



**WE CAN'T SWIM THERE:  
ROYAL CANADIAN NAVY NEEDS TO SUPPORT THE CANADIAN ARMY**

**Lieutenant-Colonel Anonymous**

**JCSP 49**

**Exercise Solo Flight**

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## **WE CAN'T SWIM THERE: ROYAL CANADIAN NAVY NEEDS TO SUPPORT THE CANADIAN ARMY**

The Canadian Army (CA) deploys all over the world and requires support from the Royal Canadian Air Force (RCAF) or commercial shipping for logistical and sustainment support. At times, the RCAF can support the CA, but the lines of support are long, expensive and multiple aircraft are required to carry the CA heavier equipment such as their tanks or light armoured vehicles. The CA uses commercial shipping and aircraft to transport their equipment and personnel in to and out of theatre, but this is costly. Currently the Royal Canadian Navy (RCN) can not support the movement of troops and equipment because the RCN is focused on blue water operations, which is defeating other navies head-to-head, and are not focused on littoral or amphibious operations which is a capability that the Canadian Armed Forces (CAF) does not have. A refocusing of naval strategy to support the CA and CAF missions is required to meet the conditions outlined in Strong, Secure and Engaged (SSE). This paper will discuss the need for the RCN to be able to support the CA and reintroduce amphibious operations to meet the requirements of SSE.

### **HISTORICAL**

Since the creation of navies, the army have used the navy to transport them to foreign lands either to claim and hold new land or repel a foreign invader of the colonies. The French navy transported their French settlers and soldiers from France to Canada to colonize and protect the new colony. By the mid-1700's, they transported 44,000 settlers', their supplies and provided a continuous resupply. The ancient Greeks invented amphibious warfare like seen in the battle of Troy where hundreds of Greek ships, carrying 30-50 soldiers sailed across the Aegean Sea and landed on Troy's beaches. These soldiers off loaded their equipment and supplies and invaded Troy. A Canadian amphibious warfare example is Operation Overlord, where Canada participated in the largest amphibious assault against the Germans. The Allies transported 132,000 soldiers by sea across the English Channel and on 6 June 1941, Allied forces landed on several beaches in France. After the Allies took the beaches, they continued to bring in more soldiers and equipment which allowed them to amass over two million soldiers by the end of August, 1941. Allied air forces and naval forces were used to soften targets before disembarking and the Allies used deception against the German's to deceived them where and when the disembarkation would have taken place. The invention of the aircraft helped reduced the time to transport the army, however, modern militaries still trains in amphibious warfare and are able to deploy huge forces by sea to foreign lands to either to invade, protect or to assist. Canada has participated in amphibious warfare during Operation Overlord by using Royal Navy landing craft assault (LCA) ships but has not acquired LCA's since then and the CA has not trained for this capability, but it still has it in its doctrine.

Canada had expeditionary forces since World War One, that sailed on merchant marines' ships, but the RCN and the Government of Canada were concentrated on combating German U-boats. Canadian fishing schooners and trawlers were sunk by German U-Boats within Canadian waters and without destroyers, the RCN could not protect Canadian ships within Canadian waters. Prime Minister Borden wanted the RCN to be focused on Anti-Submarine Warfare

(ASW).<sup>1</sup> This carried on through pre and post World War Two due to the high losses of ships, material, and personnel, crossing the Atlantic Ocean being sunk by German U-boats. The ASW focused remained and continued when Vice-Admiral Harry DeWolf had the RCN focused on ASW<sup>2</sup> even though, the Canadian Expeditionary Forces (CEF) was recognized for their formidable fighting skills during the landings in Dieppe and Juno beaches. Other NATO nations saw the value of amphibious warfare, such in the Falkland Island war, and continued to develop and modernized this capability. The decision made by Vice-Admiral DeWolf continues to drive current RCN procurement that does not support the army and forgetting how successful amphibious warfare was during two World Wars.

## ISSUE/DEFINITION

Canadian Army doctrine defines the function of amphibious forces is to “undertake littoral or riverine operations, deployed, and supported (at least initially) from ships. The land force component of an amphibious force will normally consist of light, or a mix of light and medium forces.”<sup>3</sup> They also define amphibious operations as “a military operation launched from the sea by a naval and landing force embarked in ships or craft, with the principal purpose of projecting the landing force ashore tactically into an environment ranging from permissive to hostile.”<sup>4</sup>

Currently, the CA does not practise amphibious operations because the RCN does not have the ships to support and if the CA wants to train in amphibious operations, they will have to ask for assistance from other nations such as the US Marines. CA doctrine explains that amphibious forces “are employed in operations launched from the sea by naval and landing forces against a hostile or potentially hostile shore. They may be combined with an air manoeuvre, airmobile or airborne operation.”<sup>5</sup>

To accomplish this type of operations, the RCN will need to acquire amphibious assault ships and the RCAF to increase their Chinook numbers to deploy a sizable force. Amphibious operations may be used as “an enabling process to seize an entry point for the landing of heavier follow-on forces, in support of other land operations, in support of wider maritime operations, or as an independent operation.”<sup>6</sup> This capability does not exist in the RCN, RCAF and CA. SSE says that the CAF is to be “Strong at home...Secure in North America...Engaged in the world...”<sup>7</sup> In order to achieve these aims and not rely on RCAF assets or commercial vessels alone, an amphibious capability will be required. SSE also says that the RCN needs to have

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<sup>1</sup> William Johnson, “Government of Canada,” Canada.ca (/ Gouvernement du Canada, December 4, 2020), <https://www.canada.ca/en/navy/services/history/naval-service-1910-2010/first-ww.html>.

<sup>2</sup> Richard Oliver Mayne, “Government of Canada,” Canada.ca (/ Gouvernement du Canada, November 8, 2017), <https://www.canada.ca/en/navy/services/history/naval-service-1910-2010/years-of-crisis.html>.

<sup>3</sup> National Defence, “B-GL-300-003/FP-001 - Land Operations,” Public Intelligence | (Government of Canada, April 17, 2010), <https://publicintelligence.net/canadian-forces-land-operations-manual/>

<sup>4</sup> *Ibid*

<sup>5</sup> *Ibid*

<sup>6</sup> *Ibid*

<sup>7</sup> National Defence, “Strong, Secure, Engaged: Canada's Defence Policy,” Canada.ca (Government of Canada, March 9, 2023), <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/canada-defence-policy.html>

“...flexibility, global reach, and staying power, allow it to succeed across a broad mission set: combat operations, rapid provision of humanitarian assistance and disaster relief to those in need, defence diplomacy, and collaborating with other government departments and agencies on a daily basis in support of domestic defence and security.”<sup>8</sup>

What the Government of Canada needs is for the CAF to obtain proper ships to support the RCN objectives within SSE, but the requirements need to be properly defined.

### **WHAT NEEDS TO BE MOVED?**

To figure out the requirements, the CAF needs to figure out what the CA needs to move to conduct combat operations, rapid provision of humanitarian assistance and disaster relief operations and the length of time to sustain itself. To figure out the requirements, the CAF needs to calculate the tonnage that must be move for the most intense operations which is combat operations. Using a hypothetical requirement, the CAF will deploy a Mechanized Battalion with the ability to establish a beachhead that is contested and hold until follow-on forces that will arrive in five days.

### **WHAT IS THE TONNAGE OF A BATTALION?**

A Canadian battalion consist of a battalion headquarters, three combat companies, a combat support company, and an administrative company with an aviation battalion. Doctrinally, the total of number of vehicles and personnel required are 180 vehicles, twelve helicopters and one thousand two hundred personnel. What is the tonnage? The basic weights of each vehicle, personnel, ammunition, fuel, weapons, and food for a battalion are broken down as follows:

#### **Vehicles<sup>9</sup>**

- Bison Armoured Vehicle – 12,846 kg
- Light Utility Vehicle Wheeled (G-Wagon) – 1,500 kg
- Light Armoured Vehicle (LAV) – 28,576 kg
- Medium Support Vehicle System (MSVS) – 17,675 kg
- Light Support Vehicle Wheeled (LSVW) – 5,250 kg
- Heavy Logistics Vehicle Wheeled (HLVW) – 13,076 kg

The total weight of the vehicles is 78,923 kg, making all up weight of all the 180 vehicles for a battalion is 14,206,140 kg (1,420 tonnes).

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<sup>8</sup> *Ibid*

<sup>9</sup> Canadian Army National Defence, “Government of Canada,” Canada.ca (Gouvernement du Canada, April 14, 2021), <https://www.canada.ca/en/army/services/equipment/vehicles.html>

## Personnel<sup>10</sup>

The approximate average weight of a soldier is 80 kg and the average ruck sack weighs 35 kg. One soldiers' weight, on average, is 116 kg thus 1200 personnel weighs 139,200 kg (139 tonnes).

## Ammunition<sup>11</sup>

- 7.62 mm (100 rounds) – 710 grams
- 5.56 mm (100 rounds) – 356 grams
- 9 mm (100 rounds) – 745 grams
- 25 mm – 458 grams
- 50 Cal – 23 grams
- 81 mm mortar bomb – 4.5 kg
- 40mm grenades – 370 grams

Using the requirements, five days of intensive fighting to secure a contested beachhead, 850,000 rounds of small arms, 280,000 rounds of 25mm, 108,000 rounds of 81mm, and 288,000 rounds of 40mm, bring the total ammunition weight is 2,278,560kg (2,278 tonnes).<sup>12</sup>

## Weapons<sup>13</sup>

- 90 x FN Herstal 50 CAL heavy Machine Gun – 38 kg
- 1000 x 9mm Browning pistol – 1.1 kg
- 50 x C6A1 – 11.6 kg
- 500 x C7A2 – 4.58 kg
- 500 x C8A3 – 4.1 kg
- 50 x C9A2 – 11.35 kg
- 90 x C16 grenade launcher – 29kg
- 40 x M72 Light anti-tank weapon – 3.45 kg
- 20 x 81 mm mortar launcher – 34.5 kg

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<sup>10</sup> National Defence, “Carrying Heavy Weight in Combat - Some Historical Observations,” Canada.ca (Gouvernement du Canada, October 20, 2021), <https://www.canada.ca/en/army/services/line-sight/articles/2021/09/carrying-heavy-weight-in-combat.html>.

<sup>11</sup> Canadian Army National Defence, “Government of Canada,” Canada.ca (/ Gouvernement du Canada, April 14, 2021), <https://www.canada.ca/en/army/services/equipment/vehicles.html>.

<sup>12</sup> Renae Merle, “Running Low on Ammo,” The Washington Post (WP Company, July 22, 2004), <https://www.washingtonpost.com/archive/business/2004/07/22/running-low-on-ammo/3a28182c-a29a-4fca-8cab-544849bdf153/>.

<sup>13</sup> *Ibid*

- 40 x 84 mm anti-tank launcher – 14.2kg

Using this weapons configuration, the total weight of weapons is 12,357kg (12 tonnes).

### **Food<sup>14</sup>**

On average a soldier consumes 2.72 kg/soldier/day thus 16,320 kg of food they would be needed for five days.

### **Fuel<sup>15</sup>**

To have enough fuel to meet the requirements, the average consumption of fuel/soldier is 103 kg/day, requiring 618,000 kg of fuel for five days.

### **Water<sup>16</sup>**

A soldier consumes about 3kg of water/day requiring 28,380 kg of water for five days.

### **Aviation Battalion**

#### **CH-147 Chinook<sup>17</sup>**

- Basic empty weight – 11,800 kg / 6 x CH-147 = 70,800 kg
- Parts and Equipment – 10 pallets at 34,000 kg
- Fuel – 3900 kg/flight = 4 flights/day/6 x CH-147 = 93,600 kg x five days = 468,000 kg

#### **CH-146 Griffon<sup>18</sup>**

- Basic empty weight – 3600 kg /6 x CH-146 = 21,600 kg
- Parts and Equipment - 6 pallets at 21,000 kg
- Fuel – 1255 kg/flight = 4 x flights/day/6 x CH-146 = 30,120 kg x five days = 150,600 kg

With the CH-146 Griffon and the CH-147 Chinook with their supporting equipment, the aviation battalion weighs 784,000 kg (784 tonnes).

The total weight of a Battalion is 18,082,957 kg (18,082 tonnes) to establish a beachhead that is contested by an adversary and hold for five days until the arrival of follow-on forces. This

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<sup>14</sup> Renae Merle, "Running Low on Ammo," The Washington Post (WP Company, July 22, 2004), <https://www.washingtonpost.com/archive/business/2004/07/22/running-low-on-ammo/3a28182c-a29a-4fca-8cab-544849bdf153/>

<sup>15</sup> "U.S. Military in Iraq Feels Gouge of Fuel Costs," NBCNews.com (NBCUniversal News Group, April 2, 2008), <https://www.nbcnews.com/id/wbna23922063>

<sup>16</sup> Richard Leighton, "Supply," Encyclopedia Britannica (Encyclopedia Britannica, inc.), accessed April 5, 2023, <https://www.britannica.com/topic/logistics-military/Supply>

<sup>17</sup> Bfs, "10 Reasons Why the CH-47 Chinook Is the Ultimate Heavy Lift Helicopter," CH-47D Aerial Firefighting | Billings Flying Service | Al & Gary Blain | Chinook Heavy Lift Helicopters, August 24, 2022, <https://billingsflyingervice.com/ultimate-heavy-lift-helicopter/>

<sup>18</sup> Helicopter Bell, "Bell 412," Bell Flight, accessed April 4, 2023, <https://www.bellflight.com/products/bell-412>

Mechanized Battalion with aviation support configuration can also support other things other than war such as a security action in Haiti or humanitarian assistance because of flooding in Pakistan.

### **WHAT SHIP CAN MOVE 18,082,957 KG (18,082 TONNES)?**

Several types of ships that can carry helicopters, troops plus their support vehicles and landing crafts exist within many militaries. These types of ships are called landing helicopter dock (LHD) or Landing Helicopter Assault (LHA) and there are different classes, for example, the WASP class built in the United States, Mistral class from France, and the Canberra class from Australia. These ships can carry a mix of vertical takeoff fighters, helicopters, thousands of troops, crewed by 1,100 sailors, and multiple landing crafts. For example,

“a WASP class ships are the first to be specifically designed to accommodate 6 x AV-8B Harrier jump jet, 3 x LCAC hovercraft, along with the full range of Navy and Marine helicopters, conventional landing craft and amphibious assault vehicles to support a Marine Expeditionary Unit (MEU) of 2,000 Marines.”<sup>19</sup>

The WASP class ships are 844 feet long with a beam of 106 feet with two steam propulsion plants that moves the 40,500-tonne ship to reach speeds greater than twenty knots with a cruising speed of 18 knots. The WASP class LHD is

“...able to store 450,000 gallons of fuel for embarked aircraft and other vehicles and has the ability to produce up to 200,000 gallons of fresh water each day. Each WASP class ship has accommodations for 3,000 troops and is crewed by 1,100 sailors and is equipped with operating rooms and has 600 hospital beds.”<sup>20</sup>

A WASP class LHD can transport and land ashore a Canadian Mechanized Battalion with an embedded aviation battalion with room to spare but would require additional or reallocating staff to support by either reducing the RCN fleet or using more reservist to staff a WASP class LHD. The RCAF will have to increase the amount of CH-147 from fifteen airframes to thirty airframes and increase its support and staffing. The RCAF has enough CH-146 to support a WASP class LHD deployment. An RCN WASP class LHD would be a capital asset and would send a strategic message and project national power, like a United States WASP class LHD carrying a Marine Expeditionary Force (MEF).

### **STRATEGIC MESSAGING**

SSE says “naval forces provides Canada with a responsive and agile means to respond across a wide spectrum of maritime situations, and serves as an instrument of national power on the international stage.”<sup>21</sup> To have national power on the international stage, the CAF must be

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<sup>19</sup> John Pike, “LHD-1 Wasp Class,” LHD-1 Wasp class - Navy Ships (Military Analysis Network, May 9, 2000), <http://man.fas.org/dod-101/sys/ship/lhd-1.htm>

<sup>20</sup> *Ibid*

<sup>21</sup> National Defence, “Strong, Secure, Engaged: Canada's Defence Policy,” Canada.ca (Government of Canada, March 9, 2023), <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/canada-defence-policy.html>



able to force project its capabilities, not notional through a 6-pack of CF-18 fighters to Romania nor training and assist teams in various countries, but project CA, RCN, and RCAF assets that can deliver a rapidly deployable combat power anywhere, globally. A WASP class LHD is require deploying the CA by the RCN, but the WASP class ships require enormous amount of national treasure to purchase and maintain. For example, one WASP class landing helicopter dock (LHD) cost approximately “\$3.7 billion”<sup>22</sup> with an “average operating cost of \$270 million per ship.”<sup>23</sup> In comparison, the Halifax class frigate (twelve ships) cost “\$9 billion with an additional \$3.2 billion”<sup>24</sup> for upgrades and the new Canadian Surface Combatant is priced at “\$84.5 billion”<sup>25</sup> for twelve ships (seven billion dollars/ship), however, if the Government of Canada wants to project national power, these costs will have to be spent and the government change its military maritime strategic objectives. This strategic messaging will change how the CAF combat and support units’ functions, by primarily using regular forces units to be for expeditionary operations while the reserve units would be used for domestic operations, but this is outside the scope of this paper.

## **OPERATIONALLY-DEPLOYED**

Projecting national power will be under the command of Canadian Joint Operations Command (CJOC) to rapidly deploy to areas of the world where a battalion can assist, in humanitarian assistance to full scale conflict. CJOC, under the strategic direction of the CDS, will have to predict where the WASP class LHDs be deployed and for how long or have ready to deploy units in Canada. To be flexible, the battalion, which will become an expeditionary task force (ETF) will have to have everything they need to be sustainable for an extended period. CANSOFCOM units can be embedded into the ETF as a force multiplier or operate independently with the support of the ETF with either deployed or ready to deploy units.

There are operational posture options, 48 hours notice to deploy from Canada, or a sailing ETF preposition based on intelligence triggers or request for assistance, but each have their own issues.

48 hours notice to deploy will require to preposition equipment in one location or onboard the LHD. These locations will require a large storage area and seaport, such as Montreal or Vancouver, which already have busy and congested ports, but it will cut down on transportation time, however additional security, servicing and maintenance sections would be required. As well, it takes assets and equipment from units that uses them for proficiency training.

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<sup>22</sup> John Pike, “LHD-1 Wasp Class,” LHD-1 Wasp class - Navy Ships (Military Analysis Network, May 9, 2000), <http://man.fas.org/dod-101/sys/ship/lhd-1.htm>

<sup>23</sup> *Ibid*

<sup>24</sup> National Defence, “Interdepartmental Review of the Canadian Patrol Frigate Project Report ”(DND/PGWSC, March 26, 1999), <https://publications.gc.ca/collections/Collection/P75-48-1999E.pdf>

<sup>25</sup> Megan Eckstein, “Canadian Surface Combatant Cost May Rise 9% with Delays, Inflation,” Defense News (Defense News, October 27, 2022), <https://www.defensenews.com/naval/2022/10/27/canadian-surface-combatant-cost-may-rise-9-with-delays-inflation/#:~:text=The%20original%202008%20budget%20for,sits%20at%20CA%2484.5%20billion>

An ETF onboard a WASP class LHD, cruising at 18 nautical miles per hour (kts), can sail from the east coast to the Mediterranean Sea in nine days, the Baltic Sea in ten days and the Black Sea in eleven days. A west coast ETF can be off the coast of Taiwan in twelve days, and off the coast of Japan in ten days. Either ETF from each coast can deploy to the Middle East or Eastern Africa but it would take the ETF 27 days from the west coast or sixteen days from the east coast of Canada. Preposition the WASP class LHD with an ETF onboard will reduce sailing time by five to ten days. For example, a Canada based ETF will move to Halifax, load personnel and equipment and sail to the Baltic Sea, would take fifteen to twenty days before they arrive in the area. This may be acceptable, but the response time is greatly reduced, and it is not very responsive if a crisis broke out. However, currently, if the CAF would be asked to do the same deployment, it would take longer. The CAF will have to charter a cargo vessel, if one is available, to carry the 18,082,957 kg of the ETF personnel and equipment, which could take at least five days by road, air and/or rail to a port in Montreal. This movement would take at least two days for the notice to deploy, five days to move the personnel and equipment, four days of loading, and ten days to cross the Atlantic which equates to at least twenty-one days before arriving in the Baltic Sea.

The other option is a sailing ETF that would be at sea with all the requirements to conduct the full spectrum of missions. This would consist of a battalion with their aviation assets, but they would be from home for months at a time. A concept of operations (CONOPS) would be one WASP class LHD at sea for six months, with another WASP class LHD and battalion being prepped for the next rotation. The issues are that the CAF would have to consolidate their resources to create enough mechanized and aviation battalions and enough WASP class LHDs sailors to create three ETFs, one in reconstitution, one sailing ETF, one readiness training ETF. To have enough personnel and equipment to support the rotation, a third WASP class LHD would be needed to support and ETF.

The prepositioning of the ETF at sea would be predicated on either intelligence triggers, such as a build up of troops on a border, or a request for assistance from another nation, thus a robust intelligence network or diplomatic links is required. The issue is that one WASP class LHD can only be in one place at one time, thus the response time can be quick or lengthy, depending on where they are sailing.

A WASP class LHD has a cruising speed of 18 kts, which means it can only cover 408 NM per day, and with an average range of 9,500 NM, refuelling and replenishment would be required, thus increasing the resources and staffing for the RCN. The Government of Canada will have to re-evaluate what type of global naval capabilities they want and would conclude that a small offensive combat naval power with an expeditionary force will meet Canada's national interest, but it may affect Canada's commitment to NATO. The Baltic Sea is 3,500 NM from Halifax, a WASP class LHD can travel there without refueling nor the need for replenishment, but CJOC would have to have the WASP class LHD deployed somewhere in the North Atlantic Ocean, the Mediterranean Sea or the North Sea for the WASP class LHD to respond in a timely manner but this will meet the aim of projecting national power.

## TACTICALLY-USED

The CA has doctrine about amphibious warfare but does not practise it because the RCN does not have assets to help them train. CA doctrine discuss the capabilities and types of amphibious operations, which consist of “amphibious assault, raids, withdrawal and demonstration”<sup>26</sup> whereas the RCAF and the RCN does not mention amphibious capabilities within their doctrine because they do not have the necessary equipment nor train for these types of operations. CA doctrine states within the planning stage “it is necessary to identify command relationships at stage because there are significant changes in command relationship in the other stages.”<sup>27</sup>

During the embarkation and movement stages, Maritime Component Commander (MCC) is the supported commander because they are responsible for transporting the ETF to the point of disembarkation. At that point, the assault or demonstration stage, the Land Component Commander (LCC) is the supported Commander, and the ETF Commander could have Operational Command (OPCOM) or Operational Control (OPCON) over their forces and conduct their operations. The expeditionary forces would either deployed by foot, by vehicles or by aircraft. Naval gunfire (NGF) and close air support (CAS) from the naval and air force assets would be required to support any resistance; thus, a frigate class and fighter aircraft may be required to provide those capabilities, increasing the complexity of the CONOPS for this scenario but is outside the scope of this paper and should be explored.

Since the CA does not train and the RCAF and RCN does not have amphibious operations within their doctrine, this will be a new capability for the CAF which will increase training, staffing, maintenance, infrastructure, and other associated costs to the CAF budget which the Government of Canada would have to justify to the Canadian public. If the Canadian public see the resiliency of having this capability by having an ETF with an amphibious capability to provide responsive combat power or humanitarian assistance abroad or at home, the Government of Canada may obtain the willingness and support from the Canadian public to fund this capability.

## ARTICLE 5 INVOKED

In 2025, the Chief of Defence Staff (CDS) decided to restructure the CAF, making it expeditionary. Their decision consolidates the CA into one division with four brigades, each commanding three battalions. The RCN was reduced to six frigates but obtain two replenishment ships, purchased three WASP class LHD from the US and maintained their submarine force. The RCAF reduced their fighter force to fifty F35, with vertical lift capabilities, and increased their Chinook and Griffon by twenty aircraft each. CANSOFCOM and the other Level One organizations remained the same or augmented by the extra resources from the CA and RCN. The Government of Canada fully support the change and provide the financial resources to bolster the CAF.

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<sup>26</sup> National Defence, “B-GL-300-003/FP-001 - Land Operations,” Public Intelligence | (Government of Canada, April 17, 2010), <https://publicintelligence.net/canadian-forces-land-operations-manual/>

<sup>27</sup> *Ibid*

The CAF started training for amphibious operations in 2025 with the US marines and is proficient in amphibious warfare. They have been training with the RCAF and only thing left was to train with the RCN when the WASP class LHD arrives, which is scheduled for 2026. In 2027, the training with the CA, RCAF, RCN and CANSOFCOM has commenced and the first CA battalions, RCAF units, CANSOFCOM units, and one of the WASP class ship is operational ready by mid 2027. Infrastructure is continuing to being build but Halifax harbour only need to small infrastructure update because of the current RCN presence. The CDS decided that the CAF will have a deployable battalion at sea for 6 months to be ready to conduct humanitarian assistance or combat operations.

First battalion from the First Brigade is ordered to be the first expeditionary force with a helicopter aviation battalion and Special Operations Force (SOF) elements to support and schedule to sail in the fall of 2027 for 6 months. 18,082,957 kg of vehicles, ammunition, fuel, water, POL and support equipment ascend on Halifax and is loaded on HMCS *Algonquin* (LHD) in 10 days. Late fall in 2027, HMCS *Algonquin* (LHD), HMCS *Halifax*, HMCS *Toronto* (frigates), HMCS *Cornerbrook* (submarine), HMCS *Kingston* and HMCS *Edmonton* (coastal patrol) sailed from Halifax as a Canadian Naval Task Force for six months to their assigned patrol area, the North Atlantic.

In 2024, a stalemate between Ukraine and Russia created a de-militarize zone in eastern Ukraine, but two years later in 2026, Russia invades Ukraine again and NATO still does not enter into conflict but the threat of global war is increasing. In preparation for a global conflict, NATO countries have been moving forces to Europe. Russia is also moving forces to its borders and is in position to invade NATO's eastern front. Five days into the sail, the Canadian Task Force is order to the Baltic Sea and await further orders. Russia is getting frustrated with the increased build up of NATO forces in the region and repeats their threats of invading NATO's eastern front if NATO keeps on building up forces. Five days from the Baltic Sea, Russia invades Latvia and the Canadian Task Force is tasked to secure a beachhead just outside of Riga for follow-on forces to arrive which is five days away. Enroute, the battalion prepares the vehicles, weapons, and equipment for an amphibious assault. Intelligence indicates that a battalion size of Russian soldiers with a squadron of transport and attack helicopters are within the city of Riga.

Meanwhile back in Canada, the second mechanized and aviation battalions' prep HMCS *Athabaskan* (LHD) for an immediate deployment to the Baltic Sea, the remaining battalions are recalled and Canadian's third WASP class LHD (HMCS *Iroquois*) maintenance is sped up to be ready to deploy in ten days. Five days later, HMCS *Athabaskan* sails from Montreal to the Baltic Sea and would arrive in the region in 17 days.

HMCS *Iroquois* is ready to deploy 15 days later but is on the west coast in Vancouver. CJOC decides to keep HMCS *Iroquois* in the Pacific Ocean in case China or North Korea decides to take advantage of the Russian invasion of Latvia. The Government of Canada is using this mobilization and the conflict in Ukraine, and now Latvia, to combat the opposition statements that the purchase of three LDHs was a waste of taxpayers' money. The messaging is working and the support from Canadian in supporting the military is growing.

The assault plan is to deploy SOF elements, by sea and by air, twenty-four hours prior to the invasion. One SOF element is flown to Norway via a CH-147 Chinook to be flown to Riga, Latvia by the Norwegian Air Force. Another SOF element is transported by ridged hull boats (RHIB) to HMCS *Cornerbrook*. HMCS *Halifax*, *Toronto*, *Cornerbrook*, *Kingston*, and *Edmonton* take positions ahead of HMCS *Algonquin*, screening and searching for Russian surface, sub-surface combatants and anti-ship mines as they head into the Baltic Sea. The Norwegian Air Forces agreed to provide close air support (CAS) during the landing and while the beachhead is secure. Two days prior to arriving, the one SOF elements boards two CH-147 Chinook and flown from HMCS *Algonquin* to a Norwegian air base and prep to deploy. A second SOF element takes RHIBs to HMCS *Cornerbrook* as it sails to the west coast of Riga. The mechanized and aviation battalions on HMCS *Algonquin* prep and ready their equipment for a dawn landing.

Twenty-four hours later, under the cover of darkness, SOF units HALO (High Altitude-Low Opening) just to the east of Riga and are met with little resistance while HMCS *Cornerbrook* deploys the second element to the west of Riga. The eastern SOF teams take up positions on a beachhead just outside Riga and provide intelligence updates of Russian positions, troop and equipment strength while waiting for the task force. The western SOF team conducts sabotage activities and gather intelligence in the western part of Riga as part of a deception plan to draw Russian forces. On D-day, HMCS *Algonquin* arrives with the Canadian Naval Task Force at a beachhead east of Riga, HMCS *Halifax* and *Toronto* provides NGS at selected Russian military targets west of Riga as a deception plan to draw Russian forces and the Canadian Task Force disembarks to the east. HMCS *Algonquin* lowers its back deck and the Canadian Reconnaissance Platoon is first off and starts heading to the west to setup defensive positions five kilometer from the beachhead as the remainder of the Task Force disembarks. HMCS *Algonquin* provides a Command-and-Control platform for the Task Force Commander, a floating airport for the aviation battalion and a supply chain to the Canadian Task Force. The Task Force secures the beachhead and waits for follow-on forces; however, a Russian patrol spots the Canadian Task Force and request for more troops to counter the battalion. Russia moves their battalion to the east and encounter the Canadian Battalion. A battle ensues and with the help of the Norwegian Air Force and NGS, the Canadian Task Force can maintain their positions and the follow-on NATO forces from United Kingdom (UK) arrives. The UK brings two mechanized battalions which deploys east and west of Riga. HMCS *Algonquin* is used by Canada and UK forces as a Role Two hospital ship and the injured are transported by the aviation battalion to Stockholm for further follow-on care. The three LHDs from both nations are interoperable with each other and keeps supplying support to their forces throughout the conflict of securing Riga. The Canadian and UK task forces link up and moves into Riga. Air support from HMS *Ocean* and the Norwegian Air Forces, support the ground forces and HMCS *Algonquin* is used as a battlefield air controller directing air support. As the battle continues, HMCS *Algonquin* becomes the battlefield headquarter for the Commander responsible to retake and secure Riga. This battle last for five days and the Canadian and UK forces are victorious. HMCS *Algonquin* sails into the port of Riga and docks to be resupplied and for the battalion to regroup. HMCS *Algonquin* becomes a support hub for humanitarian aid and assisting the Latvians rebuild their infrastructure. The people are grateful and thanks Canada for their support.

A week later, a Canadian battalion are flown into Riga and an air bridge is developed to resupply HMCS *Algonquin* with fresh personnel and equipment. CJOC orders HMCS *Algonquin*

to join the UK Naval Task Force and sails from Riga which is patrolling the Baltic Sea. Their primary mission is to be prepared to conduct amphibious operation when needed to support of NATO operations in the conflict with Russia. This decision was made by CJOC to not put a hindrance on Riga to house and feed 1200 soldiers, sailors, and aviators.

The landing and the securing of Riga showed the international community that Canada has a formable expeditionary force and has master amphibious operations since it has been only a conceptual idea for the CAF but the training by the US Marines showed that CAF is adaptable and flexible. As HMCS *Athabaskan* is sailing, NATO request that Canadian deploys its second ETF to the Black Sea for a possible insertion into Crimea, Ukraine.

This useful fiction demonstrates the strategic, operational and tactical uses of a WASP class LHD and with forward vision, the CAF can support the Government of Canada to have the RCN "...flexibility, global reach, and staying power, allow it to succeed across a broad mission set..."<sup>28</sup>

## CONCLUSION

Canada conducts expeditionary operations all over the globe, a WASP class LHD is required to project national power and provide to our allies, a niche capability. A CA battalion with an aviation battalion is heavy and a WASP class LHD is needed to carry them. These WASP class LHDs are available and other countries have conducted amphibious operations for a long time where the CAF can leverage to develop this capability.

To be interoperable with Canada's allies and within a coalition, the CAF needs WASP class LHDs to be able to conduct operations and reduce the reliance on other nations to support the CAF. Semi-independence and self reliance are key to stay competitive in the global competition and ensure Canada's adversaries that it has the capability to project Canada's global influence, whether in humanitarian operations or full-scale conflict.

This, however, will require Canada to lose some sovereignty with the inability of protecting itself, a notion that has been around for 50 years, and accept it. Once that acceptance is realized, the structure of the CAF will need to change to an expeditionary force and corner that the niche market of amphibious warfare dominated by the US, UK and Australia. The CAF will need to develop an expeditionary sea-based force capability, increase resources and funding, but this will decrease the need for RCAF and commercial resources, provide robust and deployable battalions with aviation assets any where in the world to operate within the full spectrum of conflict or provide humanitarian assistance, thus keeping inline with the Strong, Secure and Engage policy.

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<sup>28</sup> National Defence, "Strong, Secure, Engaged: Canada's Defence Policy," Canada.ca (Government of Canada, March 9, 2023), <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/canada-defence-policy.html>

**RECOMMENDATION**

The CAF needs to purchase three WASP class LHDs and based them out of Vancouver, Montreal and Halifax with the associated infrastructure and support systems and restructure the CAF for it to become an expeditionary force.

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