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EMPOWERED INFANTRY BATTALIONS: FORCE 2025 MECHANIZED INFANTRY COMBAT SUPPORT

Major Andrew W. McGregor

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By Major Andrew W. McGregor

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> *The army we need for the future is not necessarily the army we have today. Difficult decisions will be made on divestment of capability in order to privilege new investment in the future.*
>
> – Commander Canadian Army Lieutenant-General W.D. Eyre*, Advancing with Purpose*

AIM

1. In December 2020, the Canadian Army (CA) published its strategic framework *Advancing with Purpose*, which initiated a holistic review of the CA's Managed Readiness Plan (MRP) and structure called Force 2025 (F2025). These initiatives are an initial bound towards Force 2030 (F2030), the CA's future operating concept, as defined in *Close Engagement.* This service paper aims to provide the Royal Canadian Infantry Corps (RCIC) with specific considerations for MRP and F2025 discussions. It introduces the "empowered battalion concept" to reconceptualizes combat support (CS) functions within the mechanized infantry battalions (MIB) and Canadian Mechanized Brigade Groups (CMBG).

INTRODUCTION

2. For managerial purposes, the CA strategic framework has two tranches.[1] The focus of this paper is "Build 1 – F2025." This is the initial in-horizon (2020-2025) effort to rebalance CA organizational structures and begin investment in priority projects like "Digital Army" C4ISR.[2] The "Build 2 – F2030" horizon (2025-2030) will realize initial in-horizon efforts while remaining forward looking. Both are benchmarks towards

[1] Department of National Defence (DND), *Advancing with Purpose: The Canadian Army Modernization Strategy – 4th Edition* (Ottawa: DND Canada, 2020), 26.
[2] *Ibid.* Build 1 – F2025 is focused on four lines of effort: Posture for Currency, Human Dimension, One-Army Integration, and Priority Initiatives. Investment initiatives include "Digital Army" Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) and key sustainment platforms.

predicting future capability requirements. The CA capability development model is comprised of three horizons: *Army of Today* (now to 5 years), the *Army of Tomorrow* (5-15 years), and the *Future Army* (15-30 years).[3] Today's army is a conventional, combat-effective, multi-purpose, medium weight land force augmented by light and heavy forces, with proficiency in regrouping for tasks.[4] In tomorrow's army, the brigade group will remain "the lowest level of headquarters that can integrate and synchronize joint effects."[5] The CA will continue to train for pan-domain operations at the brigade group level as a force generation mechanism for task tailored combined arms battle groups (BG) augmented by specialist capabilities from other CA formations, the joint force, or other government departments.[6] Based on government policy in *Strong, Secure, Engaged* (SSE), the CA's maximum expeditionary requirements are a brigade headquarters (HQ) plus several units and/or sub-units with scalable support.[7] Therefore, the CA is required to generate brigade HQs capable of executing joint campaigns[8] as envisioned in the Canadian Armed Forces' (CAF) *Pan-Domain Force Employment Concept* (PFEC) and producing BGs and Combat Teams that can support joint campaigns.

3. In addition to the strategic environment and existing CA capabilities, these baseline requirements will shape the RCIC's input into F2025. This paper will endeavour

[3] DND, *Advancing with Purpose…*, 22.
[4] DND, *Close Engagement: Land Power in an Age of Uncertainty – Evolving Adaptive Dispersed Operations* (Ottawa: DND Canada, 2019), 15, 20.
[5] *Ibid…*, 10.
[6] DND, *Advancing with Purpose…*, 17-18.
[7] DND, *Strong, Secure, Engaged: Canada's Defence Policy* (Ottawa: DND Canada, 2017), 91. The CAF's force generation mandate for contribution to international peace and security in *Strong, Secure, Engaged* (excluding domestic operations and short of a NATO Article 5 declaration requiring national mobilization) is concurrently: the sustained deployment of two large (~500-1500 personnel) organization with Canada as lead nation for one; the sustained deployment of two small (~100-500 personnel) organizations; one large and two small one-time limited deployments (6-9 months); a Disaster Assistance Response Team; and a Non-Combatant Evacuation Operation.
[8] DND, *Pan-Domain Force Employment Concept (PFEC): Prevailing in an Uncertain World* (Ottawa: DND Canada, 2020), 34.

to avoid debating specific platforms and weapon systems. Additionally, the characteristics of potential adversaries and the future operating environment are interlaced throughout the above guidance, which does not necessitate their restatement here. It is sufficient to say that "the strategic environment is increasingly complex, dynamic, volatile, and highly uncertain."[9] The implication for the Infantry Corps in F2025 is that most deployments will see traditional brigade level CS enablers and joint effects being integrated and employed at the unit or potentially sub-unit level. Combined arms teams, essentially infantry and armoured elements supported by CS capabilities and combat service support (CSS) sustainment, are "the means through which the CA delivers tactical effects."[10] The RCIC generates combined arms teams based on its light infantry battalions (LIB), to create "battalion groups" and "company groups," or MIB-based BGs and "combat teams." CA light and mechanized forces have fundamentally different deployment timelines for expeditionary tasks, which influences generation and integration of CS enablers into the combined arms teams. This asymmetry differentiates the MIB and LIB CS conceptualization. For practical reasons, the LIBs have advanced their own CS concept. This paper will predominantly focus on MIB CS. It will discuss RCIC MRP considerations, describe the Army of Tomorrow concept, and introduce the empowered battalion concept to highlight selected theoretical and practical aspects of MIB CS development, generation, employment, sustainment, and management.

DISCUSSION

4. RCIC MRP Considerations. As noted above, the LIB and MIB are differentiated by their speed of deployability, described here as Notice to Move (NTM). This has

[9] DND, *Advancing with Purpose…*, 4.
[10] *Ibid…*, 17.

implications for the MRP's build, contingency, and committed phases.[11] In the committed phase, forecasted deployment timelines enable the reorganization of personnel, redistribution of equipment, and integration of capabilities. This enables most CMBG units to mount and lead task-tailored forces on reoccurring or predictable international operations. However, in the contingency phase, former RCIC Director Brigadier-General Errington suggests infantry battalions have a competitive advantage in their ability to generate sub-units with enablers or employ a light Battalion Group or Mechanized BG for unforecasted operations. Specifically, Errington says "Canada's history and ecosystem of decisions, commitments, and deployments" has led to this contextualized situation:[12]

a. Moderate NTM (90+ days). Based on current constructs, resources, "force posture and readiness," and oceanic-transit time, CA mechanized forces (medium or heavy) are tempered in deploying for unforecasted operations after 90 days. With this moderate lead-time, additional external capabilities can be attached to existing unit and sub-unit command support systems. The MIBs are generally favoured as the CMBG's lead mounting unit as they are resourced and trained for the full the spectrum of conflict. Due to resourcing, the Armoured Corps' capability is more nuanced to specific operation sub-sets.

b. Short NTM (0-90 days). Within the CMBG, light forces are optimized to deploy rapidly for unforecasted operations using integral equipment and

[11] DND, *Advancing with Purpose…*, 31. The "build, contingency, and committed" MRP rotation will be centred on a CMBG, which *builds* combat readiness and then holds that force at a ready posture for one year, retaining forces available to react to *contingencies* as necessary. At the end of this period in high readiness, contingency elements conduct TMST and deploy on (*committed* to) predicted international operations.

[12] Brigadier-General J.W. Errington, zoom conversation with the author, 4 February 2021.

capabilities. Light forces are suited for theatre entry and relief by Moderate NTM forces after 90 days or other forces on a reoccurring basis. The LIB and their sub-units can aptly mount and lead short notice operations across the spectrum.

5. Army of Tomorrow Concept. *Close Engagement* introduced the empowered combined arms team (ECAT) concept. In simplistic terms, an ECAT is a traditional combat team that includes a wider range of CS elements and "the ability to access all land and joint enablers through an integrated lethal and non-lethal effects coordination cell and intelligence cell."[13] Emphasis is placed on non-lethal CS capabilities normally held at brigade level or higher. These include influence activities, electronic warfare, intelligence-gathering, and cultural understanding. Theoretically, any sub-unit, including CS and CSS ones, can be "empowered." The ECAT originates from the "Close Engagement" capstone concept, defined as:

> The ability to equally apply, at the tactical-level, both lethal and non-lethal effects at close range to influence the physical, moral and cognitive planes within the operating environment… Close engagement is predicated on an ability to effectively engage in close combat when required, but focusing on close engagement underscores the necessity of being able to create a broader range of effects within the operating environment to ensure operational and strategic objectives.[14]

6. Empowered Infantry Battalion Concept. Conceptually, the CMBG is empowered for joint effects. As an interim step towards the Army of Tomorrow and empowered sub-units, the infantry battalions must also be empowered. An empowered battalion can employ the full breadth of lethal close combat and non-lethal close engagement capability effects in the land domain and shield its forces from adversaries' effects originating from all domains. *Close Engagement* notes that:

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[13] DND, *Close Engagement…*, 23-24.
[14] *Ibid…*, 19.

> Combat arms units have typically held some combat and combat support elements centrally. Those elements (anti-armour, mortars, reconnaissance, etc.) are often given BG missions such as flank security or are assigned temporarily to combat teams. In dispersed operations, if the threat level indicates that one sub-unit needs to have capabilities such as long-range direct fire and short-range indirect fire, then it seems likely that the majority will as well, so there is an argument for increasing the numbers of such systems. On the other hand, some capabilities may need to be held at unit level to cover gaps between sub-unit areas of operations (AO). Further concept development and experimentation will be needed to determine the proper mix of capabilities between unit headquarters and sub-units.[15]

7. As a first step towards facilitating that analysis, below is a survey of potential F2025 CS capabilities by operational function with extant, divested, and potential capabilities for dialogue. Future technological predictions were derived from a comprehensive analysis of *Close Engagement*.[16]

a. Command. As previously noted, the MIB's competitive advantage rests in its redundant, mobile, and flexible command support capabilities.[17] While there is debate over the preferred communication systems and network requirements, that lengthy discussion is not germane to this study. The MIB will be the benefactor of CAF and CA "C4ISR-spine" decisions. The RCIC should focus its efforts on refining a HQ construct that effectively incorporates supplied hardware. Although not fully resourced in garrison, the extant MIB HQ based on Signals Platoon comprises a Main, Alternate, and Tactical Command Posts (CP). The rifle companies are similarly designed albeit it with extremely less functionality and they do not have the ability to communicate beyond 20-kilometers, which could be addressed today with HF and Satellite Communications (SATCOM) or

[15] DND, *Close Engagement…*, 23.
[16] *Ibid…, 5-67.*
[17] Errington…

tomorrow with remote/robotic air and ground vehicles, or piggy-backing on civilian network infrastructure.

b. Act. The MIB requires a close combat direct fire (DF) and indirect fires (IDF) capability that is layered from battalion to section level. DF capabilities include precision, area, and anti-armour (AA) weapons. Of concern, AA is a sub-optimal capability in that it is not sufficiently layered and the principal AA weapon (TOW) is not vehicle mounted. Additionally, the MIB does not have integral battalion nor company IDF, relying on artillery support, since the loss of 81 mm Mortar Platoons and the divestment of 60 mm mortars in the 2000's. For lethal and non-lethal pan-domain "fires," the MIB depends on external support or augmentation: JTACs for air/aviation; PSYOPS, CIMIC Teams for information, engagement, and influence activities; and Electronic Warfare (EW) Detachments for electronic attack (EA). The same will likely apply to cyber and space.

c. Sense. Despite a recent history of counter-insurgency operations and hybrid threats, the MIB is limited to ground manoeuvre reconnaissance (GMR) with its Reconnaissance Platoon. Aerial reconnaissance (AR) with unmanned aerial systems (UAS) has developed slowly and lacks layering. Integral intelligence support will need to expand to the company level with the ability to reach-back for real-time social media analysis, cultural advice and remote translation. For EW/cyber sense, the MIB relies on augmented passive electronic support measures (ESM). The ability to sense cyber threats to battalion systems is unknown.

d. Shield. For traditional mobility, counter-mobility, and survivability support, including decontamination, the MIB depends on brigade assets since losing its Pioneer Platoon. To counter hybrid threats, the MIB must be shielded from effects originating in other domains. In terms of Air Defence (AD), the CA is addressing Ground Based AD (GBAD) for protection from adversary air and aviation. However, the lack of integral anti-UAS and anti-swarm systems is a serious capability gap. Similar to sense, the MIB relies on external support for electronic counter measures (ECM) and protection of cyber systems.

e. Sustain. The capabilities and processes of the CSS Company is outside the scope of this paper; however, the increased focus on additional CS enablers has implications for MIB CS Company sustainment that will be discussed later.

8. Generating and Developing MIB CS. F2025 discussions will include negotiating which corps and brigade units develop and generate empowered capabilities. As a moderate NTM organization, the MIB has more mounting time than a LIB but less than units tasked with predictable forecasted operations. The MIB will therefore require greater internal capability than other brigade units. Any non-integral capability must come with clear generating direction for the parent unit. The inability of CMBGs to generate Mortar, Pioneer, and AA Platoons for use by the MIB demonstrates this point. The following considerations may impact these discussions on capability placement:

a. Layered Support. In the same way that AA weapons are layered and grouped with increasing range and weight from section up to battalion and higher, the layering of each capability must be considered. Capabilities must differentiate between supporting the manoeuvre of the brigade, battalion, company, or below.

In generating emerging enablers down to company level, relying completely on external augmentation is not realistic. Higher order aspects should remain brigaded with lower order ones employed by specifically trained infantry soldiers.

b. Reach-back Support. Emerging capabilities will likely use technology to reach-back to higher-level or national organization. This may require imbedded specialist or training infanteers. The "One Army" concept taken to the extreme could include reach-back in intelligence, social media analysis, and cultural-language support to reserve members or civilian employees.

c. Attached Support. Infantry BG and combat teams can rapidly "plug and play" traditional core combined arms capabilities resident within the CMBGs, such as armoured, combat engineers, and artillery observers. Within moderate NTM, MIBs can integrate familiar higher-level division, joint, national or coalition capabilities such as EW, UAS, and AD.

d. Centrally Controlled Integral Battalion Support. The Signals, Reconnaissance, and Sniper Platoons in CS Company support MIB manoeuvre and remain required. The MIB is "fitted for but not with" the divested Mortar, Pioneer, and AA Platoons as well as the phased-out company and platoon support weapons detachments. Now is the opportunity to reintroduced lost capabilities to the Corps; however, this must be prioritized and balanced against emerging capabilities. Innovative models may assist in CS platoon generation, including the LIB's reserve augmentation model or cross-trained "dual role" platoons.

e. Centrally Controlled Integral Company Support. Since ECAT and the empowered battalion are evolving concepts, nascent capabilities could be held

centrally at the battalion level for development and generation but attached tactically to manoeuvre companies for trial, experimentation, and employment.

9. CS Company of Tomorrow. The focus on CS capabilities ultimately requires some reimagining of the MIB CS Company and codification in doctrine.

a. Empowered MIB HQ. As above, the MIB HQ is based around a Main, Alternate and Tactical CP. For battlefield survivability and flexibility, the Main and Alternate should be lean symmetrical command nodes with the ability to readily attach/detach other elements (Plans, ESCC, FSCC, etc.) and CS platoons depending on the tactical situation and commander's guidance. The CS Company Commander and Sergeants-Major could become responsible for the HQ's tactical movement and defence and security. Reinvestment in Signals Platoon capability and force employment concept requires dedicated study.

b. CS Company A1 Echelon. The CS Company Quartermaster Stores (CQMS) is currently under resourced to tactically sustain the CS platoons and CPs. With expanded CS capabilities requiring greater quantities of unique stores and operating at extended dispersion, continuing to rely on a co-located rifle company or direct resupply from the CSS company is problematic.

c. MIB Chief of Staff (COS). To reflect the expanded role of CS Company and the need for additional control of enablers, the CS company commander could be tasked as the MIB COS. The required seniority would suggest returning the position to a post-rifle command billet.

10. Close Engagement (CE) Platoon. To be an "edge organization" requires dedicated structure and resourcing. Capabilities often start as brigade enablers before

becoming integral battalion assets and eventually layered capabilities. The creation of a centrally managed CE Platoon within CS Company would empower development and generation of emerging technologies while allowing the manoeuvre companies to employ and experiment with these capabilities. As a proof of concept, a CE Platoon[18] could be resourced to supply enabler Detachments[19] for the forward two rifle companies using existing RCIC and CAF capabilities before expanding into emerging technologies. The Platoon would be divided into sections based on domain effects. The Ground Effects Section would include LRC Detachments, initially based on HF or SATCOM, and DF Detachments, initially based on a dismounted C16 or TOW (or dual-trained on both), which could expand to mounted systems. The Air Effects Section would contain AD (Counter-UAS) Detachments and AR Detachments based on Type 1 UAS. Lastly, an Information and Systems Effects Section would generate EW/Cyber Detachments based on passive ESM/ECM and Information Detachments trained in intelligence, Tactical Questioning, CIMIC, PSYOPS, or other influence activity qualifications.

CONCLUSION

11. This service paper aimed to provide RCIC specific considerations for MRP and F2025 discussions through an examination of select theoretical and practical aspects of MIB CS Capabilities. The "empowered battalion concept" reconceptualizes that support as a pragmatic and practical step towards the F2030 vision. Furthermore, several options

[18] Tactically, the CE Platoon Commander and Warrant Officer could become the Plans Team. Each Section is commanded by an Officer and/or Senior NCO who manage the development and generation of their Detachments' capabilities. Tactically, they fill various MIB CP staff roles (often associated with their specialty).

[19] The Detachments are led by Junior NCOs (MCpl/Cpl) and staffed with infantry soldiers. In garrison, these Sections could share an association to other CS Platoons (ex. LRC and EW/Cyber with Signals) or Battalion HQ elements (Info with Intelligence Cell) but are held separate to be committed to supporting company level manoeuvre.

to immediately enhance MIB CS are noted, which have been further elaborated as recommendations below. Several areas require further study. They include communications infrastructure, future sustainment considerations, rifle company organization, and potential benefits to morale and retention. However, the RCIC will need to make initial decisions regarding F2025 in the near term. This paper will assist with that review and a possible "right-sizing" of its mechanized CS capabilities.

RECOMMENDATION

12. If the "empowered battalion concept" is accepted, the initial step is to orient the Corps by publishing a RCIC F2025 vision that includes prioritization of CS capabilities, a process for corps experimentation procurement, and a writing plan for CS Company doctrine as well as the other identified areas for study. Secondly, the Corps would need to decide on key initiatives such as MIB COS, creating a CE Platoon, reinvigorating disbanded CS Platoon (Pioneers, Mortars, or AA), and rebalancing vehicle fleets with particular attention to the CPs and CS A1 Echelon. Lastly, the Corps would act on F2030 initiatives through full resourcing of F2025 initiatives and procuring the first tranche of emerging technologies. For too long, CS has been an afterthought rather then the critical enabler for all operations with the potential to empower future combined arms teams at the battalion and company levels.

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