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Has Canada Missed the Boat in the Indo-Pacific? The Requirement for a Canadian Submarine Fleet

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JCSP 49

Service Paper

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PCEMI n° 49

Étude militaire

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JCSP 49 - PCEMI 49

2022 - 2023

Service Paper – Étude militaire

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HAS CANADA MISSED THE BOAT IN THE INDO-PACIFIC? THE REQUIREMENT FOR A CANADIAN SUBMARINE FLEET

AIM

1. On November 27th, 2022 *Canada's Indo-Pacific Strategy* was released to signify the economic and strategic challenges of the Indo-Pacific region. In an area of the world where the assets required for hard power are expanding at alarming rates, Canada can no longer rely on their soft power alone to garner a strategic effect. Noticeably, the Indo-Pacific Strategy only discusses augmenting naval presence in the region by utilizing frigates, with no mention of submarines. The release of Canadian military strategic documentation in the last two decades illustrates the known power projection that a submarine fleet yields, yet throughout this same time period, the relevance of a submarine fleet in Canada has been an ongoing debate.¹ This paper aims to demonstrate the importance of possessing a functional submarine fleet as identified in Royal Canadian Navy (RCN) doctrine and provide illustrations on how submarines could be utilized to further the strategic objectives identified in *Canada's Indo-Pacific Strategy*.

INTRODUCTION

2. The interpretation of the future operating environment for the RCN has been documented through strategic doctrine publications. The intent is to first explore these publications that have a direct correlation in shaping the future force composition and operational objectives for the RCN. The concepts that define a capable Navy have persevered in doctrine throughout the last twenty years and the requirement for a submarine fleet has remained consistent. As Canada seeks to expand its international influence and build stronger partnerships within the Indo-Pacific region, there is a sizable gap between Canadian maritime doctrine and the capability actually being delivered.

3. With the growing great power competition, the RCN must inform the Government of Canada (GoC) on the practicality and significance of submarines. It is crucial to showcase a submarine's ability to contribute to national security objectives such as collective defense in contested regions, protection of vulnerable supply chains, and support for international peace and security efforts - many of which are outlined in the Indo-Pacific Strategy. Notably, in a 2017 report, the Standing Committee on National Security and Defence presented a roadmap for addressing strategic challenges facing Canada in the 21st century. According to Dr. Boutilier, the RCN's former Asia-Pacific² advisor, the Navy's current state is in "disastrous decline."³ Thus, it is imperative to take immediate action and strengthen the Canadian maritime component with a credible submarine force to support allies and deter adversaries that threaten the international rules-based order in the Indo-Pacific.

¹ Byers, Michael, 'Does Canada Need Submarines?' *Canadian Military Journal*, 14 July 2008

² The RCN used several different names to define the Indo-Pacific region over the last twenty years, and these are captured throughout this essay. They include: Asia-Pacific, Northeast Asia, and most recently Indo-Pacific. p.30

³ Standing Senate Committee on National Security and Defence. *"Reinvesting in the Canadian Armed Forces: A Plan for the future Report."* Senate of Canada, 42nd Parliament, 1st session, 2016.

DISCUSSION

Review of Canadian Military Strategic Doctrine

4. In 2001 the Department of National Defence (DND) released *Leadmark: The Navy's Strategy for 2020* (LM 2020). There are many passages throughout this publication suggesting that the RCN identifies the credible threat that submarines pose, such as “the threat from submarines will continue into the future and ASW [anti-submarine warfare] is difficult at the best of times, given the advantages inherent to hostile submarines.”⁴ LM 2020 acknowledges that “Northeast Asia... is [one] of the more heavily armed regions in the world, particularly with respect to naval power.”⁵ Although, one of the most notable passages in the publication is the discussion of future technology, including submarines, stating “Canada must sustain and upgrade the naval capabilities of the Canadian Forces. To do less, would unduly place in jeopardy not only Canada's ability to participate in multinational stability operations, but the lives of the sailors and airmen charged to carry out Government policy.”⁶ At the time of publication HMCS *ictoria* had just recently been commissioned into the RCN on December 2nd, 2000.⁷ Overall, the purpose of *Leadmark 2020* was to provide a framework for strategic planning, to ensure that the Navy remained responsive and adaptable to evolving challenges in the maritime environment.

5. In 2005, building on LM 2020, *Securing Canada's Ocean Frontiers: Charting the Course from Leadmark* was released as the next strategic military doctrine for the RCN. This publication served to identify the vulnerabilities faced by the RCN that were overlooked in LM 2020, such as, “of the three warfare disciplines, the underwater battle is still the one that is most exploitable by an adversary. Thus, a submarine that can deny the enemy the use of his own waters while the surface and air forces support those ashore is a most useful and deadly asset.”⁸ This strategy aimed to address various challenges such as climate change, economic development, sovereignty, and security, among others, while also fostering collaboration between government, industry, and other stakeholders to achieve a shared vision for Canada at home and abroad in the maritime domain. Of particular interest in this document is the statement that the *ictoria* class submarines (VCS) will be nearing end of service in 2025.⁹

6. In 2016, *Canada in a New Maritime World: Leadmark 2050* (LM 2050) takes aim at the changing dynamic of global power and the role the maritime domain plays in issues “central to Canada's vital interests.”¹⁰ Following in the wake of the United States of America's (USA) 2010 National Security Strategy and the Pivot to Asia Strategy¹¹, the RCN acknowledges in LM 2050 the importance of the Asia-Pacific region and the critical role the sea plays in connecting vital trading partners. Since this pivot, up to sixty percent of the United States Navy (USN) has been

⁴ Government of Canada, ‘*Leadmark: The Navy's Strategy for 2020*’.p.154

⁵ Ibid, p.D5

⁶ Ibid, p. D13

⁷ Government of Canada, Royal Canadian Navy History. “HMCS Victoria.” Accessed February 25, 2023. <https://www.canada.ca/en/navy/services/history/ships-histories/victoria.html>

⁸ Government of Canada, ‘*Securing Canada's Ocean Frontiers: Charting the Course from Leadmark*’p.35

⁹ Ibid, p.45

¹⁰ Government of Canada, ‘*Canada in a New Maritime World: Leadmark 2050*’. Executive Summary, p.5

¹¹ Milot-Poulin, Jeanne, Sarfati, Rachel, and Paquin, Jonathon, ‘The American Strategic Pivot in the Indo-Pacific’. *Network for Strategic Analysis*, 19 October 2021.

devoted to the Pacific region¹², while Canada lacked the military means necessary to provide an actual effect. LM 2050 further explains that “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.”¹³ All these factors are likely what caused the RCN to deploy a VCS to Asia-Pacific for the first time in 2018. Finally, in LM 2050, in contradiction to *Securing Canada’s Ocean Frontiers: Charting the Course from Leadmark*, the publication discusses the VCS’s life extension to mid-2030s, ten years longer than previously planned.¹⁴

7. Released in 2017, *Strong, Secure, Engaged: Canada’s Defence Policy* (SSE) was written to ensure that Canada has a modern, flexible, and well-equipped military that is able to protect the country's security and interests at home and abroad. The policy aims to achieve this by investing in new equipment and technology, but states that the investment in the RCN regarding submarines is only to “operate and modernize the four Victoria-class submarines,”¹⁵ with no further mention of the future submarine fleet post mid-2030s. Overall, the intent of SSE is to ensure that Canada is well-equipped to protect its citizens and to contribute to global peace and security efforts.

8. With SSE being the last military strategic doctrine released, the concerning reality is the absence of any commitments for a timely delivery of any new submarines that would provide a future, robust naval asset capable of carrying out the GoC’s strategic aims both at home and abroad in the maritime domain. The disconnect between what the RCN demonstrates as critical in doctrine differs from what the GoC deems as necessary for future warfare. This fact becomes apparent when reading Canada’s Indo-Pacific Strategy and noting the requirement for naval presence, but thoughtfully only mentioning frigates and declining to mention the role of Canadian submarines in the region. While the four VCSs have been plagued with controversial headlines, from mechanical difficulties, soaring costs and extended deep maintenance periods, the Canadian population has been dissuaded on the necessity of a submarine fleet.¹⁶ The reality is, to be relevant in the Indo-Pacific, a submarine fleet is necessary.

Submarine Operating Environment in the Indo-Pacific

9. The maritime operating environment in the Indo-Pacific is complex and dynamic, with a range of regional and global actors competing for influence and resources. The region includes some of the busiest shipping lanes, strategic chokepoints and some of the most contested water in the world. Nations present in this region comprehend the significance of controlling the underwater realm and are allocating a substantial amount of resources towards rejuvenating and expanding their submarine fleets. The number of submarines in the Indo-Pacific region are difficult to estimate with complete accuracy. However, RCN Asia-Pacific Advisor Dr. Boutilier is quoted estimating “that there are probably more than 200 operational submarines in the Indian

¹² Ibid

¹³ Government of Canada, *Canada in a New Maritime World: Leadmark 2050*.p.39

¹⁴ Ibid, p.42

¹⁵ Canadian Armed Forces, *Strong, Secure, Engaged: Canada's Defence Policy*. p.35

¹⁶ Byers, Michael, ‘Does Canada Need Submarines?’ *Canadian Military Journal*, 14 July 2008

and Pacific Ocean area of operation alone, and more are being built for regional navies.”¹⁷ HMCS *Winnipeg* a *Halifax* class frigate was recently operating in the South China Sea with Australian, Japanese and American allies and the ship’s Captain was quoted stating, “These exercises... demonstrate our interoperability with other navies and provides opportunities to learn as well as prove our abilities to work seamlessly together. It is a prime example of our motto “One with the strength of many”; working together, we are stronger.”¹⁸ However, the extreme imbalance of military might between Canada and allies begs the question, has Canada become too reliant on allies in the region to achieve Canadian strategic objectives?

10. The USA, Canada's closest ally, acknowledges the significance of submarine power projection in the Pacific and disclosed that they have approximately thirty submarines constantly operating in that area.¹⁹ With over sixty-six nuclear submarines, the USN has a dominant role in providing undersea deterrence in the Indo-Pacific. The USA also understands the requirement to maintain this key component capability and in 2022 allocated five billion dollars in order to procure Columbia Class Ballistic Missile Submarines (SSBN) for delivery by 2031.²⁰ Other notable ally nations in the region operating submarines are Japan who currently have twenty-one submarines²¹, India with nineteen²², and South Korea with twenty-two²³. Australia, a country smaller in population than Canada, has a current fleet of six Diesel-electric attack submarines, with a commitment to replace these with at least 8 nuclear power attack class submarines.²⁴

11. After decades of the USA having a hegemonic position over global security, China as a rising superpower, has taken note of Western presence in their maritime operating environment. An American political scientist is quoted as stating, “when a great power increases its military budget, even for defensive purposes, challengers feel compelled to respond in kind.”²⁵ China has responded. They have been investing heavily in expanding their submarine force as a key component of the country’s military strategy. Estimated to have over seventy operational submarines, including thirteen nuclear platforms²⁶, the People’s Liberation Army Navy (PLAN) understands that in order to project power and control vital waterspace, submarines are the best-suited platform for the region’s complex security challenges.

¹⁷ Standing Senate Committee on National Security and Defence. *"Reinvesting in the Canadian Armed Forces: A Plan for the future Report."* Senate of Canada, 42nd Parliament, 1st session, 2017. p.36

¹⁸ United States Navy, ‘U.S. Navy Supports Australia’s Indo-Pacific Deployment Alongside Canada, Japan in the South China Sea’.

¹⁹ Ben Werner ‘Indo-Pacom Commander Says Only Half Of Sub Requests Are Met’. *USNI News*, March 27, 2019.

²⁰ Moriyasu, Ken, ‘Indo-Pacific: The Front Line of US and China next-Gen Submarines’.

²¹ Janes Information Group. *Fighting Ships: Japan Submarines*. London: IHS Markit, 2022.

https://customer.janes.com/CountryIntelligence/Countries/Country_963/navy#equipment-in-service

²² Janes Information Group. *Fighting Ships: India Submarines*. London: IHS Markit, 2022.

https://customer.janes.com/CountryIntelligence/Countries/Country_955/navy#equipment-in-service

²³ Janes Information Group. *Fighting Ships: South Korea Submarines*. London: IHS Markit, 2022.

https://customer.janes.com/CountryIntelligence/Countries/Country_969/navy#equipment-in-service

²⁴ Janes Information Group. *Fighting Ships: Australia Submarines*. London: IHS Markit, 2022.

https://customer.janes.com/CountryIntelligence/Countries/Country_886/navy#equipment-in-service

²⁵ Drezner, Daniel W., ‘The Perils of Pessimism: Why Anxious Nations Are Dangerous Nations’. *Foreign Affairs*. August 2022

²⁶ Janes Information Group. *Fighting Ships: China Submarines*. London: IHS Markit, 2022.

https://customer.janes.com/CountryIntelligence/Countries/Country_918/navy#equipment-in-service

12. Out of Canada's four VCS, there has been only one operational deployment to the Indo-Pacific region, which was in 2018 when HMCS *Chicoutimi* deployed for seven months.²⁷ The RCN's decision to send a submarine to this region was likely driven by a combination of strategic, diplomatic, and operational considerations, yet no follow-on deployments have been announced, even with the release of *Canada's Indo-Pacific Strategy*. Dr. Boutiller is quoted as stating, "there is no doubt that the best way to defend from a submarine presence is to have submarines of our own"²⁸ yet, Canada has deployed only a single submarine to one of the most disputed and densely populated regions for submarines. Apart from detecting and deterring enemy submarines, there are various other strategic applications for a Canadian fleet of submarines.

Utilizing Submarines for Strategic Objectives in Indo-Pacific Strategy

13. The GoC has recognized growing tensions associated to great power competition occurring in the Indo-Pacific, and is striving to increase engagement in the region to safeguard national interests and promote stability. The strategy states, "Canada's engagement with countries in the Indo-Pacific region will be guided by our interests and consistent with our values,"²⁹ yet we often rely on our allies to promote or carry out the hard-power objectives that Canada is keen to achieve. By integrating Canadian submarines, the five strategic objectives outlined in Canada's Indo-Pacific Strategy have the potential to enhance Canada's international recognition as a contributor in the region.

14. The strategic objectives to promote peace, resilience and security and to be an active and engaged partners to the Indo-Pacific both touch on similar themes.³⁰ Submarines can assist with maritime security, conduct collaborative training exercises with allies, conduct intelligence gathering and provide regional diplomacy with a significantly smaller draw on RCN personnel in comparison to a frigate. The crew size of a VCS submarine is approximately one-fifth the size of a frigate, meaning the utilization of personnel for strategic effect is considerably reduced. The submarines could be called upon to supplement already existing operations, such as enforcing United Nations Security Council Resolutions against North Korea conducted during Operation Neon. The GoC states that China has become "more assertive"³¹ and "grows in influence"³² in the region, and the addition of Canadian submarines could serve as an additional deterrence to uphold the international law of the sea. Finally, Canadian submarines could be used to bolster the intelligence gathering in the region for Five Eyes allies.

15. The next objective is to expand trade, investment and supply chain resilience. With more than one-third of all global economic activity occurring in the region, and ninety percent of global commerce moving by sea³³, a Canadian submarine could serve as an instrument of

²⁷ Government of Canada, Royal Canadian Navy History. "HMCS Chicoutimi." Accessed February 25, 2023. <https://www.canada.ca/en/navy/corporate/fleet-units/submarines/victoria-class/chicoutimi.html>

²⁸ Standing Senate Committee on National Security and Defence. *"Reinvesting in the Canadian Armed Forces: A Plan for the future Report."* Senate of Canada, 42nd Parliament, 1st session, 2017. p.36

²⁹ Government of Canada, 'Canada's Indo-Pacific Strategy' p.6

³⁰ Ibid, p. 14,22

³¹ Government of Canada, 'Canada's Indo-Pacific Strategy' p.14

³² Ibid,

³³ Royal Canadian Navy, 'A Global Navy in an Era of Rapid Change'.

national power on an international stage by protecting these critical trade routes. Submarines can play an important role in maintaining maritime security by detecting and tracking vessels, conducting surveillance and reconnaissance operations, and deterring potential threats.

16. Third, invest in and connect people. The strategy states, “Investing in ties between Canadians and people from the region lies at the heart of Canada’s Indo-Pacific Strategy.”³⁴ By deploying submarines, Canada can demonstrate its commitment to its regional partners, including Australia, Japan, and South Korea through strategic partnerships. Naval exercises serve as an opportunity to build stronger relationships with these countries and enhance cooperation on security and defense issues. This would also allow Canada to continue to refine its inter-operability between naval platforms in the event of elevated levels of conflict.

17. The final objective is building a sustainable and green future. The strategy states that Canada will, “support oceans management initiatives and expand measures against illegal, unreported and unregulated fishing in the Indo-Pacific.”³⁵ During the 1995 Turbot Crisis, the illegal fishing off the coast of Newfoundland, HMCS *Cornerbrook* was tasked to surveil the area. LM 2020 states that the threat of being detected by the submarine acted as a deterrence to the Spanish and American fishing vessels, eliminating overfishing in Canadian waters.³⁶ Covert patrols could be increased in areas of the Indo-Pacific where illegal fishing is known to occur.

CONCLUSION

18. LM 2050 states, “submarines are likely to remain the dominant naval platform for the foreseeable future, and hence are an essential component of a balanced combat-effective navy,”³⁷ yet there are no plans for a future submarine platform once the VCS reaches end of life. Canada is a pacific nation that wishes to operate in the Indo-Pacific for the foreseeable future, yet with the naval capabilities in a steady decline and possess no plans to recapitalize on one of the best power projectors in the maritime domain. Through RCN doctrine, the requirement for submarines remains clear, yet the challenge exists in convincing Canadians on the strength that these platforms possess and how they are critical to operate in the Indo-Pacific.

RECOMMENDATION

19. Protect the current RCN submarine capabilities. This includes ensuring the RCN submariners remain proficient in operating submarines, ensuring VCSs are fully mission capable, and regaining the Canadian population’s confidence in their necessity.

20. Prevent a naval asset gap between the VCS and Canada’s next submarine fleet. Meaning, that is the RCN wants to ensure they maintain the capability, they must take prompt action to secure the acquisition of a new fleet of submarines now.

³⁴ Government of Canada, ‘*Canada’s Indo-Pacific Strategy*’. p.19

³⁵ Ibid, p.21

³⁶ Government of Canada, ‘*Leadmark: The Navy’s Strategy for 2020*’. p.64

³⁷ Government of Canada, ‘*Canada in a New Maritime World: Leadmark 2050*’. p.50

21. Project the requirement of a submarine fleet to the GoC by demonstrating how critical these assets are to the Indo-Pacific region. This could be demonstrated by once again deploying a VCS to the Indo-Pacific in response to the Indo-Pacific Strategy.

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