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## WHAT IS THE PROBLEM WITH JOINT CAPABILITY?

Maj R.A. Moore

### JCSP 42

#### *Exercise Solo Flight*

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EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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Maj R.A. Moore

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## **Introduction**

The Canadian Armed Forces (CAF) has struggled in the past and still struggles today, with the introduction of new capabilities and replacement of old within their capability development and acquisition framework. Presently the CAF development process to replace or bring online new capabilities, particular joint equipment capabilities, is disjointed as a result of internal cultural barriers between environmental commands, National Defence Headquarters, and the government itself. Other frictions in capability development are that of major capabilities acquisitions such as aircraft, ships, and armour vehicle fleets which compete for funding and other resources. These capabilities execute missions assigned by the government of Canada and ensure that Canada through the CAF can provide the national security to sustain its sovereignty and protect its interests home and abroad. The CAF resources have been structured and allocated to meet the security requirements for the government of Canada. These structures have developed over time to what they are today as imperfect as they are.

The history of the CAF to achieve the best “bang for the buck” has always been at odds with what the government can afford. Numerous times since the World War II has the government tried to maximize the efficiency of the CAF to provide the best military in which the government can afford. Canada is not a state that can afford to acquire all the military capabilities required for every scenario in the spectrum of conflict. Nor is it state to shrug off its responsibilities to ensure its sovereignty and assist in global peace and security given its geography and status in global affairs.

The object of this paper is to demonstrate that there is lack “Jointness” amongst of the three environmental services to develop those capabilities that could maximize the effective of the CAF. There is requirement to change the culture and/or organize how the CAF develops new

capabilities for new tasks and replaces old capabilities for sustained tasks. The tools for capability based planning have been around for some time now, they are not new. They are also effective as proven by various allies such as the United States Joint Forces Command.<sup>1</sup> However, how the CAF chooses to use continues miss the mark in maximizing its effectiveness. This paper will examine how the structure of the CAF of today came into place, setting the stage in how it might better organize, align and adapt itself to develop its capabilities to address the assigned government tasks for the future security environment.

### **The History of CAF adapting for Effectiveness**

Post World-War II the government has looked upon defending Canada through alliances, treaties, mutual agreements, and supporting global peace and security through expeditionary operations in accordance with government of the day's foreign policy.

The structure of the CAF post WWII was initially determined by requirements to meet the threat of the Warsaw Pact at that time and to avoid being caught off-guard such was the case at the beginning of WWII. The Royal Canadian Navy (RCN), the Canadian Army (CA), and the Royal Canadian Air Force (RCAF) determined what they needed given the resources allocated based on the threat, that being the Soviet Union and the Warsaw Pact.<sup>2</sup> Each service had their particular view on how to meet assigned defence tasks. The Cold War was set in a traditional state-on-state conflict where components of warfare would square-off against each other in this conventional idea of warfare. However, this idea was challenged when the Soviet Union had nuclear military capability. Nuclear capabilities on both sides of the Cold War necessitated a shift in capability one more towards countering incursion into Canadian sovereignty by Soviets through the Air, hence the creation of the North American Aerospace Command (NORAD) to provide Air

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<sup>1</sup> Byron Greenwald, "Joint Capability Development", Joint Force Quarterly, Issue 44, 1<sup>st</sup> quarter 2007, 50.

<sup>2</sup> Arthur E. Blanchette, *Canadian Foreign Policy, 1945-200: Major Documents and Speeches*. Toronto: Golden Dog Press, 2000.), 1.

Defence for North America with the United States as a bi-lateral partner. Also the Navy found it self protecting the North Atlantic from the threat of Soviet Nuclear Submarines. This left the CA with providing a token force in Europe to show itself as a willing partner in NATO to counter the Warsaw Pact and with the less warfighting task of providing ground forces to ensure security, stability and peace which later become known as peacekeeping.

With the Cold War holding as a stale-mate of nuclear deterrence between the two super powers of the United States and the Soviets, conventional weapons advanced significantly in the realms of firepower, stand-off engagements, speed, and detection capabilities. There was a requirement for militaries not to be interoperable with alike allied services but interoperable within their own militaries. The overriding motive for the maintenance of the CAF since WWII has had little to do with our security. It has everything to do the underpinning of our diplomatic negotiations positions vis-à-vis various international organizations and other countries.<sup>3</sup> This would set the cultural status quo for the three environmental services which even last to this day.

In the 1960's the tensions between NATO and the Soviet Union were escalating. Defence spending was increasing and was a major part of governmental expenditures. When the Liberals formed the government in in 1963, the Minister of National Defence Paul Hellyer embarked on a plan to streamline and bring efficiencies to the Canadian Military by unifying all three services. With unification the three services could be rid of the duplication and triplication of effort that each the RCN, CA, and RCAF had. This would reduce costs and resources by having one pay

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<sup>3</sup> Eric Tremblay and Bill Bentley, Canada Strategic Culture: Grand Strategy and the Utility of Force: *Canadian Military Journal* 2, no.3 (Summer 2015), 15, <http://www.journal.forces.gc.ca/vol15/no2/doc/4-eng.pdf>.10CMJ 13

system, medical system, supply system and etc. There would be one unified command and headquarters that could respond to the government.<sup>4</sup>

The 1964 Defence White paper gave left and right of arcs on what the Canadian Military was tasked with. In order of priority, the tasks were: defend Canada, defend North America, and participate in international operations of choice.<sup>5</sup> This allowed Minister Hellyer the freedom to re-organize the Military and unify it as the CAF thereby providing centralized command, control, and administration.<sup>6</sup> Unification would also provide the mechanism to develop and acquire future capabilities efficiently that would best serve Canada. However, culture of the military fought against unification. The RCN, CA, and RCAF were distinct in how they trained and fight. Unification did not bring them together to train and fight, it just brought shared administration and service support practices amongst them. The CAF accepted what the government wanted and carried on but it did not make it more effective. This structure would carry on for next 30 years until the Cold War ended.

The end of the Cold War saw shift in the global security environment. No longer were there two super powers determining the status quo on global security. There was a drawing down of forces and military spending across the globe. Canada withdrew forces from Europe. The 1994 Defence White paper was used to articulate how the CAF would close bases, cut forces and capabilities but maintain the same commitments but from a new posture that was scaled back. New managerial practices would be put into place at NDHQ to optimize business practices.<sup>7</sup> During this time new capabilities that were developed during the Cold War were finally being

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<sup>4</sup> Daniel Gosselin and Craig Stone, "From Minister Hellyer to General Hillier: Understanding the Fundamental Differences between the Unification of the Canadian Forces and its present Transformation", *Canadian Military Journal* 2, no.4 (Winter 2005), 10, <http://www.journal.forces.gc.ca/vo10/no2/doc/4-eng.pdf>.10p

<sup>5</sup> Ibid...7

<sup>6</sup> Ibid...7

<sup>7</sup> Ibid... 10.

fielded such as the Canadian Patrol Frigates and the Air Defence Anti-Tank System. It was realized that with cuts to defence new methods of capability development needed to be utilized in order to justify sustaining and developing the capabilities of the CAF. Concurrently the CAF's tempo escalated compared to the Cold War era where it found itself deploying to the Middle East to support the coalition in liberating Kuwait from Iraq, the Balkans for peacekeeping and enforcement, Haiti for Humanitarian Assistance, and Africa for peacekeeping. This tempo also showed the ethical and cultural flaws the CAF had and in particular the Army due to the events that occurred in Somalia resulting in death and torture of Somalis by the deployed Airborne Regiment. The CAF and in particular the Army would reflect on how to better train, equip, and manage its forces.<sup>8</sup> This reflection would then trickle throughout the CAF as new practices would be put into place. The CAF would emerge from the decade of darkness learning from its errors and successes. However, it was the CAF still lacked resources and the ability to coherently articulate its capabilities requirements internally and externally to the government.

The current capability development process can be traced back to modern management comptrollership initiatives intended to control Defence spending which were brought into DND back in the 1990s. In DND, the Defence Management Committee and the Program Management Board manage the Defence Series Program and long term Investment Plan. The plan that is the framework for the CAF defense planning.<sup>9</sup>

In 2005 the CAF embarked on transformation which only resided on the uniform side of DND. Under the leadership of then Chief of Defense Staff General Hillier set out to operationalize the CAF as saw that there was of operational planning capability at National and

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<sup>8</sup> Michael, Jeffery, "Inside the Canadian Forces Transformation," *Canadian Military Journal* 2, no. 2 (Spring 2010), 10, <http://www.journal.forces.gc.ca/vo10/no2/doc/10-eng.pdf>. 10p 10

<sup>9</sup> Ross Fetterly, "Budgeting within Defence", in *Public Management of Defence in Canada*. (Toronto: Breakout Education Network, 2009), 42 .

Regional Headquarters in the CAF.<sup>10</sup> Concurrently, the Treasury Board instituted a new Defence management, Resources and Results Structure (MRRS). The MRRS consists: Program Activity Architecture (PAA); defined strategic outcomes, and structure for decision-making mechanisms.<sup>11</sup> Regarding capability development this meant the continual evaluation of CAF capabilities to justify, prioritize, and align capabilities for funding and resourcing. Valid capabilities would be maintained, unneeded capabilities would be retired, and needed capabilities would be acquired given the perceived future security environment.<sup>12</sup> The Chief of Defence Staff (CDS) re-invigorated Capability Based Planning (CBP) and institutionalized in the CAF as centrally driven top-down approach to Force Development.<sup>13</sup> The 2008-2009 Report on Plans and Priorities noted that migration from a threat based planning model to a capability based planning model also aligned with the Defence MRRS requirements, maximize multipurpose capability so efficiently contribute to multiple outcomes.<sup>14</sup>

### **CAF and the Capability Development Process**

The CBP process was a recommendation of the of the General Hillier's transformation team. It was also recommended that this process be headed by a "3-Leaf General/Flag Officer".<sup>15</sup> This was not accepted and the responsibility was given to the Vice-CDS which looked after institutional matters of the CAF and as acted as the Chief of Staff amongst all the other General and Flag Officers. Originally the DCDS Group was responsible for Capability Development with

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<sup>10</sup> Daniel Gosselin and Craig Stone, "From Minister Hellyer to General Hillier: Understanding the Fundamental Differences between the Unification of the Canadian Forces and its present Transformation", *Canadian Military Journal* 2, no.4 (Winter 2005), 11, <http://www.journal.forces.gc.ca/vo10/no4/doc/4-eng.pdf>. 10p

<sup>11</sup> Department of National Defence, "Report on Plans and Priorities 2008-2009), 7.

<sup>12</sup> Marshall E.S. MacLeod, "Canadian Forces, Modernization and Reorganization: A Critical Look at the Canadian Forces Transformation Project," (Applied Project, Athabaska University, 2007), 27, <http://dtp.r.lib.athabascau.ca/action/download.php?filename=mba-07/open/marshallmacleodProject-apf.pdf>.

<sup>13</sup> D. Blakeney, A. Billyard, L. Kerzner, B. Solomon, and P. Chouinard, "Operational Research Tools Supporting the Force Development Process for the Canadian Forces," *Information & Security* 23, no. 1 (2009): 1, 1

<sup>14</sup> Department of National Defence, "Report on Plans and Priorities 2008-2009,"....., 8.

<sup>15</sup> Macleod, "Canadian Forces, Modernization and Reorganization....," 37.



a focus on Joint Capabilities. With Transformation the DCDS group dissolved and capability development was assigned to the VCDS Group. The Vice-CDS then assigned CBP process to a “Major-General/Rear-Admiral” to be the Chief of Force Development, who is responsible to manage strategically relevant, aligned and affordable CAF force development, at one rank below the environmental commanders.<sup>16</sup> The Chief of Force Development remains tasked with providing validating and establishing force structure and providing the capability framework for all commands in the CAF to follow. However, it is up to the various CAF Commands to turn a capability into requirements. CFD ensure that there is no duplication of capability amongst commands or if it is, that capability is identified as service support or so called “purple trades”.

To enable the CBP component outcomes the level of refinement required by the new management practices, analysis tools were created to capture and contrast CAF capabilities.<sup>17</sup> An early tool that linked options to objectives, through a risk-based scoring process, was CATCAM (CAT capability assessment methodology).<sup>18</sup> The information from steps one and two in Figure 2 is derived from 18 classified scenarios and the *command, sense, act, shield, sustain* and *generate* capability domains. CATCAM allows detailed analysis of what impact a particular action has on the overall mission to determine prioritized capabilities – these are then compared to CAF force structure options.<sup>19</sup> The latest generation of CATCAM refines this capability to allow different combinations of options to be compared.<sup>20</sup>

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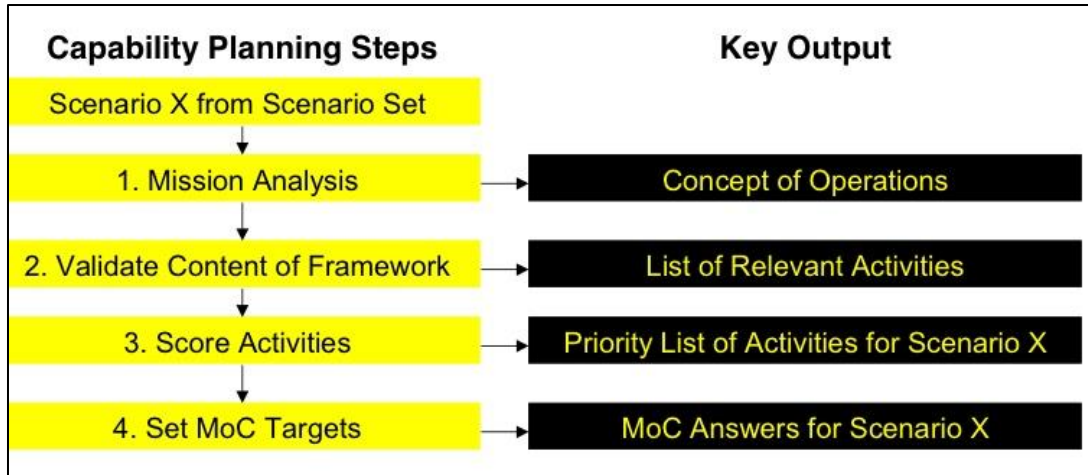
<sup>16</sup> Department of National Defence, *Capability-Based Planning Handbook* (Ottawa: Chief of Force Development, 2014), 21.

<sup>17</sup> Note: The tool sets were developed by DRDC. See Blakeney, Rempel, and Wesolkoski in Bibliography.

<sup>18</sup> Blakeney, “Operational Research Tools Supporting...,” 2. Note: newer generations of the CATCAM exist, but the name remains constant for consistency.

<sup>19</sup> Blakeney, “Operational Research Tools Supporting...,” 3-7.

<sup>20</sup> Rempel, *An Overview of the Canadian Forces’ Second Generation Capability-Based ...*, 18. note the newest CATCAM modification is now called option SC2RAT- Scenario Capability/Capacity Requirements Assessment Tool.



**Figure 2 – Capability Planning Process Steps**

Source: Blakeney, “Operational Research Tools Supporting ...,” 3, fig 1.

Along with CATCAM, the CBP analysis tools included an optimization processes (comparison of personnel and equipment options based on maximum value for minimum cost) and a cost sensitivity process (cost risk of an optimized solution remaining within funding limits).<sup>21</sup> Thus, the entire process writ large allows CBT to provide a detailed audit trail for capability development decisions.<sup>22</sup> However, for all this exhaustive analysis the process is still critically dependent upon having the correct scenario, conducting mission analysis (step 1) and allowing development of new concepts with input from the right stakeholders.<sup>23</sup>

The correct scenario is dependent upon views of the future security environment (FSE). Although publications attempt to capture the FSE and define needed capability (such as *Future Security Environment 2025* and *Designing Canada’s Army of Tomorrow*) the only thing that is common consensus about the FSE is that there *is* no certainty.<sup>24</sup> The RCN and RCAF also have

<sup>21</sup> Rempel, *An Overview of the Canadian Forces’ Second Generation Capability-Based ...*, 15-18.

<sup>22</sup> The Technical Cooperation Program. *Guide to Capability-Based Planning* (Washington: TTCPC Joint Systems and Analysis Group — Technical Panel 3, 2004), 14.

<sup>23</sup> The Technical Cooperation Program. *Guide to Capability-Based Planning ...*, 6.

<sup>24</sup> Department of National Defence, *The Future Security Environment 2013-2040*. (Ottawa: Chief of Force Development, 2014), 90; Canadian Army, *Designing Canada’s Army of Tomorrow*, Directorate Land concepts and designs (Kingston On.: DND, 2011), 3; Sam Tangredi, *All Possible Wars? Towards a Consensus View of the Future Security Environment, 2001-2025* (Honolulu Hawaii: University Press of the Pacific, 2000), 21.

futuristic publications reflective of their respective desires for future development.<sup>25</sup> The RCAF's recent Future Concepts Directive publication identifies the concept development organizations at the CAF level: for the RCAF, Director Air Programs; for the RCN, Director Naval Strategy; and, for the Canadian Army, the Land Staff.<sup>26</sup> The service chiefs are each responsible for providing land, sea or air forces to support the Defence Program – the above shows why CFD coordination is required.<sup>27</sup>

The capability development flow depicted in Figure 1 is displayed as shown in Figure 3. This illustrates how the entire system is integrated/phased with the Defence Planning and Management categories (pillars) of Conceive, Design, Build and Manage. Although CFD oversees all pillars, (Chief of Programs focuses on the Build and Manage pillars) the Conceive Pillar is where new capability concepts are introduced.<sup>28</sup> Chief of Programs manages and account for funds and performances expended in the near term cycle of up to 5 years. A 1998 RAND study for the U.S. Secretary of Defense identified that new capabilities are generally contentious – therefore, broad analysis of mission accomplishment should precede platform identification.<sup>29</sup> The CAF process borrows the same steps as described in the RAND study: Identification, Options Analysis, Definition, Implementation and Close Out. The sequencing of this in the overall process is shown at the bottom of Figure 3.

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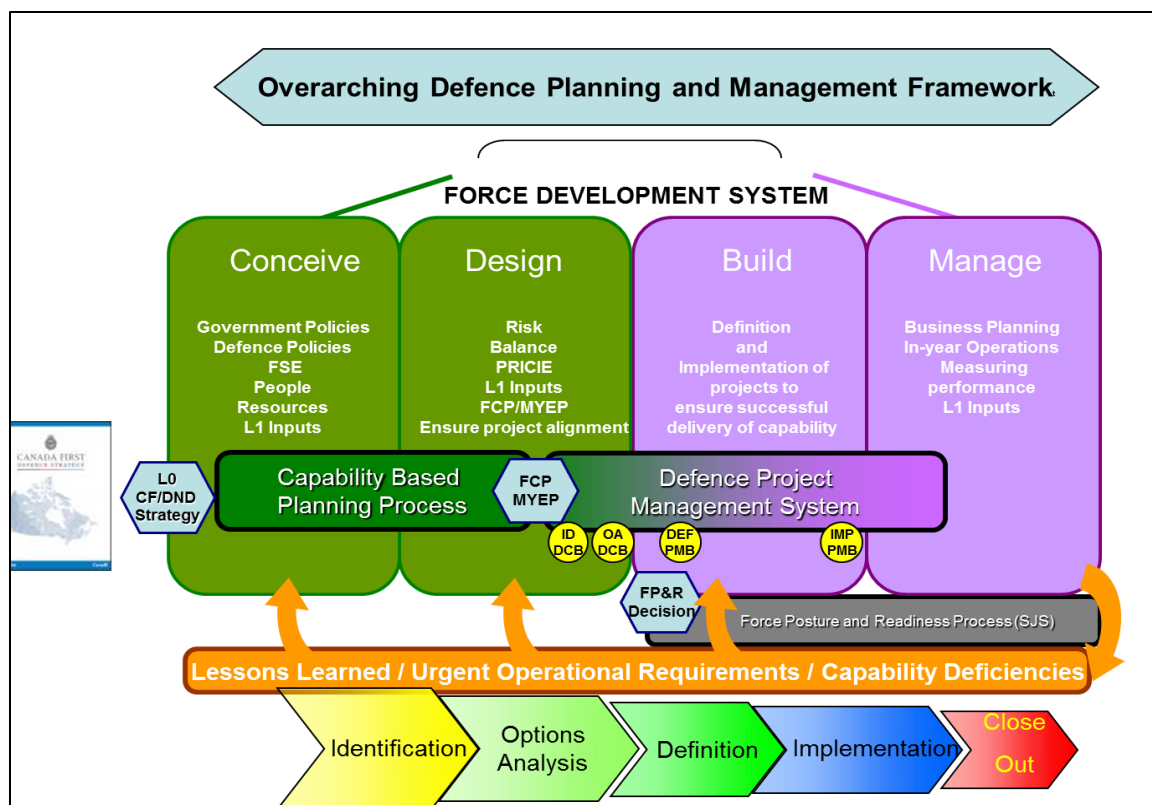
<sup>25</sup> Note: the RCN publication is *Securing Canada's Ocean Frontiers: Charting the Course from Leadmark*; the RCAF publication is *Royal Canadian Air Force Future Concepts Directive*. See bibliography for full reference.

<sup>26</sup> Department of National Defence, Royal Canadian Air Force, *Royal Canadian Air Force Future Concepts Directive* Draft (Custodian: Director Air Programmes, January 2015), A-3, A-5; Canadian Army, *Designing Canada's Army of Tomorrow ...*, 85.

<sup>27</sup> Eric Ouellet, "Walt and Gilson Model" (lecture, Canadian Forces College, Toronto, ON, 19 April 2016), with permission.

<sup>28</sup> Royal Canadian Air Force, *Royal Canadian Air Force Future Concepts ...*, 1-6.

<sup>29</sup> John Birkler, Richard Neu, and Glenn Kent, *Gaining New Military Capability: An Experiment in Concept Development* Prepared for the Secretary of Defense (Santa Monica, Calif. : Rand, 1998), xi, 1, 4.



**Figure 3 – Canadian Armed Forces' Force Development System**

Source: Department of National Defence, *Capability-Based Planning Handbook ...*, 16, fig 1-2

To ensure broad mission analysis occurs, when a new capability is brought forth, all options are considered – it is not air, army or navy specific. Only after the identification phase has concluded that a new concept should be pursued, can it be nationally supported by an environmental service.<sup>30</sup> It should also be noted that capabilities cannot be overlapped due to how DND conducts business funding of projects. Also does this aligned, broadly analyzed, CBP process fairly identify the real need? Professor Martin Shadwick notes in defence policy, history is proof of extensive RCN employment by the Canadian government – yet the navy has yet to

<sup>30</sup> Department of National Defence, *Project Approval Directive 2015* (Ottawa: Director Defence Programme Coordination 6, 2015), 2, 81.

see the investment first promised in 2005.<sup>31</sup> In 2013, Shadwick warned that true focus on defence priorities was replaced by preoccupation with procurement *details*.<sup>32</sup> Capability may address the need but the output of the process from where & when the process began is affected by so many variables internal and external that the desired outcome the proponent may not be realized.

### **The Foundation of Capability Development in the CAF**

Canadian Defence policy is the foundation for CAF to determine how the institution will operate and evolve to meet future security environment. The CAF's keys tasks have not changed significantly during past 60 years. The primary tasks have always revolved around: Defending Canada and ensuring its sovereignty, Defending North America in cooperation with the United States, Contributing to International Peace and Security.<sup>33</sup>

However, within this overall framework, since the 1990s governments have pursued alternating defence policies in particular in terms of strategic orientation and military expenditures. Over the years, the CAF experienced significant budgetary reductions and delays in major armament programs driven by financial constraints rather than defence political objectives.<sup>34</sup> In doing so, as most of its allies, Canada aimed to realize a 'peace dividend' to spend now free financial resources outside the defence sector. Not expecting the end of the Cold War, the future environment assessment of that time did not consider upcoming challenges of a

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<sup>31</sup> Martin Shadwick, "The Leadmark Chronicles," *Canadian Military Journal* 2, no. 3 (Autumn 2001): 75, <http://www.journal.forces.gc.ca/vo2/no3/doc/75-eng.pdf>.75; P. Jones, and P. Lagassé, "Rhetoric versus reality: Canadian defence planning in a time of austerity," *Defense & Security Analysis* 28, no. 2 (June 2012): 143.

<sup>32</sup> Martin Shadwick, "What are the Forces to do?" *Canadian Military Journal* 13, no. 2 (Spring 2013): 82, <http://www.journal.forces.gc.ca/vol13/no2/index-eng.asp>. Emphasis added.

<sup>33</sup> Department of National Defence, *Defence Policy Review – Public Consultation Document 2016* (Ottawa: DND Canada, 2016), 5 in conjunction with Prime Minister of Canada Justin Trudeau, "Minister of National Defence Mandate Letter," accessed 1 May 2016, <http://pm.gc.ca/eng/minister-national-defence-mandate-letter>.

<sup>34</sup> Peter Jones and Philippe Lagassé, "Rhetoric versus reality: Canadian defence planning in a time of austerity," *Defense & Security Analysis* 28, no. 2 (June 2012): 141-143.

constantly changing global security environment focused on regional conflicts with a need for rapid response rather than conventional warfare capabilities.<sup>35</sup>

Consequently, it was an underfunded and under-resourced CAF that the government sent to the global hot spots, notably Afghanistan, in order to meet foreign policy goals. Still facing serious budget restraints, capability development at that time was reduced to downsizing and, ultimately, abandonment of military capabilities. It was not before 2005 that significant reinvestments were initiated. However, again, these budget decisions were mainly based on an improved fiscal situation and did not follow a consistent defence political course. The following Canada First Defence Strategy like the previous Defence policies before it affirmed the political commitment for a general purpose force. Shortly thereafter, though, it became evident that the allocated financial resources were still not sufficient to meet the government's objectives in terms of military capabilities. Today the Canadian multi-purpose force threatens to founder for lack of funding.<sup>36</sup>

In retrospect, capability development in Canada happened to be driven decisively by constraints outside the scope of defence policy and broadly being disconnected from actual operational requirements.

Regardless of the huge internal challenges, the CAF constantly had to deploy forces to alliance operations. In addition to being the largest contributor to United Nation (UN) missions in the early 1990's<sup>37</sup>:

Canadian troops participated in all of the UN's and NATO's Balkan missions, including the unsuccessful UN Protection Forces, NATO's Implementation Force (IFOR),

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<sup>35</sup> Derek Braddon, *Exploding the Myth? – The Peace Dividend, Regions and Market Adjustment* (Amsterdam: OPA, 2000), 1, 4-5.

<sup>36</sup> Peter Jones and Philippe Lagassé, "Rhetoric versus reality: Canadian defence planning in a time of austerity," *Defense & Security Analysis* 28, no. 2 (June 2012): 141-143.

<sup>37</sup> Michael K. Carroll, "Peacekeeping: Canada's past, but not its present and future?" *International Journal* 71, no. 1 (2015): 174.

Stabilization Force (SFOR), and the Kosovo Force (KFOR). In all of those instances, Ottawa answered NATO's call for military and political assistance without hesitation and in spite of its own financial limitations and economic difficulties.<sup>38</sup>

Contrary to this relatively coherent political course of strong commitment to alliances, the Canadian government withdrew from most of its alliance programmes and joint operations during the last decade. While edging away from both, UN and North Atlantic Treaty Organization (NATO), Canada increasingly preferred to collaborate bi-laterally with selected allies.<sup>39</sup> Against these trends, the current government is now aiming for a strong commitment to NATO and a renewal of Canada's commitment to UN peace operations.<sup>40</sup> In contrast, Canada has always maintained a close partnership to the USA, in particular in defending North America. The bi-lateral North American Aerospace Defense Command (NORAD) is at the heart of this alliance and therefore one of the main determinants of the capability decision-making process.<sup>41</sup>

Consequently, it is imperative for Canadian capability development to consider existing alliances, at least to the politically preferable extent, to avoid negative future impacts like the declining influence within NATO since 2006.<sup>42</sup> Moreover, allied capabilities could be included in a truly comprehensive capability decision-making process. Exemplarily, the specialization options outlined by Jones and Lagassé built on the principle of allied burden-sharing to compensate optional deficits in Canada's expeditionary component. However, specialization would require a clear political commitment against particular military capabilities and future

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<sup>38</sup> Benjamin Zyla, "Explaining Canada's practices of burden-sharing in the International Security Assistance Force (ISAF) through its norm of 'external responsibility'," *International Journal* 68, no. 2 (2013): 290, 303.

<sup>39</sup> Karolina Maclachlan and Zachary Wolfrain, "Diplomacy disturbed: NATO, conservative morality and the unfixing of a middle power," *British Journal of Canadian Studies* 28, no. 1 (2015): 43-44.

<sup>40</sup> Prime Minister of Canada Justin Trudeau, "Minister of National Defence Mandate Letter," accessed 1 May 2016, <http://pm.gc.ca/eng/minister-national-defence-mandate-letter>.

<sup>41</sup> Department of National Defence, *Defence Policy Review – Public Consultation Document 2016* (Ottawa: DND Canada, 2016), 12-13.

<sup>42</sup> Karolina Maclachlan and Zachary Wolfrain, "Diplomacy disturbed: NATO, conservative morality and the unfixing of a middle power," *British Journal of Canadian Studies* 28, no. 1 (2015): 44-45, 58.

political leaders to accept and respect resulting limitations.<sup>43</sup> This, in turn, “could marginalize Canada’s ability to contribute to future allied operations.”<sup>44</sup>

Currently, the government addresses questions like:

- How should Canada contribute to NATO and its evolving role in global security in the years ahead?
- How should Canada-United States cooperation on defence of North America evolve in the coming years?
- What form should the CAF contribution to peace support operations take?
- Are there specific niche areas of capability in which Canada should specialize?<sup>45</sup>

So, despite a long-term consensus on key roles, non-defined National Security goals and objectives in terms of alliance commitment continues to be troublesome for military capability development.

The CAF uses Capability Based Planning (CBP) as a tool to link capability development to government policy by applying an optimizing scenario-based approach. It results in a mix of military capabilities to meet defence political objectives in the future within allocated resources.<sup>46</sup>

CBP also explicitly encourages output-based planning by linking capability decisions to high-level strategic goals. By focusing on forecasted requirements for future capabilities to achieve the nation’s strategic goals, decisions to upgrade existing systems or invest in new systems critically depend on how these investments are likely to impact future capabilities and strategic goals.<sup>47</sup>

Though widely used, CBP is not uniquely defined. Basically, it aims to broaden the view to organizational needs instead of particular systems/platforms based on future scenarios and

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<sup>43</sup> Peter Jones and Philippe Lagassé, “Rhetoric versus reality: Canadian defence planning in a time of austerity,” *Defense & Security Analysis* 28, no. 2 (June 2012): 146-148.

<sup>44</sup> *Ibid.*, 148.

<sup>45</sup> Department of National Defence, *Defence Policy Review – Public Consultation Document 2016* (Ottawa: DND Canada, 2016), 15, 38.

<sup>46</sup> Ross Fetterly and Binyam Solomon, “Facing future funding realities – Forecasting budgets beyond the future year defense plan,” in *Military Cost-Benefit Analysis – Theory and practice*, ed. Francois Melese, Anke Richter and Binyam Solomon (New York: Routledge, 2015), 167.

<sup>47</sup> *Ibid.*, 167.



conditions. However, CBP does not provide a feedback mechanism to the resources management system. To overcome this gap, Webb, Richter and Bonsper suggest a program structure that encourages systems thinking by connecting capability plans and financial resources bidirectional.<sup>48</sup>

Canadian political objectives are subject to change, whether slowly over time or even suddenly. The CAF remains an important instrument of foreign policy and therefore has a future role to play internationally.<sup>49</sup> The current revolution in military affairs (RMA) requires a strategic reorientation towards a new generation of military technologies and its implications for military capabilities in the full spectrum of conflict. Analysts of future capabilities need to consider RMA as a crucial determining factor, especially in Canada. As the CAF highly relies on interoperability, the modernization of military capabilities must be balanced with the needs of the State.

The Canadian strategic culture, however, is just not well suited to embracing the RMA. It is exceedingly conservative and reluctant to embrace suddenly such a radical and costly shift in resource allocation. Fiscally, it lacks the funds to acquire all the necessary related weapons systems.<sup>50</sup>

It is challenging to estimate desired outcomes of Canadian defence policy. While Canada withdrew from alliance operations/programs, a strong alliance commitment is still politically postulated. While the defence budget is inadequate subject to may be concerned about it, nevertheless capabilities of a multi-purpose military are maintained in order to be operable with liked allies. CBP in theory “provides a clear linkage between military outputs and defense policy

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<sup>48</sup> Natalie J. Webb, Anke Richter and Donald Bonsper, “Linking Defense Planning and Resource Decisions: A Return to Systems Thinking,” *Defense & Security Analysis* 26, no. 4 (December 2010): 389, 394, 399.

<sup>49</sup> Michael K. Carroll, “Peacekeeping: Canada’s past, but not its present and future?” *International Journal* 71, no. 1 (2015): 175.

<sup>50</sup> Alexander G. Salt, “Cultural differences: transformation and the future of American-Canadian defence relations,” *Canadian Foreign Policy Journal* 20, no. 3 (2014), 266.

outcomes”<sup>51</sup>, its application in the context of Canadian strategic culture is challenging as desired political outcomes remain nebulous.

### **The Realities of Capability Development**

The current reality of capability development in the CAF is that of disjointed system. It is not Joint, although there has been a movement at the Strategic and Operational levels of the CAF to bring the each of the commands closer together to be Joint. CF Transformation initiated the philosophy of the Joint Military but it did align itself with the management and business practices of the whole National Defence team in Ottawa. This was a military transformation not a National Defence Transformation.

This transformation initiative ironically created more headquarters to focus military planning and operationalize the military culture. It also delineated between commands what was force generation and force employment. The RCN, CA, and RCAF became force generators. With the creation of the Canadian Expeditionary Command (CEFCOM), Canada Command (CANCOM), Canadian Operational Support Command (CANOSCOM) and Canadian Special Operations Forces Command (CANSOFCOM) became the Force Employers. This delineation of Force Generation and Force Employment was problematic especially for the RCAF and RCN as those services conducted real time operations domestically and globally. The subtle fix is that the RCAF and RCN would act as Component Commanders at their respective Operational Levels. Whereas the CA was more than willing to detach and attach elements to the force employers as directed. However, this was without friction. The overall perception of this transformation was that CAF was now Army centric as this coincided with the conflict in Afghanistan where the

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<sup>51</sup> Ross Fetterly and Binyam Solomon, “Facing future funding realities – Forecasting budgets beyond the future year defense plan,” in *Military Cost-Benefit Analysis – Theory and practice*, ed. Francois Melese, Anke Richter and Binyam Solomon (New York: Routledge, 2015), 167.

Army was heavily committed. This created a culture where the RCAF and RCN were second fiddle to the Army in the overall CAF priorities.

The major point about Transformation that was not considered was that it was readily apparent about the separation of Force Generation and Force Employment but little attention was paid to Force Development and Force Management and how all force interconnected.<sup>52</sup>

Throughout the Afghanistan conflict it became apparent that there were issues with the separation of these four responsibilities. Force Development and Force Management are directly related to Force Generation and Force Employment. Force Development is an input and the Force Employment is the final output of Defence with Force Management supporting Force Generation and Force Employment.

The end of the Afghanistan mission and the experiences gained by the CAF during 2010 with the respect to the Vancouver Olympics and Op HESTIA in Haiti the CAF realized that numerous Commands that did Force Employment needed to be consolidated. CEFCOM, CANCOM, and CANOSCOM were amalgamated into Command named Canadian Joint Operations Command (CJOC) that would be responsible for the Force Employment of all CAF assets. CJOC was the unifying answer to make the CAF Joint. However, this again did not address the Joint Force Development. It was apparent at the senior leadership level that there was lack of joint force development and joint capability as seen through the CAF activities from 2006-2010. Suffice to say Joint capability improved across the CAF during this time period but it was not from Force Development practices but from Unforeseen Operational Requirements that were urgently needed to complete assigned tasks in Afghanistan or the Vancouver Olympics.

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<sup>52</sup> Department of National Defence, *B-GJ-005-300/FP-000, Canadian Forces Joint Operations Publication CFJP 3.0*, dated 2005-08-15, 2-1.

These capabilities were employed for a specific mission and not institutionalized in the CAF, thereby a number of these capabilities were not sustained.

Then CDS, General Natynchuk formed CJOC, he also instituted the “Joint Exercise (JOINTEX)” series which would see the CAF exercise its ability operate Jointly. Operation NANOOK, the yearly northern sovereignty exercise in the Canadian Arctic demonstrates Joint capability but it does not stress these CAF abilities as it is an activity to conduct show of presence in the Arctic. JOINTEX exercises the CAF to test its current capabilities and determine what improvement are required to be more Joint. To date there has been two JOINTEX(s) in 2013 and 2015 which highlighted capability strengths and weakness of the CAF. Through the JOINTEX process of planning and executing the CAF has recognized the importance of Joint Capability. However, Joint Capability and that it allows the CAF to maximize it capability to meet the governments assigned task for a given mission.

## **Conclusion**

Joint Capability is not something you create from the tactical level and make it work. It is a capability that needs to developed, analyzed, compared too, tested, and then prioritizes, and then accepted amongst all actors within National Defence and the whole of Government. CJOC is the only true Joint element that is concerned with capability across the spectrum of conflict. It is only an end-user stakeholder at the very end of the output of capability development. It has absorbed the Canadian Forces Warfare Centre (CFWC) to assist in understanding the requirements Joint Capability. CJOC and CFWC do not have a direct command or support link CFD or the environmental commands warfare centers and their respective Army, Navy, and Air Force directorates of Development and Requirements. These separations of directorates have not enabled the CFD to force the Commands into a coherent narrative of capabilities. Yes, the VCDS

and CDS are the Joint forcing functions for the CAF; however, those two individuals only have so much capacity to staff, convince, and order the National Defence to increase its joint capability.

The counter argument to being Joint is that the Government can only afford a finite amount of capability. Not all capabilities support another capability, even considering if there are second and third effects that could be leveraged between them. The CFD CBP is based on what scenarios the government of Canada needs and wants to do and those that they can afford. Each command has their own priorities in which they want to advance. CFD and VCDS as the holder of establishment personnel positions can control to an extent how the services structure a capability but the equipment and funding of that capability is outside the control of CFD. With the CAF being personnel neutral in numbers, retention and recruiting are significant issues that it must be address to sustain the status quo. This leaves the actual equipment and resources as the variables that can be changed. Hence, commands are very hesitant to give up personnel for capability even within their own purview. This then goes back to the culture of protecting their own capabilities and not supporting the capabilities required for the future.

In the end the CAF needs to better align its Force Development to have a more cohesive narrative in developing the capabilities of the CAF and sustaining them in the long run. The CBP is the correct the process but the institutional structures to support those processes are not aligned and the culture to leverage those processes is not there. Capability Development needs to have a Joint understanding of all things CAF in order to produce the right capabilities not the best capabilities available. It is complicated process that needs understanding in order to work.

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