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**PROPOSED IMPLEMENTATION OF SPLIT-BASED SUPPORT
TO DEPLOYED OPERATIONS**

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JCSP 46	PCEMI 46
Service Paper	**Étude militaire**

Canada

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AIM

1.   The aim of this service paper is to justify the commitment of resources to scoping the creation of a location within Canada where Canadian Armed Forces (CAF) and Department of National Defence (DND) personnel can deploy to provide split-based support to designated operations. On the basis of specified assumptions, the strengths and challenges of one such approach will be examined.

INTRODUCTION

2.   Reachback support refers to "the process of obtaining products, services, and applications, or forces, or equipment, or material from organizations that are not forward deployed" as defined by the United States (US) Department of Defence.[1] Although it can refer to frontline units reaching back to theatre assets, in common parlance and in this paper, it refers to reaching out of theatre, usually to the home nation, for support. Information resources are among the easiest to reach back for, because they can be easily transferred from the home nation to the deployed force. Reachback supports all operations, from combat to humanitarian assistance.

3.   Split-based operations refer to teams that have trained together in some meaningful way, and which share a coherent chain of command but are geographically dispersed. In the general use of the term, a team could be split within a theatre, between home and theatre, or even across theatres. The focus in this circumstance is on bases split

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[1] Joint Chiefs of Staff, *Joint Air Operations*. JP3-30. (Washington, D.C.: Joint Chiefs of Staff 2019) GL-7

between home and theatre, which is the most common employment of the term, especially by Canada.

4. This paper will first propose an enumeration of different ways people contribute to deployed operations, then it will define one course of action for moving people away from the zone of hostilities and analyze the advantages and disadvantages of that approach.

DISCUSSION

5. It is proposed that personnel contribute to a theatre of operations in one of four categories:

a. Category 1: those who perform the actions that must take place in theatre. These are the trigger-pullers, wrench-turners, burger-flippers, training content-deliverers and others whose job is to do things in theatre to ensure the mission works. They must be in theatre.

b. Category 2: those who must interact directly with personnel in theatre. These include, for example, commanders or medics. This category includes both those who interact with the first category, and those who interact with others in the second category, like commanders of commanders or headquarters staff. Membership in this category may change based on the mission and based on changes in technology, but these people must be in theatre.

c.   Category 3: personnel who are not needed in theatre because the work that they do does not require intimate face-to-face coordination with the personnel there. This is the group for which the current reachback model works well and no revision is proposed in this category. There are two primary sub-categories of this type:

(1)   Those who provide specialized, low-demand, urgent and high value support. These personnel, like rare-disease specialists or airfield worthiness engineers, are on call from Canada to provide support within their domain of expertise when needed. If they need to be in theatre to provide support, then they belong to category 1 or 2 and deploy on Technical Assistance Visits (TAVs).

(2)   Those who provide large scale, less intimate support. These personnel might, for example, do broad scoped intelligence analysis, generate topographic maps for the area of operations or perform analysis of long term maintenance issues to identify ways of improving. They receive tasks from theatre, work on them for extended periods, and then return a finished product.

d.   Category 4: those who provide regular, consistent, direct support to the work of the operation in a fashion similar to that conducted by personnel in theatre, but the nature of their work does not demand that they be physically present in theatre. Many personnel assigned on previous missions to the second

category can be moved to this one by use of split-based operations techniques thanks to increasing telecommunications capability.

6.   It is assumed that it is desirable to move as many people as possible from the second category to the fourth so long as operational effectiveness is not compromised. The method to achieve this that will be analyzed in this service paper is a split-based approach where the out of theatre elements are not left in their normal garrisons but rather home-deployed to a proposed location in Canada, referred to as Camp Maple in this document. This proposed solution will be described and then it will be evaluated in terms of practical, administrative and ethical considerations.

7.   The proposed split-based team consists of a working group located at Camp Maple with a small forward element providing liaison and expertise in theatre. This requirement was identified in the Exercise ARDENT DEFENDER 2018 (Ex AD 18) After Action Review (AAR) for geomatic support that was provided to the Mapping and Charting Establishment`s Geomatics Centre of Excellence. Ex AD 18 had reachback geomatic support that was found effective; however, without a representative on the ground to represent its capabilities and equities, it was not used to its full potential.[2] They attempted to fill a Category 4 requirement with a Category 3 solution using a virtual team spanning from the exercise to the supporting units in garrison.

8.   Effectively building split-based teams is a leadership challenge, but it is one that has been solved by militaries and businesses; split-based teams are a compromise that

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[2] Major Travis Kelley, email conversation with Mapping and Charting Establishment, 17 October 2019

minimizes loss of effectiveness while moving people out of theatre. For the split-based team to work, it must train together to establish the teamwork dynamic described by scholar Susan Hill.[3] It must also train in a split-base in order establish trust while working through virtual connections, according to virtual collaboration specialists Nandhakumar and Baskerville.[4] Likewise, such a team should complete workup training with the task force in order to integrate into the larger organization. Because these split-based teams are part of the rotation, they need to complete workup training like all other elements of the deployment.

9.   To enable the split-based concept, Camp Maple is envisioned as a segregated location on an existing, major CAF base. The home elements of the split-based teams would home-deploy to Camp Maple, where they would be barracked and cared for as though deployed using support from the base for things like Role 1 medical, infrastructure management and contracting support. They would work on the time zone of the deployed personnel and report to the theatre chain of command.

10.   The soldiers assigned to Camp Maple would be considered deployed and consequently receive theatre pay and tax-free status as per *Strong Secure Engaged, Canada's Defence Policy* (SSE) for soldiers on named operations.[5] They would be in the Home Leave Travel Assistance (HLTA) rotation and would not be permitted to leave Camp Maple without appropriate cause in the same way that their deployed counterparts

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[3] Susan E. Kogler Hill "Team Leadership," in *Leadership: Theory and Practice 8th Edition*, ed Peter G. Northhouse (Washington D.C.: Sage, 2019) 374.
[4] Joe Nandhakumar and Richard Baskerville. "Durability of Online Teamworking: Patterns of Trust." Information Technology & People 19, no. 4 (2006): no page.
[5] Department of National Defence, *Strong, Secure, Engaged: Canada's Defence Policy.* (Ottawa: DND Canada, 2017) 12

would not, in general, leave their Main Operating Bases (MOBs). Finally, they would be uniformed as the in-theatre element, allowing them to move to theatre for a Technical Assistance Visit (TAV), if required, without any administration beyond the travel arrangement.

11.   Finally, civilians could be assigned to Camp Maple as well, when their tasks are appropriate to the split-based concept. Civilian-Military hybrid teams might be highly effective in the split-based construct with some of the military members in-theatre and the rest of the hybrid team at Camp Maple. This would allow certain types of expertise, such as the deep regional knowledge of some of Canadian Forces Intelligence Command's civilian analysts, to be harnessed to the theatre without sending those civilians to an operational area. This approach is not intended for specialists with rarely used but highly valued expertise, the third category of support to missions, but for those whose expertise is needed on a daily basis, synchronized with theatre operations, such as those civilians who deployed to Kandahar and other locations in support of the CAF.

12.   The concept of split-based teams working from Camp Maple has practical advantages and disadvantages. The primary practical advantage is cost savings; from an economic point of view, it has been clear for decades that virtual deployment of appropriate support personnel could save on operational costs. US intelligence officer Michael Castagna wrote as far back as 1997 that the US should virtualize intelligence support through split-based teams as a cost saving measure. Journalist Matthew Fisher estimated the cost of feeding each soldier at Kandahar Airfield as $20,500 per year, much

more than an equivalent contract in Canada.[6] The cost of every flight, every leave trip, and every supply for each soldier not deployed would also be saved. Furthermore, every support person not required thanks to the Camp Maple elements is a further saving. It is beyond the scope of this analysis to estimate the total incremental saving, but significant amounts have already been identified.

13.   Moreover, the incremental costs are not the only saving; the facility could be used for different missions over time, allowing the establishment cost to be amortized over multiple missions. Investigative journalist Nick Turse criticizes the multi-million dollar construction costs of the US military for facilities in Afghanistan. [7] His facts show the high cost of infrastructure in deployed areas and Canadian construction in theatre is unlikely to be used for the lifetime of a building. Certainly in-theatre facilities will be necessary, but some can be eliminated by building them at Camp Maple and using them for multiple missions. Split-based operations are a cost saving measure

14.   A practical weakness of the Camp Maple split-based concept is its dependence on effective communications. Firstly, the split-based team concept does not work in a context of unreliable communications, such as Roto 0 or a conventional battlespace; other options are required in these circumstances. Secondly, the capability of the deployed signals element to transmit sufficient bandwidth to enable collaboration establishes the maximum amount of split-based support that a given mission can conduct and its nature.

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[6] Matthew Fisher. "Afghanistan Mission Cost Surpasses $525,000 per soldier". The Vancouver Sun. Last Modified 1 September 2010,
http://www.vancouversun.com/news/Afghanistan+mission+cost+surpasses+soldier/2424735/story.html
[7] Nick Turse. "Settling Down in Afghanistan". Mother Jones. Last Modified 13 February 2012,
https://www.motherjones.com/politics/2012/02/afghanistan-military-bases-building-boom/

For example, Geospatial-Intelligence products have been established as well suited to split-based work[8], but they require more bandwidth than written intelligence analysis products.[9] The technical considerations must be satisfied to enable split-based reachback, but the process and constraints are familiar to any modern CAF headquarters.

15.   They key weakness to the Camp Maple split-based approach is in the administrative domain. There is no definition of deployment in the National Defence Act (NDA) [10], The Queen's Regulations and Orders (1.02: Definitions) (QR&O)[11], the Canadian Forces Temporary Duty Travel Instructions (Chapter 2: Definitions) (CFTDI)[12], or SSE[13]. The definition of deployment in the Defence Administrative Orders and Directives (5029-3) (DAOD) refers to the civilian staffing mechanism and is not relevant.[14] DAOD 5028-0 refers to the "deployment of DND employees" relating to international operations but does not define deployment. The only relevant definition in these documents is in NDA section 34: "A person who is under the age of eighteen years may not be deployed by the Canadian Forces to a theatre of hostilities."[15] This statement implies the existence of deployments which are not to theaters of hostilities. This is presumed to refer to the use of reservists under the age of eighteen for humanitarian assistance and disaster relief, but the implication remains that deployment is separate

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[8] National System for Geospatial Intelligence, *Geospatial Intelligence (GEOINT) Basic Doctrine*, Publication 1.0, (Washington D.C.; National System for Geospatial Intelligence, 2018) 24
[9] Ibid. 36
[10] National Defence Act, R.S., c. N-4, s. 1.
[11] Department of National Defence, *Queen's Regulations and Orders* (Ottawa: DND Canada, 2019) 1.02
[12] Department of National Defence, *Canadian Forces Temporary Duty Travel Instructions*. (Ottawa: DND Canada, 2012) Chapter 2.
[13] Department of National Defence, Strong, Secure, Engaged. 12.
[14] Department of National Defence, *Defence Administrative Orders and Directives* (Ottawa: DND Canada, 2005) 5029-3
[15] National Defence Act, section 34.

from the theatre of hostility. The guiding documents governing DND and the CAF do not define deployment.

16.   This ambiguity complicates the implementation of the Camp Maple concept. While there is no clear definition that has to be changed in order to provide personnel deployed to Camp Maple the tax free status promised in SSE,[16] the absence of a definition is likely to be sufficient to complicate any such initiative. However, some useful precedent exists; the eligibility criteria for the Operational Service Medal (OSM) state that it can be awarded to suitable individuals who "served in a theatre of operations, provided direct support on a full-time basis to operations conducted in such a theatre…"[17] This criterion implies an expectation that a Camp Maple type construct exists or is anticipated for the CAF. Inquiry to the Joint Task Force Two intelligence section generated an indication that that it employs split-based operations but no details are available at the unclassified level.[18] This may be the precedent that inspired that phrasing for the OSM criteria. Although the administrative complexity of initiating the Camp Maple split-based approach is the most problematic hurdle, there are elements already in place which anticipate such a requirement.

17.   The final consideration is ethical and it has two parts. The first is the strain on troops and families when they are expected to support split-based operations from garrison, rather than a third location like Camp Maple. US Air Force intelligence

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[16] Department of National Defence, Strong, Secure, Engaged. 12.
[17] Department of National Defence, *Operational Service Medal – Expedition (OSM-EXP)* (Ottawa: DND Canada, 2019) no page
[18] Captain Casey Anderson, email conversation with author, 4 October 2019

specialists and psychologists Ogle, Reichwald and Rutland observe the high rate of Operational Stress Injury (OSI) among image analysts who support operations from garrison. Referring to theirs as "combat to cul-de-sac" days, these aviators' rate of OSI exceed even that of their peers in theatre.[19] Establishing Camp Maple allows split-based team members to be supported as well as their in-theatre counterparts and psychologically ties them to operations, rather than jumping between home and operational contexts.

18.   The second ethical consideration is fairness. The OSM criteria already imply the equivalence of service at an operational tempo and in an operational context regardless of whether it is on the front line, in the MOB or in direct full-time support from outside of theatre. *Leadership in the Canadian Forces: Doctrine* explains the importance of fair treatment of subordinates as a key to leadership.[20] An intelligence analyst who works, more than full-time, supporting theatre from Ottawa contributes as much and sacrifices as much as one who does so from the MOB in theatre. Fairness demands equal recognition of both. The same can be said of any split-based team. Camp Maple is a stewardship tool to ensure fair treatment during the work and the broader split-base concept ensures fair treatment as concerns recognition such as pay and medal eligibility.

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[19] Alan Ogle, Reid Reichwald and Brian Rutland. "Psychological impact of remote combat/graphic media exposure among US Air Force intelligence personnel." Military Psychology 30, no. 6 (2018) no page

[20] Canada. Department of National Defence. A-PA-005-000/AP-003, Leadership in the Canadian Forces: Doctrine. (Ottawa: DND Canada, 2005) 32

CONCLUSION

19.   Reachback support for long term projects or low demand highly specialized

advice is working in DND. Recently, however, technology has introduced a means of

establishing virtual teams which can support operations on a daily basis from Canada.

These should be established as split-based teams with a forward element to integrate with

the in-theatre clients and a rear element to perform the work. The Camp Maple concept is

a proposed method of implementing these teams with practical advantages and

challenges, serious administrative hurdles which are not insurmountable and a

fundamentally ethical justification for implementation.

RECOMMENDATION

20.   The Canadian Army should lead the detailed analysis of this concept in order to

justify the construction of Camp Maple and the implementation of split-based teams

supporting the CAF's conventional forces on deployment.

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