





# THREAT-BASED ANALYSIS: CANADA'S SOLUTION TO ARCTIC DEFENCE PROCUREMENT

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### **JCSP 46**

## Solo Flight

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### **SOLO FLIGHT**

# THREAT-BASED ANALYSIS: CANADA'S SOLUTION TO ARCTIC DEFENCE PROCUREMENT

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# THREAT-BASED ANALYSIS: CANADA'S SOLUTION TO ARCTIC DEFENCE PROCUREMENT

### **INTRODUCTION**

Defence procurement within western states can be a highly controversial topic and has garnered many political debates. Defence spending often accounts for the largest portion of discretionary spending within a government's yearly budget, a large portion of which is usually attributed to defence procurement. Not surprisingly, mishaps relating to the government's largest procurement projects often have negative political impacts.<sup>1</sup> Whether specific defence procurement mistakes have actually resulted in re-election failures is subject to debate. Nevertheless, within Canada, it has been argued that "all... governments have equally mismanaged defence procurement."<sup>2</sup> It is therefore evident that defence procurement is quite complex and is difficult to execute without the occasional miscalculation under the best of scenarios. The action of projecting future military requirements is at best imperfect as it is impossible to exactly identify all potential threats to a state or the demands which will be put upon its military force within the next 30 years. As a result, Canada turned from threat-based planning (TBP) to capability-based planning (CPB) in 2000.<sup>3</sup> It uses CBP as "a key decision aid that assists senior leadership in making Force Development (FD) choices concerning future capabilities in the 5 to 30 year timeframe." However, despite Canada's recent use of CBP, this paper will show that the fact that the threats to the Canadian Arctic are well

<sup>&</sup>lt;sup>1</sup>The Procurement Office, "Feds Slammed for Military Procurement Failures," last modified [or accessed] 23 January 2014, http://procurementoffice.com/feds-slammed-for-military-procurement-failures/

<sup>2</sup> Charles Davies, "Why defence procurement so often goes wrong," *POLICY OPTIONS*, 20 January 2016, 1. https://policyoptions.irpp.org/magazines/january-2016/why-defence-procurement-so-often-goes-wrong/

<sup>&</sup>lt;sup>3</sup> Canada. Department of National Defence. Capability Based Planning for the Department of National Defence and the Canadian Forces Ottawa: Vice Chief of Defence Staff, 2002, 2.

<sup>&</sup>lt;sup>4</sup> Canada. Department of National Defence. Capability-Based Planning Handbook. Ottawa: Chief Force Development, June 2014 (Version 8), 5.

defined makes TBP a more appropriate planning tool in this environment. This is evident when exploring Canada's historical use of CBP and the benefits it provides in comparison to the two known threats to the Canadian Arctic. Further evidence is provided by the fact that TBP is specifically designed to focus on one or two potential threats and as a result, would be more suited in meeting Arctic requirements and Canada's North American Aerospace Defense (NORAD) commitments.

#### BACKGROUND

Due to the typical uncertainty of forecasting potential threats, states have turned to specific models and methodologies in order to minimise mistakes in projecting future defence requirements. Prior to the introduction of CBP, nations turned to TBP to plan and project future defence requirements. This method focuses on an identifiable threat and reasonable scenarios related to that threat. The amount of force required, along with other relevant factors to counter this threat are then derived from the analysis process. This method works best when focused on one or two threats. Currently, most Canadian allies employ CBP as "over the past decade, [CBP] has become something of a 'gold standard' in defence planning throughout the [North Atlantic Treaty Organization (NATO)] alliance." This is done in an attempt to meet the vast demands that could be laid upon these various military forces when the enemy or challenge of the next 30 years may not be clear. "The central idea behind adopting this process was that military organizations would no longer know what nation, combination of nations, or armed non-state actors

<sup>&</sup>lt;sup>5</sup> Tony Balasevicius, "Is It Time To Bring Back Threat-Based Planning?," The Mackenzie Institute, last modified [or accessed] 7 April 2016. https://mackenzieinstitute.com/2016/04/is-it-time-to-bring-back-threat-based-planning/

<sup>&</sup>lt;sup>6</sup> Stephan De Spiegeleire, "Ten trends in capability planning for defence and security," *RUSI journal* 156, no. 5 (October/November 2011): 20.

would potentially pose a future security threat to Western interests." In such an environment, TBP was seen as no longer suitable in meeting the requirements of FD planning, thus the CBP model was introduced.

### CANADA'S USE OF CAPABILITY-BASED PLANNING

Canada's defence procurement structure has undergone significant transformation throughout the 20<sup>th</sup> century. It underwent centralization in response to the procurement surges seen in World War I (WWI), World War II (WWII), Cold War and Korean War. In contrast, a decentralization of defence procurement was experienced during times of peace and reduced tension, leading up to today's multi-departmental structure. The current structure has the Treasury Board of Canada Secretariat, Innovation, Science and Economic Development Canada and Public Services and Procurement Canada playing key roles in procuring military platforms. Though these roles are important to the process, the Department of National Defence's (DND) role in identifying future requirements sets the foundation for effective defence procurement. A critical element to this process is the methodology used to identify what will be required by the Canadian Armed Forces (CAF) to operate as a military force over the next 30 years. Consequently, analysing DND's current methodology, CBP, and its suitability to the Arctic scenario can help resolve the TBP vs CBP dilemma for the Canadian Arctic environment.

Throughout the 20<sup>th</sup> century, the DND employed TBP to conduct procurement planning, focusing its efforts on the known adversary. This allowed it to tailor the CAF's capabilities to the needs of WWI, WWII, the Cold War and the Korean War. However,

<sup>&</sup>lt;sup>7</sup> Tony Balasevicius, "Is It Time To Bring Back Threat-Based Planning?," The Mackenzie Institute, last modified [or accessed] 7 April 2016. https://mackenzieinstitute.com/2016/04/is-it-time-to-bring-back-threat-based-planning/

<sup>&</sup>lt;sup>8</sup> Martin Auger, "The Evolution of Defence Procurement in Canada" Background Paper, Ottawa: Library of Parliament, 4 February 2016, 1-9.

with the conclusion of the Cold War, the adversary or the threats that would be faced in future operations were difficult to forecast. The CAF's operational diversity throughout the 21<sup>st</sup> century only brings credence to this effect. Its peace-support operations as part of Op ATHENA in Afghanistan and its peacekeeping role as part of Op CALUMET in Egypt are perfect examples of this mission diversity. While Op ATHENA had the CAF conducting counter-insurgency operations, Op CALUMET sees the CAF supporting the Multinational Force and Observers in a non-combat role. The growing Russian military threat in Europe<sup>10</sup>, tensions in the South China Sea and increased non-state military force activity further demonstrate the challenge with a methodology that focuses on a single adversary, such as TBP.

Consequently, "in 2005, [the CAF] Chief of Defence Staff announced the commencement of the transformation of the [CAF]." This transformation included the revamping of its FD process, with CBP at its core, as depicted in Figure 1.

<sup>&</sup>lt;sup>9</sup> Government of Canada, "Operation ATHENA," last modified [or accessed] 19 November 2014, https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/operation-athena.html, Government of Canada, "Operation CALUMET," last modified [or accessed] 31 May 2018, https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-calumet.html

<sup>&</sup>lt;sup>10</sup> The Commission on Security and Cooperation in Europe, "The growing russian military threat in Europe," last modified [or accessed] 17 May 2017, https://www.csce.gov/international-impact/events/growing-russian-military-threat-europe?page=1

<sup>&</sup>lt;sup>11</sup> Department of National Defence, Strategic Planning Operational Research Team, *An Overview of the Canadian Forces' Second Generation Capability-Based Planning Analytical Process*, September 2010, 1.

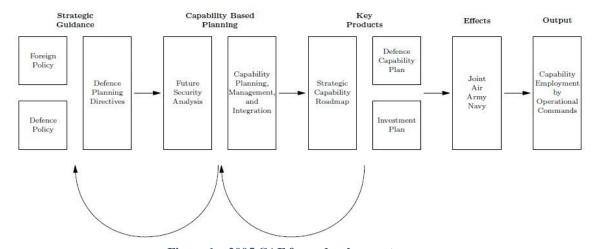


Figure 1 – 2005 CAF force development process
Source – Rempel, An Overview of the Canadian Forces Second Generation Capability-Based Planning
Analytical Process, iii.

The new process was designed to be proactive, enabling the DND to project future capability requirements. This deviated from previous methods, where the DND often based its defence procurement on the performance of pre-existing military platforms. <sup>12</sup> In its simplest form, the force development process is the analysis of strategic guidance via CBP to produce key products, which could in turn be used to produce effects and outputs (i.e. the employment of future capabilities). This places CBP at the center of the process, as it is the key element required to transform strategic direction into output, or more specifically, a new platform.

Though the DND's Force development model may have changed throughout the years, its CBP process remains the central point between inputs that at the highest level are derived from strategic guidance and the output products that are utilized to procure future military platforms. Therefore, it would be difficult to deny CBP's importance to the DND's FD process, as "determining future capability requirements and testing the

<sup>&</sup>lt;sup>12</sup> Ibid., 1.

Force of tomorrow are key undertakings of the CBP process." The current DND CBP process is depicted in Figure 2.

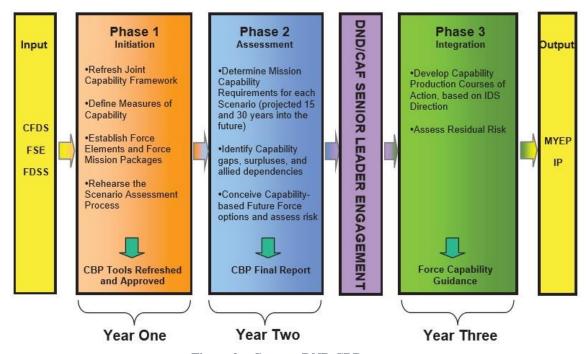


Figure 2 – Current DND CBP process
Source – Department of National Defence, Capability-Based Planning Handbook, 7.

Conceptually, CBP is a non-prescriptive process used to analyse various foreseeable futures and identify a set of capabilities that would be capable of responding to the threats of that future environment. However, the CAF Capability-Based Handbook specifies that the "CBP process disassociates capability from individual weapon systems or platforms." CBP begins by projecting the future security environment in order to identify different scenarios and threats which could be faced. From this, the various tasks and activities required to achieve mission success over the given scenarios are identified, from which are derived the required capabilities. Risk analysis is then used to identify the importance of each of these capabilities and organize them by priority. Only then are the

<sup>&</sup>lt;sup>13</sup> Canada. Department of National Defence. Capability-Based Planning Handbook. Ottawa: Chief Force Development, June 2014 (Version 8), 7.

<sup>&</sup>lt;sup>14</sup> Ibid., 10.

specific weapons systems and platforms identified. It does so by identifying which ones would be more suitable to achieve the desired capabilities. The end result is an investment and establishment plan for defence acquisition. The complete logic flow of the DND CBP is depicted in Figure 3.

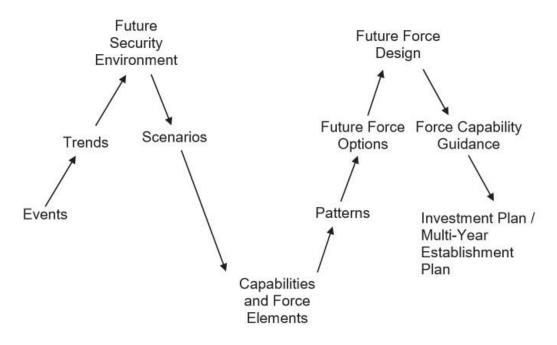


Figure 3 - CBP logic flow
Source: Department of National Defence, *Capability-Based Planning Handbook*, 15.

Fundamentally, CPB allows the DND to focus "on how an adversary might fight rather than who the adversary might be or where a war might occur." This approach provides advantages when faced with a future which could have multiple different types of adversaries and multiple types of threats or scenarios. Knowing that funding is always limited, especially so for a middle power like Canada, 16 states cannot tailor their militaries to respond to all possible scenarios in the manner in which it was done for

Tony Balasevicius, "Is It Time To Bring Back Threat-Based Planning?," The Mackenzie Institute, last modified [or accessed] 7 April 2016. https://mackenzieinstitute.com/2016/04/is-it-time-to-bring-back-threat-based-planning/

<sup>&</sup>lt;sup>16</sup> Global Firepower, "Defence Spending by Country (2020)," last modified [or accessed] 5 May 2020, https://www.globalfirepower.com/defense-spending-budget.asp

single adversaries with TBP. CBP addresses this challenge by analysing the various threats which could be faced, providing a set of capabilities when properly implemented which can span the requirements of the most probable scenarios. It is however important to note that due to its prioritisation of capabilities through risk analysis, CBP does not provide the best force package to respond to each individual scenario. It provides the best force package to respond to the gamut of scenarios which the nation deemed legitimate and probable. In so doing, it sacrifices precision for flexibility.

### THREATS TO THE CANADIAN ARCTIC

The Canadian Arctic poses an intriguing FD challenge for Canada considering its use of a CBP process. Though the CAF's future expeditionary operations can expect a large diversity of adversaries and threats in the next 30 years, this does not necessarily translate to its Arctic operations. Canada's defence policy, *Strong, Secure, Engaged* (SSE), identifies very specific CAF mandates when it comes to the Artic. The first is its commitment to the (NORAD) and the second is increasing its presence in the arctic while working with Arctic partners, <sup>17</sup> These partners include the eight states that have a territory north of the 60° north latitude. These countries, which are Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States form the Arctic Council and are "the premiere body for cooperation in the region." Not to be overlooked are Non-Government Organizations (NGOs), private sector representatives and other organizations as "climate change, combined with advancements in technology, is leading to an increasingly accessible Arctic." With such specific mandates, the CAF's Arctic

<sup>&</sup>lt;sup>17</sup> Department of National Defence. D2-386/2017E, Strong Secure Engage Canada's Defence Policy (Ottawa: Minister of National Defence, 2017), 14.

<sup>&</sup>lt;sup>18</sup> Ibid., 50.

<sup>&</sup>lt;sup>19</sup> Ibid., 51.

threats can be broken down into two specific categories, man-made disasters and threats to Canadian sovereignty.

The first threat, the increased risk of man-made disasters, is a direct result from rising Arctic activity. For the purpose of this discussion, man-made disasters are considered disasters as a result of human activity such as oil spills, naval disasters, airplane crashes, and other such incidents. With the increase in arctic activity, there is no denying that the risk of such disasters will increase. Of note, the Arctic Council discussed concerns surrounding the projected increase in arctic tourism during the 2013 Arctic Circle conference. These concerns were validated in 2016 when the Crystal Serenity, a luxury cruise liner, navigated the Northwest Passage, demonstrating the feasibility of Arctic tourism as a viable industry. Though the conference's focus was on environmental concerns, the projections will increase the risk of naval and air incidents, while also increasing the likelihood of lost persons. Any of these scenarios could necessitate a CAF response. It is important to note that "alongside the Canadian Coast Guard, the Canadian Armed Forces responds to more than 9,000 search and rescue (SAR) calls annually."<sup>22</sup> SSE further emphasises the fact that the CAF will continue to conduct aeronautical and maritime SAR and disaster assistance operations. <sup>23</sup>

Though the opening of the Northwest Passage can "create a significant economic opportunity for shipping companies, as it provides a route that is about 7000 km shorter

<sup>23</sup> Ibid,, 87.

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<sup>&</sup>lt;sup>20</sup> Andrea Hill, "Arctic tourism poses threat to the environment, Canadian expert tells Arctic Circle conference," Postmedia News (Oct 2013): 1, https://search.proquest.com/docview/1442091695?accountid=9867

<sup>&</sup>lt;sup>21</sup> Businesswire, "Mission Accomplished: Crystal Serenity Completes 32-Day Northwest Passage Journey," last modified [or accessed] 5 May 2020, https://www.businesswire.com/news/home/20160916005705/en/Mission-Accomplished-Crystal-Serenity-Completes-32-Day-Northwest

<sup>&</sup>lt;sup>22</sup> Department of National Defence. D2-386/2017E, Strong Secure Engage Canada's Defence Policy (Ottawa: Minister of National Defence, 2017), 87.

for travel between Tokyo and London than using the Panama Canal,"<sup>24</sup> it certainly comes with significant risks for international shipping companies. In addition to icebergs, Arctic storm waves and shoals throughout make travel in the area a dangerous enterprise.<sup>25</sup> While ice melt rates are difficult to predict, there is no denying the overall reduction in ice levels. The immediate impact of the "changing climate on Arctic marine transportation will be an increase in the length of the summer shipping season."<sup>26</sup> This increase summer shipping season also provides greater potential for local resupply, facilitating the establishment of communities or industry. In both scenarios, the frequency and quantity of naval shipments throughout the area would increase. Such expansion would further increase the risk of naval incidents in the north, thus increasing the potential for CAF SAR or disaster assistance operations. The Northwest Passage is depicted in Figure 4.

<sup>&</sup>lt;sup>24</sup> Government of Canada, "Implications for Economic Development and Adaptation within key Sectors," last modified [or accessed] 30 November 2015,

 $<sup>\</sup>frac{https://www.nrcan.gc.ca/environment/resources/publications/impacts-adaptation/reports/assessments/2008/10273?wbdisable=true$ 

<sup>&</sup>lt;sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Ibid.



**Figure 4 - Northwest Passage** Source - *Encyclopaedia Britannica* 

Another contributor to increased Canadian Arctic activity is the mining and oil and gas industries. Though scientific exploration and other industries are not to be dismissed, Statistics Canada reports that the mining, quarrying, and oil and gas extraction industries account for over seven percent of Canada's monthly gross domestic products.<sup>27</sup> The potential for increased access to natural resources in the Arctic is without a doubt garnering interest from industry leaders, as well as other Arctic states. Three major mines are already established in Canada's northern territories, while other projects have been approved or are currently in the approval process, while some of the largest potential oil reserves are found in the Canadian Arctic.<sup>28</sup> This assured increase in activity will further contribute to the increased risk to man-made disasters, which could include oil spills,

<sup>&</sup>lt;sup>27</sup> Statistics Canada, "Gross domestic product (GDP) at basic prices, by industry, monthly, growth rates (x 1,000,000)," last modified [or accessed] 6 May 2020, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610043402

<sup>&</sup>lt;sup>28</sup> Government of Canada, "Implications for Economic Development and Adaptation within key Sectors," last modified [or accessed] 30 November 2015, https://www.nrcan.gc.ca/environment/resources/publications/impacts-adaptation/reports/assessments/2008/10273?wbdisable=true

naval and aeronautical incidents, or any number of scenarios. While the CAF are not the only participant in responding to these types of scenarios, it does have a key role to play and will be expected to do so in the future.

The second threat as it relates to the Canadian Arctic is the threat to Canadian sovereignty. Canada's Arctic Foreign Policy describes sovereignty as the most important pillar towards recognizing the potential of Canada's Arctic,<sup>29</sup> making it the government's primary concern in the north. From a CAF perspective, the potential military threats to Canadian Arctic sovereignty can be narrowed to the Arctic Council members as they are the seven countries which share territory north of the 60° north latitude. These countries have the benefit of relative proximity and access to the Canadian Arctic with the opening of the northern water ways. As a result, it makes them the most legitimate adversaries as it relates to challenging Canadian sovereignty in the north.

Canada and the United States (US) have been partners in the defence of North America through NORAD since 1958. 30 As a result, the US is not a probable military adversary in the Arctic. As with the US, though to a lesser extent, Denmark, Iceland and Norway fall under the same category as NATO allies. 31 Finland and Sweden are NATO partners 32 and have shown no signs of aggressive expansionism or aggression against Canada. They both have excellent relations with Canada and are considered like-minded democratic states. Both countries also have a number of bilateral agreements with

<sup>&</sup>lt;sup>29</sup> Government of Canada, "Canada's Arctic Foreign Policy," last modified [or accessed] 12 May 2017, https://www.international.gc.ca/world-monde/international\_relations-relations\_internationales/arctic-arctique/arctic\_policy-canada-politique\_arctique.aspx?lang=eng

<sup>&</sup>lt;sup>30</sup> North American Aerospace Defense Command, "Welcome to NORAD & US Northern Command!," last modified [or accessed] 5 May 2020, https://www.norad.mil/About-NORAD/Newcomers/

<sup>&</sup>lt;sup>31</sup> North Atlantic Treaty Organization, "Member countries," last modified [or accessed] 24 March 2020, https://www.nato.int/cps/en/natohq/topics\_52044.htm

<sup>&</sup>lt;sup>32</sup> North Atlantic Treaty Organization, "Partners," last modified [or accessed] 24 March 2020, https://www.nato.int/cps/en/natohq/51288.htm#fn08

Canada.<sup>33</sup> Consequently, all six of these Arctic Council members are too geopolitically aligned to be considered viable military adversaries in the Canadian Arctic.

This leaves Russia as the only probable military threat to Canada's sovereignty in the Arctic. A NATO partner, their aggressive actions in Ukraine prompted NATO to suspend practical NATO-Russian cooperation,<sup>34</sup> providing evidence of aggressive and expansionism tendencies. It's continued use of grey zone activity across the globe<sup>35</sup> further demonstrates this aggressive nature, to the point of being referred to as "a Second Cold War between Russia and Western countries." In so doing, Russia has demonstrated on "overarching obsession with fragmentation and subversion... [and a] perceived need to recreate a buffer zone at Russia's borders against the West."

Russia's actions in the Arctic further supports the argument that they would be the probable military adversary in the eventuality of military conflict in the Canadian Arctic. "Historically, the Arctic has been a prime location for Russia's global strategic assets for two reasons: It is the shortest flight path for missiles toward the United States and the Arctic offers good access to the Atlantic." With its recent military build-up in the

<sup>&</sup>lt;sup>33</sup> Government of Canada, "Canada-Finland relations," last modified [or accessed] 6 January 2020, https://www.international.gc.ca/country-pays/finland-finlande/relations.aspx?lang=eng, Government of Canada, "Embassy of Canada to Sweden, Canada – Sweden Relations," last modified [or accessed] 18 March 2020, https://www.canadainternational.gc.ca/sweden-suede/bilateral relations bilaterales/canada sweden-suede.aspx?lang=eng

<sup>&</sup>lt;sup>34</sup> North Atlantic Treaty Organization, "NATO-Russia relations: the facts," last modified [or accessed] 9 August 2019, https://www.nato.int/cps/en/natohq/topics\_111767.htm

<sup>&</sup>lt;sup>35</sup> A Virtual Think Tank Analysis, *The Characterization and Conditions of the Gray Zone*, NSI, Winter 2016, 14.

Hans Klein, "Information Warfare and Information Operations: Russian and U.S. Perspectives," Journal of International Affairs (Spring 2018), 137. https://jia.sipa.columbia.edu/information-warfare-and-information-operations-russian-and-us-perspectives

<sup>&</sup>lt;sup>37</sup> Center for Strategic & International Studies, "Russia's Design in The Black Sea: Extending the Buffer Zone," last modified [or accessed] 28 June 2017, https://www.csis.org/analysis/russias-design-black-sea-extending-buffer-zone

<sup>&</sup>lt;sup>38</sup> Stephanie Pezard, Abbie Tingstad, Krisitn Van Abel and Scott Stephenson, *Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North*, (Santa Monic: Rand Corporation, 2017), 9.

Arctic<sup>39</sup> and repeated bomber incursions into the US and Canadian Arctic throughout the years,<sup>40</sup> there is no denying their intent to be a primary military presence in the Arctic. Consequently, Russia is without a doubt the most legitimate and probable adversary in any future conflict in the Canadian Arctic.

Though there is no denying that the CAF may engage in other types of operations in the Arctic, such secondary operations do not provide the same impact to diversity of operations that is experienced during expeditionary operations. The only exception would be assistance to natural disaster events. However, the CAF' current capabilities translate well to such operations, which includes SAR and its Disaster Assistance Response Team. The CAF currently supports natural disaster operations domestically on a yearly basis. Consequently, the future potential threats to the Canadian Arctic can be narrowed down to two, assistance to man-made disasters and attacks on Canada's Arctic sovereignty by Russia.

### WHY THREAT-BASED PLANNING IS THE CANADIAN ARCTIC SOLUTION

As the future threats in the Canadian Arctic can be narrowed down to two primary threats, an analysis model that focuses on a specific threat to identify future capability requirements would provide a more precise and effective solution to counter these threats. It is true that supporters of CBP would argue that "no one today advocates assessing only two specific threat vectors, from source to strategy to tactics." This is a

<sup>&</sup>lt;sup>39</sup> Stephanie Pezard, Abbie Tingstad, Krisitn Van Abel and Scott Stephenson, Maintaining Arctic Cooperation with Russia: Planning for Regional Change in the Far North, (Santa Monic: Rand Corporation, 2017, 9, Vladimir Isachenkov, "Russia revamps Arctic military base to stake claim on region," CBC News, 5 April 2019. https://www.cbc.ca/news/canada/north/russia-arctic-military-tool-1.5085101

<sup>&</sup>lt;sup>40</sup> "NORAD intercepts Russian bombers off west coast of Alaska for 2nd time this year," CBC News, 7 September 2018. https://www.cbc.ca/news/canada/north/norad-intercepts-russian-bombers-alaska-1.4814851

<sup>&</sup>lt;sup>41</sup> Kathleen H. Hicks, "Bad Idea: Arguing Over Capabilities- vs. Threat-based Planning," Center for Strategic & International Sudies, December 2017, 2.

very reasonable argument in today's complex security environment, especially for a country that is involved in various types of operations throughout the world. However, as this paper demonstrated, the Canadian Arctic is not a typical operational environment. In fact, it has precisely that, an environment with two specific threat vectors. As stated by Hicks, director of the International Security Program at the Center for Strategic and International Studies and supporter of CBP, this "is the very definition of [TBP]."

Considering this reality, a properly integrated TBP process would provide significant advantages in Canada's efforts to develop its Arctic capabilities. The DND FD could develop a "well-defined strategic concept on how to win a war rather than the current practice of producing capabilities to defeat the capabilities of a generic enemy." In so doing, its defence procurement would be focused on the exact capabilities required to overcome and defeat the two potential threats in the Canadian Arctic. Such a focused approach would provide capabilities that are more effective in dealing with these threats as these capabilities would not be diluted by the generalist approach of CBP. More specifically, the CAF's capabilities would be those best positioned to defeat or meet the actual threats to the Canadian Arctic.

Additionally, TBP would also be effective in meeting Canada's NORAD commitments, the most prominent of which include providing "sufficient mission-ready fighter aircraft, and enhance [its] capacity to provide continuous aerospace and maritime domain awareness and aerospace control." Using TBP, the DND could ensure that its

<sup>&</sup>lt;sup>42</sup> Ibid., 2.

<sup>&</sup>lt;sup>43</sup> Tony Balasevicius, "Is It Time To Bring Back Threat-Based Planning?," The Mackenzie Institute, last modified [or accessed] 7 April 2016. https://mackenzieinstitute.com/2016/04/is-it-time-to-bring-back-threat-based-planning/

<sup>&</sup>lt;sup>44</sup> Department of National Defence. D2-386/2017E, Strong Secure Engage Canada's Defence Policy (Ottawa: Minister of National Defence, 2017), 83.

Arctic surveillance and interdiction capabilities are also focused on the legitimate and probable Canadian Arctic threats. Consequently, TBP would be a superior Arctic defence procurement planning process in comparison to CBP by providing the CAF with more effective capabilities and allowing Canada to meet its NORAD commitments.

#### **CONCLUSION**

In conclusion, despite Canada's recent use of CBP, this paper clearly demonstrated that the threats to the Canadian Arctic are well defined, making TBP a more appropriate planning tool in this environment. While CBP is considered an effective defence procurement planning process for uncertain and diverse operational environments, it is ill-suited for dealing with an environment that has one or two specific threats. Due to the fact that TBP was designed to deal with one or two specific threats and that this paper's analysis has demonstrated that the Arctic faces two threats, TBP is without a doubt a superior alternative. Its focused approach would enable the procurement of the most effective CAF capabilities for Arctic operations. Due to their combined threat-based capabilities, it would allow the CAF to overcome these threats posed to the Canadian Arctic. Finding ways to incorporate a TBP/CBP hybrid approach in DND's current FD structure is the next step in this analysis.

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