



Optimizing the Canadian Army Structure

Major Stephen Tremaine

JCSP 48

Service Paper

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2022

PCEMI 48

Étude Militaire

Avertissement

Les opinons exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2022



CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES

JCSP 48 – PCEMI 48 2021 – 2022

Service Paper – Étude militaire

Optimizing the Canadian Army Structure

Major Stephen Tremaine

"This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence."

"La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale."

OPTIMIZING THE CANADIAN ARMY STRUCTURE

AIM

1. The aim of this paper is to outline inefficiencies in the current Canadian Army (CA) organization, contrast it to allied armies and propose changes towards optimizing the structure to enable reconstitution and meet future threats.

INTRODUCTION

2. The Canadian Armed Forces (CAF) is experiencing significant personnel shortages. As of November 2021, the CAF indicated it was short 12,000 troops while an additional 10,000 were untrained, sick, or injured. For a force intent on growing to 71,500 personnel, this shortfall of personnel is substantial.² The CA has not been spared from this. While it was contracting prior to the pandemic, the disruptions initiated by the COVID-19 pandemic, whether justified disruptions or self-inflicted wounds (by ceasing training and recruitment efforts), has exacerbated the situation into what can now be called a crisis. Forecasts indicate the CA will be short approximately 8,000 full time personnel by 2023.3 While these shortages need to be addressed through recruitment and retention efforts, recruiting and training new personnel is a slow process requiring significant investment into individual training (IT) in the form of instructors that are currently in insufficient supply. Many of the CA's Force 2025 objectives, including enhancing readiness, preserving force ratios, reinforcing institutional support and Canadian Ranger enhancement, also require more personnel.⁴ Accordingly, the CA needs to take bold action to maximize efficiencies with existing personnel to meet its training requirements, and support its modernization efforts while still answering its operational remits. In order to realize these efficiencies, this paper is proposing a bold reorganization of the CA structure that achieves greater efficiencies through economies of scale while simultaneously ensuring correctly apportioned and better enabled headquarters.

DISCUSSION

UNITED STATES' (US) ARMY ORGANIZATION

3. Before examining the CA structure, it is beneficial to look at some other armies for considerations of best practices. The US Army is one of the largest armies in the world and as such has many divisions with some degree of variation. Despite variation, there remains a high degree of uniformity. This uniformity enables efficiency and scalability. Their divisions all consist of two to four Brigades, divisional artillery, a combat aviation brigade, and sustainment brigades. Although there are a few exceptions,

1/9

¹ The Canadian Press, "Military Dealing With More Than 10,000 Unfilled Positions Amid Growing Pressures," National Post, 18 January 2022.

² Strong, Secure, Engaged: Canada's Defence Policy, Canada. Department of National Defence, 2017. 33.

³ JCSP Research Topic List, Canadian Forces College 2021/2022, 12.

⁴ "Force 2025" Canadian Army video, 7:36.

their divisions are almost entirely segregated by component being either Regular Force or National Guard Divisions. At the brigade level, although there are numerous armoured brigades, the majority of brigades are infantry centric. The typical brigade consists of three infantry units, a cavalry regiment, an artillery regiment, an engineer battalion and a support battalion. Manoeuvre elements are normally segregated at the divisional level by type of force (light, medium, heavy) or by capability (airborne).⁵ Focus by type of component and capability, while simultaneously ensuring appropriate levels of manoeuvre, combat support (CS) and combat service support (CSS) ensures that all the divisions in the US Army have a high degree of efficiency, combat capability and self-sufficiency. The 10th Mountain Division structure is provided as a proxy for what a typical US Army Division looks like.

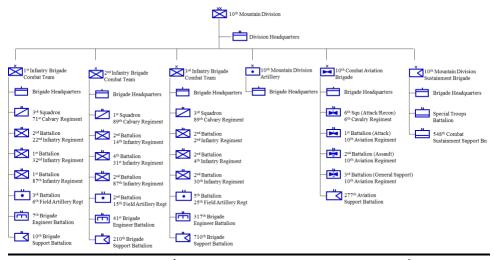


Figure 1: 10th Mountain Division Organization⁶

AUSTRALIAN ARMY FORCES COMMAND

4. Forces Command in the Australian Army commands a series of regular force direct report brigades, their Royal Military College as well as 2nd Division, which is comprised of the Australian Army's reserve force. Its regular force brigades include three brigades, a CS brigade, an aviation brigade, and a CSS brigade. Their three manoeuvre brigades are symmetrical containing one unit each of armoured, motorized infantry, light infantry, engineer, artillery, signals and CSS.⁷

2/9

⁵ US Army Forces Command, Accessed 23 January 2022. https://www.forscom.army.mil/

⁶ Ibid

⁷ The Australian Army Organisation Structure, accessed 23 January 2022. https://www.army.gov.au/our-people/organisation-structure

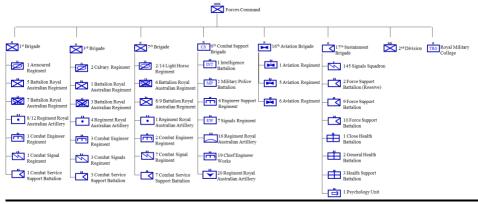


Figure 2.1: Australian Army Forces Command Organization⁸

- 5. The Australian Army's 2nd Division (reserve division) is comprised of five reserve brigades and a training brigade focused on basic and initial training to reserves. Its manoeuvre brigades are themselves comprised of between two to four infantry units, an armoured unit or squadron as well as complements of engineers, signals and CSS units or sub-units ⁹
- 6. Forces Command effectively leaves the Australian Army with a regular force division (the direct reports to Force Command) and a reserve division. The regular force division has much more CS and CSS capability, indicative of a need to conduct high intensity combined arms training and combat at higher levels than reserve portion of the military. Segregation by component is leveraged to yield efficiencies.

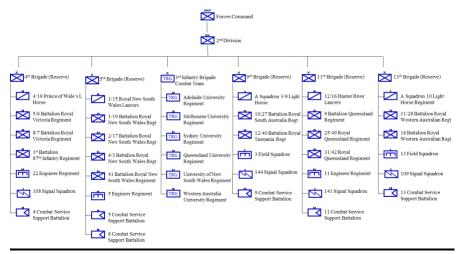


Figure 2.2: Australian Army 2nd Division (Reserve Division) Organization¹⁰

9 Ibid

⁸ Ibid

¹⁰ The Australian Army Organisation Structure, accessed 23 January 2022. https://www.army.gov.au/our-people/organisation-structure

CURRENT CANADIAN ARMY STRUCTURE

- 7. The current structure of the CA has four asymmetric divisions organized geographically. While some efficiencies are gained through geographic organization, this model is largely based on the legacy Land Force Area system. Despite the geographic focus, there remains two divisions and several brigades in the CA that are non-contiguous in their subordinate units and formation locations, largely negating advantages of a geographic focus. Due to digital advances, the benefits once afforded by geographic grouping are yet further diminished. While the regular force brigades are appropriately scaled, reserve brigades proliferate and command substantially fewer troops. Divisional CS units are concentrated in the smallest division, thereby creating challenges to effectively integrate those forces into training efforts for the majority of the field force. While there is certainly a mixture of Francophones and Anglophones throughout the CA, the vast majority of Francophones are concentrated within a single division. As rates of bilingualism are very low in Canada at approximately 18% maintaining relative segregation by language presents a high degree of efficiency. 12
- 8. All four divisions see a mixture of components with regular and reserve force brigades. ¹³ The fact that other militaries tend not to intermingle regular and reserve components below the divisional level is a highly pragmatic decision and greatly aids efficiency. This is due to the administration and employment of regular and reserve forces being extremely distinct. Differences include unique pay processes, parading requirements, excused duty and training regulations, separate recruitment processes, different medical benefits, separate pension processes, and modified training plans for reserve courses just to name a few of the reserve specific challenges and considerations. Further complicating the matter, all divisions possess Canadian Ranger Patrol Groups that have further distinct employment and sustainment considerations. ¹⁴
- 9. Another major portion of the Army is the Canadian Army Doctrine and Training Centre (CADTC). While CADTC's subordinate formation, the Combat Training Centre (CTC), conducts a significant amount of the Army's IT, a substantial portion is conducted at divisional training centres, as well as some primary combat function training and basic level courses being conducted at the brigade or unit levels of the field force. With respect to collective training (CT), CADTC's subordinate formation Canadian Manoeuvre Training Centre (CMTC), plays a significant role, most notably being responsible to deliver MAPLE RESOLVE, an annual brigade level high readiness

¹⁴ Ibid

¹¹ Bases and Units Army Command, accessed 23 January 2022. http://www.army-armee.forces.gc.ca/en/home/bases-units.page

¹² Census in Brief. "English-French Bilingualism Reaches New Heights" Canada. Statistics Canada. 31 August 2017.

¹³ Bases and Units Army Command, accessed 23 January 2022. http://www.army-armee.forces.gc.ca/en/home/bases-units.page

exercise.¹⁵ Despite the high level of their training delivery, CMTC requires substantial external resources to deliver these effects and creates competing responsibilities between field force commanders that are already invested in training their subordinates. MAPLE RESOLVE only runs once a year, where equivalent training establishments in the US such as the National Training Center or Joint Readiness Training Centre conduct ten serials of comparable training exercises a year.¹⁶

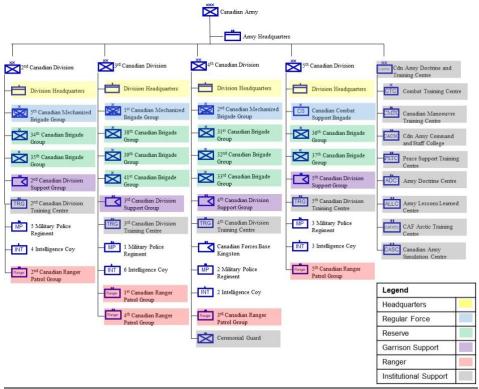


Figure 3.1: Current Canadian Army Structure¹⁷

10. Although currently external to the CA, there is merit in mentioning 1st Canadian Division (Cdn Div). While the joint deployable HQ used to be part of the CA, it was moved to Canadian Joint Operations Command (CJOC) in 2015. Tasked with numerous high readiness standby tasks, including non-combatant evacuation operation and humanitarian disaster relief, 1st Cdn Div is ostensibly an HQ without troops until

¹⁶ Maj John M. Ruths, "Preparing to Succeed at the National Training Centre", Army Sustainment Magazine. 8 July 2014.

¹⁵ Ibid

¹⁷ Bases and Units Army Command, accessed 23 January 2022. http://www.army-armee.forces.gc.ca/en/home/bases-units.page

¹⁸ Lucy Ellis., "1st Candian Division Moves to CJOC" (Government of Canada. National Defence and Canadian Armed Forces) 17 April 2015.

activation.¹⁹ As such, the CA has numerous forces that conduct training and maintain high levels of readiness to potentially support 1st Cdn Div upon activation. It is also important, to note that the Royal Canadian Air Force maintains a Joint Force Air Component Command in Winnipeg while the Royal Canadian Navy maintains Maritime Component Commands on each coast.²⁰ These commands maintain command over the majority of deployed air and naval capabilities, rendering 1st Cdn Div a *de facto* land-centric command. As it lacks the personnel, resources, or enablers of a fully staffed divisional headquarters, it is questionable whether or not its current design establishes optimal conditions for success upon potential deployment.

11. The CA has further high readiness responsibilities towards domestic operational response. It not only maintains immediate response units spread across the country, but also provides three headquarters for domestic operations including Joint Task Force West (JTFW) in 3rd Cdn Div, Joint Task Force Central (JTFC) in 4th Cdn Div, and Joint Task Force East (JTFE) in 2nd Cdn Div. Both the domestic and expeditionary operational high readiness responsibilities further exacerbate the lack of focus and problem of all CA divisions doing all things leading to redundant efforts.

CONCLUSION

12. The CA structure is comprised of far too many headquarters that simultaneously lack sufficient troops to justify their existence while at the same time, lack the personnel or resources to exercise proper command and control, enable or sustain their subordinate units and formations. The current structure is too complex, leaving the divisions as jacks of all trades, but masters of none. The CA needs to be reorganized along components and functions, while amalgamating headquarters to ensure they are properly resourced, simultaneously increasing their capability while eliminating redundancy. IT and CT responsibilities need to be more clearly delineated, while both domestic and expeditionary high readiness operational tasks need to be better rationalized. Resources that are freed up through reorganization of the CA need to focus on proper resourcing of IT to situate the CA to reconstitute while reducing the frictions created by the continual tasking from the field force to the training establishments.

RECOMMENDATIONS

13. Having identified inefficiencies in the current structure, and what must be done about it, this paper will now propose with greater specificity a more optimal structure for the CA. The below changes should occur.

¹⁹ 1st Canadian Division Headquarters, accessed 23 January 2022. https://www.canada.ca/en/department-national-defence/services/operations/military-operations/conduct/1-canadian-division.html

6/9

²⁰ Canadian Joint Operations Command, accessed 23 January 2022. https://www.canada.ca/en/department-national-defence/corporate/organizational-structure/canadian-joint-operations-command.html

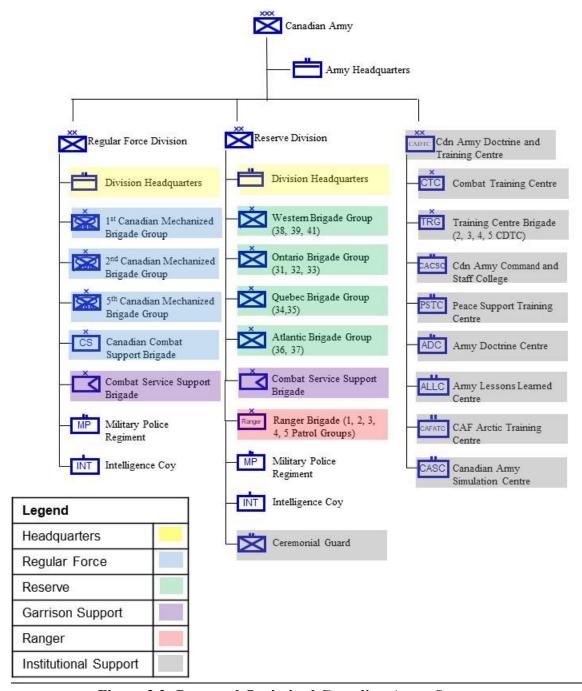


Figure 3.2: Proposed Optimized Canadian Army Structure

14. <u>Consolidate four divisions into two with component and functional focus</u>. A regular force division containing the three Canadian Mechanized Brigade Groups (CMBG) and the CS Brigade would focus on force generating for high intensity combat and expeditionary operations while a reserve division would focus on lower level training and domestic focus. Residual personnel from the two defunct headquarters would be used to properly staff these headquarters with excess personnel addressing other staff shortages in the CA. Segregation by component would ensure a concentration of

component specific expertise resulting in significant economies of effort while creating a strong champion for reserve issues. Each of these headquarters will require substantial bilingual capabilities. While existing infrastructure should be leveraged, selecting locations that balance cost of living, employment opportunities and quality of life should be carefully considered to compliment CA retention goals.

- 15. Consolidate four divisional support groups and Canadian Forces Base Kingston into two sustainment brigades. Each of the two divisions will require appropriate scaled and tailored CSS formations. As the divisions would be radically different in their composition, their CSS requirements will be radically different with the reserve division having small elements much more geographically dispersed. This is in contrast to the formation sustaining the regular force division that would have forces concentrated in approximately seven locations, but with a much greater amount of equipment. This sustainment brigade would also require more consideration towards force generation for deployed operations. The net result of consolidating five organizations into two would not only see greater efficiency through the elimination of redundant functions, but it would result in greater functional focus and formations that more approximated their equivalents amongst allied armies.
- 16. Consolidate ten reserve brigades into four. Reserve brigade headquarters should be geographically based and contiguous roughly divided into four regions as follows: Western Canada, Ontario, Quebec, and Atlantic Canada. The remaining headquarters should be moderately expanded while residual personnel are reallocated to other areas of the CA. As infrastructure requirements will be increased for the four remaining but higher staffed headquarters, the consolidation plan should be complimented by the plan to consolidate the divisions, for example if the divisional headquarters currently in Toronto or Montreal were to vacate those facilities, that would present sufficient infrastructure for consolidated the Ontario or Quebec reserve brigades to occupy.
- 17. <u>Consolidate Canadian Rangers under a single command</u>. Economies of scale would be achieved by pooling the Canadian Ranger Patrols, necessitating the creation of a new ranger headquarters, subordinate to the reserve division, with a strong understanding of their distinct employment and sustainment considerations.
- 18. <u>Eliminate CMTC</u>. CMTC represents too much overhead for its output. The resources in equipment, money and staff cannot be rationalized with a significantly reduced CA that needs to prioritize IT to reconstitute. Further, with the likely concentration of tanks in 1 CMBG, the CA's focus on combat team attacks will be greatly reduced for 2 CMBG and 5 CMBG, reducing the need to train the open terrain offered in Wainwright. With divisional headquarters that are properly staffed, the divisions can serve their function of executing required CT for their formations.

- 19. Return 1st Cdn Div functions and personnel to the CA. An expanded regular force joint division will have sufficient staff to meet the current force generation responsibilities of 1st Cdn Div while Commander CJOC can remain the force employer upon activation. This would also help enable an operational focus for the regular force division.
- 20. <u>Consolidate JTFW, JTFC, and JTFE under the expanded reserve division</u>. As the changes to the divisional structure will disrupt these commands, the new commander of the reserve division will be best positioned to respond to requests for assistance with disasters and critical incidents with their forces dispersed throughout the country. The consolidation of these commands will also create staff efficiencies. Placing this responsibility under the reserve division, will also enable a greater role for reserve forces in domestic response, better leveraging their flexibility much like what is seen with the National Guard in the United States, thereby mitigating the disruption of things link Operation LENTUS on the Regular Force.
- 21. <u>Move divisional training centres to CADTC</u>. Just as with concentrating reserves and regular forces under one command, there are also major efficiencies to be gained by placing all the schools under a single command. Primary combat function courses that are traditionally run through units or reserve brigade "battle schools" would remain the responsibility of the field force, but all other IT would be concentrated in a command that was focused on this type of training allowing the field force to better focus on CT and force generation. The inclusion of the training centres under CADTC will enable greater flexibility in training delivery thereby increasing efficiency in the individual training system.
- 22. Properly resource IT. There are challenges created by the significant shortage of personnel, equipment and vehicles possessed by the various schools which results in the continuous transfer of these items between the field force and the various schools. This requires significant staff effort to plan, creates pressures and shortages amongst the field force and adversely impacts the quality of life of personnel tasked away from their families adding to retention issues. As IT will be hugely important as the CA attempts to reconstitute, this issue will only worsen if not addressed through improved resourcing of training establishments. Consequently, it is essential that personnel, vehicles and equipment freed up by moving towards a more optimized structure be given first and foremost to the training establishments.
- 23. <u>Consolidate gains</u>. While the bold changes outlined above are substantial and would drastically focus and streamline the CA, enhancing structural efficiency to meet the threats of the future should be a continuous process. After the changes herein, are realized, ensuring units are optimized, particularly as new technologies are being fielded will be essential for the CA.

BIBLIOGRAPHY

- Canada. Department of National Defence. "Advancing With Purpose: The Canadian Army Modernization Strategy." Fourth Edition. HQ, Canadian Army, Ottawa Ontario, December 2020. https://www.canada.ca/en/army/services/for-the-soldier/canadian-army-modernization-strategy.html
- Canada. Department of National Defence. Bases and Units Army Command, accessed 23 January 2022. http://www.army-armee.forces.gc.ca/en/home/bases-units.page
- Canada. Department of National Defence. Canadian Joint Operations Command, accessed 23 January 2022. https://www.canada.ca/en/department-national-defence/corporate/organizational-structure/canadian-joint-operations-command.html
- Census in Brief. "English-French Bilingualism Reaches New Heights." (Canada. Statistics Canada) 31 August 2017: https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016009/98-200-x2016009-eng.cfm
- Canada. Department of National Defence. "Close Engagement, Land Power in an Age of Uncertainty: Evolving Adaptive Dispersed Operations." Canadian Army Land Warfare Centre. Kingston, Ontario, December 2019. http://www.army-armee.forces.gc.ca/assets/ARMY_Internet/docs/en/close-engagement.pdf
- Canada. Department of National Defence. Ellis, Lucy. "1st Canadian Division Moves to CJOC.", Government of Canada. National Defence and Canadian Armed Forces. 17 April 2015.
- "Force 2025." Canadian Army video, 7:36. Accessed 23 January 2022.
- JCSP Research Topic List, Canadian Forces College 2021/2022.
- Keess, Captain John H., "Canadian Expeditionary Brigade Groups: A Proposal for Reforming Canadian Mechanized Brigade Groups." Canadian Army Journal Volume 17.1, National Defence, Canadian Army, 2016. https://publications.gc.ca/collections/collection_2017/mdn-dnd/D12-11-17-1-eng.pdf
- Peterson, Lieutenant-Colonel Cole F., "Transforming the Army for Force 2025," Canadian Army Journal Volume 19.1, National Defence, Canadian Army, 2021. http://www.armee.forces.gc.ca/assets/ARMY_Internet/docs/en/canadian-army-journal/caj-19-1-en.pdf
- Ruths, Maj John M. "Preparing to Succeed at the National Training Centre." *Army Sustainment Magazine*. 8 July 2014.

- https://www.army.mil/article/128699/preparing_to_succeed_at_the_national_training center
- Canada. Department of National Defence. *Strong, Secure, Engaged: Canada's Defence Policy*, 2017. https://www.canada.ca/content/dam/dnd-mdn/documents/reports/2018/strong-secure-engaged/canada-defence-policy-report.pdf
- The Australian Army Organisation Structure, accessed 23 January 2022. https://www.army.gov.au/our-people/organisation-structure
- The Canadian Press, "Military Dealing With More Than 10,000 Unfilled Positions Amid Growing Pressures." *National Post*, 18 January 2022. https://barrie360.com/military-unfilled-positions/
- US Army Forces Command, Accessed 23 January 2022. https://www.forscom.army.mil/
- 1st Canadian Division Headquarters, accessed 23 January 2022. https://www.canada.ca/en/department-national-defence/services/operations/military-operations/conduct/1-canadian-division.html