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## **BACK TO THE FUTURE: THE RENEWED REQUIREMENT FOR ESCORT AIRCRAFT CARRIERS**

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**BACK TO THE FUTURE:  
THE RENEWED REQUIREMENT FOR ESCORT AIRCRAFT CARRIERS**

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## **BACK TO THE FUTURE:**

### **THE RENEWED REQUIREMENT FOR ESCORT AIRCRAFT CARRIERS**

#### **AIM**

1. Following the end of the Cold War and the events of 9/11 the world is becoming less uni-polar and more multipolar, and as argued by Rear Admiral (Retired) Christopher Parry variably polar, where the dominant state at any given time will change depending on the location and subject of the issue at hand.<sup>1</sup> This uncertainty will precipitate threats to the global sea lanes of communication and will continue to grow for the foreseeable future. If a state chooses to use force or the threat of force to influence others in their maritime approaches the most significant threat a maritime state can impose on the sea lanes of communication is the submarine. In order to continue to contribute in this unpredictable world and assure Canadian and allied access to the global sea lanes of communication the Royal Canadian Navy (RCN) requires a new capability in the form of a small Anti-Submarine Warfare (ASW) Escort Aircraft Carrier. This new capability must be able to assure the safe transit of Canadian trade through areas which contain modern, well trained, and empowered submarine threats intent on disrupting the flow of goods to and from Canada and her allies. The following paragraphs will argue the requirement, use cases, concept of operations and further research required to fully realize a renewed carrier capability in Canada and the RCN.

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<sup>1</sup> “Statesmen and sea power: challenges for 21st century maritime strategy,” YouTube Video, 1:07:36. Posted by “The International Institute for Strategic Studies,” 23 January 2018.  
<https://www.youtube.com/watch?v=JbaEMWIE-LI>

## INTRODUCTION

2. This service paper is being written to expand upon the idea of the RCN being an “Escort Navy”<sup>2</sup> as put forth by Cmdre Angus Topshee while briefing JCSP 46 in the fall of 2019. If in fact this role is desirable to the Government of Canada (GC) and the RCN, than a small to medium sized Anti-Submarine Warfare Aircraft Carrier, with associated ASW Helicopters, would best aid in addressing this capability gap and enable a truly capable, world class escort navy, while complementing the current and near future RCN fleet.

3. In the following paragraphs Canada’s role as a middle power will be discussed within the context of how the RCN contributes to both the military and political components of Canadian geo-political power. In order to support the proposal that the RCN requires an ASW Escort Carrier, several concepts will be discussed as follows: the history and current thoughts of the middle power concept with a focus on where Canada fits in the current world order, then the idea of an Escort Navy will be expanded upon, the current and future ASW problem space will be described in order to situate the reader, other justifications for a vessel of this nature will be investigated to help justify the cost of the proposal, and finally why an ASW Escort Carrier is the best solution to address this problem for the RCN.

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<sup>2</sup> Cmdre Angus Topshee (Brief to JCSP 46, Toronto, Ontario, 10 September 2019.)

## DISCUSSION

### Middle Power

4. The concept of a middle power has been around since the 15<sup>th</sup> century.<sup>3</sup> Since that time there have been numerous attempts at defining the concept with most describing a balance between military strength and international influence, but below the level of a great or superpower. This concept has figured heavily in Canada's foreign policy since the end of the second world war<sup>4</sup> Arguments have been made for where Canada falls on this spectrum of power and whether it is indeed a middle power.<sup>5</sup> Most who have argued in the affirmative have focused primarily on Canada's political influence rather than its military might.<sup>6</sup> When taken as a whole, particularly within recent history, Canada has aspirations of middle power, but without a renewed focus on the military strength side of the equation Canada will not truly achieve the status it desires. Focusing on Canada's military power, specifically Canada's Navy, the Royal Canadian Navy (RCN), one of the primary roles the RCN has fulfilled starting in the second world war is ensuring the security of allied sea lanes of communication.

5. Other nations of similar size, with similar reliance on the current rules based order, and maritime trade are investing heavily in both their submarine and anti-

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<sup>3</sup> E-International Relations, "A Critical Review of the Concept of Middle Power," last accessed 27 October 2019, <https://www.e-ir.info/2015/12/04/a-critical-review-of-the-concept-of-middle-power/>

<sup>4</sup> Adam Chapnick. "The Canadian Middle Power Myth." *International Journal* 55, no. 2 (Spring, 2000): 188.

<sup>5</sup> Robert M. Cutler "Canada Regained Middle-Power Status in Ukraine Crisis." *The Gazette*, May 16, 2014.

<sup>6</sup> Canadian Global Affairs Institute, "Searching for a Middle-Power Role in a New World Order," last accessed 27 October 2019, [https://www.cgai.ca/searching\\_for\\_a\\_middle\\_power\\_role\\_in\\_a\\_new\\_world\\_order](https://www.cgai.ca/searching_for_a_middle_power_role_in_a_new_world_order)

submarine capabilities.<sup>7</sup> If the RCN is to assure, on behalf of the Government of Canada and the Canadian People, the safety and security of Canadian trade wherever it may be threatened the RCN must recommit itself to excelling in Anti-Submarine Warfare and make the necessary investments in platforms, technologies, and training to meet this aim. The standard the RCN must hold itself to given the potential for aggressive competition and conflict is the ability to escort high value Canadian trade safely through a modern and capable submarine threat environment.

### **Escort Navy**

6. One need only search the term *Escort Navy* in Google and it will return tens of millions of results ranging from references to the historic Battle of the Atlantic to other notable naval engagements<sup>8</sup>, but more relevant to the discussion at hand are contemporary examples of both allies and adversaries using of their navies to protect their economic interests in contested and threatened sea lanes of communication throughout the world, most recently in the Strait of Hormuz where the United Kingdom, along with other allies, has deployed naval combat vessels to the middle east region in response to Iranian threats against maritime trade.<sup>9</sup> This Escort Navy role is a concept that accurately describes and builds upon the RCN's historic, World War Two

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<sup>7</sup> James Manicom and Andrew O'Neil, "China's rise and middle power democracies: Canada and Australia compared," *Oxford Academic* 12, no. 2 (May 2012) <https://academic.oup.com/irap/article/12/2/199/671875>

<sup>8</sup> Google search of term "Escort Navy", [https://www.google.com/search?q=escort+navy&rlz=1C1GCEA\\_enCA866CA866&source=lnms&sa=X&ved=0ahUKewjsg8nZlr7lAhXkmeAKHUf3DIUQ\\_AUICSgA&biw=1396&bih=686&dpr=1.38](https://www.google.com/search?q=escort+navy&rlz=1C1GCEA_enCA866CA866&source=lnms&sa=X&ved=0ahUKewjsg8nZlr7lAhXkmeAKHUf3DIUQ_AUICSgA&biw=1396&bih=686&dpr=1.38)

<sup>9</sup> The Washington Post, "British navy begins escort for ships in strategic Strait of Hormuz," last accessed 27 October 2019, [https://www.washingtonpost.com/world/middle\\_east/britain-sends-warships-to-escort-tankers-through-the-strategic-strait-of-hormuz/2019/07/25/d7c7d6d2-aecc-11e9-9411-a608f9d0c2d3\\_story.html](https://www.washingtonpost.com/world/middle_east/britain-sends-warships-to-escort-tankers-through-the-strategic-strait-of-hormuz/2019/07/25/d7c7d6d2-aecc-11e9-9411-a608f9d0c2d3_story.html)

through Cold War, force structure and order of battle.<sup>10</sup> However, given the decline in fleet size and warship diversity since the end of the Cold War any desire to maintain or reinvigorate this concept will require additional capabilities and investment. When one looks back at this period of history the RCN's escort capability was centered on ASW aircraft embarked in light aircraft carriers, the last of which, HMCS *Bonaventure*, was decommissioned in 1969.<sup>11</sup>

7. In spite of the decline in fleet size and the reduction of some capabilities the RCN of today continues to train and operate for this traditional RCN role. The premise of the existing fleet is the ability to escort high value units, typically RCN resupply ships, in a multi-threat environment. Unfortunately, with the limited number of helicopters which can be carried on existing ships it is difficult to maintain a full ASW defensive posture for a prolonged period of time, potentially weeks as would be required for escorting trade across the vast expanse of the Pacific Ocean. Therefore, in order to field sufficient number of ASW aircraft and reasonably sustain a force at sea against a modern submarine threat more aircraft are required within a naval task group. With Canadian allies focusing their carrier capabilities on strike or amphibious operations, the RCN could fill a significant gap in allied capability by fielding a small, yet capable, aircraft carrier with enough helicopters to address the threat.

## **ASW Problem Space**

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<sup>10</sup> Cmdre Angus Topshee, Brief to JCSP 46, Toronto, Ontario, 10 September 2019.)

<sup>11</sup> "HMCS Bonaventure Retired in 1969: Final Edition." Niagara Falls Review, Jan 17, 2003.

8. Although much of Canada's international trade arrives by way of the United States of America most of that trade arrives in North America via the sea. Additionally, nearly a third of Canadian international trade is conducted directly through Canadian sea ports.<sup>12</sup> The security of this free movement of trade is vital to the prosperity of Canada, her allies, and the current global rules based order. Due to the highly integrated nature of maritime trade, threats to shipping in any part of the world can have wide ranging impacts on the whole system. Maritime threats to Canadian economic interests are numerous ranging from simple coercive threats to complete closure of key sea lanes. These influence on trade can be achieved through the use of anti-ship missiles, mines and the focus of this paper. Typically threats of this nature have been localized geographically however, as competition increases impacts to shipping could end up more global in nature. Compounding this issue today is the significant advantage given to the offensive side, particularly the submarine. Anti-Submarine Warfare technologies have lagged behind the submarines for some time.

9. Much of the effort in defensive technologies has focused on the above water warfare threat, specifically missiles, since the end of the cold war and the decline of the Russian submarine force.<sup>13</sup> This shift, although reasonable at the time, appears to have been somewhat short-sighted as submarine capabilities have been making a resurgence. This renewed interest has not been limited to the great naval powers of the twentieth century and many regional powers and other states have augmented their navy's with

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<sup>12</sup> The Canadian Encyclopedia, "Shipping Industry" last accessed 27 October 2019, <https://www.thecanadianencyclopedia.ca/en/article/shipping-industry>

<sup>13</sup> Leona Alleslev, "NATO Anti-Submarine Warfare: rebuilding Capacity, preparing for the future," NATO Parliamentary Assembly, Science and Technology Committee, 15 April 2019, 3-10.



submarines. Most of the proliferation of submarine technology has been conventional diesel-electric submarines (SSK), but several nations have sought to augment their conventional forces with nuclear powered submarines (SSN).<sup>14</sup>

10. Traditionally submarines have been used to attack an adversaries surface warships and supply lines, limiting its ability to wage war. The German use of submarines during both world wars demonstrated the efficacy of this capability. however, this role can be expanded upon to include sea denial operations as a strategic option between geo-political competitors. A submarines need not even fire a shot, its mere presence or threat of its presence can impact the maritime traffic in the area of interest. The impact could be as mild as increased insurance rates for vessels seeking to transit through a submarine threat area, to as severe as completely denying its use thereby leveling an economic penalty on the users of the sea lanes in question.<sup>15</sup> The reason for this impact is the difficulty confirming or refuting any claim to a submarines presence. The simple act of implying the presence of a submarine can provide a state with the ability to deny the use of the sea to competitors or advisories. As the population of the world continues to grow the potential for increased competition and even conflict over resources will rise accordingly.<sup>16</sup>

### **Other Justifications**

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<sup>14</sup> Ibid.

<sup>15</sup> Michael A. Glosny, "Strangulation from the Sea," International Security 28, No. 4 (Spring 2004) 128.

<sup>16</sup> The Guardian, "UK's ex-science chief predicts century of 'resource' wars," last accessed 27 October 2019, <https://www.theguardian.com/environment/2009/feb/13/resource-wars-david-king>

11. Due to the limited financial resources made available to defence in Canada when compared to our allies arguing for such a significant and potentially costly capability requires that the investment provide capability even when the threat it is designed to counter is insufficient to warrant its full operational capability. In addition to the primary role of defending Canadian economic interests at sea vessels of this nature lend themselves well to uses in operations other than war. The ability to transport large amounts of equipment and personnel would provide the Government of Canada options when dealing with domestic and international emergencies and humanitarian disasters. The Royal Australian Navy has recently acquired two vessels of the general type and capability suggested in this paper and in the summer of 2016 HMAS Canberra was tasked to provide humanitarian assistance and disaster recovery to Fiji in the aftermath of Cyclone Winston.<sup>17</sup> With the focus on aviation capabilities a Canadian ASW Carrier would excel under similar conditions. There would be no requirement for jetty facilities nor deep ports to accommodate the vessel, the ship-shore connection could be accomplished by the embarked helicopters. Also given the size of these vessels the crews tend to be somewhat larger, with space to accommodate even more, the ability to project personnel ashore, as demonstrated during Operation *Hestia* the RCN can have significant impact on the welfare of those in need. These good will operations, although employing military capability, provide Canada with significant political influence that can be leveraged to the justify the requirements to ensure the RCN possesses the capabilities required when the more traditional uses of an Aircraft Carrier are needed.

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<sup>17</sup> The Diplomat, "HMAS Canberra to the Rescue in Fiji," last accessed 27 October 2019, <https://thediplomat.com/2016/02/hmas-to-the-rescue-in-fiji/>

## **CONCLUSION**

12. This service paper has demonstrated the issue of varying polarity of the modern geopolitical climate which has been increasing competition between states, and how this competition could cause states to contemplate the use of submarines to influence this competition. Canada, with its aspirations as a middle power, and as one of a handful of states most interested in preserving the current rules based order requires renewed attention on its anti-submarine warfare capabilities to ensure the security of its sea borne trade. As argued above this renewed capability should be centered on a small to medium ASW Escort Aircraft Carrier. A vessel of this size and type will give Canada the flexibility and option space to contribute internationally and provide a greater impact to operations conducted under a coalition banner, but more importantly, if the trend in multi-polarity continues, would give Canada the option and capability to conduct operations alone.

## **RECOMMENDATION**

13. The Royal Canadian Navy should investigate buying at least two Anti-Submarine Warfare Escort Aircraft Carriers based on an existing design that is operational within the allied community. Suitable examples, ranging from smallest to largest are: the Italian San Giorgio Class (small), the South Korean Dokdo-class (medium), and the Australian Canberra class (large). Larger vessels of this type exist, like the American America Class and British Queen Elizabeth Class, but are too large and expensive to justify as the initial solution to the stated problem. In order to fully enumerate the requirements, specifically the number of ASW Helicopters required, The Canadian Forces Maritime Warfare Centre

along with Defence Research and Development Canada should be tasked with analysing the problem of successfully operating a naval task group, centered on an ASW Escort Aircraft Carrier, in support of the safe transit of Canadian trade through a submarine threat environment. In addition to the number of aircraft required this research should assess supporting technologies, other escort ship requirements, training, and survivability. With this research the RCN will be in a position to argue for the resources necessary to acquire two ASW Escort Aircraft Carriers and assure Canadian and allied trade upon the high seas in competitive times of peace, and if necessary supply lines in times of conflict.

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