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Sovereignty and Security Concerns and the Northwest Passage

JCSP 47

Exercise Solo Flight

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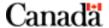
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CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES

JCSP 47 – PCEMI 47 2020 – 2022

Exercise Solo Flight – Exercice Solo Flight

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SOVEREIGNTY AND SECURITY CONCERNS AND THE WARMING NORTHWEST PASSAGE

AIM

1. The climate in the Arctic is warming almost twice as fast as the rest of the world, according to the Arctic Climate Impact Assessment (ACIA), published in 2004 by the Arctic Council. The temperature in the Arctic "is expected to keep increasing from 4 to 7 degrees over the next century; the continuing reduction in sea ice is very likely to lengthen the navigation season and increase marine access to natural resources in the Arctic." The purpose of this paper is to discuss sovereignty and security concerns, that arise from the warming climate and the resulting changes to the Northwest Passage (NWP) and reinforce that these changes should be acknowledged and actioned.

INTRODUCTION

- 2. The NWP refers to numerous routes, through the Canadian Arctic archipelago that connect the Atlantic Ocean to the Pacific Ocean. Historically, the NWP has been difficult to impossible to transit, especially without the assistance on an ice breaker. It is predicted that the NWP "could be open to year-round navigation in the next 15 years, as early as 2030." As the NWP waters, become increasingly ice free, it is likely that commercial, military and private traffic will increase. *Strong, Secure, Engaged* (SSE), Canada's Defence Policy, states, "Climate change is increasingly leading to a more accessible Arctic region... Arctic and non-Arctic states alike are looking to benefit from potential economic opportunities associated with new resource development and transportation routes."
- 3. The Arctic and Northern Policy Framework (ANPF) states, "In today's increasingly complex Arctic ... the continued safety and security of the North depends on strengthened emergency management ... including the enhanced presence and ability to respond of security providers, such as the, Canadian Armed Forces ..." The ANPF reinforces SSE, and justifies the need for the Canadian Armed Forces (CAF), in cooperation with all other Government Departments (OGDs), to enhance their ability to work in the Arctic in order to maintain sovereignty and security.
- 4. Sovereignty and security concerns and threats will increase as the NWP becomes more accessible and influence how the CAF and other OGDs operate in the Arctic. The terms sovereignty and security will be defined in the context of the Arctic. Differing perceptions of the

3 Maryanne. Mundy, "The Polar Express Lane: Promoting Cleaner Shipping in The Northwest Passage," *Georgetown Environmental Law Review* 29, no. 1 (September 2016): 154.

¹ M. Nolin, "Heated Conflict over the Northwest Passage: Is Canada's sovereignty Melting Away?" *Journal of Maritime Law & Commerce* 84 no. 3, (2017): 364.

² Idib., 364.

⁴ Department of National Defence, Strong, Secured, Engaged - Canada's Defence Policy (Ottawa: Canada, 2017), 79

⁵ Government of Canada, "Artic and Northern Policy Framework," Last modified 18 November 2019. https://www.rcaanc-cirnac.gc.ca/eng/1560523306861/156052330587

NWP, the changed required to Search and Rescue (SAR) and the Arctic military presence will be used to highlight the increased concern around sovereignty and security. Acknowledgement, understanding and action on the changes around the NWP and the Arctic will enable the CAF and OGDs to be prepared and ready to respond.

DISCUSSION

Sovereignty and Security

- 5. There are many definitions of the Arctic. SSE, defines the Arctic as any territory north of 60 degrees stating, "The Arctic represents an important international crossroads where issues of climate change, international trade, and global security meet." It should be noted that using this definition Canadian Arctic encompasses the three Territories and part of Northern Quebec. The population that lives in this area is low. The three Territories have a total population of just over 113,000, which equates to approximately 0.32% of Canada's population. Northern Quebec is also sparsely populated. This is relevant because in discussions of sovereignty and security, it puts in perspective how few people live in Arctic and along the NWP.
- 6. Sovereignty defined has three main elements "a defined territory; an existing governance system and a people within the defined territory." Canada meets two of these variables; an existing governance and a people within the defined territory. The third element, a defined territory or boundary is contested in several areas, including the NWP. "The third variable defined boundaries has the greatest relevance for the discussion of Canadian Arctic sovereignty. For a boundary to have validity, the international community needs to agree on its boundaries." Unless the international community agrees with Canada then, as the ice melts the discussion will increase on if Canada has sovereignty over the NWP.
- 7. Security can be defined as "the ability of states to utilize their economic capabilities to build militaries that could both enforce and protect their will." Arctic security is defined as "the Canadian government's ability to respond to all forms of threats that arise in its Arctic region." In regards to the NWP, Canada must have recognized sovereignty over the are the area in order to ensure security can be maintained.
- 8. This is where sovereignty and security become intertwined and are not exclusive of each other. 12 It is clear that, "Canadian policy makers need to protect Canadian Arctic sovereignty in order to provide for Canadian Arctic security ... As it is impossible to protect Canadian Arctic security without protecting its Arctic sovereignty and vice versa, the two concepts are completely

⁶ Department of National Defence, Strong, Secured, Engaged ..., 50.

⁷ Canada Population. "Population of Canada by Province/Territory 2021/2022," last accessed 26 May 2022, https://canadapopulation.org/population-of-canada-by-province-territory/

⁸ Rob Huebert, "Canadian Arctic Sovereignty and Security in the Transforming Circumpolar World." *Foreign Policy for Canada's Tomorrow* no. 4. Canadian International Council (July 2009): 1. 9 *Idib.*, 2.

¹⁰ *Idib.*, 3.

¹¹ *Idib*.

¹² Idib., 7.

interlinked."¹³ Without control over the NWP, Canada cannot ensure that security of the area can be maintained.

- 9. Sovereignty and security must both be maintained in order to ensure the NWP and the Arctic can be safeguarded from threats. The Government of Canada, "needs to have control over its north so that it can take action to protect against a wide number of threats that will increasingly come from beyond Canadian northern boundaries." Threats in the NWP and the Arctic are evolving and changing over time. It is noted that "the core issue of Canadian Arctic sovereignty is control, the core issue of Canadian Arctic security is about responding to threats." With both sovereignty and security, threats can be responded to by the CAF and other OGDs as required. As these threats increase the ability to respond will have to increase, requiring more resources and funding. This question of Arctic sovereignty and security and the NWP is one that will have to face with rising importance as the climate in the North changes and the ability to access the Arctic increases.
- 10. Threats in the NWP and the Arctic have evolved over time, markedly since the Cold War. In both Canada and the United States, "the emphasis is no longer primarily on traditional military threats, given that their assessments concur that there is a low probability of state-to-state armed conflict breaking out in the Arctic." The unlikelihood of a military invasion means threats will come from other areas. In Canada, "Official statements now give significant weight to environmental, economic, human and cultural security considerations and the importance of integrated strategies rooted in interagency/departmental and international collaboration." Both SSE and the ANPF recognize the requirement improve the ability to work in collaboration with partners. To support sovereignty and security the operating procedures of the CAF and OGDs around the NWP and the Arctic will require change.

The Northwest Passage

11. With decreasing ice and increasing international interest, the NWP becomes important to sovereignty and security. If the NWP is ice free, this allows for large financial and time savings over the current shipping routes. In addition to increased commercial advantages, private usage and tourism stand to expand. The size of the area that encompasses the NWP is large. As noted in SSE, "Canada's North is a sprawling region, encompassing 75 percent of the country's national coastlines and 40 percent of its total land mass."²⁰ The opening of these waterways will have an impact. SSE, also remarks that this area is, "a challenging region to monitor — particularly as the North encompasses a significant portion of the air and maritime approaches to

¹³ *Idib*.

¹⁴ *Idib*.

¹⁵ Idib., 6.

¹⁶ Whitney Lackenbauer and Rob Huebert, "Premier partners: Canada, the United States and Arctic Security." *Canadian Foreign Policy Journal* 20, no. 3 (2014): 321.

¹⁷ *Idib.*, 321.

¹⁸ Department of National Defence, Strong, Secured, Engaged ..., 57.

¹⁹ Government of Canada, "Artic and Northern Policy Framework,"

²⁰ Department of National Defence, Strong, Secured, Engaged ..., 79.

North America."²¹ As these maritime approaches open, maintaining sovereignty and security becomes more challenging.

- 12. The sovereignty and security issues in the NWP stem from the inability for Canada and the international community to agree who controls this area. Canada, the United States and others, "disagree on the status of the Northwest Passage, which Canada claims as historic internal waters but which the United States views as an international strait." The importance of this is that, "If the Canadian position is correct, then Canada has the right to control all elements of shipping in the passage, including the right of controlling who comes into the passage and who cannot." If the Canadian position is not correct, then Canada loses the ability to control the NWP. In either case, the increase in usage means the CAF and OGDs will need to increase their ability to operate in the area.
- 13. The CAF has, until very recently, had limited ability to sail the waters of the NWP. In the summer of 2021, this changed when the new Arctic Offshore Patrol Ship, the Her Majesty's Canadian Ship (HMCS) Harry DeWolf, completed a passage through the NWP. This was the first Royal Canadian Naval Vessel to transit the NWP since the HMCS Labrador in 1954.²⁴ The CAF is also working to complete a port at Nanisivik Naval Facility to support northern requirements.²⁵ Continued expansion of military assets like this will strengthen Canada's sovereignty and security in the NWP and the Arctic.

Search and Rescue

- 14. An increase in the number of people in the Arctic and using the NWP, for tourism, commercial reasons and scientific research will change how the CAF and OGDs operate in the North. Increasing the number of people in the Arctic, compounded with the fact they are likely not experienced with the conditions, will lead to more people requiring assistance. This means a higher requirement for increased Search and Rescue (SAR) capabilities. The Arctic is dangerous and sparsely populated, the likelihood of successful rescue is low if help is not close by.
- 15. This changing requirement for SAR can be seen increasing over time. In the past 12 years, "there have been three major SAR operations in the Canadian Arctic, with lives saved only because of favourable weather or the coincidental proximity of well-trained and equipped rescue personnel" The CAF and OGDs have limited ability to respond and often the luck of being in the right place at the right time is what leads to survival.

²¹ Department of National Defence, Strong, Secured, Engaged ..., 79.

²² Andreas Osthagen, "One Arctic? Northern Security in Canada and Norway." in *Breaking through: Understanding sovereignty and security in the circumpolar arctic*, ed. by W. Greaves and P.W. Lackenbauer (Toronto: University of Toronto Press, 2021), 174.

²³ *Idib.*, 24

²⁴ Canadian Naval Review, "HMCS Harry DeWolf transits Northwest Passage, tests ASW towed sonar," Last updated 1 October 2021. https://www.navalreview.ca/2021/10/hmcs-harry-dewolf-transits-northwest-passage-tests-asw-towed-sonar/

²⁵ Department of National Defence, Strong, Secured, Engaged ..., 79.

²⁶ Michael Byers and Nicole Covey. "Arctic SAR and the 'security dilemma'," *International Journal* 74, no. 4 (2019): 502.

- 16. The first incident occurred on 27 August 2010, the cruise ship *Clipper Adventurer*, ran aground, two days later the Canadian Coast Guard rescued all 128 passengers and brought then to Kugluktuk, Nunavut safely.²⁷ The second incident was 20 August 2011, when First Air Flight 6560, crashed near Resolute Bay, Nunavut, killing twelve people. The three survivors were rescued by Canadian Armed Forces (CAF) personnel that were on a previously scheduled exercise nearby.²⁸ The third incident happened 24 August 2018, the cruise ship *Akademik Ioffe*, grounded itself near Kugaaruk, Nunavut. The sister cruise ship *Akademik Sergey Vavilov* arrived the following day to take the 162 passengers on board. Two Canadian Coast Guard Vessels and five CAF aircraft were dispatched to assist.²⁹
- 17. These incidents had various causes ranging from lack of experience and reduced or lack of situational awareness. Concerning to the maritime incidents is that both ships ran aground due to inexperience and lack of adequately charted Arctic waters on the NWP routes. As noted, "Climate change is fundamentally transforming the Canadian north and not just in a physical way. Climate change has altered the geopolitical environment facing Canada, opening the Arctic to the world in both perception and reality." As movement throughout the NWP and the Arctic increases, incidents requiring a SAR response will also increase. To maintain sovereignty and security Canada must be ready to respond.
- 18. The CAF currently has no primary SAR aircraft stationed in the Arctic. This means that any response aircraft must come from southern Canada. This delays response times and can negatively affect outcomes. The Canadian Rangers are often called upon to do ground search and rescue (GSAR), there is no one permanently designated to conduct this function on behalf of the CAF in the Arctic. OGDs paly a significant role in Arctic SAR and along with the CAF will need to be strengthened as interest in and movement around the Arctic increases.

The Arctic Military Presence

19. Arctic sovereignty and security will continue to impact those that live in the Arctic. Specifically, "one of the most important issues that Canada will face in its Arctic region will involve the security of its own northern population." The problem is that, "The decrease in ice cover and the increasing interest from the outside world in the Arctic are drastically changing the lifestyle, environment, and economic realities facing all Canadians who call the north home." This is especially true for the Indigenous population that has called the Arctic home for the longest.

²⁷ Transportation Safety Board of Canada, "Marine investigation report M10H0006," last accessed 26 May 2022. https://www.bst-tsb.gc.ca/eng/rapports-reports/marine/2010/m10h0006/m10h0006.html

²⁸ Transportation Safety Board of Canada, "Aviation investigation report A11H0002," last accessed 26 May 2022. https://www.tsb.gc.ca/eng/rapports-reports/aviation/2011/a11h0002/a11h0002.html

²⁹ Transportation Safety Board of Canada, "Marine transportation safety investigation M18C02225," last accessed 26 May 2022. https://www.tsb.gc.ca/eng/enquetes-investigations/marine/2018/m18c0225/m18c0225.html

³⁰ Rob Huebert, "Arctic 2030: What are the consequences of climate change?" *Bulletin of the Atomic Scientists* 68, no. 4 (2012): 18.

³¹ *Idib.*, 20.

³² *Idib*.

- 20. Canada's permanent Arctic military presence consists of a very limited number of people. The permanent presence is mainly, Joint Task Force North (JTFN), a headquarters in Yellowknife, Northwest Territories that has two detachments, one in Whitehorse, Yukon and one in Iqaluit, Nunavut. 440 (Transport) Squadron, 1 Canadian Ranger Patrol Group (1 CRPG) and Loyal Edmonton Regiment (LER) are also located in Yellowknife. Various other small detachments complete those who live full-time in the Arctic. In addition, the numerous Canadian Ranger patrols are dispersed around the Arctic communities. Numerous other CAF units come to the Arctic for short periods of time to train and operate.
- 21. The CAF also shares a number of facilities with ODGs. These include a, "cold weather training facility at Resolute Bay, a signals intelligence facility at Canadian Forces Station Alert the northernmost permanently inhabited facility in the world and a high Arctic weather station in Eureka." As part of the North American Aerospace Defence (NORAD), a series of facilities are operated in Inuvik, Yellowknife and Iqaluit, that support fighter aircraft and numerous early warning radar sites. In the Arctic cooperation is key and is highlighted in the amount of shared assets the CAF has. Maintaining these operating facilities is key to maintaining sovereignty and security.
- 22. The CAF and OGDs rely heavily on the Canadian Rangers for their deep knowledge and experience in the Arctic. The Canadian Rangers are "a subcomponent of the Reserves that leverages the skill-sets of Canadians from diverse ethnic and social backgrounds to support home defence, security, and public safety missions." The Canadian Rangers have always had a role in sovereignty and security. It has been seen that, "In the twenty-first century, the Canadian Rangers an unorthodox military organization compromised predominantly of indigenous people have emerged from the shadows to become a hall mark of Canadian sovereignty and security in the North." The security of the Indigenous communities surrounding the NWP, to which many Canadian rangers belong, will have to be maintained.
- 23. The vastness of the area that the Canadian Rangers are the 'eyes and ears' for, makes it an impossible task to have all areas monitored. For example, "The 1st Canadian Ranger Patrol Group (1 CRPG) is responsible for Nunavut Territory, Yukon Territory, Northwest Territories, and Atlin, British Columbia, which accounts for about 40 percent of Canada's land mass." There are limited individuals involved in the organization, "1 CRPG has an establishment of 2000 Canadian Rangers in 61 patrols ... across the north. The headquarters is located in Yellowknife, Northwest Territories." With increased attention on the NWP, the CAF and OGDs will be forced into increasing their presence in the area to ensure activity is monitored.

³³ Department of National Defence, Strong, Secured, Engaged ..., 79.

³⁴ P. Whitney Lackenbauer, "Indigenous Communities are the Heart of Canada's North: Media misrepresentations of the Canadian Rangers, Indigenous Service, and Arctic Security," *Journal of Military and Strategic Studies* 19, no. 2 (2018): 158

³⁵ *Idib*.

³⁶ Government of Canada, "1 Canadian Ranger Patrol Group," last modified 13 September 2021. https://www.canada.ca/en/army/corporate/canadian-rangers/1-canadian-ranger-patrol-group.html 37 *Idib*.

CONCLUSION

- 24. The Government of Canada, "has invested a lot of political capital in ministerial trips to Canada's North, and to talking about the importance of the region to Canada's identity and security. Unfortunately, the military and coast guard are a long way from being able to effectively patrol and monitor what is going on..."³⁸ This becomes important as the climate changes and usage of the NWP increases. The response abilities of the CAF and OGDs must be increased if sovereignty and security are to be maintained.
- 25. As the sovereignty and security concerns and threats increase around the NWP, they will influence how the CAF and OGDs operate in the Arctic. Sovereignty and security challenges must be met, "if sovereignty is being pursued for the purpose of protecting the security, safety and well-being of Canadians then not only is it worth the effort, but it is an absolute necessity." Differing opinions on control of the NWP, increased SAR demand and the Arctic military presence, highlight the sovereignty and security concerns the Arctic faces. In response to this, the roles of the CAF and OGDs will evolve and change to meet the needs of the Government of Canada.

RECOMMENDATION

26. SSE and the ANPF are two examples of policies that set an initial basis and understanding for the challenges that will be faced in a changing Arctic. Building on these policies and moving the ideas into action will set the Arctic and Canada up for success in the evolving current and future sovereignty and security issues in the Arctic. Cooperation, coordination and inclusion of all interested in Arctic sovereignty and security is paramount to success.

³⁸ John Crump, "Diplomatic Chill: A new cold war in the warming arctic?" The Monitor (May 1, 2014): 25.

³⁹ Rob Huebert, "Canadian Arctic Sovereignty and Security ..., 6.

BIBLIOGRAPHY

- Byers, Michael and Nicole Covey. "Arctic SAR and the 'security dilemma'." *International Journal* 74, no 4 (2019):499-517.
- Canada. Department of National Defence. *Strong, Secured, Engaged-Canada's Defence Policy*. Ottawa: Canada, 2017.
- Canada Population. "Population of Canada by Province/Territory 2021/2022." Last accessed 26 May 2022. https://canadapopulation.org/population-of-canada-by-province-territory/
- Canadian Naval Review, "HMCS Harry DeWolf transits Northwest Passage, tests ASW towed sonar." Last updated 1 October 2021. https://www.navalreview.ca/2021/10/hmcs-harry-dewolf-transits-northwest-passage-tests-asw-towed-sonar/
- Crawford, Alec, Arthur Hanson, and David Runnalls. "Arctic Sovereignty and Security in a Climate-changing World." *International Institute for Sustainable Development* (November 2008): 1-16.
- Crump, John. "Diplomatic Chill: A new cold war in the warming arctic?" *The Monitor* (May 1, 2022): 24-25.
- Government of Canada. "1 Canadian Ranger Patrol Group." Last modified 13 September 2021. https://www.canada.ca/en/army/corporate/canadian-rangers/1-canadian-ranger-patrol-group.html
- Government of Canada. "Arctic and Northern Policy Framework." Last modified 18 November 2019. https://www.rcaanc-cirnac.gc.ca/eng/1560523306861/1560523330587
- Huebert, Rob. "Arctic 2030: What are the consequences of climate change?" *Bulletin of the Atomic Scientists* 68, no. 4 (2012): 17-21.
- Huebert, Rob. "Canadian Arctic Sovereignty and Security in the Transforming Circumpolar World." Foreign Policy for Canada's Tomorrow no. 4. Canadian International Council (July 2009): 1-44.
- Huebert, Rob. "Submarines, oil tankers, and icebreakers: Trying to understand Canadian Arctic sovereignty and security." *International Journal*. (Autumn 2011): 809-824.
- Lackenbauer, P. Whitney. "Indigenous Communities are at the Heart of Canada's North: Media Misperceptions of the Canadian Rangers, Indigenous Service, and Arctic Security." Journal of Military and Strategic Studies. 19, no. 2 (2018): 157-192.

- Lackenbauer, Whitney and Rob Huebert. "Premier partners: Canada, the United States and Arctic security." *Canadian Foreign Policy Journal* 20, no. 3 (2014): 320-333.
- Mundy, Maryanne. "The Polar Express Lane: Promoting Cleaner Shipping in The Northwest Passage." Georgetown Environmental Law Review 29 no. 1 (September 2016): 153-183.
- Nolin, M. "Heated Conflict over the Northwest Passage: Is Canada's sovereignty Melting Away?" *Journal of Maritime Law & Commerce*, 84 no. 3 (2017): 341-364.
- Osthagen, Andreas. "One Arctic? Northern Security in Canada and Norway." In *Breaking through: Understanding sovereignty and security in the circumpolar arctic*, edited by W. Greaves and P.W. Lackenbauer, 168-184. Toronto: University of Toronto Press, 2021.
- Transportation Safety Board of Canada. "Aviation investigation report A11H0002." Last accessed 26 May 2022. https://www.tsb.gc.ca/eng/rapports-reports/aviation/2011/a11h0002/a11h0002.html
- Transportation Safety Board of Canada. "Marine investigation report M10H0006." Last accessed 26 May 2022. https://www.bst-tsb.gc.ca/eng/rapports-reports/marine/2010/m10h0006/m10h0006.html
- Transportation Safety Board of Canada. "Marine transportation safety investigation M18C02225." Last accessed 26 May 2022. https://www.tsb.gc.ca/eng/enquetes-investigations/marine/2018/m18c0225/m18c0225.html