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PUBLIC OPINION MATTERS: WHY CANADA NEEDS SUBMARINES

Lieutenant-Commander Ashley N. Hunt

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By Lieutenant-Commander Ashley N. Hunt

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AIM

1. The question of why Canada needs submarines continues to be an emotive topic in politics, media and in the Canadian population writ large. Those who work in the maritime world understand the importance of submarines, because they understand the complexities of the underwater domain, and that the only way to master the underwater domain is to be in it. The Royal Canadian Navy's (RCN) strategic outlook policy, *Leadmark*, acknowledges the importance of the underwater domain through the continued employment of the Victoria Class Submarines, and by postulating the need for submarines beyond the service life of the current class. Despite the RCN's commitment to a continued submarine service, the question of why Canada needs submarines persists. Most Canadians do not work in the maritime industry and have limited exposure to what submarines do for Canada. The aim of this analysis is, firstly, to develop a clear message for the Commander RCN (CRCN) that answers the question of why Canada needs submarines. Secondly, the discussion highlights why the RCN needs to develop a messaging strategy regarding the value of submarines with the purpose of gaining the support of Canadians. The recommendations herein aim to provide some solutions for how Canada can successfully proceed with promoting the requirement for this capability.¹

INTRODUCTION

2. Canada's submarine service has a long history, dating back to 1914 when British Columbia purchased two conventional submarines from a Seattle Shipyard. Despite this long history, the nation's support for the submarine service has vacillated and, without fail, whenever Canada is forced to examine a submarine replacement option, the nation questions whether the capability is required at all. In the last 107 years, Canada has owned conventional submarines, wavered on the possibility of operating nuclear submarines, rented submarines from its allies to maintain antisubmarine warfare and submarine operating capability, and capitalized on the assets of its allies to maintain its proficiency in the above-mentioned skillsets.² The fact is that employing humans underwater for weeks or months at a time has inherent risks, so the submarine is correspondingly complex and therefore the purchase and maintenance of this complex machine requires a large investment. The roles and capabilities of these assets are, however, typically shrouded in secrecy, making it difficult to showcase the submarine's capabilities to Canadians. Unfortunately, this means that the negative news makes it to the media, but the positive accomplishments rarely do. These factors make it exceedingly difficult to justify such a large expenditure for a small and resource limited

¹ The author of this Service Paper is a serving Submariner in the RCN. She has been working with, sailing in, and supporting the Victoria Class since 2010 and therefore has inherent knowledge of the Victoria Class Submarines, the Canadian Submarine Enterprise, and the capabilities of submarine operations. She has endeavoured to rely on doctrine and open-source information; however, where appropriate, she has relied upon her knowledge and experience to provide supporting evidence.

² Julie H. Ferguson, *Through a Canadian Periscope*, 2nd ed. (Toronto, Canada: Dundurn Press, 2014).

navy. As information availability expands with the growth of social media and 24-hour news, Canadian citizens demand more transparency and can easily express their formed opinions to influence political decision-makers. It is therefore absolutely necessary that the RCN define clearly the roles for its submarine service, for both Canada's politicians and Canadians.

3. The analysis and discussion herein provides justification for why Canada must continue to operate submarines beyond the service life of the Victoria Class, and why communication strategies must be developed to gain support for a future submarine capability. This analysis is built upon an exploration of the role of submarines in the RCN and CAF strategic policy documents, the growing body of evidence that indicates the nature of maritime warfare will be increasingly driven into the underwater domain, and an examination of the role that submarines play in Canada's international relationships. Clearly, public opinion cannot and will not be the only driving factor that determines the assets that the CAF needs or how the assets are employed, there are other important factors required for such decision making. This paper does not postulate on the type of submarine required or the appropriate procurement method to acquire future submarines, although those considerations will have a strong influence on Canada's ability to maintain its submarine service. It does, however, provide several recommendations regarding what is required to garner Canadian public support for a future submarine fleet.

DISCUSSION

4. *Strong, Secure, Engaged* (SSE) and *Leadmark 2050* together form an exciting vision of the current and future RCN and provide evidence that submarines will continue to play a role in Canada's maritime defence strategy. SSE highlights the need for submarines to achieve a balanced blue-water navy, identifies them as a tool for intelligence collection, and describes submarines as an important part of the system-of-systems required for maritime domain awareness. It calls for the modernization of the Victoria Class, but stops short of confirming any intentions related to a future submarine program.³ SSE's lack of commitment to future submarines, coupled with the announcement of the National Shipbuilding Project that did not include a Victoria Class replacement strategy caused speculation in Canada about whether or not submarines would play a role in the future fleet.⁴ The vagueness surrounding a Victoria Class replacement project can certainly be understood given the political and emotive nature of the topic, but there is a growing need to provide clarity and begin to promote the institution's intentions related to the role of future submarines in Canada's defence strategy. The reality is that submarine ownership is an expensive endeavour, and Canadians deserve to understand why Canada needs to invest in it.

5. The CAF vision is built upon the three fundamental principles: being *strong at home*, *secure in North America*, and *engaged in the world*.⁵ Examining the principles of

³ Canada, *Strong Secure Engaged* (Canada: Department of National Defence, 2017).

⁴ Dave Perry and Jeffrey Collins, *Podcast - does Canada Need New Submarines* (Canada: Canadian Global Affairs Institute, 2019).

⁵ Canada, *Strong Secure Engaged* (Canada: Department of National Defence, 2017).

SSE through a maritime capability lens offers significant evidence to support the need for submarines. *Strong at home* requires that Canada's sovereignty be well-defended. If sovereignty is taken to mean *supreme power* [over an area], *freedom from external control*, and having a *controlling influence*,⁶ then in terms of maritime power, sovereignty can be correlated to sea command, or the capability to exercise sea control over its territorial waters.⁷ Submarines play a crucial role in protecting and projecting the sovereignty of a nation. A modern submarine that is capable of quietly patrolling Canadian waters with cutting edge sensors and weaponry poses a formidable threat, and the mere possibility of the presence of such a submarine can be sufficient to deter even the most powerful adversary from entering Canadian waters. In partnership with the capabilities of the United States Navy submarine force, the security of the underwater domain of North America is strengthened significantly, supporting the principle of *secure in North America*. Canada's ability to project this unique capability for the purpose of sea control in aid of an ally, or intelligence collection in support of Canadian or coalition operations abroad keeps Canada's navy *engaged in the world*.

6. *Leadmark* lends context to the RCN's role in supporting the fundamental principles that are articulated in SSE. It answers the question of why Canada needs a navy, and what each RCN asset brings to the maritime defence domain of today and in the foreseeable future. It postulates that the RCN must be guided by the notions of *protect, prevent and project*.⁸ The navy is relied upon to *protect* Canadian sovereignty, North American maritime approaches, and the peace of the global maritime domain. It must be able to *prevent* conflict through deterrence and to *project* these capabilities beyond territorial waters in support of global stability. *Leadmark* provides a description of the value of submarines in the RCN:

Unique among the assets in the [CAF] inventory, submarines are weapons of strategic deterrence whose presence – actual or inferred – can alter an adversary's decision making across an entire maritime theatre of operations. They are the RCN's ultimate warfighting capability, a platform through which Canada can control a substantial ocean space or deny it to others. Moreover, Canada's submarines can prosecute an assigned mission to successful completion without being visible to other nations or the Canadian people – an invaluable asset when discretion in military action is needed.⁹

7. It is clear now that submarines are a capable platform for intelligence gathering, surveillance, and reconnaissance (ISR) and pose a large enough threat, real or inferred, to have an immense deterrent effect against even the most powerful of adversaries. A submarine can exercise these capabilities at home or abroad to protect Canada or its

⁶ Merriam-Webster, "Sovereignty," <https://www.merriamwebster.com/dictionary/sovereignty#synonyms>.

⁷ Canadian Forces College, "Naval Doctrine Manual" Canadian Forces College, Toronto, 2006).

⁸ Canada, *Leadmark 2050 - Canada in a New Maritime World* (Canada: Department of National Defence, 2016).

⁹ Canada, *Leadmark 2050 - Canada in a New Maritime World* (Canada: Department of National Defence, 2016). 39.

allies. But why is this important to Canadians and why should Canada invest in this level of protection and force projection in the maritime domain? There are three important reasons: Canada is a maritime nation; global economies are highly reliant on maritime commerce; and the future of maritime warfare is underwater.

8. Canada is a maritime nation, it has three ocean borders and the longest coastline in the world. It has the second largest continental shelf and the fifth largest exclusive economic zone.¹⁰ This is a lot of landscape for a small navy, even with the partnerships between the RCN, the maritime component of the Royal Canadian Air Force, and the Canadian Coastguard. These three organizations are highly capable of monitoring and protecting the ocean's surface and air space, but have limited capabilities in the underwater domain. As climate change continues to make the Canadian Arctic waterways more accessible, these resources will be spread thinner yet. The critical advantage that submarines bring to the table is that they are the only asset in the RCN inventory that's influence reaches far beyond what its sensors can see. As stated in *Leadmark*, the possibility of a submarine in the water impacts the decision-making of adversaries. In this regard, a single submarine can have more influence on the maritime domain than an entire fleet of surface ships. This highlights the submarines real value-for-money.

9. Global economies rely on the movement of goods through the maritime domain, and Canada's economy is no exception. In 2018, Canada's product exports were valued at \$431 billion, and product imports were valued at \$369 billion.¹¹ Around 90% of these goods are moved over the ocean, with around 20 million containers travelling on ships across the world every day.¹² An increase in the rate of piracy puts more emphasis on the need for security on the world's oceans. The RCN has a role to play in protecting the import and export of these goods in Canadian and allied waters, and submarines are a powerful tool for tracking and interdicting nefarious vessels.

10. Maritime warfare is increasingly being driven underwater. The fast pace of technological advancement means that sensors are becoming more sophisticated and are increasing in range. Sensor integration is allowing for larger, real-time collation of the maritime picture, weapons are being developed with increasing reach, precision and lethality, and the use of unmanned vehicles above and below the oceans surface is making it nearly impossible for surface ships to hide or maintain the element of surprise. In the underwater domain, the sensor capabilities have improved immensely, but so has the technology that supports the stealth characteristics of submarines at sea, so submarines have the distinct advantage of being able to transit in and out of an area of interest to conduct ISR activities without being detected. Global powers like China and Russia are making significant expenditures on offensive and defensive area denial around

¹⁰ Canada, *Strong Secure Engaged* (Canada: Department of National Defence, 2017). 34.

¹¹ The Observatory of Economic Complexity, "Canadian Economic Statistics 2018," <https://oec.world/en/profile/country/can/?depthSelector1=HS6Depth&subnatTradeValueSelector=tradeScale0> (accessed 1 February, 2021).

¹² Rose George, *Ninety Percent of Everything: Inside Shipping, the Invisible Industry that Puts Clothes on Your Back, Gas in Your Car, and Food on Your Plate*, 2nd ed. (United Kingdom: Henry Holt, 2013).

their borders, including advanced submarines and sophisticated underwater weaponry.¹³ The best defence against an enemy submarine is a submarine, because no other asset in the defence inventory has the capability to detect and engage in the underwater domain with as much skill as a modern submarine with a highly competent crew. Traditional maritime powers like the United States, United Kingdom, China, Russia, and Japan have been expanding and improving their submarine fleets, and smaller countries have also been investing in these assets, particularly in the Asia-Pacific region.¹⁴ If Canada chose not to maintain its submarine capability it would be falling significantly behind the trend of the maritime warfare domain, and would be losing a critical asset not only for the protection of Canada but also for use in support of its allies.

11. There are clearly a myriad of reasons why Canada needs submarines, the difficulty that remains is bundling this information in a way that will resonate with Canadians, and finding a way to garner support from the population for the current and future Canadian submarines. If Canadians care that the country's borders are well-defended from enemy threats, and that the country is playing an active role in the peace and security of the world, then the message is this: a submarine is the only asset in the RCN inventory that can *single-handedly* deter enemies from entering our waters, can covertly monitor the maritime domain and bring real-time offensive action when required, and can mobilize these capabilities in support of our allies for the promotion and maintenance of global peace and good order.

12. Earning the support of Canadians will not be an easy task, particularly after 20 years of mainly negative media coverage of the Victoria Class. These submarines took approximately a decade to reach a steady operational state, and the class has been marred by extended maintenance delays, accidents, and numerous periods of time where none of the four submarines were available for operations. Despite several successful deployments, media coverage of the Victoria Class has been almost exclusively negative. So how do we now announce a submarine replacement project? SSE and the Naval Shipbuilding Strategy have already dedicated enormous investments in the RCN, not accounting for the financial requirements of a submarine replacement project. The situation is made more difficult in a time where Canadians are focused on the global pandemic and the resulting economic recovery requirements. All the while the Victoria Class inches closer to end-of-life. This class is currently expected to remain in service until the mid-2030's, so the RCN cannot afford to wait to begin the procurement process for its replacement.

13. The RCN absolutely must find ways to showcase the capabilities of the Victoria Class to the Canadian population. It must work with marketing and public affairs experts who can assist in rebranding the submarine service in a positive light, and can show Canadians all of the important roles that only these assets can fill. Today's submarine service must be willing to welcome the spotlight, and let go of the old notion of the *silent service*, where missions were shrouded in secrecy. The submarine force has been trying

¹³ Canada, *Leadmark 2050 - Canada in a New Maritime World* (Canada: Department of National Defence, 2016). 30.

¹⁴ Andrews Davies, "Up Periscope the Expansion of Submarine Capabilities in the Asia-Pacific Region," *RUSI Journal* 152, no. 5 (October, 2007), 64-69.

to do this for the past decade or so, but positive stories are quickly overshadowed by the next extended repair or gap in availability. It is time to bring in some experts to develop a marketing strategy; because announcing another major RCN procurement, particularly for submarines, will not be well received by Canadians.

CONCLUSION

14. Canada needs submarines, and the RCN needs to be able to articulate this need to the Canadian population. Although it is understood that what Canadians want does not dictate what the RCN receives, the love-hate relationship that Canada has with its submarine service warrants a deliberate effort by the RCN in advertising the incredible capabilities and value of this essential military asset. This is particularly critical in a time when the country is focused on a global pandemic and a major economic recovery that will put extra pressure on any announcements for additional funding to the RCN for an asset that has not yet been publicly announced. Submarines are an essential RCN asset, and the public deserves to know why.

RECOMMENDATIONS

15. The RCN should employ marketing and public affairs experts to develop a strategy to communicate the value of its current submarines, to help Canadians understand why we invest in this asset, and to help Canadians understand the complexities and risks involved. Canadians need to understand why this asset is important, and why it is such a large investment.

16. The RCN should be as transparent as possible with the Canadian public about the value that new submarines will bring, capitalizing on the capabilities that Canadians deem most important.

17. The RCN should employ marketing and public affairs experts within the submarine replacement project team to develop and maintain a messaging strategy to rebrand Canada's submarine service in a positive light.

18. Finally, when planning for the future submarine fleet, the RCN must rationalize the roles of the new submarines against the number of hulls required to ensure that Canada does not experience gaps in submarine availability that has been seen with the Victoria Class. The RCN must heed the lessons of the previous 20 years of submarine ownership, and make a plan to overcome the shortfalls of the past.

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