NOTE FOR NATIONAL DEFENCE:
Beyond Ballistic Missile Defence 2021 - Three Aspects to Consider Regarding Canada's National Security.

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Summary

- The purpose of this report is to review Canadian vulnerabilities in the event of nuclear conflagration between the U.S. and other powers. Possible strategic situations highlighted by emerging defensive technologies, the political position of Canada vis-à-vis the U.S., and modernization aspects, are considered. Viable solutions are implied and/or proposed.

CONTEXT AND BACKGROUND

Historically, Canadian policy on ballistic missile defence (BMD) has not succeeded neither in becoming an effective solution to the possibility of nuclear conflict between the U.S. and other nuclear states, which most likely would involve Canada, via intercontinental ballistic missiles-borne nuclear (ICBM), nor in finding a two-way profitable defence strategy between the U.S. and Canada. Binational defence strategies are in a moment of transition, given current geostrategic and political transformations, and the emergence of a new generation of weapon technologies. The result of this is the need to adapt the mechanisms to defend the integrity of the Canadian nation, beyond BMD.

THE ISSUE

As Prime Minister Justin Trudeau and President Joe Biden recently agreed on reinforcing the strategic alliance between Canada and the U.S., the current position of Canada's government with respect to BMD is negative. This justifies increased involvement in the North American Aerospace Defense Command (NORAD) actions, the main institutional column of defence cooperation in the North American region; however, certain aspects of Canada's Defence Policy could and should be updated. The historic concern for Canada has been the possible loss of national sovereignty, however, as NORAD evolves, due to changes in the world's political and geostrategic environments, and to the emergence of new weapons systems, Canada should act regarding the defence strategy aspects that can be improved. and which inevitably will alter NORAD's status-quo, without altering Canada's independence. Three elements are the object of attention: 1. The updating of the North Warning System (NWS), 2. The -likely- increase (and adaptation) in missions of NORAD, and 3. The acknowledgment of the new six-dimensional threat condition (air, maritime, cyber, aerospace, space, and land) identified by the Permanent Joint Board of Defense (PJBD) throughout the study of the Evolution of North American Defense (EvoNAD), which invalidates the

previous paradigm of North America menaced by air, and ballistic missiles attack, encountered by a Canadian-American defence alliance.

NORTH WARNING SYSTEM

The most urgent element of the defence system is the updating of the NWS (North Warning System) in the Artic, which was completed in the late 1980s, and consists of a series of radars, of different ranges, distributed along the coast of the Canadian Artic down to Labrador. Even though pointed out by Canada's government in the recent *Strong, Secure, Engaged,* report, as a key element of the country's defence strategy, up to date there is no budgeting to this effect. An agreement in 2019, on the need of modernising the NWS was signed between the two countries. Perception of loss of Canada's sovereignty is one of the main preoccupations of the Canadian government, which can explain why there is no more public information on this sensitive topic. NWS became obsolete the moment that Canada extended, in 2018, its Canada's Air Defence Identification Zone (CADIZ). This means that NWS should move North, however, given the current threat's environment, the NWS is limited in efficacy and therefore, insufficient, maybe even obsolete. The NWS was created as a response to emerging technologies in the 1970s and prevalent ones in the 1980s, i.e., air-launched cruise missile (ALCM). Eventually, the need to guide NORAD defence systems to Soviet bombers became only one threat in a new multidimensional system of possibilities. For one, the emergence of hypersonic missiles (HGV), which includes updated ground-launched cruise missiles (GLCM) deployed in the Artic, rends NWS, in its present state, useless. An updated NWS, with multidimensional capacities (ground, air, maritime, and space) is imperative to ensure Canadian security.

NORAD

In 2006, the U.S. and Canada agreed on the indefinite renewal of the NORAD alliance (created in 1958), which brought along a new silence on the topic, at least on the Canadian side. Once more, the possible reason of this is a matter of perception from the part of the public (and the government) of possible loss of national sovereignty in Canada. The last significant transformation of NORAD happened in that same year (2006), when the binational planning group (BPG), a new task force created by the U.S. and Canada, recommended the inclusion of a bipartite sea warning mission. Because of these renewed concerns regarding loss of Canadian sovereignty, this mission was reduced to an informative one: the Canadian naval command (in Halifax) transmits information to the U.S. Fleet Forces Command, which retransmits to NORAD. Given the menace of new sea-launched cruise missiles (SLCM), air-launched cruise missiles (ALCM) and ground launched cruise missiles (GLC), this aspect (as others) of the alliance must be updated, i.e., Canadian maritime defence control is urgent. The Evolution of North American Defense (EvoNAD) study commissioned by the Permanent Joint Board of Defense (PJBD) that points out the new six-dimensional threat condition (air, maritime, cyber, aerospace, space, and land), implies the integration of air and space, i.e., the emergence of HGVs, capable of defeating ballistic missile defences, means that Canada must review its policy regarding BMD's participation.

NORTH AMERICAN DEFENCE

The previous paradigm that implied possible threats originating outside of North America has ceased to exist. The current one includes menaces coming from the interior of its territory as well, particularly after 9/11/2001. Since defence of the North American territory's defence cannot be divided, the new condition implies the possibility a of a new tri-partite NORAD, including Mexico. The EvoNAD analysis identified two key concepts: seams and gaps[1]; seams cannot only be profited out of those existing in the U.S.-Canada

border, and/or of those between U.S.-Canada defence commands, but also in the U.S.-Mexico ones, which could end up affecting Canada's security. Existing gaps in different aspects of U.S.-Canada defence co-operation, can be capitalized by enemy forces, as well as the absence of a U.S.-Mexico (and Canada) NORAD agreement, even though currently, there are measures considered by the U.S. Northern Command (USNORTHCOM) in this regard. These seams and gaps are continuous and have not been addressed effectively. With the inclusion of the maritime warning mission described in the previous part, NORAD ceased being an exclusively aerospace entity and de facto became a bi-dimensional defence command, however, because of the present-day conditions, and the findings of the EvoNAD study, it is not sufficient. One obstacle to achieve a North American multidimensional, bi (or maybe even trinational) command is the preference of Canada to keep its policies in a state of defence, whilst the U.S. ones are of offensive and defensive nature, simultaneously. As for Mexico, if ever considered to become an active part of the alliance (there is no intention of including Mexico et the writing of this report), the nature of its armed forces is of internal control, exclusively.

CONCLUSIONS

Since the defence of North America is indivisible, updated, and acute, defence cooperation has become an obvious need for U.S. and Canada. Mainly, the NWS, NORAD, and the North American Defence vision, should be modernized. The unidimensional condition of the Cold War has transformed into a multidimensional one. A more inclusive (geographically), flexible and agile (strategic, and tactic) approach is needed, since the demands to ensure Canada's security have significantly complicated since the end of the Cold War, and particularly after the attacks of 9/11. NORAD must be adapted according to the multidimensional threats' conditions identified by the EvoNAD study, which would solve the current NWS obsolescence, and would also address the present seams and gaps between U.S. and Canada, vulnerabilities issues. The condition of indivisibility of the defence of North America, should also be used as the logic to resolve the absence of a binational defence command, as well as the current limited inclusion of Mexico in U.S.-Canada defence apparatus.

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[1] Seams refer to geography. The disadvantages of the seams of the U.S.-Canada border. Also, to the seams between the North American alliance and other commands of the Canadian forces. Gaps refer to the competencies of the North American defence apparatus.

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