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## Royal Canadian Navy Task Group Expertise

Lieutenant-Commander Anonymous

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**ROYAL CANADIAN NAVY TASK GROUP EXPERTISE**

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# ROYAL CANADIAN NAVY TASK GROUP EXPERTISE

## AIM

1. The aim of this service paper is to examine the traditional construct of the Royal Canadian Navy (RCN) task group, and consider the benefits of evolving the task group concept in a changing operational environment to include unique niche capabilities such as drone ships and hospital ships. By reflecting upon the provision of current capabilities and the consideration of unique niche capabilities in a rapidly evolving maritime domain, the RCN will ensure that it continues to remain relevant and in demand. The precision costs analysis associated with this topic falls outside the scope of this paper and could serve as an area of study to further quantify any potential cost savings.

## INTRODUCTION

### The Enduring Task Group Construct

2. The RCN has traditionally been steadfast on its requirement to simultaneously support 2 Task Groups. One on the east coast in Halifax, and the other on the west coast based out of Esquimalt. Although the composition of ships has varied in the post cold war era, the concept of a task group has remained relatively stable, despite recent changes in warfare domains. The 1994 defence white paper, describes “a naval task group [which should] comprised of up to four combatants (destroyers, frigates or submarines) and a support ship, with appropriate maritime air support, on each coast.”<sup>1</sup> In the 2001 Leadmark: The Navy’s Strategy for 2020 policy document, “the task group concept remains the fundamental precept of the operational employment of the Canadian fleet”<sup>2</sup> and remained unchanged, although did introduce a concept to be extrapolated upon later in this paper.

3. Following the Leadmark 2020 document, another policy refresh in 2009 through the Canada First Defence Strategy, highlighted a national shipbuilding strategy that outlines the procurement of 15 ships to replace Canada’s destroyers and frigate.<sup>3</sup> “These new ships will ensure that the military can continue to monitor and defend Canadian waters and make significant contributions to international naval operations”.<sup>4</sup> The new policy did not however introduce any new ships that offer a wholesale shifts in capabilities. The most recent *Strong, Secure, and Engaged* policy update in 2017 again reiterated “A fleet built around an ability to deploy and sustain two naval task groups, each composed of up to four combatants and a joint

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<sup>1</sup> Canada. Department of National Defence. *1994 Defence White Paper*. Ottawa: Canada Communication Group. 1994. P.4

<sup>2</sup> Canada. Department of National Defence. *Leadmark: The Navy’s Strategy for 2020*. Ottawa: DND Canada, 2001. P.66

<sup>3</sup> Canada. Department of National Defence. *Canada First Defence Strategy*. Ottawa: DND Canada, 2009. P.17

<sup>4</sup> Ibid.P.17

support ship”.<sup>5</sup> This will allow Canada can make a valuable contribution alongside its allies, while also maintain the capacity to monitor its own ocean territory and support the security of North America.<sup>6</sup> As the scope of warfare continues to expand beyond the traditional land, sea, and air domains to encompass SOF, joint, cyber, and space, emerging technologies and artificial intelligence have evolve to have greater asymmetric operational effect. It is imperative that the RCN re-evaluate their capabilities to ensuring security at home and abroad. The RCN must consider its unique security environment to re-evaluate how best to provide security at home, and maximize the support provided to allies. This paper explores the evolution of domains coupled with Canada’s favourable geography and how the introduction of new niche capabilities such as drone and hospital ships could provide a unique Canadian capability to an otherwise tired task group model while generating cost savings.

## DISCUSSION

### Operations in an Era of Changing Domains

4. The Canadian task group consisting of up to four combatants and a joint support ship, build capabilities that balance all 5 operational functions; “aspect of command and control (Command), an ability to collect information (Sense), an ability to manoeuvre and access fire support (Act), some form of protection (Shield) and some inherent ability to sustain itself (Sustain).”<sup>7</sup> Although warfare and technology has evolved greatly in the post cold war era, the 5 operational functions remain valid today and must be inherent in any future iteration of the Canadian Naval task group. It is not the operational functions that change, rather the interaction within these functions that must evolve.

5. Canada is a unique country that has the “longest coastline of any nation, bordering on three oceans; Atlantic, Pacific and Arctic.”<sup>8</sup> More than two-thirds of the country’s landmass is encompassed by its exclusive economic zone, which is endowed with a rich and diverse array of mineral and biological resources, constituting an offshore estate.<sup>9</sup> Being surrounded by three oceans, and an allied super power to the South, has allowed Canada to take a reserved approach to security. With no immediate threat to Canada’s landmass, Canada has been able to leverage its defence as a contribution warfare nation. Following decades of under investment in the military and challenges in procurement, the RCN continues to strive towards the structure of being able to

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<sup>5</sup> Government of Canada, Strong, Secure, Engaged: *Canada’s Defence Policy*. Ottawa: DND Canada, 2017. P.34

<sup>6</sup> Government of Canada, Strong, Secure, Engaged: *Canada’s Defence Policy*. Ottawa: DND Canada, 2017. P.34

<sup>7</sup> Canada. Department of National Defence. *COMMAND; The Operational Function, Army Doctrine*. Ottawa: DND Canada, 2018. P.13

<sup>8</sup> Canada. Department of National Defence. *Leadmark: The Navy’s Strategy for 2020*. Ottawa: DND Canada, 2001. P.3

<sup>9</sup> Ibid. P.3

support 2 task groups, though finds itself with antiquated ships rusting apart,<sup>10</sup> chronic personnel shortages, and a severe lack of experience amongst its sailors.<sup>11</sup> Contribution warfare, that is the provision of individual capabilities (such as 1 ship) into an overall greater force, is perhaps the extent of the limitations in which the RCN can currently operate in a sustained manner.

6. This brings the RCN to the current inflection point and provides an opportunity to re-examine the current construct of the Canadian task group concept. The RCN is currently recapitalizing its entire fleet with the purchase of 15 Canadian Surface Combatants (CSC), 6 AOPS, and 2 Joint Support Ships (JSS), while concurrently reconstituting its personnel to address its debilitating shortages. This endeavour could provide an opportunity for the RCN to save some money on ships, while reducing the overall personnel requirements and delivering a similar TG effect, with two additional niche capabilities.

7. A brief review of the overall costs as presented by the parliamentary budget officer of acquisition for the 15 CSC's is identified at \$80.2 Billion from a total \$306 Billion life cycle costs<sup>12</sup>. Considering \$80.2 Billion acquisition for 15 ships, gives a per unit cost of \$5.35 Billion. For comparison purposes, the Davie shipbuilding yard converted a civilian ship to be leased to the RCN as a re-supply tanker, MV Asterix, to be used as a stop gap measure. "In 2018 Davie offered the Asterix's sister vessel, Obelix, for \$500 million outright".<sup>13</sup> Although the detailed costs fall outside the scope of this paper, the assumptions made in this paper in reference to costing are based on the premise that the combatant ships are orders of magnitude higher than converted commercial ships. By substituting two CSC's for two converted commercial ships to deliver niche capabilities, there would be sufficient available funding to not only purchase the converted ships, but also the purchase of supporting equipment (drones and hospital equipment) as well as new training facilities to support the new capabilities. There could also be linkages made to the National ship building strategy where currently 2 shipyards are responsible for the production of all new surface ships being built. The current strategy does not include Canada's third largest shipbuilders, Davie Shipbuilding in Quebec, who have demonstrated experience converting commercial ships for the military.

### **Drone Ship**

8. The concept of having a dedicated ship to conduct drone operations would be a very unique capability. A capability that is not held by any of Canada's allies. Drones can be used for intelligence, surveillance, and reconnaissance purposes, while allowing task groups to gather

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<sup>10</sup> Lynch, Tim. "That Sinking Feeling: Despite a Huge Investment in Shipbuilding, Canada's Navy Isn't Living up to Its Historic Reputation." *Legion Magazine*, July-Aug. 2021, pp. 26-31

<sup>11</sup>Berthiaume, Lee. Canada's navy facing personnel 'crisis' as vacancy nearly 20%: commander. *Global News*. September 27<sup>th</sup>, 2022.

<sup>12</sup> Canada. Office of the Parliamentary Budget Officer. *The Life Cycle Cost of the Canadian Surface Combatants. A Fiscal Analysis*. Ottawa; PBO Canada, 2022. P.3

<sup>13</sup> Pugliese, David. *MV Asterix: An unexpected shipbuilding success story*. *Esprit de corps* Canadian military magazine. 2022 P.1

more information about their surroundings and potential threats. As drones can cover greater distances and reach places that are difficult to access, this can extend the reach of a task group and provide better situational awareness in a significantly safer and more cost-effective manner than crewed assets. Certainly, the idea of launching drones from ships is nothing new and most allied navies have been leveraging this capability. These capabilities however have been typically limited to one or two drones on the ship. There have been airborne drones, drone boats, as well as submersible drones.

9. Leveraging the concept of a drone ship into a dedicated capability could be done by converting a large commercial cargo ship. The top deck could be converted as a flight deck for drones of various sizes, while the large interior could store hundreds of drones with various capabilities. Large drones capable of carrying heavy weapons payloads, long endurance drones dedicated for surface picture compilation, smaller drones that could be employed in various swarm tactics, and other drone types yet to be devised. A large bay door in the hull of the ship, could be used for the easy launch and recovery of drone boats or even submersible drones. Though the intent of this ship would primarily be to leverage drone superiority in the operating environment, it would also provide another capability that had been discussed in the policy document *Leadmark: The Navy's strategy for 2020*. Due to its large size and capacity to carry large amounts of bulk cargo, this ship could also fulfill the requirements for the theoretical *Afloat Logistics and Sealift Capability (ALSC)* ships that was intended to provide logistical support to deployed ships, as well as the ability to transport Canada's expeditionary force to areas of conflict anywhere around the globe accessible by sea.<sup>14</sup> This new capability would also provide "other roles, including aviation support, humanitarian crisis response and a joint and (or) combined force headquarters capability, may be accommodated as well".<sup>15</sup>

10. In addition to providing a unique capability in drone warfare, a drone ship could also facilitate the expeditionary nature of our forces by providing sea lift capabilities for our land forces. A capability that is currently not held within the CAF and has been at times contracted through civilian service providers. Evidently a civilian service provider is not the ideal situation in an operational environment as evidenced in 2000 when a civilian ship had been contracted to return equipment and munitions to Canada and attempted to hold the equipment hostage. The minister of National defence at the time stated that "Having our equipment held hostage was not something acceptable to us Mr. Eggleton said, noting that some of the cargo was highly sensitive military equipment".<sup>16</sup> This reliance is problematic and exposes a vulnerability as the CAF must rely on civilian service providers whose economic motivations might not align with operational objectives.

11. Submersible, floating, and airborne drones are all capabilities that the CAF is working on, however, have yet become experts. By leveraging the significant cost savings from reducing the number of CSC ships, the CAF could invest heavily in this domain and become world leaders,

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<sup>14</sup> Canada. Department of National Defence. *Leadmark: The Navy's Strategy for 2020*. Ottawa: DND Canada, 2001. P.67

<sup>15</sup> Ibid. P.67

<sup>16</sup> Sallot, Jeff. *Troops seize cargo ship*. The Globe and Mail. August 4, 2000. P.1

while maintaining its enduring two task groups. This capability would place the RCN as a very desirable partner capable of providing this unique and emerging capability.

### **Hospital Ship**

12. The RCN is a vital component of Canada's national defence and security strategy, however is not solely limited to military operations. The RCN plays a significant role in Humanitarian Assistance and Disaster Relief (HADR). "The Royal Canadian Navy's 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."<sup>17</sup> The introduction of a Hospital ship would play a critical role in HADR efforts in times of natural disasters such as earthquakes, hurricanes, and tsunamis, or even localised outbreaks of viruses and diseases such as the SARS outbreak in Toronto. A hospital ship would provide a substantial medical surge capability anywhere in the world that is navigable by sea going vessels, extending ranges with organic helicopters. This surge capability could also be employed at home to provide medical care to under resourced communities in Canada such as the north during summer conditions when sea ice permits.

13. A hospital ship would also help increase Canada's reputation as a soft power by demonstrating Canada's commitment to international aid and cooperation. It would also appeal to Canadians who have largely felt that the CAF ought to function within the framework of the United Nations as peacekeepers rather than collaborating with the United States or other major powers. This reflects the belief in pursuing more virtuous goals. According to a survey conducted in 2009, 50% of respondents desired for Canada to solely engage in peacekeeping efforts"<sup>18</sup> Canadians not only pride themselves for their world class healthcare system, they are also front and center to offer help in times of need. A hospital ships would be a very Canadian capability that is reflective of Canadian values and thus prove beneficial as an instrument of soft power for the government.

14. Ultimately, a hospital ship in the RCN would be a significant capability for providing medical support in times of hostilities. Equipped with advanced medical facilities and highly trained medical professionals capable of treating a wide variety of combat related injuries, providing medical assistance to the wounded and performing surgeries, a large hospital ship could provide much needed role three medical capabilities in a theater of operations. In a hypothetical conflict similar to the war in Ukraine, a hospital ship and her crew could be permitted to enter the black sea as a non warship enjoying the protections allocated by article 36 of the 1949 Geneva convention that provides "medical and hospital personnel of hospital ships and their crews shall be respected and protected... and under no circumstances be the object of attack"<sup>19</sup> and could station itself clear of hostilities but in close proximity. This surge capacity

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<sup>17</sup> Government of Canada, Strong, Secure, Engaged: *Canada's Defence Policy*. Ottawa: DND Canada, 2017. P.34

<sup>18</sup> Spearin, Christopher, *Dissecting Military and Security Outsourcing in Canada's Expeditionary Culture*. Taylor & Francis Group, 2016. P. 31

<sup>19</sup> International Committee of the Red Cross. "Protection of the Personnel of Hospital Ships." Chapter. In *Commentary on the Second Geneva Convention: Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces*

could provide medical support to wounded soldiers on the battlefield and help evacuate them to a more substantial role three medical facility in close proximity to maximize the evacuation of wounded within the golden hour and increase their chances of survival.

## CONCLUSION

15. This service paper examined the current composition of the RCN task group concept. The composition of a Canadian task group that has remained relatively unchanged in a post cold war era, despite the evolution of technological progress and introduction of new domains. While operational functions remain unchanged, advances in military capabilities provides greater opportunity to re examine the interaction with these functions with more deliberate capabilities. With a unique geography that provides a natural barrier to kinetic engagements, Canada is well position to provide niche capabilities by leveraging costs from a slightly reduced fleet of surface combatants. These costs savings could be easily invested to generate a highly capable drone ship that would provide advanced capabilities in a much more technologically advanced operating environment. The cost savings could also generate a highly coveted hospital ship to fill a current capability deficiency amongst allies. These new capabilities would be highly palatable to Canadians by leveraging Canada's strong values to help others as well as its burgeoning technology industry. The RCN is reconstituting its personnel, and recapitalizing its entire fleet. The time is now for the RCN to ask itself where it wants to be in the future.

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*at Sea*, 859–77. Commentaries on the 1949 Geneva Conventions. Cambridge: Cambridge University Press, 2017. P.859



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