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Let's Make a Real Contribution: Canada's Requirement for Amphibious Assault Ships

Major John Natynczyk

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Major John Natynczyk

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LET'S MAKE A REAL CONTRIBUTION: CANADA'S REQUIREMENT FOR AMPHIBIOUS ASSAULT SHIPS

AIM

1. The aim of this paper is to reinvigorate senior military and political discussions for Canada's need to procure amphibious assault ships in its near future. It will discuss the broad spectrum of capabilities these modern platforms would bring to the Canadian Armed Forces (CAF), enabling it to fulfill its mandate as outlined in the Canadian Defence Policy. The paper will not discuss or recommend specific platforms but emphasize the requirement for the cross-platform advantages and situations where this joint capability will provide a meaningful contribution in today's rapidly changing environment both at home and around the world. The information included will benefit the 'Conceive' phase of The Defence Model and Force Development System managed by Chief Force Development.

INTRODUCTION

2. Since 2014, the world's international security balance has been upheaved by Russia's invasion of Ukraine, China's increasingly overt espionage, political interference and aggression, and a global competition for transportation, energy and food resources. Renewed great power competition has seen multiple 'dormant' countries move to reinvigorate their national and military power. The CAF's lack of strategic capabilities and brand of 'contribution warfare' will soon see it left out of the conversation by allies and partners who are serious about defence and security. The CAF requires the capability to independently project and sustain combat power strategically if it desires to remain relevant on the international security stage. This paper will review Canada's past surrounding amphibious assault ships and the current national shipbuilding strategy for background context. It will discuss the capabilities of strategic sea lift and force projection, amphibious capability, enabling of joint operations, command and control (C2), medical facilities, and support to land operations. Both contemporary and future situations will be discussed to exemplify the practicality and diverse applicability of the joint capabilities provided. Certain elements of PRICIE+G will be discussed to better understand the feasibility and impact these procurements may have on the rest of the CAF and its operations. Canada's limited defence budget instills a procurement culture of getting the most value for the dollar in terms of breadth of capabilities. The strength of these platforms is their versatility across a broad spectrum of operations and tasks from peace time to full spectrum operations.

DISCUSSION

3. As this paper will make reference to generic amphibious assault ships, it is important to provide an overview of what these ships consist of. In general, "Common features of this type of vessel include a large flight deck for helicopters or vertical take-off/landing (VTOL) fighter aircraft, large troop and equipment transport capacity, aircraft hangars, and a well deck for launching amphibious vehicles and landing craft."¹ Modern ships have relatively small crews because of enhanced digital systems and have the capacity to embark between 500-1000 soldiers in the landing force, plus the aircraft flight and support crew. In a Canadian army context this

¹ Christopher Cowan. 2014. "A New 'Big Honking Ship': Why Canada Should Procure An Amphibious Assault Ship (Part I/V)." NATO Association of Canada.

landing force size equates to a mechanized battle group (BG). There are several classes of amphibious assault ships, with different configurations and nuances. Most commonly the variants are designated as either landing helicopter assault (LHA), landing helicopter dock (LHD), landing platform dock (LPD), and landing ship dock (LSD) variants. The difference in variants is based on their facilities for aircraft and the configuration of a well dock.

4. The purpose of amphibious assault ships, as described by Andrea Lane are "...to transport and launch troops and vehicles via ship, as well as the launching of ground-targeted weapons from the sea"² According to Schulyer Liebensborn, the ship "is designed and engineered to operate either as a critical part of a group, or operating alone in forward, hostile water"³. Due to the catastrophic severity of the loss of an amphibious ship with an embarked landing force, they are commonly escorted as part of an amphibious task group, including surface combatants and potentially submarines. Christopher Cowan explains, "Amphibious assault ships tend to operate as focal points of amphibious naval task forces and form the backbone of many navies' force projection capabilities."⁴

5. Canada is not a stranger to the capabilities and benefits offered by these highly capable joint platforms. In the early 2000's, military analysts were calling for an innovative change to ensure the CAF maintained relevance in the post cold war era.⁵ In 2005, there was a DND proposal to the house of commons for the requirement for strategic sealift capacity for contemporary operations. This proposal included the Chief of Defence Staff (CDS), at the time, Gen (ret'd) Rick Hillier stating Canada "should buy a 'big honking ship' to boost Canada's blue water naval capabilities. His suggestion... would drastically improve the Navy's strategic sealift capabilities and its ability to respond to crises in the twenty-first century"⁶ The concept became known as the Amphibious Assault Ship Project. The project soon lost steam as the procurement and budget for the Canadian Surface Combatants (CSC) and Joint Support Ships (JSS) were given priority.⁷ Opportunity arose in 2014, when France cancelled the sale of two purpose-built Mistral-class amphibious assault ships to Russia, due to its invasion of Crimea. The purchase was an opportunity to obtain a modern world-class capability at a fraction of the price and politically support a NATO ally's application of sanctions.⁸ Canada showed great interest in the purchase of these ships. Though due to over stretched resources, the potential to negatively impact the current national ship building program, and an upcoming federal election, Canada did

² Andrea Lane, Jeffrey Collins. 2016. "More Than Just Showing the Flag: The Case for Amphibious Ships." *Canadian Global Affairs Institute*.

³ Liebensborn, Schulyer. 2008. "The Navy's Newest LPD Amphibious Assault Ships." *Sea Classics* 34-39.

⁴ Christopher Cowan. 2014. "A New 'Big Honking Ship': Why Canada Should Procure An Amphibious Assault Ship (Part I/V)." NATO Association of Canada.

⁵ John Eggenberger, Ralph Fisher, Richard Gimblett, Lew MacKenzie,. n.d. A Canadian Rapid Reaction Force that Counts. Accessed March 1, 2023.

⁶ Christopher Cowan. 2014. "A New 'Big Honking Ship': Why Canada Should Procure An Amphibious Assault Ship (Part I/V)." NATO Association of Canada.

⁷ Christopher Cowan. 2014. "A New 'Big Honking Ship': Why Canada Should Procure An Amphibious Assault Ship (Part I/V)." NATO Association of Canada.

⁸ Gene Germanovich, and Noel Williams. 2015. "Buying the French Mistral Amphibious Ships is a Win-Win." *War on the Rocks*.

not purchase the ships, and they were sold to Egypt.⁹ The amphibious assault ship project was not mentioned in the 2017 Defence Policy and has since not been discussed at the senior decision maker level.

6. The CAF currently lacks the ability to strategically project power. During operations in Afghanistan and in smaller operations since, Canada has relied on its small fleet of C-17 Globemasters and contracted air and sealift to transport forces. The Canadian navy has one sustainment ship, the *MV Asterix*, a civilian container ship that has been brought into service as a stop gap measure until the JSS are commissioned. The ship does not have any self-defence or survivability systems for operating in threat environments. This sealift capability gap is evident during NEO operations, where Global Affairs Canada (GAC) and DND have had to contract out civilian ships and aircraft to assist in evacuation operations. In the post pandemic economy there is a 'premium' on transportation, and Canada cannot depend on industry or allies to support them during a sudden conflict or emergency.

7. The amphibious assault ship enables rapid build up and projection of combat power. If Canada had one ship on each coast, it would permit a rapid response to multiple situations at the request of the Canadian Government. Canada's combined arms land organization of choice for 'large' deployments is a BG. This has been the building block around Canadian expeditionary operations since the Korean War. The BG headquarters is the smallest force element that has the capacity to integrate several key enabling elements required for independent expeditionary operations. The ship would be able to embark a full mechanized BG if required, but could also deploy SOF elements, or smaller purpose-built combat teams. The ability self-sufficiently deploy and support combat power makes a statement to our allies and partners that Canada is capable of independent action at home and abroad.

8. It can be argued that the CAF does not conduct joint operations. There is limited integration between the RCAF and the CA, and the RCAF and the RCN. Aside from joint fires and special operations, these integrations are typically small in scale, and without any tangible effect in the operating area. The amphibious assault ship is more than just an 'army shuttle bus', but a joint platform that integrates forces from across the elements to have rapid effect in littoral environments. The Command and Control (C2) systems onboard provide an extensive information infrastructure to support command support systems and provide C2 for the embarked force, on top of the typical suite of communications, systems, radars, and integrated surveillance systems. In heavily contested theatres, the operational commander can exercise C2 from offshore, and the integrated force will receive the benefit of this integration of systems networked to the deployed air, land, and maritime forces. The typical hospital on an amphibious assault ship has approximately 60 beds, which is sufficient, when combined with the CASEVAC capabilities of integral air assets, for light to medium combat operations. The integral air assets can provide ISR, transportation, CAS, CASEVAC, and sustainment to landed forces. Having both combat service support, combat support and manoeuvre capabilities packaged in a self-defensible offshore platform allows the CAF to deploy, command, and sustain itself independently while bringing meaningful capabilities to the fight.

⁹ Everson, Kristen. 2016. *Top general and defence bureaucrat were at odds over whether to buy French warships*. February 8. Accessed March 1, 2023.

9. The Canadian Defence Policy states, “The Canadian Armed Forces (CAF) must be ready and able to deliver across a spectrum of operations – from domestic humanitarian assistance and disaster response to counter-terrorism and peace support operations, to high intensity combat operations”.¹⁰ Canada does not have a large enough defence budget to procure platforms and systems that singularly focus on one specific mission or theatre. The amphibious assault ship’s strength comes from its versatility that allows it to complete a broad spectrum of tasks and has the adaptability to reconfigure for specific missions if required. In today’s coalition-heavy theatres it is deemed as unlikely that Canada would independently conduct contested amphibious operations, but the amphibious capabilities and integral support elements enable the ship to be a critical asset in various mission sets at home and abroad.

10. The receding arctic ice, contested territorial claims, increasing maritime traffic and growing interest transit routes create a sense of urgency for the Canadian government to have the ability to project and sustain presence in the North. Christopher Cowan states, “an amphibious task force (centred on an amphibious assault ship and its helicopters and landing craft) could be a premier tool for maintaining Canada’s sovereignty in the Arctic”¹¹ This would alleviate US concerns that Canada is not able to monitor and respond to incidents in its territory.

11. Canada recently released its Indo Pacific Strategy in 2022, which states, “Canada will increase our military engagement and intelligence capacity as a means of mitigating coercive behaviour and threats to regional security.”¹² Currently, Canada conducts OP NEON, a presence patrol to “uphold UN sanctions imposed against North Korea and uphold international law of the sea including the UN convention through forward naval presence operations”.¹³ An amphibious task group not only sends a stronger message to adversaries, but provides a symbol of commitment to our Pacific allies and partners. The capability provides the opportunity for increased partnership and training exercises to demonstrate solidarity while increasing interoperability and relationships.

12. The ship would greatly increase the Canadian Governments rapid reaction to humanitarian and natural disasters across the globe. The platform is ideal to respond to HART, DART, or NEO operations, as there is sufficient capacity to support the crew, while not drawing on the local economy. The ability to transport integral mobility assets, air platforms, and large quantities of humanitarian stores enables a ‘one-stop shop’ for providing relief. Andrea Lane explains, “In early 2016, *Canberra* (an Australian Defence Force Amphibious Ship) responded to a typhoon in Fiji with 60 tonnes of humanitarian supplies, and a complement of several hundred engineers, carpenters, electricians, and plumbers, all of whom were able to access even the most remote areas in the Fijian archipelago using the ships helicopters and landing craft.”¹⁴ When disaster strikes, and the government of Canada is looking for options, an amphibious ship

¹⁰ Defence, Department of National. 2017. Strong, Secure, Engaged: Canada's Defence Policy. Ottawa.

¹¹ Christopher Cowan. 2014. "A New 'Big Honking Ship': Why Canada Should Procure An Amphibious Assault Ship (Part I/V)." NATO Association of Canada.

¹² Canada, Government of. 2022. Canada’s Indo-Pacific Strategy. Ottawa.

¹³ Canada, Government of. 2022. Canada’s Indo-Pacific Strategy. Ottawa.

¹⁴ Andrea Lane, Jeffrey Collins. 2016. "More Than Just Showing the Flag: The Case for Amphibious Ships." *Canadian Global Affairs Institute*.

with an affiliated land component would be the most comprehensive option, that could independently and deploy to have a tangible impact.

13. The current conflict in Haiti is degrading, as world leaders look to Canada to take the lead on stability operations. If the Canadian government were to send the CAF to intervene an Amphibious Task group centered on an Amphibious Assault ship would be an ideal force package. The embarked BG conducting stability tasks ashore, would be supported by the real-life support systems of the ship, the integral C2, sustainment capabilities and maritime air assets. As opposed to an ad-hoc inflow of forces seen in the CAF's 2011 earthquake response, an amphibious assault ship would be a symbol of national power and commitment to regional stability.

14. To fully understand the impacts procuring and operating amphibious assault ships, the paper will use the scenario of Canada procuring two Mistral Amphibious Assault Ships in the next decade. The implementation, operating costs, and maintenance of the amphibious assault ships would create secondary impacts to the rest of the CAF that would need to be addressed in a PRICIE+G analysis as part of the *Build Phase* of The Defence Model and the Force Development System. To not impact the current National Ship Building Strategy the money would need to come from a budget increase of \$4-6 billion each. There is an argument to be made of the balance of the RCN's fleet, and the practicality to reducing the number of CSCs at the cost the Amphibious Ships, but that will not be discussed in this paper. If the two LHDs were to be integrated into the RCN, this would require the growth of the RCN personnel to approximately 1200 pers. These PYs if not approved for independent growth would likely be extrapolated from the other elements. Depending on the type of operation the deployment of the ships would need to coincide with other RCN ships to provide escort and force protection, which could further stress current RCN staffing shortages. As a new capability, the CA would need to reroll two Inf Bns and affiliated combat support elements to conduct amphibious training. This would likely be the light infantry battalions (3rd Bn) from 1 and 5 CMBG, due to proximity to the coasts. This capability may come at the expense of flexibility in the army managed readiness plan. The current air platforms to support land operations over water would need to be revisited. The current F35 project, and CH-146 replacement project could be amended to procure appropriate variants enabling integration. This would entail a comprehensive review of current aerospace projects to ensure air assets are procured or reconfigured to include the required information and maritime safety systems. These considerations amount to a series of accommodations and impacts that would be shared across the L1s.

CONCLUSION

15. The procurement of an amphibious assault ship capability is a vital part of national strategy that would allow the CAF to rapidly project and sustain strategic power at home and abroad. The integration of joint effects would enable the CAF, as per the Canadian Defence Policy "to operate across the spectrum of conflict, enable interoperability with Canada's allies, and maintain an operational advantage over the threats of today and tomorrow."¹⁵ The integral C2, sustainment, and maritime assets would enable the CAF to independently make meaningful contributions to coalition operations and rapidly respond to humanitarian and natural disasters. The procurement and operations of the platforms will come at a cost to the rest of the CAF in

¹⁵ Defence, Department of National. 2017. Strong, Secure, Engaged: Canada's Defence Policy. Ottawa.

terms of budget, personnel, and resources. As John Eggenberger describes, “in turn (it) will give Canada the military credibility needed to exercise diplomatic muscle in meeting the challenges of the 21st century, just as we did in previous generations.”¹⁶

¹⁶ John Eggenberger, Ralph Fisher, Richard Gimblett, Lew MacKenzie, n.d. A Canadian Rapid Reaction Force that Counts. Accessed March 1, 2023.

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