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A NICHE BASED FORCE STRUCTURE: SMART CAPABILITIES FOR THE CANADIAN ARMED FORCES

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Exercise Solo Flight

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EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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The contribution Canada can make to the deterrence of war is limited by the size of our human and material resources. Nevertheless, what we can contribute is far from negligible. We have an obligation to make that contribution.

– MDN Paul Hellyer, 1964 *White Paper on Defence*

INTRODUCTION

The mission in Afghanistan, Canada's largest land campaign since Korea, is over. So, it would seem, is a period of growth within the federal budget for defence. Defence expenditures grew substantially throughout the 2000s, reaching a zenith of \$22.8 billion in 2012 and 2013, but have been reduced to \$21 billion and \$18.3 billion in 2014 and 2015 respectively.¹ Yet the new Liberal government has committed to maintaining, and possibly increasing, the size of the Canadian Armed Forces (CAF).² This announcement comes when the existing force structure of the CAF has already been determined fiscally unsustainable, and operating and maintenance costs have been slashed at the expense of future capability.³ Much of the current capability resident within the CAF was structured for or by the mission in Afghanistan. Although some trends and lessons from that conflict, insurgencies for example, may well continue to afflict the world in the future, the CAF involvement in future conflict will undoubtedly look somewhat different depending on the location and level of political commitment. Thus the current force structure, already unsustainable from a financial point of view, must change.

The question is: how can the Canadian military structure change and still remain an effective force? Future conflict is inherently difficult to predict, yet we do expect it to become more complex and challenging, involve multiple actors with divergent interests, and require a

¹Peter Weltman, *Fiscal Sustainability of Canada's National Defence Program* (Ottawa: Parliamentary Budget Officer, 2015), 14.

²Lee Berthiaume, "Liberals reject cutting the size of Canadian military. Instead, they're looking to expand," *National Post*, 18 February 2016, <http://news.nationalpost.com/news/canada/liberals-reject-the-idea-of-cutting-the-size-of-canadian-military-instead-theyre-looking-to-expand>.

³Weltman, *Fiscal Sustainability*...15.

more hybrid approach to operations.⁴ Hence, building flexibility into the force structure will allow it to accomplish multiple tasks and contend with multiple challenges. For some, flexibility will mean developing a wide range of capability to ensure the CAF possesses the right tool for the job at hand. For others it means ensuring each capability is designed for multiple purposes so the CAF can accomplish several jobs with the same tool. Both cases assume the CAF must provide a complete set of tools for every job. Put another way, both approaches assume Canada will conduct military operations in isolation. This assumption has rarely been valid for expeditionary operations as Canada has nearly always deployed its forces in cooperation with allies or a coalition. Therefore flexibility may come in a third form: contributing defence expertise, or niche capabilities, when it is required by the coalition in question and makes sense to do so within the specific mission context. The obvious corollary is Canada would not contribute to a coalition operation which does not require the specific expertise or niche capabilities it has developed. Done correctly and in close cooperation with regular allies like the five eyes community or perhaps NATO, such a force structure has the potential to reap significant dividends for each state involved, including Canada.

This paper argues that Canada must change its approach to military capability development in the face of evolving global security trends and contracting budgets, and specifically it should investigate developing niche capabilities which can plug into coalition operations with allied states. The paper begins with an analysis of the domestic need for defence capabilities, driven by state and human security requirements as well as political impetus. It then looks at how niche capabilities could be developed within an alliance and coalition context. Finally, the paper proposes the CAF can, if some traditions and biases are set aside for the wider

⁴Department of National Defence, *The Future Security Environment, 2013-2040* (Winnipeg: 17 Wing Winnipeg Publishing Office, 2014), 93.

good, develop more intelligent capability requirements which can serve both state security purposes as well as fill niche roles within an expeditionary context.

CANADA'S DOMESTIC DEFENCE NECESSITY

Any analysis of military capability must begin with those activities which are necessary for the state in question. In Canada's case, necessary or 'must-do' activities fall into two categories. The first category encompasses those activities intended to defend the state from external threats through the state's monopoly on the managed application of violence. These can include defence activities conducted internally or externally to the state. In Canada's military tradition, these state defence activities are conducted almost exclusively beyond Canada's borders in what Sean Maloney calls "Forward Security."⁵ Defence of Canada's own airspace under the NORAD umbrella is one of the few exceptions. The second category encompasses those mandatory activities which are directed by the state, leverage existing military capabilities, and may or may not apply managed violence. Search and rescue is one example of 'must-do' activity conducted by the CAF which is directed by the state and does not require the state's monopoly of managed violence. Supporting domestic authorities, such as the RCMP, to secure Canadian Special Security Events (CSSEs) is an example of activity directed by the state which has the potential to apply managed violence.

Only the first category, defence of the state, is absolutely necessary if political and cultural interests are set aside. Defence of the state is, after all, the clear and unequivocal rationale for maintaining an armed force in the first place. This domestic mandate must come before all other tasks explicitly or implicitly assigned to the armed forces. In the 21st century, this

⁵Sean Maloney, "In the Service of Forward Security: Peacekeeping, Stabilization, and the Canadian Way of War," in *The Canadian Way of War*, edited by Colonel Bernd Horn, (Toronto: Dundurn Press, 2006): 297.

fundamental requirement is sometimes forgotten or assumed away, especially in Canada where the probability of major combat on Canadian soil, on or below its territorial waters, or within its airspace is almost negligible. Discussions about future procurement of capability are therefore often related to missions conducted overseas or in aid to the civil power at home, rather than how best to achieve the primary role: defence of the state. This is not surprising since nearly all tasks assigned to the Canadian Armed Forces (CAF) since the end of the Cold War have fallen into one of those two categories.

However, planning for future military capabilities must always consider the primary mandate first. That is, in a resource constrained environment, smart force development strategies must ensure any future capability has a role to play in providing state security as a minimum. Canada simply does not have the luxury of acquiring capability which provides no domestic state security function. "Multi-role, combat-capable" are terms often used to describe requirements for CAF capabilities.⁶ More than simply policy catch-phrases, these terms have particular significance for a small or medium power military in a resource constrained environment. "Multi-role" identifies the need to ensure spending on future capability is done smartly, with more than a single purpose in mind. "Combat-capable" reflects the need to ensure military capabilities are, at minimum, capable of performing a state defence function. Thus Canada is quite familiar with assigning multiple purposes to military equipment. Growing niche capabilities out of those which already exist for basic state security purposes is a prudent starting point. But first we must understand what Canada requires for its state defence.

Canada's defence policy has been reasonably consistent since at least the mid-1960s. Paul Hellyer's White Paper on Defence in 1964 identified a clear need for Canada to defend its

⁶Department of National Defence, *Canada First Defence Strategy* (Ottawa: National Defence, 2008): 3, 5, 9, 14.

own interests, cooperate with the United States on North American defence, and contribute to international agreements and peacekeeping efforts overseas.⁷ These themes have been reshaped in each successive defence policy update, but the central ideas of defending Canada, defending North America and contributing to international peace and security have endured for more than half a century to include the Cold War, post Cold War, and post 9/11 eras.⁸ Hence these defence themes are relatively independent of the current security environment and it is reasonable to expect they will remain relevant into the future. Consequently, future policy makers must keep these defence priorities in mind when considering investment in future capabilities.

The second category of 'must-do' activities, those which are directed by the state authority and employ military resources but which may not directly contribute to state defence, cannot be ignored in the analysis. Realistically, these activities are important to the military because they are important to the elected authority within our democratic system. In Canada, they are of specific importance because of the very fact that the probability of full scale armed conflict within Canadian territory is extremely remote as has already been discussed. Search and rescue, aid to the civil power, and disaster relief are all examples which fall in this second category. Although they may not contribute to state security, they should be considered 'must-do' activities by the CAF. As such, they present opportunities to grow niche capability which could be used in an expeditionary and coalition environment. Moreover, the persistent or regular nature of some of these domestic missions will allow the CAF to develop natural expertise not necessarily available to the militaries of allied states.

⁷Department of National Defence, *White Paper on Defence* (Ottawa: Queen's Printer, 1964), 12-16.

⁸Department of National Defence, *Defence in the 70s* (Ottawa: Information Canada, 1971), 16; Department of National Defence, *Challenge and Commitment: A Defence Policy for Canada* (Ottawa: Canadian Government Publishing Centre, 1987), 17-26; Department of National Defence, *Canadian Defence Policy* (Ottawa: Department of National Defence, 1992) 4-11; Department of National Defence, *Canada's International Policy Statement: A Role of Pride and Influence in the World* (Ottawa: Department of National Defence, 2005), 16-30; *Canada First Defence Strategy*, 7.

The mandatory domestic activities, whether they are driven by traditional state security or political direction, must be the starting point for the discussion of building a force structure of niche capabilities. In Canada's case, these are the minimum capabilities necessary for territorial defence in the air and at sea, as well as those other activities such as search and rescue which are politically non-negotiable. Building upon these essential force components would allow Canada to make meaningful and valued contributions to coalition operations beyond its borders. Further, all other capabilities currently within Canada's force structure should be considered discretionary. The following section analyzes the relative advantages and disadvantages of such a force structure.

TAILORED COALITION OPERATIONS

With the domestic security requirements firmly established, this section argues that Canada's force structure can and should be tailored such that any capability overlap with alliance partners is limited to domestic state and human security needs. Excess capability should be limited only to those niche, interoperable capabilities which leverage a nation's military-industrial strengths and, to the maximum extent possible, complement standing defence or security arrangements.

Operating within an alliance or coalition has been, and will continue to be, the norm for Canadian expeditionary operations.⁹ Yet the CAF continues to insist on acquiring and developing a broad range of modest capabilities which are envisioned to be effective across the full spectrum of combat operations. Canada has an army, navy and air force, and intends to develop space and cyber capabilities. Investing sufficient amounts of funding to be effective in all five environments and across the full spectrum of operations is not realistic. Moreover, such

⁹Department of National Defence, *The Future Security Environment...*, 87.

investment may not be necessary because Canada expects to operate alongside close allies on nearly every expeditionary operation.

Why Niche?

There are already several principal reasons to consider restructuring the CAF away from 'a little bit of everything' to specific areas of niche expertise. First, as previously stated, the current force structure is unsustainable. Recent budget cut backs have not only jeopardized the affordability of the current CAF structure, they have led to a loss of capital purchasing power in the future.¹⁰ Restructuring the CAF with niche capabilities in mind has the potential to produce significant cost savings as well as ensure robust investment profiles to sustain high levels of specialization over the long term. Second, NATO has already been calling on existing and new member states to find specific niche roles within the alliance and perhaps even reduce some territorial defence capabilities.¹¹ Reducing territorial defence capabilities which are redundant in a security alliance will contribute to cost savings. This call has been echoed by senior military and civilian authorities within the alliance who have recognized these benefits.¹² Third, the depth of expertise gained in those home-grown niche areas would provide significant returns on investment for both domestic and expeditionary operations.

Budget cutbacks are familiar territory to the CAF and most western militaries. As the largest discretionary budget within the total federal spending plan, the Department of National Defence is often seen as a ripe target when the national economy is poor. The Force Reduction

¹⁰Dave Perry, "A primer on recent Canadian defence budgeting trends and implications," *School of Public Policy* 8 no. 15 (April 2015): 6. <http://policyschool.ucalgary.ca/sites/default/files/research/canadian-defence-budgeting-perry.pdf>

¹¹Ann Roosevelt, "New NATO Nations should Find Niche Military Capability, Secretary General Says," *Defense Daily* 221, no. 58 (Mar 30, 2004): 1; National Defense University, *Affordable Defense Capabilities for Future NATO missions: a National Defense University Special Report* (Washington: Center for Technology and National Security Policy, 2010): 33.

¹²Major General Ivar Gjetnes quoted in Michael McLean, "Coalitions Redefined?" *Advanced Military Studies Course Paper*, Canadian Forces College, 2000, 14; Donald Rumsfeld (speech, NATO HQ, Brussels, 6 June 2002); Department of National Defence, *The Future Security Environment...*, 106.

Plan of the early to mid 1990s and more recent cutbacks following the global debt crisis of 2008 are prime examples.¹³ Coupled with an increasing reliance on technology within western forces and the rising cost of that technology, the affordability of Canada's military has become more untenable than ever before.

The possibility of close cooperation with these key allies in order to attain a better burden-sharing arrangement is not a new concept. As D.W. Read put it, "a stronger and more effective Alliance, based on mutual cooperation and division of labour, will make NATO a guarantor of peace and security in Europe in the new century."¹⁴ This perspective has been widely echoed, including in the US. In 2002, former Defence Secretary Donald Rumsfeld called on new NATO members "to choose areas of special emphasis for their militaries to take on and to be responsible for delivering those capabilities for the alliance."¹⁵ Moroney, Grissom and Marquis identified that even the US Army has capability shortfalls which can be filled by alliance partners in coalition operations.¹⁶ As the mounting strain of maintaining full spectrum military capabilities weighs on NATO members, more serious discussion and cooperation amongst allies to develop niche capabilities will develop.

Finally, the increasing complexity of both conflict and technology demands more expertise within each military capability. This includes the doctrine, training, and experience necessary to skilfully plan, manage, and employ high-tech military capabilities. The 'jack of all trades but master of none' approach, while theoretically improving flexibility, poses considerable risk in military operations. Thus developing and institutionalizing expertise in specific niche

¹³Department of National Defence, *1994 White Paper on Defence* (Ottawa: National Defence, 1994): conclusion; David Pugliese, "Budget Cuts Affecting Canadian Defense Programs," *Defense News*, 15 March 2010.

¹⁴Read, D.W., "The Revolution in Military Affairs: NATO's Need for a Niche Capability." (National Security Studies Course Paper, Canadian Forces College, 2000): 4.

¹⁵Donald Rumsfeld (speech, NATO HQ, Brussels, 6 June 2002).

¹⁶Jennifer Moroney, Adam Grissom, and Jefferson P. Marquis, *A capabilities-based strategy for Army security cooperation* (Santa Monica: RAND Corporation, 2007): 14.

combat capabilities can reduce overall risk to both the contributing state as well as the coalition operation in question.

Past Approaches to Building a Niche-based Force Structure

NATO's role in future conflict may evolve, but the alliance is not expected to dissolve any time soon.¹⁷ Additionally, core partnerships with states such as the United States and United Kingdom are also expected to remain extant for the long term. Hence pooling capabilities and resources between alliance members, and divesting redundancies, seems to be a natural conclusion. There have been several examinations of the niche-based force structure and even some proposals to achieving it.

Colonel D.W. Read has proposed leveraging the US-led Revolution in Military Affairs (RMA) as a means to develop a niche capability strategy based upon supplementary and complimentary capabilities within NATO. Instead of trying to close the capability gap between the US and the rest of NATO, these supplementary and complimentary capabilities could provide depth and breadth, respectively, to the alliance and allow each member state to contribute according to its means.¹⁸ Read argues that this niche capability strategy will only work if eight core principles are maintained: a tiered capability structure within NATO; establishing "core competencies" for all members; exchanging technology between members to maintain interoperability; redefining NATO funding policies; improving European research and development funding; integrating Europe's defence industries; integrating capital acquisition planning; and working towards small, achievable goals.

Lieutenant Colonel Michael McLean argues a niche-based capability strategy for coalitions would mitigate many of the traditional friction points between coalition members. He

¹⁷Department of National Defence, *The Future Security Environment...*, 131.

¹⁸Read, "The Revolution in Military Affairs...", 24.

identifies the traditional friction points as the coalition's goals, logistics, capabilities, training, equipment, doctrine, intelligence, language, leadership, and cultural differences.¹⁹ According to McLean, a niche-based force structure for coalition operations would actually reduce problems in all of these traditional friction areas except for intelligence, leadership and culture. Niche-based force structures could exacerbate coalition friction as large powers would likely retain a monopoly of intelligence and leadership within such a coalition, and cultural differences would only dissipate over the long term as trust is built in partners' abilities to deliver their niche capabilities.

Another approach suggested to niche-based capability force structuring is that proposed by Moroney, Grissom and Marquis at the RAND corporation. Their more recent study examined the US Army which is arguably one of, if not *the*, most capable land forces in the world. However they identified that even the US Army has capability shortfalls. As a consequence, they argue that it would be to the US Army's advantage to cultivate niche capabilities in potential coalition partners. Their niche building strategy is founded upon the capability-based planning framework and identifies just four criteria to assess the utility of foreign niche capabilities.²⁰ The first criterion, complementarity, requires the niche capability to fill a void within the US range of capabilities. This is the essence of most niche-based strategies. The second criterion, operational contribution, assesses whether the niche-capability provides any value added. Conceivably, there are some capabilities which bring nothing to the table and thus are not valuable contributions to the coalition. The third criterion, practicability, evaluates the relative ease with which a partner state can develop the niche capability and the ease with which it can integrate the capability into the coalition. The final criterion, dual-utility, assesses the how the niche-capability may be used

¹⁹Michael McLean, "Coalitions Redefined?" (Advanced Military Studies Course Paper, Canadian Forces College, 2000): 24.

²⁰Jennifer Moroney et al., *A capabilities-based strategy...*, 22.

by the partner state to promote security and stability at home. Although the RAND study primarily examines non-traditional partner states, namely those who have under-developed militaries, it can be equally applied to states with well developed but still limited military capabilities such as Canada.

Problems with the Niche-based Force Structure

Niche-based capability strategies would have some significant practical problems for implementation. Read acknowledges his niche capability strategy for NATO is a tall order to fill and he rightly identifies two of the most significant problems to his niche-based strategy. The first problem is obtaining unanimous consensus between NATO partners on the niches each state should provide. The second major problem is demonstrating value of the niche-based capability strategy to the state policy makers.²¹ Yet these are related issues. As fiscal pressure increases on each member state, the value to be obtained from a niche-based approach is easier to recognize and gaining support for the strategy also becomes easier.

Another counter argument to developing niche-based capability force structures comes from the very strength of the concept. Most advocates of niche-based force structures argue that such structures would provide significant cost savings by eliminating redundant capabilities among alliance or coalition partners. At least some of these cost savings could come from reducing or eliminating the state's territorial defence capabilities.²² In permanent alliance arrangements such as NATO, this might be a conceivable notion, particularly for states in close proximity to one another and with aligned interests. Arguably this may only be conceivable for certain states in the European Union, but even there the notion of relinquishing sovereignty, in this case the defence of one's own state, to another country would be problematic to say the least.

²¹Read, "The Revolution in Military Affairs...", 29.

²²National Defense University, "Affordable defense capabilities..." 33.

However, the concept of niche-based force structures need not go this far. As argued in the first section of this paper, a niche capability framework can and should be built upon those 'must-do' activities required in the domestic context, including state defence.

The RAND study specifically examines how non-traditional partner states could provide niche capabilities to fill in gaps within the US Army. Such arrangements would be less formal than standing alliances such as NATO and would thus have a range of different problems to consider.²³ First among these is the political willingness to participate in such *ad hoc* coalition arrangements. Without the backdrop of formal legal arrangements between the states, such as those provided by a standing alliance like NATO, states may be politically reluctant to participate in the coalition unless the benefit clearly outweighs the cost and risk. Second, there are inherent challenges to working within a coalition environment such as lack of familiarity, training, doctrine and interoperability to name a few. However, as McLean has shown, some of these very challenges to coalition operations can be mitigated by intelligently crafting the niche-based capability structure of the coalition. Moreover, by developing niche-based force structures within permanent alliances first, success within *ad hoc* coalitions which could draw upon those same contributing states would be more likely.

McLean points to another self-evident problem with constructing a niche-capability strategy: if a state which is assigned a particular niche capability decides not to participate in a given operation, the effect on the remaining coalition would be severe, possibly disastrous.²⁴ This is perhaps the most serious challenge to niche-based strategies, especially for western nations with political appetites which can vary, sometimes tremendously, from one election cycle to the next. One means to mitigate this problem is to ensure each essential niche capability is

²³Moroney et al., *A capabilities-based strategy...*, 32.

²⁴McLean, "Coalitions Redefined?" 28.

available from several member states in the alliance, rather than just one. Such a strategy would still derive the benefits from the niche-based approach while vastly increasing the likelihood that essential capabilities will be available to any given operation. Another means to mitigate this potential problem is to establish formal and standing agreements within the alliance for the provision of essential capabilities. This does not need to go so far as to establish a standing force, which is costly, but would require standing commitment from each to state to maintain their niche capability on high readiness.

DEVELOPING SMART REQUIREMENTS

The preceding section discussed the advantages and disadvantages of a niche-based capability framework in general terms. These advantages and disadvantages would be generally consistent across all states within the force structure framework, but there are additional considerations for Canada and the CAF that present unique challenges and opportunities from such an approach. By acknowledging these unique challenges and actively exploiting the opportunities, the CAF can more intelligently develop future capabilities for both the domestic defence necessity as well as potential niche roles within a coalition environment.

Assessing True Operational Imperative

The term 'operational requirement' is vastly over used in the CAF. In fact, the term has gone beyond cliché status and borders on meaningless. The problem at the tactical level stems from military culture. That is, everything concerning the mission is of ultimate importance to the tactical unit. At the strategic level however, the more significant problem with the term derives from a systemic lack of consistent political direction with respect to expectations of the force. The leadership of the Department of National Defence simply cannot predict, with any

confidence, what will be asked of it by the Government of the day. This has led to a tradition at the senior levels of the department of what Douglas Bland calls "muddl[ing] through."²⁵ As a result, defence management, including long-term force development, appears at some levels to be random as opposed to rational and consistent. Committing to a niche-based capability strategy could offer some modicum of consistency across election cycles by firmly establishing what capabilities Canada could contribute to coalition operations.

Another challenge to assessing true capability requirements stems from the biases resident within military planners. Though the CAF professes adherence to capability-based force planning in which an optimal force structure is derived without partiality or hidden agendas, the reality is the mix of future force capabilities is skewed by the biases of the stakeholders.²⁶ This reality leads to sub-optimal force structures. If Canada adopts a niche-based capability framework in coordination with permanent allies, some of this natural bias will be eliminated. Capabilities will, to a certain extent, be predetermined and immune to environmental or other prejudice.

Placing Priority on Canada's Military Industry

CAF force planners too often are oblivious to where a capability comes from. The primary concern is for combat capable equipment at the cutting edge of technology. Often this means lengthy and costly acquisition processes from foreign vendors. Yet the political reality in Canada is such that domestic industry is favoured by politicians, largely through regional industrial benefits, especially for large defence contracts. Despite rhetoric about developing and maintaining contracting expertise within the CAF itself, few regular force members remain

²⁵Douglas L. Bland and Sean M. Maloney, "Finding a Defence Policy: The Never-Ending Dynamic," in *Campaigns for International Security: Canada's Defence Policy at the Turn of the Century* (Montreal: McGill-Queen's University Press, 2004): 49.

²⁶*Ibid.*, 47.

within a contracting position for any significant length of time. As a result, the CAF relies heavily on expertise from Public Services and Procurement (formerly Public Works and Government Services Canada) as well as Innovation, Science and Economic Development Canada (formerly Industry Canada).

A better understanding within the CAF of the Canadian political-industrial relationships would help a niche-based capability force structure flourish and provide significant dividends for both Canada and its military. By aligning military goals with political-industrial goals, the CAF can build and develop robust niche capabilities which can add significant value to coalition operations. For instance, Canada has a strong aerospace industry with robust research and development infrastructure.²⁷ Purposefully tailoring a niche capability to be within the aerospace domain would be beneficial for the military, the political elites, and of course the industry itself. The advantages to politicians and industry are self-evident, and the CAF would benefit from consistent and readily available capability without needing to engage in procurement from foreign sources.

Anticipating Political Constraints and Restraints

The CAF would also benefit from better recognition of political signals and trends. Defence policy statements and white papers form the backbone of such signals, but more sources are available such as ministerial announcements, annual federal budgets, and third party assessment of trends. For instance, there is significant international attention paid to world military expenditures, and those from NATO member states in particular. Many analysts point to the spending ratios of NATO members, Canada included, and note the relative variances

²⁷Innovation, Science and Economic Development Canada, "Aerospace and Defence," last modified 12 April 2016, <https://www.ic.gc.ca/eic/site/ad-ad.nsf/eng/home>

between member states in order to advocate for more defence spending.²⁸ However, despite Canada's consistent record of spending below the 2% of GDP target set by NATO, there has been no indication from any domestic political party to raise defence spending enough to meet that target. Between 1999 and 2010, Canada's defence spending ranged between 1.14 and 1.29 per cent of GDP with an outlier of 1.44 per cent in 2009.²⁹ Since 2010, that ratio has continued to decline but remained between the 1.1 and 1.3 per cent range.³⁰ Some analysts argue Canada contributes to the alliance in more significant terms than this single metric might suggest.³¹ However, the clear political signal is that Canada will not raise defence spending to achieve the robust, full-spectrum force that CAF and NATO officials might desire.

There are also recent indications that Canada's role in Afghanistan has heightened the public's sensitivity to casualties. By 2009, public discourse surrounding the Afghanistan mission centered around the number of Canadian casualties and whether the combat mission would continue or not.³² Since the official end of major ground combat in 2011, Canada's contributions to major international coalition operations have been appreciably risk adverse. The CAF contribution to combat in Libya and Iraq have been limited to units of the Royal Canadian Air Force and Canadian Special Operations Command. Moreover, Canada was credited for punching

²⁸Andrew M. Dorman, "NATO's 2012 Chicago Summit: a chance to ignore the issues once again?" *International Affairs* 88, no. 2 (2012): 311; Ellen Hallams and Benjamin Schreer, "Towards a 'post-American' alliance? NATO burden-sharing after Libya," *International Affairs* 88, no. 2 (March 2012): 314; James Appathurai, "Closing the Capabilities Gap," *NATO Review* (Autumn 2002), <http://www.nato.int/docu/review/2002/Capabilities/Closing-capabilities-gap/EN/index.htm>.

²⁹Todd Sandler and Hirofumi Shimizu, "NATO Burden Sharing 1999-2010: An Altered Alliance," *Foreign Policy Analysis* 10, no. 1 (January 2014): 49.

³⁰Peter Weltman, *Fiscal Sustainability...*, 5.

³¹Brian Stewart, "Canada's patched-up military: Too few dollars, too many missions," *CBC News*, 28 September 2015, <http://www.cbc.ca/news/politics/canada-election-2015-defence-spending-brian-stewart-1.3242611>; Steven Staples and Bill Robinson, "More than the Cold War: Canada's military spending 2007-08," *Foreign Policy Series* 2, no. 3 (October 2007): 5.

³²CBC, "In Depth: Canada's military mission in Afghanistan," *CBC News*, 10 February 2009, <http://www.cbc.ca/news/canada/canada-s-military-mission-in-afghanistan-1.777386>

well above its weight in the Libya air campaign.³³ This could tentatively suggest combat aircraft could become a Canadian niche capability, especially considering the domestic imperative of the NORAD mission as well as potential political and financial spinoffs to Canada's already substantial aerospace industrial base.

CONCLUSION

As the 21st century progresses, maintaining a military force structure which can operate across the full range of conflict is becoming increasingly untenable. The future security environment is expected to become more complex and challenging. Further, the cost of military systems has risen dramatically as those systems become more complex and technologically advanced.³⁴ These factors are all pointing towards an urgent need to rethink the CAF's force structure. One option, which has been proposed repeatedly in the past but not implemented, is to develop a niche-based capability strategy. The challenges associated with such a strategy are not insignificant. However, neither are they insurmountable if tackled with serious intent. The potential advantages of a niche-based approach to the CAF's force structure significantly outweigh the disadvantages.

This paper examined how a niche-based capability strategy might be approached in the Canadian context. It has demonstrated that the capabilities required to meet domestic necessity, including both state defence and political direction, must form the basis of any niche-based force structure. Canada's commitments to expeditionary operations will continue to be within a coalition or alliance context. The CAF, then, should build upon the mandatory domestic

³³Tom Blackwell, "Canada contributed a disproportionate amount to Libya air strikes: sources," The National Post, 25 August 2011, <http://news.nationalpost.com/news/canada/canada-contributed-a-disproportionate-amount-to-libya-air-strikes-sources>.

³⁴Staples and Robinson, "More than the Cold War...", 5.

activities to develop niche capabilities for coalition operations with permanent alliance partners. Such a strategy would reduce costs and improve depth of expertise. Further, by defining military capability requirements more intelligently, through alignment of CAF priorities with Canada's industrial strengths and political traditions and signals, the CAF can further optimize its niche-based force structure.

Despite repeated proposals to adopt a niche-based force structure across NATO member states, few have actually moved in this direction. Yet there is evidence to suggest it is both a viable and perhaps even necessary strategy, specifically for small and middle powers. Norway, the Czech Republic, and Lithuania have already moved in this direction.³⁵ As the contradiction between the CAF's desire to be a full-spectrum combat force and the fiscal reality of the 21st century sets in, government and CAF policy makers will have a hard decision to make. At least the niche-based approach offers the possibility to restore balance between cutting edge capability and sustainable funding.

³⁵Jean-Marc Rickli, "European small states' military policies after the Cold War: from territorial to niche strategies," *Cambridge Review of International Affairs* 21, no. 3 (September 2008): 318.

BIBLIOGRAPHY

- Appathurai, James. "Closing the Capabilities Gap." *NATO Review* (Autumn 2002).
<http://www.nato.int/docu/review/2002/Capabilities/Closing-capabilities-gap/EN/index.htm>
- Arvanitidis, Paschalis and Christos Kollias. "Zipf's Law and World Military Expenditures." *Peace Economics, Peace Science and Public Policy* 15 no. 12 (October 2008): 41-71.
- Bland, Douglas L. and Sean M. Maloney. "Finding a Defence Policy: The Never-Ending Dynamic." In *Campaigns for International Security: Canada's Defence Policy at the Turn of the Century*, 155-190. Montreal: McGill-Queen's University Press, 2004.
- Canada. Department of Finance. *Strong Leadership: A Balanced Budget, Low-Tax Plan for Jobs, Growth, and Security*. Ottawa: Department of Finance, 2015.
- Canada. Department of Finance. *Growing the Middle Class*. Ottawa: Department of Finance, 2016.
- Canada. Department of National Defence. *A-GA-007-000/AF-008, Air Force Vectors*. Ottawa: Director General Air Force Development, 2014.
- Canada. Department of National Defence. *1994 White Paper on Defence*. Ottawa: National Defence, 1994.
- Canada. Department of National Defence. *Canada First Defence Strategy*. Ottawa: National Defence, 2008.
- Canada. Department of National Defence. *Canada's International Policy Statement: A Role of Pride and Influence in the World*. Ottawa: Department of National Defence, 2005.
- Canada. Department of National Defence. *Canadian Defence Policy*. Ottawa: Department of National Defence, 1992.
- Canada. Department of National Defence. *Challenge and Commitment: A Defence Policy for Canada* Ottawa: Canadian Government Publishing Centre, 1987.
- Canada. Department of National Defence. *Defence in the 70s*. Ottawa: Information Canada, 1971.
- Canada. Department of National Defence. *The Future Security Environment 2013-2040*. Ottawa: Chief of Force Development, 2014.
- Canada. Department of National Defence. *White Paper on Defence*. Ottawa: Queen's Printer, 1964.

Canada. Innovation, Science and Economic Development Canada. "Aerospace and Defence." Last modified 12 April 2016. <https://www.ic.gc.ca/eic/site/ad-ad.nsf/eng/home>

Caruso, Raul and Marco Di Domizio. "Interdependence between US and European military spending: a panel cointegration analysis (1988-2013)." *Applied Economic Letters* 23, no. 4 (March 2016): 302-305.

"Commitment to Match our Capability: Canada can Find a Niche that Suits Us in NATO's New Rapid-Response Force." *Times - Colonist*, Nov 24, 2002.

Charron, Andrea and James Fergusson. "NORAD in Perpetuity? Challenges and Opportunities for Canada." University of Manitoba. Accessed 28 April 2016. http://umanitoba.ca/centres/cdss/media/NORAD_in_Perpetuity_final_report_March_2014.pdf

Costello, Frank. "Restructuring Canada's air force: adopting a niche capability in air transport." Joint Command and Staff Program Paper, Canadian Forces College, 2001.

Dorman, Andrew M. "NATO's 2012 Chicago Summit: a chance to ignore the issues once again?" *International Affairs* 88, no. 2 (2012): 301-312.

Giegerich, Bastian. "Chapter Two: Military and Civilian Capabilities for EU-led Crisis-Management Operations." *Adelphi Series* 50, no. 414 (June 2010): 41-58.

Glenn, Russell W. *Band of Brothers or Dysfunctional Family? A Military Perspective on Coalition Challenges During Stability Operations*. Santa Monica: RAND Corporation, 2011.

Gompert, David C., Stuart E. Johnson, Martin C. Libicki, David R. Frelinger, John Gordon IV, Raymond Smith, and Camille A. Sawak. *Underkill: Scalable Capabilities for Military Operations Amid Populations*. Santa Monica: RAND Corporation, 2009.

Hallams, Ellen and Benjamin Schreer. "Towards a 'post-American' alliance? NATO burden-sharing after Libya." *International Affairs* 88, no. 2 (March 2012): 313-327.

Hendrickson, Ryan C. "What Options for NATO? Dutch Force Projection and Defense Capabilities." *Comparative Strategy* 28, no. 1 (February 2009): 60-67.

Maloney, Sean. "In the Service of Forward Security: Peacekeeping, Stabilization, and the Canadian Way of War." In *The Canadian Way of War: Serving the National Interest*, 297-323. Toronto: Dundurn Press, 2006.

McLean, Michael. "Coalitions Redefined?" Advanced Military Studies Course Paper, Canadian Forces College, 2000.

Moroney, Jennifer, Adam Grissom, and Jefferson P. Marquis. *A capabilities-based strategy for*

Army security cooperation. Santa Monica: RAND Corporation, 2007.

National Defense University. *Affordable Defense Capabilities for Future NATO missions: a National Defense University Special Report*. Washington: Center for Technology and National Security Policy, 2010.

Perry, Dave. "A primer on recent Canadian defence budgeting trends and implications." *School of Public Policy* 8 no. 15 (April 2015): 1-11.
<http://policyschool.ucalgary.ca/sites/default/files/research/canadian-defence-budgeting-perry.pdf>

Read, D.W. "The Revolution in military affairs: NATO's need for a niche capability." National Security Studies Course Paper, Canadian Forces College, 2000.

Rickli, Jean-Marc. "European small states' military policies after the Cold War: from territorial to niche strategies." *Cambridge Review of International Affairs* 21, no. 3 (September 2008): 307-325.

Roosevelt, Ann. "New NATO Nations should Find Niche Military Capability, Secretary General Says." *Defense Daily* 221, no. 58 (Mar 30, 2004): 1.

Rumsfeld, Donald. Speech, NATO Headquarters, Brussels, Belgium, 6 June 2002.

Sandler, Todd and Hirofumi Shimizu. "NATO Burden Sharing 1999-2010: An Altered Alliance." *Foreign Policy Analysis* 10, no. 1 (January 2014): 43-60.

Staples, Steven and Bill Robinson. "More than the Cold War: Canada's military spending 2007-08." *Foreign Policy Series* 2, no. 3 (October 2007): 1-10.

Weltman, Peter. *Fiscal Sustainability of Canada's National Defence Program* (Ottawa: Parliamentary Budget Officer, 2015): 1-18.