

The Only Member of the RCN Awarded The Victoria Cross Honoured In Halifax and Victoria

When the Royal Canadian Navy names the sixth Arctic Offshore Patrol Ship, HMCS Robert Hampton Gray, on August 9 at a ceremony in Halifax, the only member of the RCN to be awarded the Victoria Cross will be also be remembered in a ceremony at 10:45 a.m. at the BC Aviation Museum at Victoria International Airport.

Representatives of the Royal Canadian Navy and Airforce with members of the Vancouver Island Branch of the Naval Association and supporters of the BC Aviation Museum will gather to remember the navy pilot. Wreaths will be placed at the monument that was installed two years ago at the entrance to the museum. The short ceremony will include the sounding of the Last Post and Rouse.

The ceremonies at both ends of the country are on the same day 80 years ago in 1945, when Lieutenant Robert Hampton Gray, flying from the Royal Navy aircraft carrier HMS *Formidable* led an attack on Japanese ships in Onagawa Bay. Hit by anti-aircraft fire, he released his bomb to sink the destroyer Amakusa before his plane crashed into the bay. The last Canadians to be killed in combat in the Second World War he was posthumously awarded the Victoria Cross, also the last Canadian to be so honoured.

Coincidentally, on August 9, there is an annual community ceremony in Onagawa, Japan at a monument dedicated to Gray that is located near the community hospital. It is the only memorial dedicated to a foreign service member on Japanese soil.

Wreaths on behalf of the Royal Canadian Navy Maritime Forces Pacific, the ship's company of HMCS Robert Hampton Gray, Canadian Fleet Pacific and Canadian Forces Base Esquimalt, The Royal Canadian Airforce, The Naval Association of Canada, and The BC Aviation Museum in front of the monument to Robert Hampton Gary at the BC Aviation Museum near Victoria International Airport. (Photo: Paul Seguna)

Images clockwise

- *Former Chief of the Defence Staff, retired admiral John Anderson speaks at the Robert Hampton Gray memorial event in front of the monument at the BC Aviation Museum. Like Hampton Gray, Mr. Anderson was born in Trail, B.C. (Paul Seguna photo)*
- *President of the Naval Association of Canada Steve White, with former Chief of Defence Staff John Anderson surveying the Robert Hampton Gray memorial at the BC Aviation Museum following the ceremony of remembrance for the only member of the Royal Canadian Navy to have been awarded the Victoria Cross. (Gerald Pash photo)*
- *Officers representing Maritime Forces Pacific Headquarters read the inscriptions on the Robert Hampton Gray Memorial at the BC Aviation Museum at Victoria International Airport. Left to right, Chief Petty Officer 1stClass Armand Reelick with the Commander Canadian Fleet Pacific Captain(N) Sam Patchel had placed a wreath representing the ship's company of HMCS Robert Hampton Gray, and the Pacific Fleet at a memorial August 9. Commander Malcolm Girard-Leblanc placed a wreath on behalf of the Royal Canadian Navy, Maritime Forces Pacific and Canadian Forces Base Esquimalt. (Gerald Pash photo)*
- *(also) Former Chief of the Defence Staff, retired admiral John Anderson speaks at the Robert Hampton Gray memorial event in front of the monument at the BC Aviation Museum. Like Hampton Gray, Mr. Anderson was born in Trail, B.C.*

The Commodore Laraine Orthlieb Naval Training Centre

On September 13, a ceremony was held in Calgary to change the name of the Naval Museum of Alberta Society's Annex Building to the Commodore Laraine Orthlieb Naval Training Centre. Over 150 people attended and took the opportunity to tour the building.

The Annex Building was built in 1988 to house the Naval Museum of Alberta. Since the Museum moved to The Military Museums in 2008, the Annex has been used as a workshop and storage facility to support the Museum and also as the home of cadet corps RCSCC *Undaunted* and NLCC Captain Jackson. Recently, *Undaunted* added a world class bridge simulator that is used by both cadets and reservists from HMCS *Tecumseh*.

Laraine Orthlieb was the first female commanding officer of HMCS *Tecumseh*. Following the fire that destroyed most of the unit in 1981, she founded the Tecumseh Historical Society to preserve the unit's naval artefacts, including three aircraft. The Society raised the funds to build the Naval Museum and Orthlieb secured a 40 year lease from the federal government for the land on which the Museum was built.

In 1989, Orthlieb was promoted to Commodore and became the first female flag officer in the RCN.

The building was renamed to both recognize the amazing accomplishments of Commodore Orthlieb and to better describe the activities that take place within it. It is a vital centre for Calgary's small but very active naval community. While National Defence has indicated that the land lease will not be extended beyond 2028, the Society is working to convince them to let the current occupants and functions continue.

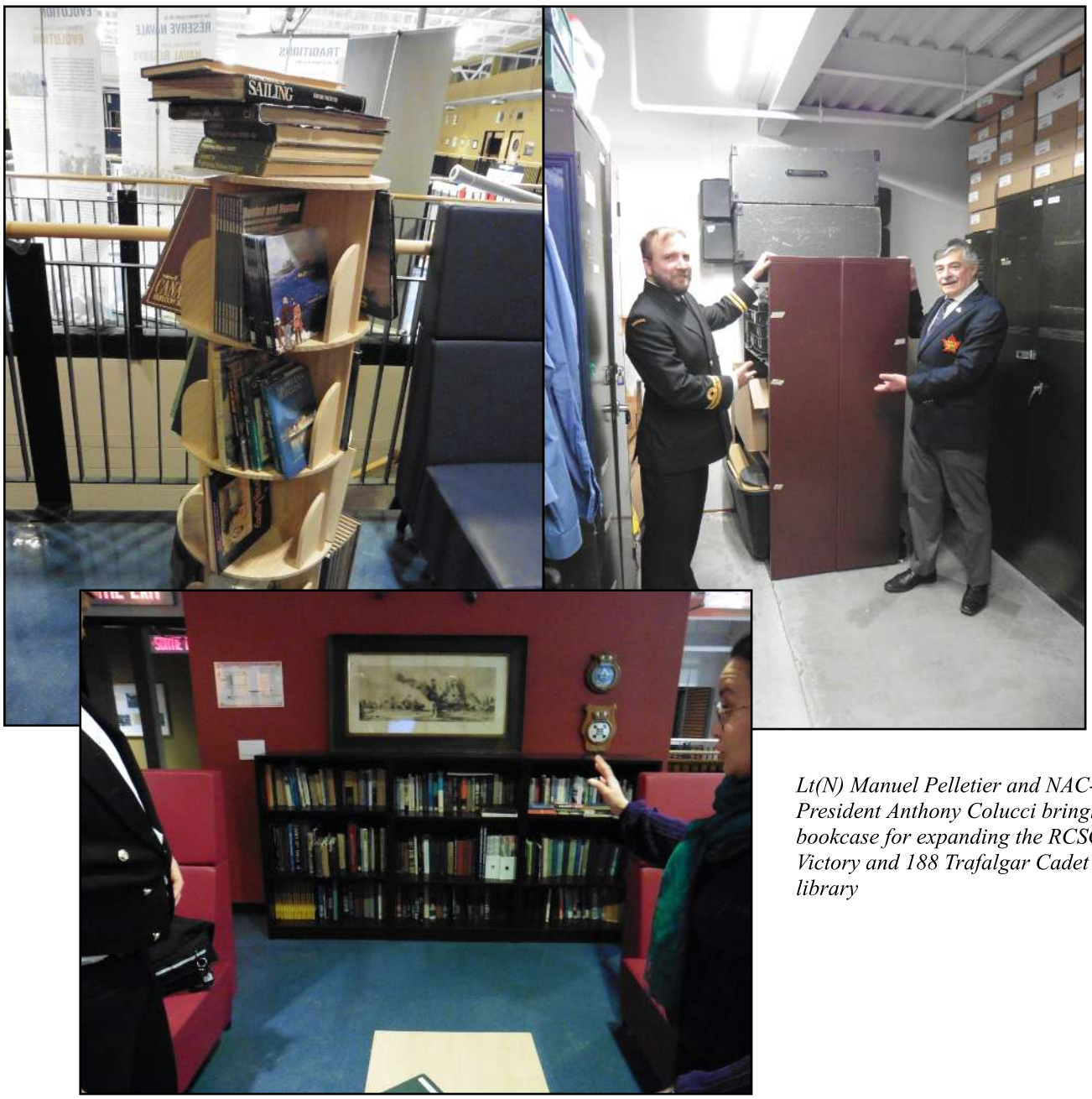
Images Clockwise

Bridge simulator (Photo: Arzouma Konpaore Radio Canada); Cmdre Orthlieb with NLCC Captain Jackson cadets (Photo: Arzouma Konpaore Radio Canada; Mayor Gondek, Cmdre (Ret'd) Orthlieb, Capt(N)(Ret'd) Bill Wilson, Cdr (Ret'd) Scott Hausberg

HMCS Donnacona Library Expanding

From Anthony Colucci

The Montreal Branch and with help from the NDG Legion Branch 24/106 has assisted the RCSCC 06 Victory and RCSCC 188 Trafalgar in expanding the naval library being housed at HMCS *Donnacona* with the donation of a bookcase and books. The books cover topics that are historical, technical and anecdotal. The project is being spearheaded by Lt(N) Manuel Pelletier of the Regional Cadet Support Unit (Eastern) and current CO of both Corps Units (although that will officially change on May 11th when Lt(N) Jessica Guilbert will take command of Victory and NAC- Montreal will be there to attend the transfer of command). The actual organization and maintenance of the library is being directed by Adiya Saifulina, President of the Executive Committee of 06 Victory.



Lt(N) Manuel Pelletier and NAC-Montreal President Anthony Colucci bringing a bookcase for expanding the RCSCC 06 Victory and 188 Trafalgar Cadet Corps library

Last Post

Compiled by Pat D.C. Barnhouse | Starshell Obituaries Editor

Kindly forward all obituaries to Pat at:
535 Kenwood Avenue, Ottawa, ON K2A 0L7
or by email: pat.barnhouse@sympatico.ca

NAC Members

Cdr Paul Arthur CADEAU, CD, RCN(Ret'd)**

NSNAC, 88 in Dartmouth, NS 15/04/25. Jn'd in '55 as OSLMS. CFR'd as CMDO 15/09/66, prom Lt 01/05/68, LCdr 01/01/79 and Cdr 01/01/84. On commissioning, srv'd several years as an AERE officer, later reverting to MARE. Srv'd, inter alia, Cornwallis, Stadacona, Magnificent, Bonaventure, Shearwater, NDHQ, MARPAC HQ, FMG(A) and DRDC Atlantic. Ret'd in '92. (WG)

Cdr Robert John GRAY, CD, RCN(Ret'd)**

NSNAC, 83 in Halifax 17/01/25. Jn'd Royal Roads as Cdt 01/09/59, thence RMC 09/61. Prom S/Lt 01/09/63, Lt 05/01/65, LCdr 01/07/72 and Cdr 01/01/85. Srv'd, inter alia, Iroquois 1, Saguenay, New Glasgow, Ojibwa, Onondaga, CFMWS, CFFS Hfx, NDHQ, CFCSC and NATO (Denmark). Ret'd in '95. (WM)

Cmdre Thomas Charles HEATH, CD, RCN(Ret'd)**

NACVI, 80 in Victoria 12/07/25. Jn'd Venture as Cdt 01/09/63 and prom A//S/Lt 01/09/64. Prom S/Lt 01/09/65 thence Columbia in '65 and Fraser in '67. Prom Lt 01/09/68 fll'd by Terra Nova, CFB Hfx (Long Wpns Cse.) 03/68, Nipigon in '70 and Athabaskan in '72. Prom LCdr 01/07/74 thence CFFS(H) in '75, CFCSC in '76 and Qu'Appelle (XO) in '77. Prom Cdr 12/07/79 fll'd by Preserver (XO) in '79, Preserver (i/c) in'80, MARCOMHQ in '81, Gatineau (i/c) in '83 and Commander Sea Trg.(Pacific) in '85 Prom Capt in '86 thence SACLANTHQ in '86, Commander DESRON 2 in '89 and French Language Training pn '91. Prom Cmdre 10/07/92 fll'd by Deputy SACLANT and CINCHAN Representative in '92 and NDHQ (DG Intelligence and Security Support) in "94. Ret'd in '98. (RH).

Lt Ernest George REID, KC, RCN (R)

NLNAC, 82 in St John's NL 19/07/25. Jn'd Cabot as UNTD Cdt in 1960, prom S/Lt 01/09/63 and, at Scotian prom Lt 01/09/65. Also srv'd Cornwallis. Bronze ('93), Silver ('99) and Gold ('17) Medallions. Branch President 1997-99. Much involved in bar associations and community endeavours. (WC)

Others

Cdr Geoffrey John H. E. ARCHBOLD, CD**, RCN(Ret'd)

80 in Saanich, BC 31/03/25.Jn'd Royal Roads as Cdt 01/09/61 thence RMC in '63. Prom S/Lt 01/05/67, Lt 01/05/69, LCdr 01/01/76 and Cdr 01/01/87. Srv'd, inter alia Ste Therese and Gatineau. Ret'd in '95. (WG)

CPO1 John James Harry AULD, CD, RCN(Ret'd**

87 in Waterville, NB 04/10/25. Jn'd in 1959 as OSRP. Srv'd Cornwallis and 10 ships including Kootenay and Protecteur(Cox'n). Ret'd in '94. (WM)

A/Lt(MED) Theodore Wilfred AVRUSKIN, RCN(R)(Ret'd)

89 in Portland, OR 14/09/25. Jn'd York as UNTD Cdt 02/01/55 thence Cdt(MED). Prom A/Lt(MED) 01/07/59. To Ret'd List in '60. (WC).

LCol(Ret'd) Thomas Andrew BAILEY, CD**

81 in Winnipeg 13/07/25. Jn'd Royal Roads as Cdt 01/09/61 thence RMC 09/63. Prom A/S/Lt 01/01/65, S/Lt in '66, Lt 01/12/67, Maj(PLT) 01/09/77 and LCol(PLT) 01/07/88. Srv'd Antigonish, Yukon, RCAF Centralia, RCAF Pottage La Prairie, Shearwater, VS-880, Bonaventure, CFFS, CFMWS, CFB Halifax, CFB Trenton, VT-406, MARCOM HQ, CFB Moose Jaw, CFB Winnipeg, CFANS, CFCSC, 436 Squadron, NDHQ, RAF Cranfield, ,CFB Edmonton (440 squadron) and CFB Winnipeg. Ret'd late 1990's. (e-Veritas, Canada's Naval Aviators)

LCdr Roger Miles BUXTON, CD*, RCN(Ret'd)

86 in Melbourne, Australia. Jn'd RMC as Cdt 01/09/57, prom S/Lt 01/05/61, Lt 06/02/64 and LCdr 01/01/73. Srv'd Stadacona, Hochalaga, Saskatchewan, Restigouche, Nipigon, Margaree, St Laurent and CDLS(L) (RN Exchange). Ret'd in '88. (e-Veritas)

Lt(N)(Ret'd) William Elliott COLLS, CD

80 in Ottawa 29/11/24. Jn'd as S/Lt 31/08/67 and prom Lt(N) 05/07/72. Srv'd, inter alia, NDHQ. Ret'd in '81. (Citizen).

Capt(NR)(Ret'd) James Arthur COTTER, CD

64 in Kanata, ON 08/07/25. Jn'g Carleton as NROC Cdt '80. Prom S/Lt, Lt, LCdr, Cdr and Capt. Srv'd, inter alia, Cataraqui (i/c), Director of Reserves and Defence Attache Korea, (WC, Citizen)

LCdr Harry Richard COUTTS, CD, RCN(Ret'd)

91. Jn'd RMC as Cdt(L) 11/09/53, prom Mid(E) 01/09/55, A/S/Lt(E) 01/01/57, S/Lt(E) 01/05/58, Lt(E) 01/10/59 and LCdr 01/07/68. Srv'd RNEC Manadon, Restigouche, La Hulloise, SUPLANT (DKYD), Ottawa, PNO Mtl and MARCOM. Ret'd in '74. (WM)

Surg Lt John Carrutherrs DEADMAN, RCN(R)(Ret'd)

94 in Kitchener, ON 26/06/25. Jn'd York as UNTD Cdt 17/01/50 and to Ret'd List as A/S/Lt in '52. Later tsf'd to Star, prom S/Lt 01/07/52 and later Surg Lt. (WC).

Lt Philip Stewart ELDER, RCN(R)(Rer'f)

84 in Toronto 07/05/25. Jn'd Cataraqui as INST Cdt 02/01/59 and prom S/Lt 01/10/61, fll'd by Discovery in '63. To Ret'd List in '65. (WC)

S/Lt Frank Boyd FINGLAND, RCN(R)(Ret'd)

96 in Victoria 23/01/25. Jnd York as UNTD OS(Officer Candidate) in '47 thence Cdt 30/10/58. Prom S/Lt 28/11/50 fll'd by Prevost in '52. Later to Ret'd List. (WC)

A/Lt Ross Lawrence FOWLER, RCN(R)(Ret'd)

94 in Halifax 09/07/25. Jn'd York as UNTD Cdt(S) 17/01/50, later tsf'd to Cdt. Prom A/S/Lt 01/07/52, thence to Ret'd List in '54. Prom A/Lt on Ret'd List. (WC)

Capt(N)(Ret'd) the Hon Joseph Jean-Marie Marc GARNEAU, PC, CC, CD*

Former Member, 76 in Montreal 03/06/25. Jn'd CMR as Cdt 08/65 thence RMC 09/68. Prom S/Lt 01/05/70, Lt 01/05/72, LCdr 01/01/77, Cdr 01/01/82 and Capt 01/01/86. Srv'd CDLS(L)(DSc Imperial College), CFFS Hfx(CSE Cse.), Algonquin, CFFS Hfx(Staff), NDHQ(Staff DMCS 2), NEU(A), CFCSC, NDHQ(DMCS 6) and Seconded NRC (Astronaut Program). Ret'd in 1989. Astronaut, President CSA, MP and Cabinet Minister. (Citizen, Globe & Mail)

LCdr David Andreas GASSER, CD, RCN(Ret'd)**

88 in Victoria 12/03/25. CTP Cdt at York 01/09/60. Prom A/S/Lt 01/09/62, S/Lt 01/09/63, Lt 16/11/66 and

LCdr 01/07/73. Srv'd, inter alia, Micmac, Inch Arran, Annapolis and NDHQ. Ret'd in '97. (WG)

S/Lt David GOYDER, RCN

In Southampton, UK 17/01/25. Jn'd Venture as Cdt 02/09/59, prom A/S/Lt 01/09/61 and S/Lt 01/09/62. Srv'd Stadacona (JOLTC), Jonquiere and Stettler. Rls'd in '66. (RD)

Cdr William Barry HODGKIN, CD*, RCN(Ret'd)

Former Member, 84 in Victoria 03/05/25. Jn'd as ROTP Cdt at Malahat (U Vic) 01/09/59, prom S/Lt 01/05/63, Lt 31/05/67, LCdr 01/01/75 and Cdr 01/01/79. Srv'd, inter alia, Stadacona, Mackenzie, St Croix, NDHQ and Mackenzie (XO). Ret'd in '85. (RH)

Capt(N)(Ret'd) George Rodney IVES, OMM, OStJ, CD*

85 In Comox Valley, BC 29/04/25. Jn'd Chaplain Branch as Lt 06/09/67. Prom LCdr 01/01/79, Cdr 01/01/84 and Capt 01/01/87. Srv'd, inter alia, MARCOM and NDHQ. Ret'd in 1990's. (WM)

LW Elsa LESSARD, WRCNS

103 in Ottawa 22/07/25. WWII service at Coverdale (Monitoring U-Boat transmissions). (Citizen)

Lt Keith George John McKEY, RCN

92 IN Toronto 15/07/25. Jn'd Royal Roads as RCN(R) Cdt 09/50 thence RMC 0952 and RCN Cdt(L) 06/01/54. Prom A/S/Lt(L) 01/06/54, S/Lt(L) same date and Lt(L) 01/03/57. Srv'd Cataraqui (Queen's U.), Stadacona, Ontario, Naden, Niagara and Bonaventure. Rls'd in '64. (WM)

LCdr Harold Clarke MECREDY, CD, RCH(Rer'd)

Former Member, 101 in Kingston, ON 11/08/25. Jn'd RCNVR at Prevost in '43, Prob S/Lt in '45 and to release. Jn'd Prevost as RCN(R) S/Lt 02/03/45 and prom Lt 02/12/46. Tsf'd to RCN as Lt (sen. 05/05/49) and prom LCdr 05/05/57. Srv'd NSHQ, Stadacona, Lauzon, Magnificent, Bonaventure, Gatineau (XO) and Niagara. Qual "D". Ret'd in '66. (PB)

Lt Evatt Francis Anthony MERCHANT, RCN(R)

80 in Regina 13/10/25. Jn'd Unicorn as UNTD Cdt 01/63, prom A/S/Lt 15/09/64 and later Lt. (WC)

LCdr(Ret'd) Roger Keith MISKOWICZ, CD*

74 in Ottawa 07/11/24. Jn'd Royal Roads as Cdt 09/68, thence RMC 09/70. Prom S/Lt 01/05/72, Lt 01/05/75 and LCdr 01/01/83. Srv'd, inter alia, CFFS Hfx, RMC (M.Eng degree) and NDHQ. Ret'd in '88. (e-Veritas)

Capt Rolfe Gibson MONTEITH. CD*, RCN(Ret'd)

Former Member, 101 in Plymouth, UK 22/07/25. Jn'd as RCN Cdt 01/09/41 thence Britannia Royal Navy College (Special Entry Course 55), Prom Mid(E) 01/05/42, A/S/Lt(E) 01/01/44, S/Lt(E) 01/04/43, Lt(E)(A/E) 01/08/44, LCdr)E) 01/08/52, Cdr(E) 01/01/58 and Capt 01/01/64. Srv'd HMS Hardy. RNEC Keyham, HMS Diadem, Shearwater, Magnificent. Sioux, NSHQ, Niagara, Gatineau (Sqn Staff), CFHQ (PM Hydrofoil and DFM) and Imperial Defence College. Ret'd in '70. Second career in UK with Babcock & Wilcox and the Weir Group. (WG, KB)

Cdr Gordon Edwin MORGAN, CD, RCN(Ret'd)**

89 in Halifax 08/01/25. Jn'd 17/06/53 as OSLMS. Rising to P1. CFR'd as CMDO 19/04/68, prom Lt 19/04/71, LCdr 01/01/78 and Cdr 01/01/85. Srv'd Cornwallis, Quebec, Stadacona, Trinity, Haida, Lauzon, Kootenay, Annapolis, Gatineau, Terra Nova, Athabaskan, CFB Esquimalt, CFFS Hfx, MARCOM HQ, SRU(A) and FMG(A). .Ret'd 12/88. (WG)

Cdr Joseph Hedley MURCHIE. CD, RCN(Ret'd)**

89 in Dartmouth, NS 06/12/24. Jn'd as OSLMS in '53. CFR'd as CMDO 15/04/65, prom Lt 15/04/68, LCdr 01/01/75 and Cdr 01/01/84. Srv'd, inter alia, Cornwallis, Stadacona, Thunder, Iroquois I, Bonaventure, RNEC Manadon, Iroquois (EO) and BTSO Hfx. Ret'd in '91. (WM)

Lt Abraham OUDSHOORN, CD, RCN(Ret'd)

88 in Nanaimo, BC 21/02/25. Jn'd Venture as Cdt 11/09/55, prom Mid 01/09/57, A/S/Lt 01/05/58, S/Lt 01/05/59 and Lt 01/10/61. Srv'd Stadacona, Fraser, Fortune, Lauzon, Cap de la Madeleine and St Croix. Ret;d in '69. (RD)

Lt Charles Gordon REEKIE, CD, RCN(Ret'd)**

85 in Victoria 02/05/25. Jn'd in '56 as OS Cook and rose to CPO1. CFR'd as Lt 12/06/81. Srv'd, inter alia, in submarines. Ret'd in '88. (WM)

S/Lt(S) William MacDonald SCOTT, RCN(R)(Ret'd)

95 in Montreal 27/04/25. Jn'd Donnacona as UNTD OS(Officer Candidate) in '47, thence Cdt(S) 29/11/48. Prom S/Lt(S) 06/02/51. To Ret'd List in '54. (WC)

S/Lt John William SCRIMGER, RCN(R)(Ret'd)

88 in Edmonton 08/09/24. Jn'd Unicorn as UNTD ORD SLt 02/01/56. Thence Malahat as ORD S/Lt (sen 01/07/58). To Ret'd List in '62. (WC)

A/Lt Peter William Shenstone, RCN(R)(Ret'd)

Former Member, 99 in Toronto 26/02/25. WWII RCNVR service as OS in York, Cornwallis, Peregrine and Haligonian. Jn'd UNTD at York as OS(Officer Candidate) in '46 and desig Cdt 01/10/48. Prom S/Lt 06/02/49 thence to Ret'd List as A/Lt. (WC)

Lt(NR)(Ret'd) Kenneth Gordon STEPHENS, CD

77 in Windsor, ON 26/08/25, Jn'd Hunter as UNTD Cdt in '66. Later prom Lt(N) and XO Hunter 08/05 to 10/07. Subsequently Capt(AIR) with RCACS 354 in Windsor. (WC).

Cdr William Ronald VELLEVAND, CD, RCN(Ret'd)**

Former Member, 95 in Ottawa 24/03/25. Jn;d in '50 as OS thence Royal Roads as CTP Cdt 08/09/50. Prom Mid 01/09/52, A/S/Lt 02/01/54, S/Lt same date, Lt 17/09/64, LCdr 17/04/64 and Cdr 01/07/73. Srv'd Ontario, Niobe (RN for Trg.), Cayuga, Bytown, RMC, Fundy (XO), Niagara, New Glasgow (XO), CDLS(W) (Twice – Intelligence) and NDHQ. Ret'd in '83. (e-Veritas)

Lt Wolfgang Oskar Von STADEN, RCN(R)(Ret'd)

96 in Regina 05/05/25.Jn'd Star as UNTD Cdt 31/01/57, prom A/S/Lt 01/07/59, S/Lt 01/03/60 and Lt 01/03/62. To Ret'd List in '62. (WC)

Lt(NR) Philip Alfred WESTBROOK

Former Member, 83 in Alliston, ON 13/06/25. Jn'd Star as UNTD Cdt 01/61. Prom S/Lt 01/01/64 and later Lt. Qual CDOS. (WC)

HMCS YELLOWKNIFE sails throught Norwegian Fjords (Photo: Mckayla Ryce, Canadian Armed, CAF)