

STARSHELL

SPRING 2023 | ISSUE 98

NAVAL ASSOCIATION OF CANADA

Canadian Naval Recruiting

**The Need for Naval
Education**

**Submarines: A Strategic
Requirement**

**Canada's Submarine
Contenders**





Starshell

ISSN-1191-1166

OFFICERS OF THE CORPORATION

PRESIDENT: Bruce Belliveau
VICE PRESIDENT AND NAVAL AFFAIRS: Tim Addison
TREASURER: David Colbourne
SECRETARY (EX. DIRECTOR): Kevin Goheen

COMMITTEE CHAIRS

NOMINATING COMMITTEE: vacant
NAC ENDOWMENT FUND COMMITTEE: John Anderson
NATIONAL AWARDS SELECTION COMMITTEE: Tim Addison
MEMBERSHIP COMMITTEE: King Wan
FINANCE AND INVESTMENT COMMITTEE: David Colbourne

NATIONAL APPOINTMENTS

NATIONAL ARCHIVIST: Richard Gimblett
CHAIR, HISTORY AND HERITAGE: Alec Douglas
EDITOR, STARSHELL: Adam Lajeunesse

EDITORIAL BOARD: Adam Lajeunesse, Tim Addison, Norman Jolin,
Howard Smith, and Ian Parker

EXECUTIVE DIRECTOR, SECRETARY/COMMUNICATIONS:

Kevin Goheen, PhD, P.Eng
Naval Association of Canada
C/O HMCS Carleton | 79 Prince of Wales Drive | Ottawa, ON K1A 0K2

STARSHELL magazine is published three times per year (with occasional special editions) by the Naval Association of Canada (NAC). The editor is solely responsible for the selection of material. Contributions are encouraged and should be sent direct to the editor at adam_lajeunesse@outlook.com.

The opinions expressed in this publication are deemed to be exclusively those of the author(s) and are not necessarily shared by the Naval Association of Canada, the Royal Canadian Navy, or the Department of National Defence. If copyright is specified for any item, permission to copy must first be obtained through the editor, otherwise material may be copied without permission provided appropriate attribution is given to both the author(s) and STARSHELL.

DISTRIBUTION and SUBSCRIPTIONS

STARSHELL is circulated electronically via email and displayed as a flipbook accessed through the NAC website.

Cover Image: HMCS *Montreal*, anchored outside the Suez Canal awaiting transit as part of Operation PROJECTION on April 17, 2023 (Photo: Corporal Connor Bennett, Canadian Armed Forces Photo)

Sailor Second Class Mohamed Ghanem descends a ladder to get in HMCS Fredericton's RHIB during Operation REASSURANCE in the Mediterranean Sea (photo: Cpl Noé Marchon, CAF Photo).



**TRUSTED TO DELIVER
21ST CENTURY SECURITY**



ENSURING THOSE WE SERVE ALWAYS STAY

AHEAD OF READY



LOCKHEED MARTIN 

Starshell Number 98 (Spring 2023)

Table of Contents

- 4** **From the Bridge**
Bruce Belliveau
- 6** **From the Ops Room**
Tim Addison
- 8** **The Front Desk**
Kevin Goheen
- 12** **Canadian Naval Recruiting**
Norman Jolin
- 18** **Why the Fleet that we Have**
Ian Parker
- 27** **Wagner's Aborted Coup**
Alexander Rojavin
- 31** **Submarines in a Dangerous World**
Adam Lajeunesse
- 34** **Canada's Submarine Contenders**
Norman Jolin
- 46** **Ops Update**
- 46** **The VIGILANCE**
Derek Buxton
- 51** **From the Branches**
- 56** **The Last Post**



HMCS FREDERICTON deck operations with an SH-101 helicopter from ITS MARGOTTINI during Operation REASSURANCE (Photo: Cpl Noé Marchon, CAF)



From the Bridge

**Bruce Belliveau,
President (NAC)**

Greetings all. It has been quite some time since the President of the NAC contributed to Starshell. As you know, our previous President, Bill Conconi, passed away last year and as Vice-President I took on the acting role. Last fall at a National Board retreat I officially assumed the role as President. It has been a very busy time for the NAC at the national level and many branches have returned to near normal levels of activity post-pandemic. Nationally, we have set out to implement our strategic plan, which was approved at the 2022 AGM. This included a re-invigorated membership committee, the establishment of a governance committee (which is developing a Board Policy manual), and the continuation of a robust Naval Affairs Programme.

One of the biggest changes, of course, was the retirement of David Soule as our Executive Director. After a significant process, the NAC engaged Kevin Goheen to replace David last December. Along with this change, David Colbourne joined the national board as our Treasurer, a significant move since the board has been without a dedicated Treasurer for several years. I welcome both to our team.

Leaving the board this year are Michael Hoare, Jeff Gilmour, and Ray Leveque. I thank them for their efforts over the many years that they have served. With these departures, it leaves the board at eight directors, one short of our desired nine. If you are so inclined to join, or know someone who is, please contact me for more information.

It is an exciting time at NAC. At the AGM on 20 June 2023, a new membership structure was recommended by the Membership Committee and approved for implementation. Moving forward there will be one membership category, that of Regular Member. The fee structure will be further developed to bring new

folks into the fold; including a one-year introductory category where the first annual fee will be waived. Other portions of the fee structure are being fine tuned and will be announced shortly for the next membership campaign for 2024.

Members are the life blood of any organization like ours. If each of us took on the challenge to bring two new members to the organization, we would triple our base. The larger our organization the greater influence we can have in achieving our mission.

The mission of the NAC is to educate Canadians on the need for a capable Navy critical for our economic well-being, security and way of life.

With the first year free, perhaps this will be an easier task than in the past. Remember, membership is open to all who are interested in ensuring that Canada has a robust and capable maritime force.

On membership, one of the questions often asked is: what is in it for the member. The membership committee is developing a membership value proposition, but in the interim, might I suggest the greatest opportunity we offer is that of participation. Getting involved at the local or national level on boards and committees or organizing events is a great way to find satisfaction in your membership, outside of traditional branch meetings, speakers' evenings etc.

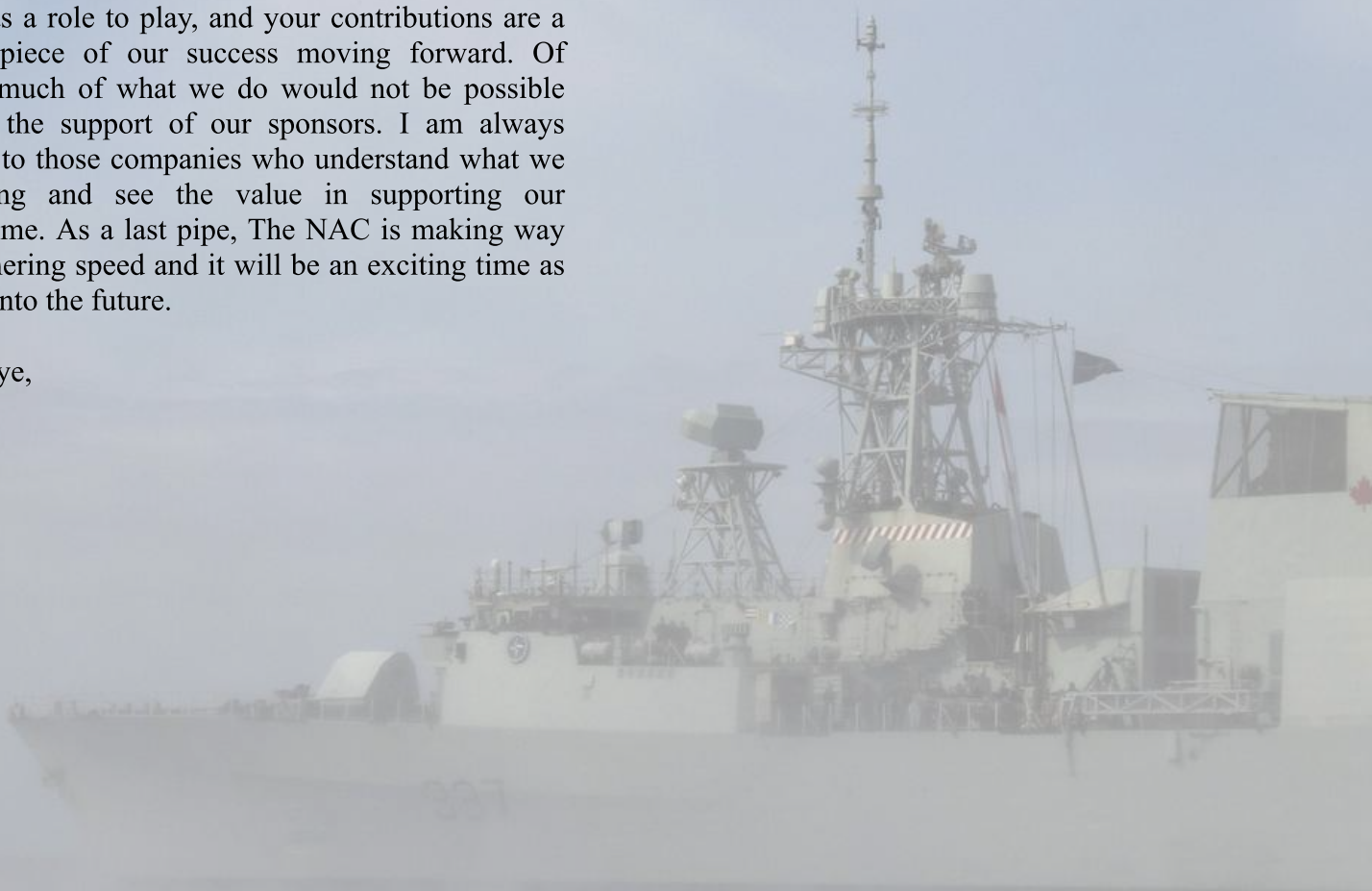
With the new CSC soon to be cutting steel, the AOPS, and growing interest in the submarine replacement, there is lots to do to ensure the public understands the

why and how of needing Maritime Forces to represent Canada on the international stage and here at home supporting the blue economy.

NAC has a role to play, and your contributions are a critical piece of our success moving forward. Of course, much of what we do would not be possible without the support of our sponsors. I am always grateful to those companies who understand what we are doing and see the value in supporting our programme. As a last pipe, The NAC is making way and gathering speed and it will be an exciting time as we sail into the future.

Yours Aye,

Bruce



Sailors from HMCS Fredericton on Operation REASSURANCE (Photo: Marchon, CAF)



From the Ops Room

Ottawa could learn a few things from Australia when it comes to Defence.

Tim Addison, Naval Affairs

Recently it was announced that Australia's defence budget would be increased in the order of 5 % through 2028.¹ This action reportedly is being taken in response to anticipated obligations of the AUKUS agreement, as well as the need to support strategic partnerships. The government of Australia intends to bolster its defence capabilities, focusing primarily on the Royal Australian Navy, as it seeks to address growing geopolitical challenges and escalating tensions in the Indo-Pacific region.

Given the recent actions of the People's Republic of China People's Liberation Army (Navy) (PLA(N)) in executing dangerous manoeuvres at sea and in the air in response to innocent passage transits of the Taiwan Strait by Canadian warship HMCS *Montreal* in company with a USN Ship, and US Air Force operations in the South China Sea in international airspace, it would appear that Australia has made thoughtful and prudent decisions.

These actions are concerning, in that China can be expected to increase its provocative behavior as it grows its naval forces and increases its capabilities. The Republic of North Korea has also continued its provocative missile launches and pronouncements related to development of nuclear weaponry to protect its national interests, thereby threatening the already tenuous stability on the Korean Peninsula. Earlier in 2023 Canada also signalled a new but rather benign (and lacking in financial commitment) Asia-Pacific Strategy. When it comes to putting money where your mouth is, Canada would do well to learn a lesson or two from Australia when it comes to planning ahead for spending on defence.

Unlike Canada, Australia has always more or less kept pace with the need to increase and modernize defence forces over the years since World War II. Its Navy has dealt with obsolescence by replacing its major warships and outdated replenishment vessels in a timely manner. Although its submarine forces have been relatively few in number and not always technologically modern, up until recently their operational readiness has been maintained at a relatively high level. Moreover, the Government of Australia has formally recognized that their submarines need replacement much earlier than Canada came to reach a similar conclusion. Naval modernization efforts are not limited to nuclear submarines under the AUKUS agreement. The Hunter-class frigate project is also a significant undertaking in terms of updating and increasing the numbers of the current surface ship fleet.

Notably, Australia's defence budget has already seen growth, increasing from \$36.3 billion in 2022 to \$38.1 billion in 2023 - a growth of 5%. AUKUS is the major contributing factor to the increased defence expenditure, which will support modernization of Australian defence capabilities. It will also enable the country to address emerging security threats. On the other hand, Canada continues to miss the mark, not only in term of capital project funding commitments to replace decades old equipment, but also to spend on in year requirements. Recent reports of the Auditor General indicate the Department of National Defence continues to underspend its budget.

Australia sees itself as a 'western' and democratic nation with a vested interest in the liberal world order and a 'free and open'

Indo-Pacific. In recent years, Australian politics has been marred by controversy over the extent of Chinese influence in the economic and political spheres. Does this statement not sound familiar Canadian ears? Unfortunately, Canada continues to be only somewhat interested, but for the most part politically tone-deaf when it comes to replacing words with actions. Our surface fleet has hit an all-time low in terms of numbers of major warships and notwithstanding the advent of the versatile Harry DeWolf-class Arctic Offshore Patrol Vessels, we are now at a point where we can only deploy up to four ships on operations a year, a situation which can be expected to last at least until the first four to six Canadian Surface Combatants are operational.²

One of the strategic partnerships which Australia is keen to support is the “Quadrilateral Security Dialogue with Japan, India, and the US, which is aimed at improving the Asia-Pacific security situation by demonstrating commitment to common goals and mutual supports. According to Global Data’s recent reports, “balancing economic interdependence with security concerns, Australia’s economic integration with China presents unique complexities. Australia aims to foster stability, protect national security interests, and contribute to the broader global security landscape through robust investments in defence capabilities and engagement with international partners.”⁵ Again this is a situation similar to Canada. China is a major trading partner, supplying billions in goods to Canada through overseas shipping every day. We saw what happened in Europe in 2022 when the natural gas supply provided by Russia was cut off. The only way to deal with a similar situation vis-à-vis China is to maintain the economic relationship while finding alternate sources and, at the same time, demonstrating that we will not be bullied. To show that we will not be bullied we must have capable, credible, and globally deployable maritime forces, both surface ships and submarines.

As tensions continue to rise in the Indo-Pacific region, Australia’s Navy will be a critical chess piece on the board to support the nation’s efforts to ensure

regional stability and safeguard its economic and security interests. On the other hand, lacking modern, capable surface and submarine forces Canada will continue to make only a marginal commitment to security in the region and have limited value to our strategic partners. As with the situation in the Atlantic and elsewhere, we will have to rely on big brother to the south to ensure our collective security and economic well-being. The bed is made, now we lie in it.

Notes

¹ According to GlobalData’s “Australia Defence Market 2023-2028” report, the country’s defence budget is set to witness a compound annual growth rate (CAGR) of 5.2%, reaching \$48.3 billion by 2028. The transformative trilateral security alliance, AUKUS, and strategic partnerships drive the modernization efforts, positioning Australia to respond effectively to emerging security threats.

² This is based on the assumption that the first Surface Combatants will replace the most aged of the HALIFAX Class and the remaining HALIFAX Class will still be fully operational.



The Front Desk

Kevin Goheen
Executive Director

While I officially started as Executive Director on 1 December 2022, this edition of Starshell has been the first one where I felt that I had sufficient knowledge of NAC that I could contribute something meaningful to the readership. That being said, I have only ever been a civilian and have had very little dealings with the RCN during my career, except for a couple of notable periods (which I will detail below) so if I occasionally misuse terms, that mistake is totally on me. I do know enough to ask questions, and I am very grateful to the NAC volunteers who have been patient with my gaps of knowledge.

In addition to learning about the organization and how tasks were done in the past, my understanding is that the first half of 2023 was an exceptionally busy period.

My Background

I completed a PhD in Naval Architecture at University College London and developed control systems for Remotely Operated Underwater vehicles. While there, I did joint research with the UK MoD on mine counter measures and also collaborated with Robert Ballard's group at the Woods Hole Oceanographic Institute. After graduation, I worked in Glasgow for the joint venture created by MIL and YARD and created machinery simulations for the CPF programme. I went back to academe and taught engineering students at Carleton and Toronto Metropolitan University, most recently part time at the former. I ran the Canadian Academy of Engineering, an organization about the same size as NAC for a number of years, where we achieved a number of successes.

BOA Gala Dinner – Ottawa

NAC hosted this event at the Canadian War Museum on 3 May. In my previous lives, I have run many conferences and dinners, but bar none, this was the best. We were honoured with the presence of the Minister of National Defence, the National Security and Intelligence Advisor to the Prime Minister, the Chief of the Defence Staff, the Commander of the RCN, and a number of MPs and Senators, as well as many Defence Attaches, our partners from the Defence Industry but most important, many NAC members and their guests who were clearly enjoying the opportunity to finally mix with their colleagues after the COVID-19 situation had gotten to the point where in-person events were feasible. Our event celebrated the Centennial of the Royal Canadian Naval Reserve and the organizing committee wisely amplified that important milestone to garner great support from HMCS Carleton and the National Band of the Naval Reserve. (Without the six volunteers from the first group who were with us for close to 12 hours that day and evening, and who really stepped up to deal with a last-minute hiccup, we would still be assigning people to seats!) I also want to thank the friends and family who were pressed into service to run our very efficient registration desks.

Thanks to our Sponsors!

The Gala would not have run, nor would the Naval Affairs programme exist without the generous supports of our sponsors. This year we thank Lockheed Martin, L3Harris, Logistik Unicorp, Seaspan, BAE Systems, Federal Fleet/Chantier Davie, Vard Marine, CAE, Rolls-Royce Canada, Commissionaires, Leonardo DRS, Navantia, Linas Pilypatis (BMO Nesbitt Burns), Prospectus, Edelman, and Heddle Shipyards.

New NAC Graphic Novel

The latest offering in NAC's offerings of fiction for young people is *Hunter and Hunted: On Board a Canadian Corvette in the Battle of the Atlantic* written by Ann Griffiths and illustrated by C. George-Hill. When Canada declared War on Nazi Germany, young men and later young women across the country volunteered to serve in the military. Like so many Canadians of the era, our hero Charlie didn't want to miss the action. He signed up to join the Royal Canadian Navy. Charlie was soon to take part in the longest battle of the war – the Battle of the Atlantic. You can order your copy [here](#).

Annual General Meeting

Our most recent annual general meeting was held virtually on 20 June. For the most part, our technology for meetings works well and I would imagine that members across the country appreciate the ability to participate in national meetings. The AGM received reports from the Board's committee chairs. These reports were previously posted and [will be left posted for readers to review](#). We had a spirited debate over the issue of having a unified national membership structure which the Board has proposed in order to demonstrate that we are a national organization, working together, and to simplify the administrative burden for staff and branch volunteers.

Administrative Issues

Nora Kennedy and I have been working diligently for the past number of months to make some changes to lessen the costs of running the national office and also to give NAC an improved image to outside parties. You will gradually see some of these changes, such as new email addresses, postal addresses and one improved website while others, such as our banking system, will not be so visible, but will help us do our jobs more efficiently.

In Summary

NAC could not exist without the many volunteers who work on the myriad of projects which we concurrently run. In particular, I wanted to acknowledge the considerable work that David Soule has put in as a volunteer Executive Director. Thanks David, for the great notes and ongoing tutorials!

I hope you enjoy these thought-provoking articles which this issue contains, perhaps while enjoying some summer downtime.

Keep in touch with the NAC

If you are receiving NAC News, but are not a member, please consider joining. Or, keep in touch through social media.

Join the NAC
navalassoc.ca/branches/

View our newest Naval Affairs work
navalassoc.ca/naval-affairs

Archived weekly NAC new links
navalassoc.ca/naval-affairs/nac-news/

Follow us on Twitter
[@navalassn](https://twitter.com/navalassn)

Should you wish to donate or leave a memorial visit:
[NAC Endowment Fund](#)

NAC reference to assist veterans and/or seniors is located at [Veteran's Corner](#)



ALL POWER IS PIVOTAL

Introducing the
Next Generation of
Uninterruptible Power.



LeonardoDRS.com/Pivotal-Power



NAC Endowment Fund

Donors in 2022

The trustees of the NAC Endowment Fund would like to acknowledge the generosity of the following who donated to the Fund in 2022.

Abbott, Arthur	Clark, Michael	Knight-Gorman, Anne	Schober, George
Addison, Tim	Coates, Ian	Lapointe, Jocelyn	<u>Shankland, Leigh</u>
Affleck, Kenneth	Dodgson, James	Lewis, Richard	<u>Shead, William</u>
Allard, Bernard & Sheila	Douglas, Alexander	Mahaffy, Adrienne	Sing, Daniel
Anderson, John	Douglas, Peter	Marshall, John	Skelton, Evelyn
Anonymous	Douglas, Robert	Marshall, Rowland	Smith, Calvin
Anonymous	<u>Drent, Jan</u>	McAlpine, James	Smith, Gordon
Archer, Richard & Marilyn	<u>Duewel, Jurgen</u>	McIlwaine, Robert	Smith, Howie
Armstrong, Heather	Dziadyk, William	McKee, Fraser	<u>Snell-Pollending, Jaime</u>
Ashley, David	Edwards, Robert	Michael, Irvin	Soule, David
<u>Auns, Vilnis</u>	Elliott, John	Michaud, JC	Sparkes, Ken & Marg
Austin, James, Sr	<u>Elmes, Roger</u>	Millar, John	Summers, Ken
Bain, George	Ernst, Victor G.	Milne, Terry	<u>Swaile, Jessie</u>
Baird, Melvin	<u>Fama, Joe</u>	Mitchell, David	Taillon, Pierre
Baker, Richard	Fletcher, Mark	Moore, George	<u>Trusler, George</u>
Barber, Josh	Forcier, Jean-Yves	Moore, Russell	Varley, Chris
Barnhouse, Pat	Fournier, Larry	<u>Murison, Vern, Estate of</u>	Waddell, Harvey
Bate, John	Garnett, Gary L.	Murray, John	Wan, King
<u>Bialek, Murray</u>	Gaynor, Peter	Nash, John	Waterman, Matt
<u>Bialkowski, Wojciech</u>	George, Bob	<u>Nason, Ken</u>	Watkins, Robert A.
Bowen, Mike	Godwin, George	Oland, Richard	Watson, Jack
<u>Bowkett, Edmund</u>	Hare, Irvine	O'Reilly, Eileen	<u>Weadon, Bryn</u>
Broadridge	Harrison, Ronald E.	Page, Simon	White, Robert
Brodeur, Nigel	Hatton, Gary	PayPal	White, Steve
Broughton, William	Hebb, Christopher	Pickford, John	<u>Whiteley, Nigel</u>
Brown, Daniel	Hendel, Hans	Raven, Donald	<u>Woznow, Harry</u>
<u>Buchholtzer, Guy</u>	Hinchliffe, Douglas	Rich, Darren	Wyatt, Rachel
Campbell, A Peter	Hoare, Michael	<u>Richardson, Sherry</u>	Wyatt, Rachel
Campbell, Peter AG	Hughes, Rod	Roots, Fred	<u>Zuliani, Ray & Anne</u>
Cannon, William A.	Jacobson, Stan	Rushton, David	Zwicker, Michael
Carlisle, William	Joost, Mathias	Saker, Michael	



Canadian Naval Recruiting

A Complex & Complicated Situation

Norman Jolin

Canadian Naval Recruiting – A Complex & Complicated Situation

The personnel situation impacting the Canadian Armed Forces (CAF), notably recruiting and retention, has dominated post pandemic media reporting of Canada's military woes for a very good reason: it is the foundation of a professional armed force. Notwithstanding the efforts currently being expended in extant capital procurement plans, new equipment, particularly ships and submarines, need trained and experienced naval personnel for their efficient operation. Moreover, training takes time and is specific to one's métier; thus, the simple reporting of overall shortfalls belies the reality that service in the navy is different from that of the air force, which is different from that of the army. This is not to say one is better than the other, rather people who choose to serve in the different environments expect to face different requirements and they tend to identify with

service in a particular environment, compared to the CAF writ large, when they decide to enter the recruiting centre.

The Royal Canadian Navy (RCN)/Maritime Command (MARCOM) has frequently faced severe personnel challenges since its inception in 1910, however, the results of policy and practices put in place in the mid-1960s are now exacerbating an ongoing military recruiting and retention crisis. The issue with recruiting is that, in addition to approved force levels for recruitment numbers, the system is intrinsically tied to training, career management (personnel assignments) and retention. Each one impacts the other, because if people are unhappy, retention goes out the window, which causes a higher demand for recruiting, which then stresses training capacity, which is necessary to produce trained personnel to meet crewing requirements and career aspirations in essential shore positions. Altogether,

the Recruit/Train/Crew/Retain paradigm, as well as training attrition, drives the actual required numbers to be recruited, and it is all based on a significant number of individual occupations – not total numbers.

What are the actual numbers?

First and foremost, the roots of the current Canadian naval recruiting problems go back to Integration (1964) and Unification (1968) where the RCN ceased to exist as a separate service and recruiting became a CAF responsibility that tends to reflect the needs of the largest constituent party – notably the Army (although they have their issues as well). As today's RCN is, in reality, a renamed Maritime Command, they do not own the recruiting system for naval occupations but can only try to influence it. The Chief of Military Personnel (CMP) controls the entire CAF recruiting system as well as the other three key functions: the training system, crewing (in the guise of personnel assignment) and retention policy. This of course drives the number of specific “hard sea occupations” (aka naval) that the CAF can recruit to.

The fleet Canada enjoyed up into the 1990s (when the Halifax-class frigates entered service) was, by and large, made up of ships that were acquired, and the crew composition established for, by the RCN when it was a separate service (pre-unification) of over 20,000 persons (fleet and ashore). This allowed for carrying extra personnel on the ship's establishment for on-the-job training (OJT).¹ as well as ashore in fleet readiness units supporting deploying ships with last minute crew changes (e.g. medical & compassionate). These are the facts of life in any navy, but without this built-in flexibility in the overall fleet establishment, which CAF-centric personnel policies do not recognize, personnel issues rapidly come to the fore and negatively impact retention.

As part of the Unification process, the new CAF introduced the “one man, one job concept” – a common personnel policy in the mid-1960s that did away with historic naval crewing practices, although the ships/submarines themselves then in service (not the supporting shore infrastructure) kept their previous RCN-designed personnel establishment. However, the CAF policy made designing the

personnel establishment for subsequent ships and submarines entering service very complex, as the makeup of a warship's crew is very complicated. The need for sailors to meet the prescribed qualification level for each position in a ship/submarine requires a combination of classroom training ashore, at sea follow-up OJT and usually an assessment/certification board to obtain the qualification. If there are no positions in the establishment to achieve this at sea training how is one to achieve the qualification? The response was that it is not a CAF problem, and the Navy has historically worked around this difficulty by using attached-postings of less than six-months between non-deploying units and shore establishments resulting in perpetual crew instability.

So, what has this to do with recruitment? It is all about the numbers. The Vice Chief of the Defence Staff (VCDS) can only authorize recruitment of personnel to the established numbers for each particular military occupation which is based on the authorised number of units (in the Navy's case predominantly ships and submarines) that are in service. However, when a ship pays off for disposal at the end of service, the CAF treats it like a base closure and unless there is a new ship to immediately go to, then all the positions are returned to the VCDS for redistribution within the CAF and not kept within the RCN. With the retirement of the three support ships, the diving support ship and the four Iroquois-class destroyers without relief, over 2000 positions ceased to exist and the CAF Recruiting system was restricted in what it could recruit to fill the required numbers in each of the respective naval occupations. In short, naval recruiting numbers are restrained by the CAF system itself, even with the knowledge the ships are going to be eventually replaced, as they are currently in build (the AOPS and JSS projects) or in contract (CSC project).

It is noteworthy that the fleet avoided major crew shortages with the arrival of the Halifax-class frigates in the 1990s because the 16 St Laurent-class destroyer-escorts (DDEs) then in service were replaced by 12 Halifax-class frigates (FFH), as they were retired, and the crews shifted over to the new ships with smaller crew requirements - but in the process Maritime Command lost four DDE crews in

the exchange. Thus from 1990 when HMCS *Halifax* began sea trials to 2017 when HMCS *Athabaskan* was paid off, the overall personnel size of the seagoing fleet was reduced by 3318 positions – to put this number into perspective that represents more than 16 Halifax-class frigate crews, of which the Navy could not recruit and train to.

When new build ships are delivered, for example the DeWolf-class AOPVs, a new establishment is authorized by the VCDS in time for the crew to form and take delivery of the vessel - this will be the same for the two Joint Support Ships (JSS) and 15 Canadian Surface Combatants (CSC). The issue is that not only has the CAF recruited to a much smaller fleet for some time, but the situation is then exacerbated by the arrival of new ships and the need for trained crews, which will be significant number, as the RCN has not been able to train to this number, even if recruiting was meeting its goals – which it has not. It is important to understand that right now, the CAF regular force is recruiting to a core fleet of 12 frigates, four submarines and six Arctic & Offshore Patrol Vessels (AOPV), as the 12 Maritime Coastal Defence Vessels (MCDV) were originally established to be crewed by predominantly naval reservists. This is the baseline numbers of which the CAF system is currently having difficulty in meeting recruiting goals. To address future fleet requirements recruiting would have to be aimed at supporting a larger fleet of 15 CSC, two JSS, six AOPV and potentially at least eight submarines and a future MCDV replacement, as well as an increased supporting shore infrastructure (e.g. Land Based Test Facility). Simply put, maintaining the current establishment targets will result in a future gap of trained effective strength as new build ship and submarines are delivered and their supporting infrastructure is defined.

Optics: The First Hurdle - Getting Naval recruits to the Recruiting Centre

The negative reporting on the Armed Forces as a whole is more than just leadership scandals, although that has a distinct impact, as the CAF recruits from Canadian society and if society believes the CAF is a questionable career choice, then the lack of recruits is somewhat predictable. This is not new, in the

mid-1970s, at the end of Vietnam war, serving in the armed forces was not considered to be a wise career option at the time in Canadian society. Hence recruiting was problematic. Moreover, motivation to join is also impacted by perception of capability and the inflammatory rhetoric used to score political points often paints a false picture. The fact that a number of systems are coming to the end of their services lives is not denied and the desire for literary hyperbole in making the point that Canada needs to step up on defence is understood. But, the fact is Canada's ships and submarines are safe and have some of most modern equipment at sea in any navy. Yes, they need replacement and projects are underway to do just that, which takes time but the story-line is not representative of reality, which, understandably, causes a reticence to even contemplate serving in the armed forces.² This is compounded by a high level of immigrants/first generation Canadians coming from countries who fear the armed forces in their native land and negative media only underpins their concerns.

The First Impression: Welcome to a CAF Recruiting Centre

All recruiting is done through local recruiting centres that are CAF-centric and not targeted for naval occupations, however, recruiting through Naval Reserve Divisions is navy focused and many naval reservists later transfer to the regular force. So instead of seeing a smartly turned-out sailor in a naval uniform, potential recruits are greeted by military personnel wearing combat clothing (designed for the field) or naval combat dress designed for shipboard wear, assuming naval personnel are available at the recruiting centre, hardly gripping (see below).

In the early 1980s there was a blitz on recruiting, focused on smart, sharply turned-out individuals, who were the subject of intensive vetting, wearing regular service dress (e.g. not combat clothing), including white uniforms in the summer. It may be hokey, but it worked.

Next, people tend to want to join a “service” (Navy/Army/Air Force) and not the CAF. This is where first impressions matter, the RCN of yore



survived by “getting them young and keeping them” with naval-focused recruiting, maximizing the local naval reserve divisions which were considered to be very much part of the fleet. The active recruiting campaign was targeted at seeing the world while getting an education supported by a slick naval administration system that processed recruits from the recruiting centre, through naval (not CAF) basic training, to the fleet as quickly as possible. Today the CAF is struggling to get recruits through enrolment. The Commander RCN recently stated that median (average) time to enrol is 240 days with some taking much more time. This has a lot to do with the inordinate amount of time it takes to screen candidates, particularly as the recruiting pool of Canadians is increasingly representational of immigration policies. That said, notwithstanding recruiting targets for visible minorities, the CAF (and by default the RCN) is made up of predominantly Anglo/Franco males.

Who does the RCN want?

Much like the Air Force, the Navy occupations are almost all technical in varying degrees (either as an operator or technician) demanding a high-level entrance requirement. The problem is that whenever the national economy is moving, and unemployment is low, the Navy is in direct competition with industry, who can often pay more and offer better living conditions. While the Navy is fortunate in that its major bases are not in remote locations, starting out can be difficult in finding suitable and affordable accommodations in Halifax and Victoria. The Navy of old recruited predominantly single teenagers who could live in barracks of the supporting base, or on the ship, until they could afford housing ashore.

Those days are long gone – so how does one entice educated people to opt to the Navy over industry? This was looked at in detail in the early 1980s when trying to address the critical shortages being faced in the technical occupations. A proposed solution was TASK – Trade Advancement through Skill and Knowledge – which proposed offering technicians higher pay, with internal occupation advancement based on technical skill and not leadership. This suggestion was anathema to the personnel system as it directly challenged the CAF policy of demonstrated leadership being the determining factor in promotion and was subsequently terminated. Not surprisingly, the navy continues to struggle in recruiting and retaining technical occupations. What is being seen today is not new, it is just particularly bad because of a number of factors coming together at the end of a three-year pandemic.

Conditions of Service versus Modern Culture

All studies continually claim that retention is not about the money, often as a foil to the huge retention bonuses offered in the US Armed Forces, but some time it really is about money. Specifically, living expenses and financial hardships caused by frequent geographical postings. In the case of non-commissioned members (NCMs), the Navy in the 1980s managed to return to a pre-Unification RCN policy whereby sailors (in hard sea occupations), once qualified, would be assigned a homeport division (Halifax or Esquimalt) and that throughout their career they would do their sea-time on that coast with the potential for inland postings. The offshoot of this is that the Navy never put any effort into military housing, and they encourage sailors to buy a house (offering to pay initial legal fees on first purchase). Thus, someone contemplating a naval career needs to think about where he/she will live and, unlike the days of old when recruits were predominantly single teenagers, today’s recruits often have families. There is little to no flexibility in affordable housing in Halifax and Victoria which is hardly enticing. Moreover, there is a particular challenge with the cost-of-living in Victoria/Halifax and, like the other environmental commands, the RCN is working on post-living differential (PLD) allowances (which is a CAF-wide issue).

RCN recruiting today

The RCN today is 1400 regular force and 1400 Naval Reserve positions short which equates to about 20% of the overall trained effective strength. To address the current shortfall the RCN has put in place a project entitled the Naval Experience Program (NEP) which offers a one-year, no strings attached, contract to experience life in the fleet.³ The goal is to enrol 80% of all recruits in 21 days with basic military training being conducted (in a naval environment) on both coasts. This program started recently and appears to be off to a great start, however it still faces a number of challenges beyond the remit of the RCN, notably that of security screening. Moreover, a return to a traditional source of recruiting would be to use the naval reserve divisions as a conduit to conduct regular force recruiting, as the CF Recruiting Centres are only open during working hours, whereas Naval Reserve Divisions work evenings and weekends across all major cities in Canada.

In summary, the RCN is facing critical personnel issues that threaten their ability to operate the current fleet, which is essential to generate the requisite trained personnel to crew and support the future fleets now in build. While no single panacea exists to solve recruiting and retention issues affecting most western armed forces, a realization that a common CAF policy that tries to square the circle between the bona fide requirements of three different environments has simply not worked. This includes policies authorising

personnel numbers to meet planned future requirements, as well as accounting for higher than historical attrition in trained effective strength. This is not new and for the RCN the solution lies in its history, which necessarily means revisiting pre-Unification RCN personnel practices adapted to 21st century realities, as navies have been adapting for centuries, it is ever thus. Finally, when looking for recruits, sailors tend to want to join a Navy not an impersonal “armed forces.”

Notes

¹ For example, when the author was the XO in HMCS *Annapolis* (1994-1996) the establishment was 228 but there were bunks for 275 to allow for training overage in each department (by occupation). Notably - the ship always sailed with 275 bunks full.

² This problem is not unique to Canada as even the US Navy is fighting for new hulls – see: Mallory Shelbourne and Sam LaGrone, “CNO Gilday to Shipbuilders: ‘Pick Up the Pace’,” Proceedings (January 10, 2023).

³ RCN, “The Royal Canadian Navy introduces a new recruitment opportunity,” News Release (March 31, 2023).

Capt(N) [Ret'd] Norman Jolin served 37 years in the Royal Canadian Navy with the majority of his career at sea in both ships and submarines, culminating in the command of HMCS Montreal. He was a member of the Directing Staff at the Canadian Forces College and later the Branch Head for Exercises at NATO's Strategic Transformation Command in Norfolk Virginia. Subsequently he served as the Naval Adviser to the UK and Defence Attache to Denmark and his final service appointment was as a member of NATO's International Military Staff in Brussels Belgium. On retiring from naval service, he set up a private consulting firm and, in 2017, he joined CFN Consultants as the associate specializing in support to acquisition projects for the Royal Canadian Navy and the Canadian Coast Guard.

Smart asset management Data-driven support

baesystems.com/warshipsupport



Why the Fleet that we Have

The Navy's Need for Strategic Thinking

Ian Parker

Some Canadians deem their country to be a maritime nation. A maritime nation is one which not only borders the sea, but it is also dependent on its use for most activities relating to trade, transport, and war. For these state activities to occur, there generally needs to be an awareness within government and the people of the value and the necessity of the oceans. For Canada, a continent sized nation where only 20 percent of the population resides near one of the surrounding three oceans, where the majority of Canadians have little or no knowledge of their navy, where the majority of trade is continental with the USA, where the army is 2.5 times the size of the navy, where governments have consistently allowed the navy to atrophy over the past 50 years, it is difficult to understand characterizing Canada as a maritime nation.

This paper considers one potential reason why this has occurred, the impact and possible ways to mitigate this “maritime blindness” in both Canadians and their government which has led to a continental culture ignoring the strategic importance of the world’s oceans and the need for a navy as a strategic security resource immaterial of any perceived peace. Would a focus, by the navy on strategic and academic study of history, naval history and war at sea have affected the evolution of Canada’s navy? Would such a culture have led to the establishment of a respected institute of naval study?

Context: The Environment

The birth of Canada’s navy was not the result of reasoned debate about Canada’s place in a maritime world, but, about contributions to imperial defence. Canada’s early and constant reliance on first the British Empire and later the USA to provide for its defence and security created an environment where wars and external circumstances, but not Canadians, established the need and the shape of Canada’s defence policy and the



navy.¹ Adopting what could be called the Laurier Doctrine, stipulating that there was no direct threat to Canada, allowed political leaders and the bureaucracy to pay lip service to defence and security.² This belief allowed a government to “experiment” with Canada’s defence forces less than 60 years ago by embarking on a process that eventually disbanded the navy, the army, and the air force creating one “service” for bureaucratic efficiency, not for increased capability or any regard for naval or military effectiveness or indeed national defence.³ Today, this political culture has given us a PM who stated, “There is no core identity, no mainstream in Canada and consequently that makes us the first post-national state.” If politically there is no belief in the nation, there can be no national defence.⁴

Government unchallenged by authoritative institutes not only layered additional civilian oversight over the military, under PM Pierre Elliot Trudeau they also drastically reduced capability and eliminated commitments.⁵ In doing so the government, and subsequent governments, built layers between the political leadership and the professional service leadership. Huntington characterized this concept as ‘Subjective civilian control’. He stated: “The simplest way of minimizing military power would appear to be the maximizing of the power of civilian groups in relation to the military.”⁶ This, coupled with overall government lack of defence and security focus, is what has happened and Canada’s navy evolved into the junior element of the Canadian Armed Forces (CAF) whereas, as essentially an island nation, Canada’s navy should have been recognized as one of the two critical services that directly contribute to the defence of the nation.

Other than those in the navy, there were no external voices to raise the alarm. Prior to the Integration/Unification policy of the 1960s the Royal Canadian Navy (RCN) fleet consisted of fifty major warships including an aircraft carrier, one submarine and ten minesweepers. Today the RCN fleet, which has never recovered from government cuts, is sixteen

aging major warships: 12 frigates and four submarines. Of note there are six Harry DeWolf-class Arctic & Offshore Patrol Vessels (AOPV) in service or building, as well as two Protecteur-class joint support ships (AOR).

Canada’s navy, existing under general government indifference, was never challenged to study and argue the central issues for a professional naval leader, war, and more specifically naval war at the strategic level. As historians Michael Hadley and Roger Sarty have observed “Canada lacked the national will to develop a navy and had no myths of glory and empire with which to nourish the idea.”⁷ Consequently, there never was a public national intellectual discussion of

what a navy is, the strategic value and importance of a navy and Canada’s naval and maritime history. The nation and its political leaders never understood that the navy was a strategic key element of national defence. This was clear with the cancellation of the Canadian nuclear

submarine project in the 1980s and the continued erosion of the surface fleet. The lack of support in government for a nuclear submarine project which would have delivered the only strategic military capability to Canada is illustrative of the ignorance of Canadians and their governments of the strategic nature of a navy in both peace and in war.

The indifference by government was translated to a navy that never sought advanced study of war at sea at the strategic level or indeed the study of its own naval history. Consequently, by the policies of Integration/Unification when the RCN was disbanded, the professional opportunity was lost. The navy and the air force were folded into the very continental focused land centric CAF, where professional developmental education was by in large continental based.⁸ This single action was the beginning of the end of any possible academic naval advice to government, as well as the public recognition that Canada had an independent navy. The Harper government tried to correct the

“The cornerstone of democracy rests on the foundation of an educated electorate”

- Thomas Jefferson

recognition issue by renaming Maritime Command to RCN, but a name change does not make a service.

The lack of a culture, within the navy, that valued, encouraged, and rewarded advanced studies, critical professional opinion and discussion about navy, maritime, strategic, and geopolitical issues which are the cornerstone of a professional organization, spilled into civilian life where no “Think Tanks”, institutes or academic institutions arose that focused on either the RCN or Canada’s place in the maritime world or naval strategy or indeed the history of our navy. Of passing interest, at present, there are no academic programs in Canada offering an in-depth study on naval strategic issues or naval history including at the Canadian Forces College.

Although various defence and security think tanks/institutes have evolved in Canada such as CGAI, CDAI, and RUSI (NS), none have a mandate to focus on the navy or maritime war and security. Indeed, these organizations, by their membership and interest are generally continentally focused with naval forces and maritime issues an apparent afterthought.⁹

For one bright shining moment Dalhousie University housed a small maritime focused center in the Centre of Foreign Policy Studies which included the late Rear Admiral (Ret’d) Fred Crickard and Peter Haydon. The centre ran annual Seapower Symposiums that attracted international maritime experts who contributed to the development of a fledgling Canadian centre focused on the navy and maritime security. For a time, the navy assigned a Fellow to the Centre, but never really managed or leveraged the position, or the institution, eventually terminating the position for budgetary reasons. Indifference ultimately led to the closing of the one centre in Canada focused on the navy and maritime security.

Although the Navy League of Canada (NLOC) was created to advocate for a navy in Canada, the Maritime Affairs function, understandably, as a volunteer function, has been part time and inconsistent over time limiting any potential reliable and long-term influence. The Naval Officers Association of Canada (NOAC), later renamed as the

Naval Association of Canada (NAC), was created as a social environment for retired naval officers post WWII with a part time volunteer function of naval advocacy, again, like the NLOC with limited influence. Both organizations have tended to “preach to the converted” and neither have political or academic clout. Over the decades neither the NAC (NOAC) or the NLOC maritime affairs have been the focus of their parent organizations, consequently, interest within the organizations tends to depend on who the maritime affairs volunteer is and how engaged or knowledgeable the individual is in national security issues. The result, a generally consistent lack of trust and engagement with the senior leadership of the navy and the navy itself.

The want of a culture embracing academic professional education early in the history of the RCN established a pattern whereby few members of the RCN contributed critical writing to academic journals such as the British Naval Review or the United States Naval Institute Proceedings (USNIP).¹⁰ Critical writing, along with research, are foundational elements of any profession which should carry on after retirement in the form of contributions to professional institutions. The culture within the navy, that did not embrace academic professional education, deemed naval post-graduate education, before the advent of the current Canadian Forces College (CFC) program, as essentially career limiting. Even specialist programs such as Oceanography were for all intents and purposes career limiting. With no culture of academic study of naval war and strategy, Canada’s navy relied on other nations to provide most professional discussion of size, shape, and capability. Moreover, unlike many other western nations there was no naval oriented institute that focused on the navy, maritime war, and maritime strategy, creating an intellectual void in Canada and contributing to “sea blindness.” It was only in 2005 that, with the help of a few farsighted senior officers and the “centre” at Dalhousie University that the Canadian Naval Review (CNR) was created, the only Canadian professional journal focused on naval issues. That said, the CNR continues to struggle to attract research and analysis from serving members. Given the upcoming generation’s fixation on social media and short texts this trend is likely to continue unless there

is a change in culture.

Consequence

The impact on Canada and her navy has been significant from the beginning. The navy has been consistently the smallest service in Canada, a reflection of Canadian continental mindset and the inability of Canadians to understand that navies are different than armies which the CAF closely reflects in thought and in culture. Indeed even some officers elevated to the position of Chief of the Defence Staff do not understand the complexity and the strategic importance of naval operations as illustrated by then Lieutenant-General Hillier who wrote, “the reality of the emerging security environment suggests that it is unlikely that the CF will be called upon to fight in

“blue skies or blue waters”, and the overall value to our country of equipping to do so would be minimal compared to providing land effects.”¹¹ Recent events and the evolving situation in the Western Pacific and the South China Sea demonstrate the flaw in this kind of thinking and the culture that nourishes this kind of thinking.

Over the past 50 years, this lack of influence, notwithstanding the increasing threat from the sea, in both the Atlantic and the Pacific and now emerging the Arctic, Canada’s navy has shrunk by 60%.¹² As the navy shrunk there was no public debate or discussion about the risks associated with a shrinking navy in a hostile world. Some may argue that the bi-partisan support for the National Shipbuilding Strategy (NSS) shows that Canadian governments are

SAVING LIVES, SUPPORTING ALLIES.

“Your commitment has helped France swiftly recover 398 persons including over 100 children.”

Vice-Admiral Slaars, Joint-Commander of the French Forces in the Indian Ocean

“Without your exceptional support, we simply could not have done this evacuation.”

Commander Johnson, Captain of the Royal Navy’s HMS Lancaster

Combat support ship, Asterix, is the Royal Canadian Navy’s strategic enabler for long-range operational capability.

Already in 2023, she has been designated the US Navy’s At Sea Command Platform for Task Force Red Sea. Asterix supported international evacuation efforts in Sudan, working with French, UK and Spanish forces.

Asterix also supported the US, Australia and Japan in a multilateral exercise for a free and open Indo-Pacific. CSS Asterix has been flawlessly operated for the RCN by Federal Fleet Services since 2018.



becoming maritime focused. But it must be recalled that the current shipbuilding program is based on the creation and the sustainment of jobs, hence votes. There has been no debate or discussion about the size or the capabilities of Canada's Navy. Moreover, as seen by the government's decision to add two Arctic & Offshore Patrol Vessels for the Canadian Coast Guard, the issue is not the needs of Canada's federal fleets but the need to preserve jobs and hence votes for the government. Essentially, NSS is a short-term political fix and is not based on a naval capability and sustainment strategy.

What if?

What if the RCN early had determined that as Canada's navy the study of history, naval history, and maritime strategic and geopolitical issues from the point of view of Canada and her navy was important? What if the old Naval College at Royal Roads had evolved to include on the campus a Staff and a War College focused on the study of naval war, naval strategy, and Canada's place in the maritime world? What if the navy developed a culture that valued, encouraged, and rewarded advanced studies, critical professional opinion and discussion about navy, maritime, strategic, and geopolitical issues which continued beyond service in the form of a naval/maritime focused "think tank"?

Would a greater investment by the navy in the study of strategy from a maritime perspective through academic engagement from inception have changed anything or would our navy be as it is, the junior party of the CAF? The 1994 Defence Review provides an insight into the possibilities. The late Rear-Admiral (Ret'd) Fred Crickard and Peter Haydon leveraging their positions at Dalhousie University were instrumental in strategically focusing parliamentarians on why Canada needed a capable navy. They helped write the naval "Vision" and authored the booklet "Why Canada Needs Maritime Forces" which was distributed to the Parliamentarians involved in the review. Additionally, they ensured that informed pro-naval witnesses appeared at every one of the ten public hearings held across Canada. While there were other factors, this effort was certainly one

of the reasons why an initial government plan to decrease the Air Force and the Navy to build up a peacekeeping Army was shelved. The Parliamentary committee also supported the acquisition of submarines, which ultimately led to the Submarine Capability Life Extension Project and the acquisition of the British ex-Upholder-class submarines. This was the value of a naval/maritime focused "think tank".

In 1964, would the RCN's last Chief of the Naval Staff, Vice-Admiral Herbert Rayner, and his team have had to battle alone to argue for the size and the capabilities required of Canada's navy?¹³ Could a largely uninterested government have been swayed and could public opinion have evolved to understand the critical importance of their navy? Could the slippery slope of fleet reduction of over 60 percent reduction in fleet size from the middle 1960s to the publication of the White Paper Defence in the 70s have been prevented? Could arguments against Unification have been successful? Would Canadians and their parliamentarians be more aware of the critical importance of their navy on their national security and way of life?

The 1984 White Paper, Challenge and Commitment was perhaps the most strategic in focus post-Second World War, not for the Division in Europe but for the focus on the naval and the air aspects of Canada's national security. Advocating for the acquisition of nuclear submarines was perhaps the single most strategic Canadian government national security decision post WWII. Regrettably, it was made by a government not focused of Canada's security. At no time was there a public discussion of the national security ramifications of the decision to cancel the project. Today, given the world situation, the decision can be seen as a strategic failure. Would a navy with a national Naval War College and an independent naval/maritime "think tank" have changed this outcome? Would the surface combat fleet have continued to shrink to the current state of 12 aging frigates, of which the youngest is 28 years old, with the intention to run the ships into the 2040s, well beyond their 25-year design life. Would a nation that borders three oceans with the longest coastline have only four secondhand submarines? Or would Canada's navy look more like that recommended by

Vice-Admiral Rayner in the 1960s, namely, nine submarines and 34 surface combatants, perhaps, given the current and the foreseen world security situation a more suitable fleet.¹⁴

Others

Countries such as the United States and Australia have developed a culture within their navy of the study at the strategic level of naval war and maritime issues, either through the creation of academic institutes or the creation of naval/maritime focused “think tanks,” or both. The US Naval War College was established in 1884 and the US Navy League was established in 1902. The Royal Australian Navy (RAN) established their academic based Seapower Centre in 2000 while the Australian Naval Institute (ANI) was established in 1975.

Both countries have the luxury of having an independent naval service whereas Canada has no independent naval service. Consequently, the USN and the RAN have control of the education of their services, academic outreach, and engagement with the

public and government. Whereas Canada with no independent naval service has very limited control over education, academic outreach and engagement resulting in a public and government with limited understanding of the critical importance of the navy to their security. To illustrate this point, during the public round-table discussions that influenced the development of the 2017 defence policy, Strong, Secure and Engaged, there was no authoritative independent and credible naval academic voice that advocated a naval response to the inherent risks of a very complex and dangerous maritime world. Thus, within Strong, Secure and Engaged the army and the air force are mentioned more than the navy and land masses are discussed more than oceans.

The Australian example provides a glimpse of what if. In an effort over a period of two decades the ANI demonstrated to the Australian people and their governments that any threat needed to be met as far as possible offshore, not on Australian beaches. They also argued and were influential in the development of the bi-partisan understanding that building ships and submarines in Australia is a critical national

Skilled at sea. Trained by CAE.

Optimized training and analytics to enable operational excellence.



security issue. As a result of this continuous and concerted effort, coupled with that of their Seapower Centre, the RAN is one of the few western navies that is expanding with bi-partisan government support.

The British Royal Navy (RN) on the other hand has been subsumed into the greater Ministry of Defence. The Navy League of the UK, established in 1895 with a mission to, “spread information showing the vital importance to the British empire of the naval supremacy upon which depended its trade, empire, and national existence” merged with the Marine Society and both were folded into the Marine Society and Sea Cadets in 2004.¹⁵ The Royal Naval College at Greenwich closed in 1998 leaving no dedicated naval institution to study naval war at the strategic level. Perhaps this is what Admiral Sir Jonathon Band, when First Sea Lord and Chief of the Naval Staff, meant when he used the phrase “sea-blindness” and warned that Britain is “losing the ability to think strategically.” The result, a shrinking fleet as the RN seems to be losing its culture of studying war at sea at the strategic level.

The Question

Can the navy tack and evolve a culture that values and encourages the academic study of history, naval history, and war at sea, and could institutions be created to effect this change? The question is important. If the RCN had established this culture in the beginning and nurtured it throughout its history the nature of Canada’s armed forces today would likely be different. The navy would be different.

A Way Ahead

Given the constraints within the CAF, it is unlikely that the navy could take full control of the education of the service or establish some form of war college. But perhaps there is the potential to establish something like the Australian Naval Institute and partner with an academic institution which could be leveraged to focus on the study of history, naval history, war at sea at the strategic level. Such an organization could collect, develop, research, teach and disseminate information about maritime and

naval affairs to both the navy and to the people of Canada including their decision makers. Given the linkage to an academic institute degree programs could be developed at the graduate level for senior naval leaders. Moreover, such an initiative would lay the foundations for independent naval “think tanks”.

The benefits of establishing and sustaining a culture of learning the art of naval war will not be seen immediately, but, over time, it has the potential to create strategic influence and mitigate some of the Canadian “sea-blindness” that has allowed governments to atrophy Canada’s navy. It will be a challenge, it will take time and effort, the leadership of the navy will need to lead the change and commit the necessary resources, to develop a culture that embraces and rewards academic study, research and debate of naval war and strategy.

The benefit to Canada will be immense, a growing understanding of the strategic importance of the oceans and Canada’s place in a maritime world coupled with a recognition of the navy’s key role in the defence and security of Canada. Without a change in culture the navy will continue to struggle, and Canada will be less secure.

Notes

¹ In his address to the Alberta Liberal Association on 12 Apr 1969 PM P.E. Trudeau stated “in the situation that we have reached, NATO had determined all of our defence policy. And our defence policy had determined all of our foreign policy.”

² Sir Wilfred Laurier in 1910, as noted in *The Seabound Coast-The Official History of the Royal Canadian Navy 1867-1939*, told Lord Dundonald “....you must not take the militia too seriously, for though it is useful for suppressing internal disturbances, it will not be required for the defence of the country, as the Monroe Doctrine protects us. The Monroe Doctrine, enunciated by U.S.A. Pres. James Monroe in his annual message to Congress declared that the Old World and New World had different

systems and must remain distinct spheres and that any attempt by a European power to oppress or control any nation in the Western Hemisphere would be viewed as a hostile act against the United States.

³ Bill E. Featherstone, "Canadian Defence Administration Policy during the Cold War," M.A. Thesis, revised 2021.

⁴ Statement to the New York Times 8 Dec 2015 by PM J. Trudeau

⁵ Canadian Defence Administration Policy during the Cold War, Bill E. Featherstone, M.A. Thesis, revised 2021

⁶ Ibid

⁷ Michael L. Hadley and Roger Sarty, *Tin-Pots and Pirate Ships* (Montreal: McGill-Queen's University Press, 1991, 301

⁸ The RCN never established staff educational programs such as those created by the RCAF and the Canadian Army during and after WWII. The RCN relied on either the RCAF program for limited attendees or after Unification/Integration the CAF programs. A limited number of officers were sent to the United Kingdom or the USA for advanced education. Consequently, RCN officer participation in any professional discussion never really evolved.

⁹ An example of land focus by Canadian institutions is the 2008 Vimy Paper, Canadians and Asia-Pacific Security the cover picture is of a soldier not a ship or an airplane. Fifteen years later the security issue in the region is maritime based not land based. After a long struggle with and within CDAI, over the past

few decades, specific interested retired Flag Officers have become members of the Board attempting to ensure that naval and maritime issues are not "overlooked" nor misrepresented in what is essentially a continental dominated organization. But this situation may not be sustainable.

¹⁰ This is clearly articulated in *Dreadnought to Daring* (100 Years of Comment, Controversy and Debate in the Naval Review) by Michael Whitby in Chapter 12, *A Distance Beyond Geography: The Royal Canadian Navy*. Published in 2012 by Seaforth Publishing Pen and Sword Books.

¹¹ 3136-5(CLS) 26 June 2003

¹² In 1977 the government approved that Canada needed 30 surface combatants in war, 26 in peace but could afford only 24. Since then through six policy changes the overall fleet has consistently shrunk.

¹³ Richard Oliver Mayne, *The Years of Crisis: The Canadian Navy in the 1960s*, *The Naval Service of Canada, 1910-2010, the Centennial Story*, edited by Richard H. Gimblett.

¹⁴ *The Naval Service of Canada 1910-2010, The Centennial Story*, p143, Dundurn Press in cooperation with the Department of National Defence and Government Services Canada, 2009.

¹⁵ Navy League Constitution quoted in A.J. Marder, *The Anatomy of British Seapower, A History of British Naval Policy in the Pre-Dreadnaught Era, 1880-1905* (New York 1940,49.

Captain(N) (Retired) Ian Parker served 37 years in Canada's Navy, commanded HMC Ships *Fraser* and *Provider*, held many force development and personnel related positions in NDHQ and served as Chief of Staff to three Commanders Maritime Staff/Commanders Maritime Command. Upon retirement from the CAF, Ian was a CFN associate for 10 years.



WESCAM MX-10 MS



A NEW GENERATION OF MARITIME SENSORS

With highly stabilized, long-range optics and leading sensor technologies, L3Harris continues to deliver powerful situational awareness intelligence to global maritime operations at a moment's notice.

- > Daylight, low-light and thermal imagers provide robust 24/7 imaging performance
- > Color HD Spotter helps detect intent at tactically significant ranges with precision
- > Continuous sensor zoom capability enables uninterrupted field-of-view changes
- > Shock-proofed to withstand rough sea states – fully ruggedized to meet the challenges of harsh maritime environments
- > Designed, qualified and performing in high-humidity and saltwater operations
- > Easily integrated into existing command and control systems
- > Able to support a variety of maritime systems

The WESCAM MX™ portfolio of maritime sensors is backed by over 40 years of mission-proven experience, global maintenance depots and dedicated personnel located worldwide.

Learn more at [L3Harris.com](https://www.l3harris.com)

L3HARRIS.COM

Image courtesy of Austal.
MAST-13 Autonomous Surface Vehicle Produced by L3Harris for Dstl (UK).



L3HARRIS®
FAST. FORWARD.

Wagner's Aborted Coup

Making Sense in the Aftermath

Alexander Rojavin

As the brief Russian Civil War ends, it is unclear what will happen next, yet what can be said is that it is almost certain to re-emerge in some form to haunt the Putin government.

As Wagnerites headed for Moscow, crossing hundreds of kilometers while Kadyrovites were purportedly “stuck in traffic” en route to take Rostov-on-Don from the mercenaries, Lukashenko’s office and the Kremlin declared that an agreement had been reached. Prigozhin’s mouthpieces soon repeated this claim, and Prigozhin himself declared that the Wagnerites were turning the columns around and cancelling the coup. Kremlin mouthpiece Peskov soon announced that the criminal case against Prigozhin had been dropped, that Prigozhin himself would go to Belarus (for unexplained reasons), that Wagnerites who had not participated in the coup attempt could still sign contracts with the Ministry of Defense, and participating Wagnerites would not be prosecuted. With that, the mercenaries turned around, while the ones holding Rostov-on-Don began departing.



In declaring the march on Moscow over, Prigozhin cited the desire to avoid spilling Russian blood as the reason, implicitly hand waving the dead teams manning the several downed regime aircraft, and audaciously ignoring the potential bloodletting typically involved in something as telegraphed as a coup that involves the siege of the capital.

In Ukrainian, Russian, and Belarusian information spaces, many commentators' response to this surreal chain of events was that it was all staged. This hypothesis, however, has an unsustainable number of holes, irrespective of the fact that we are talking about the Russian Federation. Even though the coup's final stages have been delayed, all involved sides have emerged weakened. One of the key effects of the last day's events is that we saw how an array of key actors responded to infighting at scale in Russia.

Sviatlana Tsikhanouskaya and the Kalinouski Regiment both released video addresses (in Belarusian, naturally) calling on Belarusians to avoid being drawn into Russia's civil war and to prepare for decisive actions to liberate Belarus from Russian occupation and the Lukashenko regime.

Putin was reported to have called on the leaders of the CSTO for aid. Kazakhstan's President Tokayev refused, blandly calling what was happening "an internal Russian affair," leaving the Putin regime to its fate. The regime will find no aid from the

Caucasus or Central Asia, even if faced with the prospect of violent overthrow.

Ukrainian forces took advantage of the degenerating morale and increased lack of coordination among Russian forces on the front. While the Wagnerites were moving on Moscow, and regime forces were preparing the capital for siege, Deputy Minister of Defense Hanna Malyar announced that Ukrainian forces had sprung into action along the eastern front, and reports soon surfaced that Russian forces had been entirely eliminated on the western bank of the Siverskyi Donets-Donbass channel. Moreover, Ukrainian forces had secured a bridgehead on the left bank of the Dnipro in the area of the Antoniv Bridge.

While jokes had been made in the summer of 2022 about how, with most of the Russian army in Ukraine, a small band of armed marauders could bring the whole country to its knees, the Wagnerites demonstrated that these jokes were more and less than jokes. Having functionally conquered two oblast's and made their way through a sizeable part of a third with minimal resistance, the Wagnerites handily showed the ease with which regional centers—and even *military district headquarters*—in Russia could be taken over. Put another way, they showed at greater scale what the Legion and RDK showed earlier in Belgorod Oblast': that the regime is helpless to control or protect Russian territory, up to and including major metropoli.



Wagner forces in Rostov

In Dagestan, which was the most restless of all Russian regions after the mobilization announcement in September 2022, graffiti began popping up, reading “Caucasus without Russia” and “Dagestan without Russia.” The spirit of Caucasian independence does not lurk too deeply beneath the surface.

The Wagnerites’ conquest of Rostov was a remarkable demonstration of how quickly ordinary Russians are willing both to turn against the regime and to kneel before a conquering band of Slavs, regardless of the fact that it is comprised of criminals of the worst sort. Moreover, the Wagnerites’ march showed how quickly some Ministry of Defense forces are willing either to join the band against the regime or lay down arms and assume neutrality.

The abrupt end to the Wagnerites’ march on Moscow represents an incongruence to both the regime’s *and* Prigozhin’s messaging that is incoherent enough to damage both their reputations—even among Russia’s hyper-affective populace. Prigozhin’s sudden messaging pivot from juxtaposing “truth” and “justice/fairness” with the regime (explicitly identified as Shoigu and Gerasimov, and implicitly including Putin, even though Prigozhin did not call him out directly) to stressing the “sanctity of Russian blood” and “need for unity” is enough even to cause all but the most clouded of Russian minds to jolt uncomfortably. Meanwhile, Putin’s own transition from declaring Prigozhin a traitor and mutineer, and opening a criminal case against him, to quickly cancelling the criminal case and promising amnesty to the wannabe mutineers who killed over a dozen military service members did nothing to impress Russians either—neither the Wagnerites who rose against him, nor the regular forces, whose lives Putin does not value whatsoever, nor civilians, who saw a regime unable to control regions not that far away from the capital, nor the socioeconomic elite, whose already disrupted lives were disrupted further and many of whom fled Moscow, as things looked grimmer and grimmer. Nobody was left with a good taste in their mouths.

This includes Russia’s cadre of rabidly nationalist milbloggers, many of whom expressed a mix of bewilderment, dismay, and outrage at Prigozhin’s announcement. One minute, they are promised that their kind would chase the cowardly Putin out of the Kremlin, the next—they are told that Putin’s offer of amnesty and obviously untrustworthy security guarantees are enough to save his rule. Meanwhile, the other faction of milbloggers, which includes Girkin, is equally dismayed, though this group’s dismay is at Russia’s impending doom and the fact that “there are now two presidents in Russia,” with Putin decidedly the weaker of the two; they see a Putin irreversibly humiliated and revealed to be entirely feckless, as they already suspected.

In short, the (presently) inchoate coup’s external messaging barely needs analysis: it was an all-around failure for both Prigozhin and Putin, who jointly showed that Russia is a lawless land ostensibly led by a criminal regime with near-zero control over its own territory. As for the internal messaging: both sides’ vitriolic rhetoric ultimately resolving with “we made a deal brokered by Lukashenko, of all people” is not a winning message for any Russian constituency.

This story is not over. Putin’s security guarantee to the man who made him look a helpless coward is worthless. Prigozhin understands this, as he understands the rules of power in Russia. Prigozhin will not leave his fate in the hands of the man whom he revealed to be impotent—the man who compulsively tends to an image is of virility and who does not suffer it to be smeared even for the sake of an information operation.

Finally, Wagner inadvertently confirmed the main thesis of the Freedom of Russia Legion, Russian Volunteer Corps, and leading opposition figures like Mark Feygin, Ilya Ponomarev, and, lately, Mikhail Khodorkovsky: the thesis that modern Russia must be liberated exclusively through military means—and that this is an entirely realistic prospect.

Alexander Rojavin is a multilingual intelligence, policy, and media analyst and is the Director of Counter Foreign Malign Influence Strategy at Deft9 Solutions, Inc. He writes about democratic counter-disinformation legislation and is currently finishing a book on modern Russian film as a key battlefield in the information war. He also teaches a seminar on information warfare at Middlebury’s School of Russian and moonlights as a published translator.

LOGISTIK

PROUD SPONSOR OF



· NAVY ·
**BIKE
RIDE**

Presented by

BMO



**DÉFI
VÉLO**
· DE LA ·
MARINE

Présenté par

**Congratulations to all
Navy Bike Ride participants!**

**+ \$30K
RAISED**

**+ 1,100
PARTICIPANTS**



Submarines: A Strategic Requirement in a Dangerous World

This Editorial was authored by Dr. Adam Lajeunesse and the NAC Board and was first run in June 2023 by the Canadian Global Affairs Institute

On April 30th, the Department of National Defence concluded its public consultations for the Defence Policy Update. More than the standard policy refresh, the decisions made as a result of the review may very well define Canada's response to the rapidly deteriorating global security situation for generations to come.

Of the many critical questions that will need addressing, perhaps the most strategically important is the future of Canada's submarine fleet. Today Canada's four Victoria-class are rapidly approaching obsolescence, with decommissioning expected to begin in the mid-2030s. While DND has launched a project to explore their replacement, that process has yet to result in firm decisions or a real public commitment.

Time is not on Canada's side. Russia's 2022 invasion of Ukraine has radically altered our national security situation. British Defence Secretary Ben Wallace noted this month that Russian submarines are probing new routes in the North Atlantic while Moscow doubles down on naval construction. In the Pacific, an increasingly aggressive China is radically expanding its submarine force, from 56 vessels today to a projected 79 by the end of the decade. This growing strength has emboldened Beijing in its steady stream of threats towards Taiwan and other Canadian partners in the region.

The value of submarines is beyond dispute. Even as its surface fleet has been pushed back into port by the threat of anti-shipping missiles, Russia can reliably close the Black Sea to Ukrainian ships with only two

submarines. American planners have repeatedly seen this value in war games focused on Taiwan. There, submarines consistently emerge as the key to success or failure against a Chinese invasion.

These are not new revelations. During the Falklands War, Britain pushed the entire Argentinian Navy back to port after sinking the cruiser *Belgrano* by a submarine. The mere threat of these vessels operating in the area was enough to do the job, demonstrating why they are considered strategic assets.

Closer to home, Canada now faces a growing set of challenges. New defence threats from Russia and China have joined emerging security threats from illegal fishing, trespassing, and environmental degradation. These all require deterrence and stealthy surveillance. Even state-backed sabotage has re-emerged as a real threat, dramatically demonstrated by the destruction of the Nord Stream pipelines and the NATO tracking of Russian spy ships now being equipped to sabotage undersea cables and critical infrastructure.

Other states have already begun adapting to these new realities. Australia has announced a fleet of nuclear vessels, the Europeans are expanding their fleets, and American shipyards are working at capacity. Meanwhile, the global submarine market by value has ballooned and is set to reach \$45 billion by the early 2030s.

Canada risks being the only G7 state without this vital capability. The loss to national security will be immeasurable. Canada's influence at NATO will fall further, the new Indo-Pacific Strategy will be unmasked as hollow, and the country will become increasingly beholden to Washington for the surveillance and defence of our national waters.

What is needed from the Defence Policy Update is a real political and financial commitment to procure a fleet of at least eight submarines for the Navy – the

number identified by studies as the bare minimum needed to reliably undertake the tasks Canada will demand of them. The procurement process must also be streamlined to deliver capability by the 2030s. Without this commitment, Canada's contribution to its allies, and even to its own defence, will ring hollow.

Quick action is possible. There are many friendly nations building submarines that would be open to a partnership with Canada for an off-the-shelf procurement. Canada has even shown that it can streamline the processes in a crisis. During the fighting in Afghanistan equipment was bought and deployed quickly as soldiers' lives were at stake. Canada's current support for Ukraine has, likewise, shown its ability to cut through the red tape to purchase and deploy equipment rapidly when the pressure is great enough.

Canada's submarine fleet demands the same sense of urgency. The window to save and revitalize that vital capability is small and rapidly closing. A strong and independent Canadian Navy needs submarines and that will require a clear statement of requirement from the Defence Policy Update. That statement must also be matched by a real investment of political capital and a willingness to expedite the process in a way that major procurement projects have not been in the past.

As Canada looks to replace its fleet of Victoria-class attack submarines, thoughts have turned to the options available to Canada around the world. While there are still conversations taking place in the academic community about the possibility of purchasing nuclear vessels, it seems certain that the next fleet will be diesel-electric. In an interview published in the March 2023 edition of this magazine, VAdm Angus Topshee made this very clear, stating: "even if we decided on the need to go after nuclear submarines right now, we would still need to buy a replacement class to bridge the gap. So, no matter what we do the next acquisition for submarines for the Canadian Navy will be diesel submarines,



Canadian technology for tomorrow's platforms

Rolls-Royce is the reliable choice for innovative naval handling systems. Designed and manufactured in Peterborough, Ontario, our world-leading Mission Bay Handling system is a key feature of the Global Combat Ship design, selected for the Canadian Surface Combatant program.

Delivering true multi-mission capabilities, the system has been tailored to provide an adaptable and flexible integrated solution for current and future naval operations.

The Rolls-Royce Mission Bay Handling technology enables efficient deployment and recovery of manned/unmanned crafts from both sides of the ship. Containerised mission packages can be moved on an open deck or inside a mission bay without the aid of a dockside crane offering a low-risk naval solution for tomorrow's platforms.

rolls-royce.com



Photo credit ©BAE Systems

Contract awarded for Royal Navy's Type 26 Global Combat Ship's Mission Bay Handling System



VIGILANCE BY VARD



VARD
a Fincantieri company

THALES
Building a future we can all trust

 **HEDDL**
SHIPYARDS

FINCANTIERI

SH 
DEFENCE



HMCS Windsor (Photo: Mona Ghiz, CAF)

The Contenders

The submarines to watch as Canada looks to replace the Victoria-class

Norman Jolin

As Canada looks to replace its fleet of Victoria-class diesel-electric attack submarines, thoughts have turned to the submarine options available to Canada around the world. While there are still conversations taking place in the academic community about the possibility of purchasing nuclear-powered attack submarines (SSNs), it seems certain that the next fleet will be diesel-electric. In an interview published in the March 2023 edition of this magazine, the Commander of the RCN, VAdm Angus Topshee, made this very clear, stating: "even if we decided on the need to go after nuclear submarines right now, we would still need to buy a replacement class to bridge the gap. So, no matter what we do

the next acquisition for submarines for the Canadian Navy will be diesel submarines, whether it is a bridge to something else, or as the solution."

Here, we will look at the rationale for the diesel-electric submarine option and, more specifically, what submarines may be available today that could suit Canada's requirements.

Why the Canadian Patrol Submarine replacement will have to be a diesel

To address the nuclear-powered submarine issue, (assuming that Russia, China and India are not candidates for a potential Canadian

nuclear-powered vessel), there are only three nations that build and operate nuclear-powered submarines: the US, UK, and France. It is important to note as well that this class of ship uses nuclear power for *propulsion*, Canada has never considered acquiring nuclear weaponry and that is not the issue at hand.

The limited number of producing countries creates a problem from a Canadian procurement

perspective, as do the current bottlenecks in those countries' own production. The question of infrastructure is another important consideration that is often overlooked.

The UK does not own the intellectual property for naval nuclear propulsion, so any deal with the UK would need US approval. France operates smaller SSNs, which require more frequent refuelling as they do not use enriched uranium in their reactor



Commissionaires **exists** to support veterans and their families

SINCE
1925

**FOUNDED
BY VETERANS
FOR VETERANS**

More than just an employer, we improve the lives of former service members, their families and the communities they serve.

cores.

Notwithstanding the type of reactor, the infrastructure required to support and operate SSNs is huge and would have to be duplicated on both coasts. This is much more than upgrades to current bases, as any base supporting nuclear-power submarines must be away from large population centres. That means that Halifax and Esquimalt are not suitable options.

Moreover, this infrastructure challenge involves the entire nuclear regulatory process, including through life vessel management and eventual disposal. A recent report by an Australian source showed that \$8 billion has been allocated simply to upgrade a large modern submarine base in Perth WA to support the acquisition of SSNs under AUKUS. Couple that with mandatory environmental assessments for any new infrastructure and the conclusion must be that this can not happen quickly.

A decision to procure a fleet of SSNs (at least 8 for operations on two coasts) would not only be a huge financial commitment, it would also have to maintain the support of at least five consecutive federal governments (of differing political ilk) before the first hull is delivered. History (in 1962 and 1989) has shown this is not a credible proposition.

If, in theory, Canada chose the nuclear route, who could build an SSN for Canada? Currently the US, UK and France are in the process of regenerating their SSN and SSBN fleets, which will tie up their nuclear submarine building capability well into the end of the next decade. As the Australians are finding out, even with the strong support of the US, it will be late into the 2030s before the Royal Australian Navy sees an Australian Virginia-class SSN. Currently the US has only two yards building nuclear powered submarines - Newport News, Virginia (HII) and Groton Connecticut (GD EB) and, while contracted to deliver two

Virginia-class SSNs per year, they are achieving about 1.2 hulls per year. The US simply doesn't have any excess capacity.

Moreover, the USN SSN fleet is shrinking as the older Los Angeles-class submarines reach the end of their service lives. The US Navy has a stated requirement for at least 66 SSNs and they currently have 53 in service. Furthermore, this number will drop to below 50 over the next few years. Adding to the backlog, the US is simultaneously building 12 Columbia-class ballistic missile submarines (SSBNs). The UK is down to six SSNs (five Astute-class and one Trafalgar-class due to retire next year) and is currently consumed with delivering the last two Astute-class SSNs while they simultaneously begin building four Dreadnought-class SSBNs.

This is the situation. The US and UK do not have older submarines available to lend or lease and their building yards are straining to meet current and projected orders.

Notwithstanding the above, if Canada was to choose an SSN design today, it would take the RCN about 20 years (minimum) to generate the crews and build the first submarines (at best). The Victoria-class submarines will reach the end of their service lives in the late 2030s and the ability to extend their lives further (they will be 50 years old) is not feasible.

In short, regardless of whether or not Canada chooses to pursue the acquisition of SSNs, the Victoria-class must be replaced long before any potential Canadian SSN would be available. The Canadian Patrol Submarine Project (CPSP) is essential to the maintenance a submarine capability for either the long term or, if Canada was to eventually acquire SSNs, as a necessary bridge to a future capability.

Choosing a Diesel

Given that Canada has no current submarine building capacity, an offshore purchase makes sense. Despite the fact that many of Canada's partners and allies are currently operating diesels, the process will still take time. The table to the right offers a general timeline for any such procurement.

Time, logistics, cost, and availability combine to make it clear that Canada's next submarine class will be a diesel. Given the compressed time frame, it will also have to be an overseas procurement, since a domestic design would take too long. Which will it be?

Here we look at some of those contenders:

Note: these are arranged first by in-service status and next by displacement)

Delivery Time Table

Based upon a standard project approach, a time schedule starting with a Memoranda to Cabinet and ending with delivery of first vessel would typically look like this:

- D - delivery of first submarine into service
- D -1 year – post build trials and acceptance
- D - 8 years – commence construction
- D -10 years – Contract Award and design review
- D -14 years – Request for Proposal issued
- D -16 years – Invitation to Qualify issued
- D -18 years – Requests for Information/Industry Engagement

HMCS Windsor (Photo: Trevor Ackland, CAF)

Korean KSS III class

The KSS-III (Korean Submarine-III) is a series of diesel-electric attack submarines currently being built for the Republic of Korea Navy (ROKN), jointly by Hanwha OCEAN - formerly Daewoo Shipbuilding & Marine Engineering (DSME) and Hyundai Heavy Industries (HHI). The KSS-III is the final phase of the Korean Attack Submarine program, a three-phased program to build 27 attack submarines for the ROKN, between 1994 and 2029.

The Korean vessels are equipped with lithium-ion battery technology, but also have a separate air-independent propulsion (AIP) system. Compared to previous lead-acid batteries which are generally used to power other conventionally-powered submarines, lithium-ion batteries will reportedly allow the KSS-III to cruise at greater speeds with a greater period of underwater endurance, life-expectancy and durability.

Currently in service with ROK Navy, this vessel has the advantage of a proven design. Like the Japanese option, it is also one of the few that clearly has the size and endurance that Canada needs without modification.

Displacement: 3,750 tonnes

In Service: Yes

Length: 89 m

Beam: 9.6 m

Draft: 7.62 m

Manufacturer: Hanwha OCEAN and Hyundai Heavy Industries

Armament: Six 533 mm torpedo tubes which can launch heavyweight torpedoes, mines or encapsulated missiles, as well as a six cell vertical launch system for missiles.



Ahn Mu (Korean MoD)

Japanese Taigei-class

Currently in service with the Japanese Maritime Self Defence Force, the Taigei-class submarine (29SS) is the successor to the Sōryū-class. Equipped with lithium-ion batteries, the Taigeis can travel longer distances and at higher speeds under water than most conventional diesel-electric submarines. The hull design of the Taigei class is said to not differ too much from the Sōryū-class but will be 100 tons heavier than its predecessor.

However, the Taigei-class submarines are more advanced as they are equipped with newer equipment such as updated sonar systems and snorkel power generation system. As one of the larger and longer-ranged diesel submarines, the Japanese boats offer Canada more of an ocean-going capability than many of the other alternatives.

Displacement: 3,000 tonnes

In Service: Yes

Length: 84.0 m

Beam: 9.1 m

Draft: 10.4 m

Manufacturer: Mitsubishi Heavy Industries and Kawasaki Shipbuilding

Armament: six 533 mm torpedo tubes which can launch heavyweight torpedoes, mines or encapsulated missiles



JS Taigei-class (wikipedia)

French Shortfin Barracuda class

This design was the winner of the 2016 Australian conventional submarine replacement project that has been subsequently cancelled and superseded by AUKUS.

It is based on the design of Naval Group's 5,300 ton displacement nuclear-powered Suffren-class submarine, with a diesel-electric power plant in place of a nuclear reactor. The power will be delivered to electric motors with a pumpjet propulsor instead of a traditional propeller.

Naval Group is also offering a subvariant of the Shortfin diesel-electric design, as a replacement for the current Walrus-class submarines of the Royal Netherlands Navy, competing against the A26 design put forward by SAAB and Damen.

Displacement: 4,500 tonnes

In Service: No

Length: 97 m

Beam: 8.8 m

Manufacturer: Naval Group

Armament: Eight 533 mm torpedo tubes which can launch heavyweight torpedoes, mines or encapsulated missiles



Barracuda illustration (Naval Group)

German Type 212 or 216

The German Type 212 CD is a development by tkMS for the German and Norwegian navies. It is anticipated that the first hull will start construction sometime this year with a projected six year build time. Open source information has this submarine at 2,500 tons (surfaced displacement), which is likely too small for Canada at this time. Modification may be possible, however, to increase its size and range. It will have a fuel cell AIP and there are reports it will also have lithium-ion battery technology.

The alternative Type 216 design, which has never been built, is a 4,000 ton displacement derivative of the export Type 214 design that was the German bid for the original Australian conventional submarine replacement project that has now been superseded by AUKUS. At Euronaval 2012, German Shipbuilder tkMS specifically stated that the Type 216 was designed to meet the "larger conventional submarine" needs of countries like Australia, India and Canada.

Type 216

Displacement: 4,000 tonnes

In Service: No

Length: 90 m

Beam: 8.1 m

Draft: 6.1 m

Manufacturer: ThyssenKrupp Marine Systems

Armament: 6 × 21-inch (533 mm) torpedo tubes (18 torpedoes or anti-ship missiles or mines); 1, 2, or 3 Vertical Multi-Purpose Locks for 24 missiles or 24 mines each; Swimmer Delivery Vehicle Countermeasures



Luftbild vom U-Boot (U 34) der Klasse 212A (Photo: Bundeswehr/B. Wilke)

Spanish S-80 Plus class

The Spanish S-80 Plus Isaac Peral class submarine is built by Navantia. This submarine is currently completing post build sea trials. With a surfaced displacement of 3,200 tons it may be able to meet Canadian requirements with modification. Notably the Spanish do not have an extensive submarine building reputation and this submarine design has encountered significant difficulties and delays.

Construction started in 2005 and it was only launched in 2021 and delivered this year (2023). The S-80's air-independent propulsion (AIP) system is based on a bioethanol-processor consisting of a reaction chamber and several intermediate Coprox reactors. This system gives it a range of roughly 8,000 kilometres.

Displacement: 3,200 tonnes

In Service: No

Length: 81 m

Beam: 11.68 m

Manufacturer: Navantia

Draft: 7.3 m

Armament: Six 533 mm torpedo tubes which can launch heavyweight torpedoes, mines or encapsulated missiles



S-80 Plus class submarine Isaac Peral (Photo: Navantia.)

Swedish Blekinge-class

SAAB is building two submarines of Blekinge-class (A26) for the Royal Swedish Navy. The submarines will be powered by conventional diesel-electric propulsion machinery and equipped with the Kockums Stirling AIP system. Perhaps the most unique A26 design feature is its Multi Mission Portal, for the launch and retrieval of mission payloads, such as manned and unmanned vehicles.

Of importance to Canada, this submarine does not yet exist. The first of class was laid down last year (June 2022) with delivery anticipated by 2027. The current design is just under 2,000 tons surfaced displacement, which is likely not sufficient for Canada. However, SAAB is marketing an Oceanic Extended range variant for the Dutch replacement submarine project which may be able to meet Canadian requirements.

Displacement: 1,925 tonnes

In Service: No

Length: 66.1 m

Beam: 6.75 m

Draft: 6 m

Manufacturer: Saab Kockums

Armament: Six 533 mm torpedo tubes which can launch heavyweight torpedoes, mines or encapsulated missiles.



Sailor First Class Ben Leahey onboard HMCS Montreal raises the Canadian Naval Ensign as the ship transits into Souda Bay, Greece (Photo: Corporal Connor Bennett, CAF Photo)

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

In late April, HMCS *Edmonton* returned to Esquimalt after more than 10 weeks deployed on Operation *Caribbe*. It was a productive sail; on April 8, *Edmonton* worked with American partners to intercept a drug smuggling vessel, seizing large quantities of narcotics off the coast of Mexico. The seized narcotics were roughly 755 kilograms of cocaine, with an estimated Canadian street value of \$49.5 million.

On March 26, HMCS *Montréal* departed Halifax for Port Klang, Malaysia, as it transited to the Indo-Pacific. During its deployment *Montréal* was supported by Naval Replenishment Unit (NRU) *Asterix*, and the two ships contributed to Operation *Savanne* and then Op *Projection*.

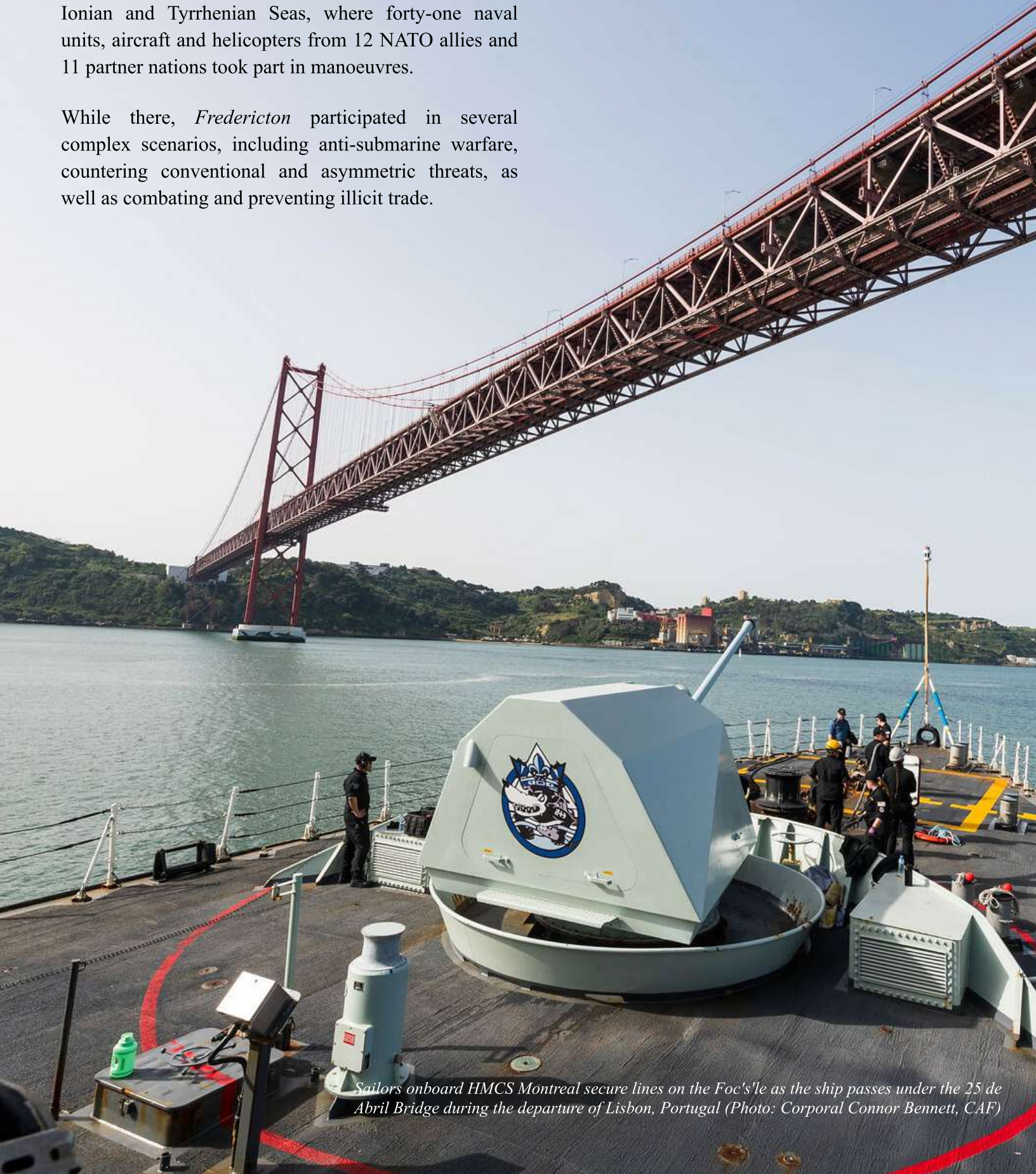
As part of Operation *Projection* West Africa, HMCS *Glace Bay* and *Moncton* were also deployed to build ties with the Navy of Sierra Leone and 20 other nations during Exercise *Obangame Express*. The exercise focused on building the skills needed to counter piracy, terrorism, and smuggling operations in the region.

HMCS *Fredericton* began patrols in the East Mediterranean on April 16th as part of Standing NATO



Maritime Group Two, which is supporting NATO's assurance and deterrence measures in Central and Eastern Europe. *Fredericton* participated in the Italian Navy led Exercise *Mare Aperto 23-1*, between the Ionian and Tyrrhenian Seas, where forty-one naval units, aircraft and helicopters from 12 NATO allies and 11 partner nations took part in manoeuvres.

While there, *Fredericton* participated in several complex scenarios, including anti-submarine warfare, countering conventional and asymmetric threats, as well as combating and preventing illicit trade.



Sailors onboard HMCS Montreal secure lines on the Foc's'le as the ship passes under the 25 de Abril Bridge during the departure of Lisbon, Portugal (Photo: Corporal Connor Bennett, CAF)

The VIGILANCE Next Generation Offshore Patrol Vessel

Derek Buxton

Vard Marine Inc. (VARD), a Fincantieri company, has launched the VIGILANCE Offshore Patrol Vessel (OPV) concept in conjunction with Team Vigilance partner companies Heddle Shipyards, Thales Canada, SH Defence, and Fincantieri.

Intended to satisfy projected future demands under the second pillar of the Government of Canada's National Shipbuilding Strategy as a replacement for the Kingston Class Maritime Coastal Defence Vessels, VIGILANCE will be designed, built, and equipped in Canada. Tailored to the needs of the Royal Canadian Navy's future fleet, VIGILANCE strikes the balance between flexibility, adaptability, and size, while maintaining the life-cycle cost advantages VARD's naval designs are known for. The vessel has been conceived for high-tempo sovereignty missions and engineered for global deployment and forward basing abroad.

Evolving from VARD's proven family of mid-sized OPV platforms such as the Roisin Class and Protector Class, commissioned respectively by the Irish Naval Service and the Royal New Zealand Navy, VIGILANCE incorporates many enhanced design features. A covered boat bay to accommodate a 13 m unmanned surface vehicle (USV) or containerized payloads, a dedicated flight deck for unmanned aerial vehicles (UAV), and a form offering improved motions and efficiency for deployed missions are just some of these features.

The design philosophy of "commercial where possible and military only where needed" leans heavily on the use of commercial-off-the-shelf

(COTS) equipment to minimize acquisition and through-life maintenance costs. VIGILANCE's adoption of automation and autonomous systems reduces crewing demand while simultaneously enhancing the efficiency of those personnel onboard. Efficient propulsion system configuration and optimized operating modes using hybrid drives and energy storage systems minimize fuel costs and environmental impact. The possibility to source locally produced Canadian steel grades will help avoid the premium associated with the production of small quantities of specialized steels from foreign suppliers.



Cost effective and forward-looking, VIGILANCE fulfills critical operational needs through its combination of organic and modular capabilities, enabling core naval missions such as intelligence, surveillance and reconnaissance, subsea infrastructure protection, mine countermeasures, fisheries enforcement, and maritime interdiction operations. The seamless integration of the CUBETM



VIGILANCE BY VARD



plug-and-play mission module and payload handling system ensures VIGILANCE remains future-proof and can offer a true multi-mission capability regardless of the tasks assigned to the vessel.

Collectively, Team Vigilance brings vast and impressive capabilities and experience to bear in naval ship design, Canadian and global shipbuilding, the integration of combat and offboard systems, modular payload systems, and life-cycle solutions. This collaboration ensures VIGILANCE can meet the needs of any naval operator in this space and beyond and will offer broader economic development for the

marine sector across Canada.

VIGILANCE is the only solution that can offer a Canadian outcome across all stages of the shipbuilding value chain from early-stage design through construction to delivery and beyond. Team Vigilance is truly committed to the designed, built and equipped in Canada mantra they have adopted, and attention has now turned to building a broad coalition of Canadian companies ready, willing and able to contribute to VIGILANCE.

Derek Buxton has been with Vard Marine Inc. since 2017 and as the Vice President for Business Development is spearheading the development of new opportunities for VARD in the global government shipbuilding sector. Prior to join VARD, Derek served a total of 32 years combined service with the Royal Canadian Navy and Canadian Coast Guard. After completing his engineering degree at the Royal Military College of Canada, Derek started his career in the military serving in many sea-going and shore-based roles, including as the Marine Systems Engineering Officer in HMCS Onondaga. He spent four years on exchange duties in Australia with the Collins Class submarine program, and subsequently worked on the acquisition and in-service support of Canada's VICTORIA Class. He then finished his military career as the Design Authority for submarine platform systems. Derek spent eleven years with the Canadian Coast Guard in senior executive roles leading their fleet renewal efforts, most recently he was responsible for the requirements definition and concept development for vessels in the Coast Guard's future fleet plan.

HMCS William Hall Named

From Irving Shipbuilding

The official Naming Ceremony of the future HMCS *William Hall*, the fourth Arctic and Offshore Patrol Ship (AOPS) being built at the Halifax Shipyard for the Royal Canadian Navy (RCN), took place April 28. The ship was officially named in a ceremony with the Ship's Sponsor, Chief Superintendent Craig Gibson (Ret'd) of the Royal Canadian Mounted Police, who was the first Black person to be promoted to the rank of Chief Superintendent as the Commanding Officer for "L" Division, Prince Edward Island. Gibson is also the first male to ever be appointed Sponsor for an HMC Ship. Gibson was raised in Gibson Woods, a small Black community where descendants of William Hall settled as Black Loyalists.

The son of former American slaves, William Hall was the first Black person, the first Nova Scotian and one

of the first Canadians to receive the British Empire's highest award for bravery, the Victoria Cross, for his bravery during the Siege of Lucknow during the Indian Rebellion of 1857. "Conditions were harrowing," said the Honourable Anita Anand, Minister of National Defence, at the ceremony. "Somehow managing to evade the barrage of enemy fire as their friends and shipmates fell all around them, in the end—of His Majesty's Ship Shannon crew—only Hall and another officer were left standing."

From left to right: Vice Admiral Angus Topshee, Royal Canadian Navy, Ross Langley, Vice Chairman of Irving Shipbuilding, Jenna Belony, Daughter of Ship's Sponsor, Debbie Gibson, Wife of Ship's Sponsor, Minister of National Defence Anita Anand, Craig Gibson, Ship Sponsor, Lieutenant Governor of Nova Scotia, The Honourable Arthur LeBlanc, Jim Irving, Co-CEO J.D. Irving, Limited, Dirk Lesko, President of Irving Shipbuilding, Commander Scott Kelemen, Commander of the future HMCS William Hall



IMPROVING HOW WE DELIVER. IMPROVING WHEN WE DELIVER.

We're on course to deliver ships faster and smarter— from advancements in how we design, prototype, and plan; to robotics, automated steel cutting and new thinking in outfitting — every day, we're building them more efficiently and for a lower cost.

Driving Improvement.



NAC Regalia Sales

Blazer Badge (NOAC/NAC) \$25 each

Blazer buttons (set of 2 large, 6 small - if you need more or less please contact me at the email address below to work a deal. These new items are not as detailed as previous versions, hence the price) - \$25/set

Medallion Lapel Pins – Gold, Silver, Bronze \$5 each

Medallion Neck Decorations \$95 each

Necktie – NOAC/NAC/RCN \$35 each

Prices include all taxes and shipping.

Email Executive Director, David Soule, executivedirector-nac@outlook.com to confirm availability. Payment: Cheque payable to "NAC National" and mail your order to Executive Director-NAC, 1138 Sauterne Pl., Orleans, ON K1C 2N8 (e-transfer option coming soon)



E-transfers now accepted



**OUTWARD BOUND
CANADA**

Outward Bound Canada offers full scholarships to children of current and veteran CAF members

Outward Bound Canada (OBC) has launched an exciting new initiative to offer full scholarships for youth of parents or guardians who are or have been serving members of the Canadian Armed Forces. This program, made possible thanks to the generous funding provided by W. Brett Wilson, aims to provide youth aged 12-19 with opportunities to develop their leadership potential and connect with their peers while enjoying epic outdoor adventures.

Designed to promote diversity and inclusivity, the program will bring together young people from different backgrounds and lived experiences on

extended wilderness-based expeditions. Applicants must reside in Canada, have a parent or guardian who demonstrates their (current or previous) membership with the Canadian Armed Forces, and be interested and motivated to participate in the Outward Bound program.

The Youth of Veteran Families scholarship provides a fantastic opportunity for youth in Canada to experience the outdoors, learn valuable leadership skills, and connect with other young leaders. Learn more about the program and apply **here**





From the Branches

NCSM DONNACONA VIRTUAL MUSEUM FOR THE 100TH ANNIVERSARY OF THE MRC

The Montreal branch of the Naval Association of Canada is proud to present you the collection of artifacts, articles and images of the NCSM Donnacona, which tells the story of NCSM Donnacona from the creation of the RVMRC to this year's Centenary Celebration. This portrait of the last 100 years of naval service was designed and executed under the direction of the M1 (ret.) Karin-Ann Goral, CD, ENS 2 Richard Eiser and Isabelle Goral.

To visit to virtual exhibit, click [HERE](#)



100 Years of Naval Service in Montreal
100 ans de Service Naval à Montréal





**The RCSCC Victory Final
Parade on May 27, 2023 at
HMCS Donnacona**
From Anthony Colucci



NAC-Montreal Branch's participation in the BOA Ceremony held May 5th at the Clock Tower of the Old Port of Montreal.

The 100th Anniversary of the RCNVR made the remembrance of the BOA all that more significant. Post-ceremony there was a reception at HMCS Donnacona. The Montreal Branch made contributions to support the events of the day using monies it had received from the NAC Endowment Funds.

From Anthony Colucci



Montreal Branch Members PO1(ret'd) Karin-Ann Goral and retired Wren Barbara Nancy Thomas pay tribute to the Wrens.

The BOA Guest of Honour, PO (ret'd) Walter Goral inspects the Ranks of HMCS Donnacona



Montreal Branch Member PO1(ret'd) Karin-Ann Goral calls the RCN and Merchant Marine ships lost during the Battle of the Atlantic.

The wreath was placed at the Clock Tower by NAC-Montreal Members. President emeritus Charles O'Leary is flanked by Catherine Flemming (L) and Karin-Ann Goral

On May 18, 2023, HMCS Donnacona hosted and NAC Montreal Branch organized a weepers. This weepers was to introduce the Virtual Museum Guide Book to the Reservists of the Unit and to highlight PO1 (ret'd) Karin-Ann Goral's contribution to the publication of the Virtual Museum Guide, including organizing and annotating the collection of artifacts, images and articles commemorating the history of HMCS Donnacona for the RCNVR Centenary Celebration of this year.

From Anthony Colucci



HMCS Donnacona Weepers May 2023 (LCdr L-P. Trudel, Benoit Larocque City of Brossard, Bob Boutilier, Capt. R. Taylor)



HMCS Donnacona Weepers May 2023 (Cdr G. Jarvis and LCdr E. Bolduc)



HMCS Donnacona Weepers May 2023 (NAC Montreal Members Bruce-Michele-Nancy)



HMCS Donnacona Weepers May 2023 In recognition by the CO of Karin-Ann Goral's work on the Virtual Museum

HMCS SCOTIAN: Our Sailors Our Stories

Len Canfield

The HMCS Scotian Alumni Group, with the support of NS Naval Association of Canada and NAC Endowment Fund grant, produced “HMCS SCOTIAN Our Sailors Our Stories” as part of the Halifax Division’s activities commemorating 100th anniversary of the Naval Reserve. Cdr (ret’d) Jim Muzzerall (at right below) academic chair of the

School of Technology and Environment at the NS Community College Ivany Campus, Dartmouth, NS, and a former member of Scotian, arranged for two graphic design students to design the 108 page book. 1. The book was part of Scotian’s Gala 100th anniversary celebration in April and will be available at other 100th anniversary events during 2023.



Shown, from left: Rob Hansen, graphic design faculty; students Jillian Chambers-Janes and Christine Deveau proudly displaying the book; Crystal McManus, graphic design faculty, and Jim Muzzerall. Photo by Kathleen Allen.



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

Lt Jaroslaw (Jerry) WYNNYK, CD, RCN(Ret'd)**

NAC-O, 88 in Ottawa 02/03/23. Jn'd RCN(R) at *Hunter* as OSNQ 03/06/52 and prom ABNQ 02/09/53. Tsf'd to RCN as ABNQ 18/09/54 thence *Cornwallis*. Prom ABAM1 31/01/55 fl'd by *Stadacona* 01/55, *St. Laurent* 01/56, *Cornwallis* 07/56 and *Crusader* 09/56. Prom LSAM1 25/12/56 and LSAM2 01/01/57 thence *Haida* 02/57 and *Naden* 10/57. Prom LSTA3 12/09/58 fl'd by *Stadacona* 09/58 and *Micmac* 03/59. Prom P2TA3 04/59 and reclassified P2WU3 01/60. Prom P2WU4 17/03/61 at *Stadacona*, thence *Cornwallis* 04/61. Prom P1WU4 in *Iroquois* 01/12/61 fl'd by *Cape Scott* 12/62. Prom C2WU4 at *Stadacona* 26/06/62 thence CFB Esquimalt 09/66 for Pre-Commissioning Course. Prom CMDO 28/04/67 fl'd by CFFS Halifax/ Weapons Div. Prom Lt 28/04/70 thence CDLS(L)/ ATO Course in '94 and NDHQ/DGAMMO. Ret'd in '85. (*Citizen*, WM)

OTHERS

Lt(O)(P) Robert Dickson BISSELL, CD*, RCN(Ret'd)

90 in Gosport Hants UK 25/04/23. Jn'd RCN(SSA) as Mid 17/07/73, prom A/S/Lt 24/07/54, S/Lt(O) same date and Lt(O) 08/02/57, Qual Lt(P) 02/60. Srv'd *Niobe* (RNAS Eglinton), *Shearwater*, *Magnificent*, RCAF Stations Centralia, Penhold and Saskatoon, *Bonaventure*, *LaHulloise*, CFB Esquimalt (MARPA), CFB Shearwater, VS-881 and VS-880. Ret'd 01/02/77. (MD, Canada's Naval Aviators)

S/Lt(MN) Leah Jenny (nee BEEHLER) CONNOR, RCN(R)

96 IN Ottawa 10/03/23. Previous RCAF service. Jn'd *Stadacona* (RCNH) as RCN(R) S/Lt(MN) 05/03/56. Rls'd in '56. (*Citizen*)

CPO William John COX, DSM, BEM, RCNVR.

105 in Halifax 23/03/23. Shelburne NS shipbuilder jn'd in '42 as Shipwright. Srv'd *St. Laurent*. Rls'd in '45. (SR, *Chronicle Herald*)

Cdr(Ret'd) Andre GAGNE, CD*

62 in Ottawa 20/05/23. Jn'd as A/S/Lt 13/02/82, prom S/Lt 13/02/83, Lt 01/01/86, LCdr 01/01/91 and later Cdr. Srv'd, inter alia, *Onondaga*, SUBRON ONE and DGMEPM. Ret'd in 2009. (TA)

LCdr(Ret'd) John Terrence GOLDIE, CD

66 IN Kitchener, ON 29/04/23. CFR'd as S/Lt 01/01/91 and later prom Lt and LCdr. Srv'd *Kootenay*, *Restigouche*, *Terra Nova*, *Toronto*, CFB Esquimalt, CFS Aldergrove, CFB Halifax and NDHQ. (BW)

Lt Walter John HOLLOWAY, CD, RCN(Ret'd)

89 in Charlottetown, PE 13/01/23, Jn'd as OSMA in '50. In '62 as P1MA4 attended Prep School at *Naden* and CFR'd as CMDO 19/01/63. Prom Lt 27/07/64. Srv'd *Cornwallis*, *Haida*, *Crescent*, *Lauzon*, *St Laurent* and RCN Hospitals in Halifax, Esquimalt and Cornwallis. Ret'd in '68. (WM)

Capt Gerald David HUMBY, CD, RCN(Ret'd)**

78 in Dartmouth, NS 26/05/23. Jn'd RCN as OS in '61 and CFR'd as S/Lt 12/12/73. Prom Lt 01/01/76, LCdr 01/01/81, Cdr 01/01/87 and later Capt. Srv'd, inter alia, *Cornwallis*, *Restigouche*, *Terra Nova*, *Chaudiere*, NEU(A)/CSEO and FMG Cape Scott (i/c). Ret'd in '98. (WM, KG)

LCdr(Ret'd) Peter Martin HUTT, CD*

71 in Halifax 20/05/23. Jn'd as A/S/Lt 01/09/66, prom S/Lt 08/07/67, Lt 08/09/70 and LCdr 01/01/83. Srv'd, inter alia, *Athabaskan*, CDLS(W)/ Exchange USN and CPF Project. Ret'd circa '93. (HS, SR, *Chronicle Herald*)

S/Lt James Kenneth KERR, QC, RCNVR

99 in Ottawa 12/03/23. Jn'd in '44 as Prob S/Lt and prom S/Lt 02/02/45. Srv'd *Cornwallis* and *Venture*. Rls'd in '45. (*Citizen*)

S/Lt John Jared KIME, RCN(R)(Ret'd)

80 in London, ON 02/04/23. Jn'd *Prevost* as UNTD Cdt 01/62 and prom S/Lt in '64. To Ret'd List on *Prevost* closing. (WC)

Lt Henri Philip LAFLEUR, RCN(R)(Ret'd)

87 in Montreal 24/05/23. Jn'd *Donnacona* as UNTD Cdt 02/01/54, prom S/Lt 01/06/56 and Lt 01/05/58. To Ret'd List in '59. (WC)

Lt Richard Allan LEVY, RCN(R)(Ret'd)

90 in Digby, NS 07/02/23. Jn'd *Scotian* as UNTD Cdt 02/01/53, prom A/S/Lt 01/09/55 and Lt 01/09/57, thence to Ret'd List. (MC, WC).

Cdr Rodney Albert LYONS, CD*, RCN(Ret'd)

97 in Abbotsford, BC 05/04/23. Qual RCAF Sgt Plt in '44, prom Pilot Officer 04/44 and Flying Officer 10/44. Tsf'd to RNVR as S/Lt(A) in '44 and srv'd *HMS Seaborn*, RNAS Lossiemouth, RNAS St Merryn, *HMS Theseus* and *HMS Vengeance*. Tsf'd to RCNVR as Lt(P) 09/04/47, thence RCN(SSA) Lt(P) (sen 05/11/45)

in '47. Prom RCN LCdr(P) 05/11/53 and Cdr in '63. Srv'd *Magnificent*, *Shearwater*, RCAF Trenton, RCAF Centralia, *Star*, *Niagara* (USN Flight Safety Cse.), NSHQ, *Columbia*, *St Croix*(XO), RN Staff College, CFB Shearwater, 803 Squadron, VC-920 and VU-32(i/c). Flew last aircraft off *Bonaventure* 12/69. Ret'd 12/03/76. (WM, SR, *Chronicle Herald*, Canada's Naval Aviators)

Lt John Alexander McNEIL, RCN(R)(Ret'd)

81 in Toronto 19/05/23. Jn'd *Cataraqui* as UNTD Cdt 01/60. Prom S/Lt attached *York* 01/07/63 and Lt 01/07/65. Summer training at *Cornwallis*. Ret'd circa 1966. (WC)

S/Lt Ronald Lyle McPHERSON, RCN(R)(Ret'd)

91 in Severn, ON 12/01/23. Jn'd *Star* as UNTD Cdt 02/01/52. Prom S/Lt at *York* 01/05/54. To Ret'd List in '56. (WC)

Surg Lt John Frederick O'CONNOR, RCN

Former Member, 80 in Halifax 09/01/23. Jn'd *Scotian* as UNTD Cdt in '60. Tsf'd to RCN as A/Surg S/Lt (sen 01/09/61), prom Surg S/Lt 06/05/68 and Surg Lt 01/05/69. Resigned in '72. (WC. SR, *Chronicle Herald*)

Capt Harold Howard OTTO, CD*, RCN(Ret'd)

94 in Dartmouth, NS 04/01/23. Jn'd RCN(SSA) as A/Lt(E) 14/07/55. Prom RCN Lt(E) 14/07/56, LCdr 01/01/64, Cdr 01/07/67 and Capt 01/01/76. Srv'd *Magnificent*, *Stadacona*, *Niobe* (RNEC Manadon), *Niagara* (PG at MIT), NSHQ, *Bonaventure* (Cdr E), HMC Dkyd Hfx (ENO) Attache Iran and NEUA (i/c). Ret'd in '81. (WD, *Chronicle Herald*)

LCdr Frederick Arnold PERRY, CD, RCN(Ret'd).**

86 in Ottawa 01/02/23. Jn'd *Prevost* as UNTD Cdt 02/01/53 and later designated Inst Cdt. Prom RCN(R) Inst S/Lt 26/05/55 and Inst Lt 26/05/56. Thence to Ret'd List. Back to active service as RCN Inst Lt 09/09/58 and prom LCdr 01/07/66. Srv'd, inter alia,

D'Iberville, Stadacona, Royal Roads and CDLS(W)/USAF Academy. Ret'd in '88. (*Citizen, WC*)

CPO1 Larry David PHILLIPS, CD, RCN(Ret'd)**

86 in Upper Tantallon, NS 16/01/23. Jn'd RCN as OSEM in '59. Srv'd *Terra Nova, Granby, Margaree, Annapolis, Nipigon, Algonqutn, Preserver*, Sea Trg. Atlantic, FMG(A) and MARCOM HQ. Ret'd in '94. (WM)

CHAP CH2 John Philip ROMERIL, RCN(R)(Ret'd)

91 in Victoria 05/03/23. Jn'd *Cataraqui* as UNTD Cdt 02/01/53, prom S/Lt 01/05/55 and A/Lt 15/09/56. To Ret'd List as CHAP CH2 in '60. (WC)

LCdr Stirling MacNeill ROSS, CD*, RCN(Ret'd)

93 in Victoria 13/03/23. Jn'd *Royal Roads* 09/48 and designated RCN(R) Cdt 30'04'49. Prom RCN Mid(E) 01/05/51, A/S/Lt(E) 01/01/52, S/Lt(E) same date, Lt(E) 01/05/54 and LCdr 01/05/62. Srv'd *Niobe* (RNEC Manadon), *Magnificent, Cape Breton, Ste*

Therese, Stadacona, Terra Nova, COND, NDHQ and CDLS(W). Ret'd in '75. (e-Veritas)

Lt Bruce Duncan TENNANT, CD, RCN(Ret'd)

74 in North Vancouver 14/04/23. Jn'd *Discovery* as UNTD Cdt in '67. Tsf'd to RCN as Cdt in '67, prom S/Lt 02/05/69 and Lt 02/02/74. Ret'd in 1980. (WC)

Lt Edwin Charles TIERNEY, CD, RCN(Ret'd)**

80 in Pembina, AB 24/03/23. Jn'd RCN as OS in '61, CFR'd as S/Lt 01/05/74 and prom Lt 01/01/77. Ret'd circa '98. (*Citizen*)

Cdr Edward James Michael YOUNG, CD*, RCN(Ret'd)

Former Member, 85 in Florida 04/02/23. Merchant Navy trained, jn'd RCN(R) on CND as A/S/Lt 19/05/59, Tsf'd to RCN and prom S/Lt 19/05/60, Lt 19/04/63, LCdr 01/01/71 and Cdr 01/01/77. Srv'd *Cornwallis, Cape Scott, Cayuga, Stadacona, Niobe* (S/M Trg., *HMS/M's Truncheon, Porpoise, Opportune*), *Onondaga* and *Ottawa* 3(i/c). Ret'd in '86. Editor *Starshell* 1993-97 and Volume 10 *Salty Dips*. (FH, *Citizen*)



*Sailors onboard HMCS Montreal prepare the Foc's'le for the entrance of Souda Bay
(Photo: Corporal Connor Bennett, CAF photo).*