





FORCE 2021: AN ARGUMENT FOR ASYMMETRICAL BRIGADES MAJOR MATT ROLLS

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AIM

1. In a problem statement for developing Force 2021, Director Land Force Development noted the "Canadian Army (CA) is not optimized to meet Force Posture & Readiness (FP&R), *Strong, Secure, Engaged (SSE)* and Army Capstone operating requirements." As a deduction from this problem, it was noted that the CA must conduct an analysis to optimize itself for *SSE* concurrency requirements. This paper contributes to that effort. It will discuss the utility of modifying the CA's structure to have non symmetrical brigade groups of light, medium and heavy forces. It will present a course of action to the Commander of CA that will better address the needs of the contemporary operating environment (COE) as well as the future security environment (FSE) while better addressing the requirements of *SSE*.

INTRODUCTION

- 2. The CA is currently structured into three similarly structured, also known as symmetrical, mechanized brigade groups. The justification for this structure has been that Canada needs a medium force capable of operating across the entire spectrum of conflict and flexible enough to force generate for a variety of tasks.³ This paper does not dispute the concept of a general-purpose force that is effective across the spectrum of conflict; however, it does not accept that every brigade must be the same to achieve this. Changes in the COE, the uncertainty of the FSE and the concurrency requirements of *SSE* place a premium on an Army that can deploy in a variety of configurations while still maintaining a capability to operate with the best, against the best. Resource shortages exacerbate the pressures on the CA, resulting in a failure to concentrate limited resources where they can be best employed. The recently institutionalised light forces being divided between the three mechanized brigades prevents them from being employed in a single brigade. The three factors of *SSE's* mission concurrency⁴ and the FSE envisioned, combined with resource constraints and the employment of light forces, require the CA to modify its structure.
- 3. The paper argues that the Army requires three different brigade groups of light, medium, and heavy forces to better achieve the concurrency requirements of *SSE* and respond to the challenges of the FSE. This model will create a more agile force, better

³ Department of National Defence, *Waypoint 2018 The Canadian Army Advancing Toward Land Operations 2021*, (Ottawa: Department of National Defence, 2015), 35.

¹ Maj Sandy Cooper, "FMSD and Force 2021 Update," Power Point presentation by DLFD SI-2, 1 May 2019.

² Ibid.

⁴ Department of National Defence, *Strong, Secure, Engaged*, (Ottawa: Department of National Defence, 2018), 81.

able to respond to the demands of SSE, better institutionalize light forces, and consolidate sparse resources for their optimal employment.

4. The paper will support the argument by reviewing the findings of *SSE* and *Close Engagement* regarding the FSE. It will describe the Albert and Hayes model of agility and examine its link to *SSE*. The model will be used throughout the paper as a metric to describe how the CA would be improved by adopting a heavy, medium, and light brigade construct. This will be followed by a review of the concurrent tasks in *SSE*. The paper will then address the problems of concurrency, resource constraints and light force institutionalization and how the proposed organization improves the CA's agility. Specific brigade structures and the impact on the Managed Readiness Plan are beyond the scope of this paper and require further study.

DISCUSSION FUTURE SECURITY ENVIRONMENT

- 5. The CA's future path is currently shaped by two primary documents. The first is *SSE* which describes the current and near FSE and the tasks that the CAF is expected to fulfill. The second is *Close Engagement* which describes the current and near FSE and how the CA must be able to fight within it. According to *SSE*, the FSE will be characterized by three major trends: "the evolving balance of power, the changing nature of conflict, and the rapid evolution of technology." These trends will be examined in the following paragraphs.
- 6. The evolving global balance of power recognizes the shifting of power from the United States and its western partners and Allies to China. Concurrently, other actors like Russia seek to challenge the global order, including through the use of military force. This is balanced by the changing character of conflict which recognizes that, despite a return of great power competition, there is a variety of factors affecting the security environment which includes non state actors, climate change, and mass transnational migration.
- 7. SSE recognizes the so called "grey zone" of conflict and "hybrid wars." In this continuous state of competition, easy classifications of conventional and non-conventional forces hold reduced meaning. States employ non-attributable means and operate below the threshold of recognizable confrontation while non state actors gain access to warfighting capabilities that would traditionally only be held by states.⁷
- 8. The rapid evolution of technology has enabled the trends mentioned previously. New domains of warfare have emerged from technological advances: space, cyber, and

⁵ Department of National Defence, Strong, Secure, Engaged, pg 49.

⁶ Department of National Defence, Strong, Secure, Engaged, pg 50-51.

⁷ Department of National Defence, *Strong, Secure, Engaged*, pg 52-55.

information. Technological advances make capabilities more affordable to adversaries, challenging the CAF and CA to adapt.⁸

- 9. *SSE* recognizes numerous implications from these trends, however, those that stand out from a CA structure perspective is that Canada requires agile, combat ready forces that can execute a wide variety of mission sets. There is a "need to engage with emerging powers, particularly in the Asia-Pacific region," a continued requirement to address terrorism and violent extremist organizations, and an enhanced ability to operate in the North. *Close Engagement* envisions a similar FSE and concludes "agility, versatility and the ability to adapt rapidly are the most important defence against the unpredictable shape of future conflict." ¹⁰
- 10. Both documents make it clear that agility is essential to having relevant forces. The uncertainty of the operating environment drives this requirement. ¹¹ According to Richard Hayes and David Alberts, agility is about being able to engage in an advantageous time and place with the right types of forces. ¹² This implies having a force that can assume multiple configurations and respond in a timely manner. Agile forces are
 - Robustness: the ability to maintain effectiveness across a range of tasks, situations, and conditions;
 - Resilience: the ability to recover from or adjust to misfortune, damage, or a destabilizing perturbation in the environment;
 - Responsiveness: the ability to react to a change in the environment in a timely manner;
 - Flexibility: the ability to employ multiple ways to succeed and the capacity to move seamlessly between them;
 - Innovation: the ability to do new things and the ability to do old things in new ways; and
 - Adaptation: the ability to change work processes and the ability to change the organization.

⁸ Department of National Defence, *Strong, Secure, Engaged*, pg 55-57.

⁹ Department of National Defence, *Strong, Secure, Engaged*, pg 57.

¹⁰ Department of National Defence, *Close Engagement Land Power in an Age of Uncertainty Evolving Adaptive Dispersed Operations*, (Ottawa: Department of National Defence, 2019), 30-36.

¹¹ Department of National Defence, *Strong, Secure, Engage*, 57.

Department of National Defence, Close Engagement, 17.

¹² David S. Albert and Richard E. Hayes, *Power to the Edge Command... Control... in the Information Age*, Department of Defence: Washington DC, 2005, pg 153-157.

characterized by possessing the traits of, robustness, resilience, responsiveness, flexibility, innovation, and adaptation. See the figure below for definitions of these attributes. ¹³ This is an ambitious grouping of attributes that a CA made up of three diverse brigades of light, medium, and heavy forces can better embody than the current Canadian Mechanized Brigade Groups (CMBG). This will be discussed further in terms of their ability to conduct concurrency, the impact of centralizing resources, and the responsiveness, and ability of light brigades to operate in restricted terrain.

SSE AND CONCURRENCY

11. In response to this operating environment *SSE* has identified eight missions. These missions could require several tasks all of which the CAF must be



CONCURRENT OPERATIONS

At any given time, the Government of Canada can call upon the Canadian Armed Forces to undertake missions for the protection of Canada and Canadians and the maintenance of international peace and stability. It will often call upon the Canadian Armed Forces to deploy on multiple operations at the same time. This policy ensures the Canadian Armed Forces will be prepared to simultaneously:

- defend Canada, including responding concurrently to multiple domestic emergencies in support of civilian authorities;
- meet its NORAD obligations, with new capacity in some areas;
- meet commitments to NATO Allies under Article 5 of the North Atlantic Treaty; and
- contribute to international peace and stability through:
 - two sustained deployments of -500-1500 personnel in two different theatres of operation, including one as a lead nation;
 - o one time-limited deployment of -500-1500 personnel (6-9 months duration);
 - two sustained deployments of -100-500 personnel;
 - two time-limited deployments (6-9 months)
 of ~100-500 personnel;
 - o one Disaster Assistance Response Team (DART) deployment, with scaleable additional support; and
 - o one Non-Combatant Evacuation Operation, with scaleable additional support.

¹³ Ibid, pg 128.

able to conduct concurrently. ¹⁴ See the figures below and to the right for the missions and tasks. ¹⁵ The diversity of these tasks speaks to the agility that *SSE* demands in its opening chapters as a result of the envisioned operating environment. This requirement for concurrency means that the CA will be required to conduct multiple diverse tasks simultaneously implying the requirement for a mixture of units and formations to best meet the mission sets. The CA already recognizes the strengths and weaknesses of light, medium, and heavy forces and that used in conjunction with each other can create superior synergy. ¹⁶ From a force generation perspective, the CA will be able to pick the most appropriate force where and when concurrent operations are required.

- 12. The tasks in SSE have not yet been translated to specific CA tasks and it must be understood that other elements of the CAF would be involved in meeting the objectives of these operations. It is, however, possible to make some deductions. The ability to respond to domestic contingencies is the task of regional Immediate Response Units (IRU). These are common tasks across the current Army structure and all three of the proposed brigades would still be able to meet these requirements in conjunction with other commitments. The Disaster Assistance Response Team (DART) and Non Combatant Evacuation Operations (NEO) tasks require a great deal of responsiveness. They would be lines of task that would work well within a light brigade. Article 5 commitments under NATO could use any of the three brigades; however, a heavy force would be optimal for meeting the challenge of another heavy peer threat. The light and medium brigades could also be of use in this context depending on what other Allies or partners require for support and the terrain in the theater of operations. Lastly, the remaining sustained and time-limited deployments are not predetermined in terms of intensity or geography. This implies that any of the three proposed brigade constructs could be of value. Further, based on the variety of potential adversaries and mission sets in the FSE, the likelihood that these concurrent tasks would be similar is unlikely, in which case a diversity of forces to meet a diversity of missions is the most appropriate approach.
- 13. In considering the variety of mission sets it is clear that an assortment of forces will be required. The necessity to be able to do different things at the same time creates great value in having asymmetric brigades. Important to note is that even in cases where one force would likely be dominant, heavy forces against a peer enemy in open terrain as an example, there are still uses for the other types of forces that could make an important contribution. Light, medium, and heavy forces will make the CA more agile and better able to adapt to the requirements of *SSE*.

RESOURCING

¹⁴ Department of National Defence, Strong, Secure, Engaged, pg 81.

¹⁵ Ibid.

 $^{^{16}}$ Department of National Defence, *Land Operations*, (Ottawa: Department of National Defence, 2008), 1-5-1-6.

- 14. Resourcing is an issue within the CA and the current structure exacerbates this problem by spreading scarce assets across three brigades. This paucity of resources creates three brigades that are not resourced to excel in any specific type of operation, thereby limiting the robustness and flexibility of the force. This situation would be greatly improved by centralizing resources relevant for light, medium, and heavy forces under the relevant brigade. As an example, the heavy brigade would gain the CA's tanks, giving the brigade an entire regiment, vice dispersing them across the three brigades. This would create a critical mass in scarce capabilities vice dissipating them across the CA.
- 15. This approach would also hold long term cost savings in capital procurement. Overall expenditures on platforms would be reduced as only a single brigade's worth of equipment, plus equipment for institutional units such as schools, would need to be purchased. The reduced capital costs would free up resources for the purchase of enhanced equipment that might otherwise unaffordable. The overall reduced number of platforms required and the mission specific necessity for a brigade's recognized mission sets would be a powerful institutional argument for such purchases. Under such a structure, the centralization of resources would serve to give brigades what they require to train and gain superior competency within their set of operations. In doing so, the government is offered a more robust and flexible force to respond to force employment demands.

LIGHT FORCES INSTITUTIONALIZATION

16. The institutionalization of light forces recognized the fact that the CA was lacking in a critical element of agility: responsiveness. ¹⁷ Currently, CMBGs plan for a 90 day window to arrive in theater after activation for a non planned mission, while light units can arrive in less than a week. ¹⁸ While not optimized to fight enemy heavy units, light forces are capable of conducting security force capacity building, operating against many non state actors, and in the "grey zone," where conflict may not be attributable and great advantage will go to the side who can arrive quickly and begin shaping the environment. ¹⁹ The FSE is complex and unpredictable and opportunities to influence the environment could be fleeting. This places a premium upon the CA's ability to rapidly project a force. The capability of CMBG's to currently do this are limited to their light battalions in conjunction with their light enablers. The brigade headquarters are optimized as mechanized brigades and therefore not equipped nor trained to operate in the light role. ²⁰ This is in contradiction to the desire for the CA to be able to operate at the brigade group level and to operate across all the *SSE* concurrent mission sets regardless

¹⁷ Commander Canadian Army, MASTER IMPLEMENTATION DIRECTIVE – LIGHT FORCES, (Ottawa: Department of National Defence, 2017) 2.

¹⁸ Ibid F-2

¹⁹ Department of National Defence, Strong, Secure, Engaged, 53.

²⁰ Department of National Defence, Waypoint 2018 The Canadian Army Advancing Toward Land Operations 2021, 35.

of conditions.²¹ A light brigade would allow the CA to deploy a task tailored light force, thereby closing this capability gap.

17. A light forces brigade will give the CA a force that is optimized to enable its units to specialize in unique environments, such as jungles and mountains. This expansion of the CA's knowledge in such environments greatly increases the force's ability to operate in a variety of theatres. Light forces also do not rely on armoured fighting vehicles to generate combat power. This allows light forces to pursue alternate means of generating combat power, increasing the flexibility of the force and challenging adversary's ability to predict CA actions. A light brigade would meet the requirements of *SSE* while increasing the CA's responsiveness, and robustness. By creating such a formation, the CA will gain a rapid response capability at the brigade level while gaining increased competence in such rapid projection missions and operations in restricted terrain.

CONCLUSION

- 18. An asymmetric, light, medium, and heavy brigade structure would be better suited to address all the above identified factors of agility and in achieving concurrency. Current CMBGs are structured similarly and are trained in similar methods. While this provides a measure of simplicity to force generation it does not recognize the variety and simultaneity of tasks facing the CA today and into the future.
- 19. Three brigades of light, medium, and heavy forces, all focussed on a narrower set of conditions for employment would provide greater robustness by enabling brigades to focus on specific modes of employment. They would be better trained and equipped for operating within their respective milieu and the institution would be better positioned to support them in doing so. The CA would become an overall more flexible organization as the brigades would essentially be new tools for meeting force generation demands. Overall CA agility would increase, creating a force better poised to meet the demands of the FSE and the concurrency of *SSE*.

RECOMMENDATION

20. Understanding the FSE, the requirements of concurrency in *SSE*, and the desire to be an agile force the CA must restructure to three separate brigades, one being made up of light forces, another medium weight force, and a heavy weight brigade.

²¹ Ibid, 36.

²² Commander Canadian Army, F-3

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