The Challenges Faced by CAF Project Managers and Staff

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AIM

1.   This service paper explores some challenges that arise because the Canadian Armed Forces (CAF) employs active military personnel (CAF members) in project management (PM) roles but doesn't have a career stream for that specialty.[1] It investigates four categories of issues – continuity, communication, positional requirements, and training – through the lenses of maximizing the effectiveness of PM teams and best employing active CAF members. This paper finds that there are significant inefficiencies in the current operating model that hinder project execution while simultaneously straining CAF staffing and training systems. In addition, the desire for CAF members in PM roles to hold multiple professional competencies applies increased pressure on individual members to complete and maintain additional training. Recommendations are included to begin addressing these issues.

INTRODUCTION

2.   CAF project delivery and equipment management is a vital function to maintain the capabilities of the force and to deliver on the investment plan outlined in Strong, Secure, Engaged: Canada's Defence Policy (SSE).[2] SSE also aspires to bring more defence spending within the control of the Department of National Defence (DND) instead of relying on other government agencies like Public Services and Procurement Canada (PSPC) or Shared Services Canada (SSC) to execute procurement on behalf of DND.[3] This rise and proposed consistency in funding and authorities has the potential to significantly increase the throughput of capital projects, which will in turn increase the demand for skilled and experienced PM staff and teams. Despite this concern, SSE only mentions 'project management' a single time with regards to funds available for hiring additional staff, without any discussion on bolstering this capability or increasing this expertise area.[4] CAF equipment projects can be exceedingly complex given the wide range of uses, high number of stakeholders, and significant integration required with both existing and future equipment. These factors dictate that PM teams within the department must be skilled, proficient, and experienced within these roles to achieve success.

3.   Currently, significant portions of PM teams within the Associate Deputy Minister (Materiel) group (ADM(Mat)) consist of CAF members posted in to either specific technical roles or full-on management positions. While usually familiar with the equipment and the operational side of CAF activities, these members frequently need significant augmentation training to learn the context and execution of their employment within a project environment. To help address this need and to formalize the training

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[1] Canadian Forces College, "JCSP Research Topic List" (Canadian Forces College, 2022), 38. CFD Topic J4. Project Management.
[2] Canada, "Strong, Secure, Engaged: Canada's Defence Policy" (Ottawa, ON: Department of National Defence, 2017), 33–41.
[3] Ibid., 16.
[4] Ibid., 99.

required at the front end of these postings, ADM(Mat) designed and established the Project Management Competency Development (PMCD) program in 2013 – a DND-oriented version of the Project Management Professional (PMP) certification that is managed internally to the department.[5] As per the PMCD handbook, this program is "a framework for the development of the knowledge, experience, and behavioural attitudes required of DND Project Managers to manage projects of various complexity and risk".[6] This program includes three levels of evaluated competency (PM1, PM2, PM3) with each subsequent level requiring additional training and experience to attain, but enabling assignment to projects with higher complexity levels. In general, at least three years' experience in PM roles at an individual's current level is required as a minimum to progress to the next higher qualification level.[7] While some of the training required for the PM1 certification is available online, much of it is available only in person within the National Capital Region (NCR). By the geographical distribution of CAF member employment this means most will not have access to the training materials before being posted to a project position, and as such will not be ready to immediately take on new project roles. With regards to experience, a significant portion of a CAF member's employment is required to be within the PM realm to achieve the highest certification levels.

4.   In the civilian domain, the Project Management Institute manages the global PMP certification that appears to be the model for DND's PMCD program. Obtaining a PMP certification is similar to reaching PM1, with the addition of a written exam, application fee, and slightly higher experience requirements, as well as a minimum mandated annual training requirement.[8] 'Project Manager' is a career stream on its own, with multiple specialization areas and professional standards to know and adhere to.

5.   Of note, two previous service papers have touched on similar topics though from different angles. In 2019 Major Levac discussed the difficulties of career stream management and succession planning in generating project staff with the right competencies, skills, and experience,[9] while in 2018 Major Caines explored the benefits of PM training to more traditional Army positions and the risk of the training gap associated with trying to cover both roles.[10] This paper takes a different approach in proposing that attempts to keep these multiple roles covered by CAF members is straining personnel and reducing project effectiveness.

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[5] Chris Thatcher, "Building Procurement Capacity," Canadian Army Today, December 17, 2018, https://canadianarmytoday.com/building-procurement-capacity/.

[6] Project Management Competency Development, *DND Project Manager Qualification Process Handbook* (Ottawa, ON: DND Canada, 2013), 1.

[7] Project Management Competency Development, *Standard for Project Manager Competencies* (Gatineau, QC: DND Canada, 2011), 22.

[8] PMI, "PMP® - Project Management Professional," Project Management Institute, 2022, https://www.pmi.org/certifications/become-a-project-manager/pmp.

[9] Robert Levac, "Professionalization of DND's Procurement Workforce: The Canadian Army Succession Plan Isn't Helping" (Canadian Forces College, 2019).

[10] Tim Caines, "Project Management: Niche Requirement or Essential Officer Skillset?" (Canadian Forces College, 2018).

DISCUSSION

6.   Four major topics will be discussed regarding the impacts of military members in project management roles – continuity, translation points, position characteristics, and training over-burden.

7.   Project teams need continuity to maximize effectiveness. With the long average delivery time for projects, most projects see the rotation of many CAF members through various roles within the project team, including the project manager. While project team rotation isn't necessarily a negative point as it can enable new ideas, increase knowledge sharing, and increase team energy, there are also associated costs in bringing new members up to speed and disrupting established teams.[11] Rotation of the project manager can be especially disruptive. In a study of the movements and results of twenty-five years of professional baseball team managers, Hill found that "too much change leads to a drop in performance, and even the savviest of managers cannot overcome this dilemma".[12] Further, a study by the Project Management Institute (PMI) found that the strength of a team is related to project success, with Team Focus, Cohesion, and Commitment being core characteristics of superior project teams.[13] These aspects of teamwork become significantly harder to maintain while managing a team with high turnover.

8.   This issue is exacerbated by promotion criteria encouraging frequent movement between types of jobs. In the case of Royal Canadian Electrical and Mechanical Engineering (RCEME) officers, individuals are incentivized with more rapid promotion if they have been able to quickly accumulate experience across three different types of jobs – Command, Staff, and Equipment – with a duration of one year in any of the employment types sufficient to meet that requirement.[14] This minimal time across multiple positions, while beneficial for the general development of the individual, comes with a high organizational cost. Frequent positional changes reduce the effectiveness of the individual until they can fully onboard the roles and responsibilities of the new position. This in turn reduced the output of peers and subordinates in the same section as they help to integrate the new member and cover off on essential tasks.

9.   A second problem is the issue of communication and confusion on role. With military members in both the Project Development (PD) and Project Management organizations, there exists a risk that the PM team reverts to using their own experience rather than in reaching back to the PD personnel who own the requirement. There also is

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[11] Michael Marsiglia, "Mid-Project Team Rotations – Pros, Cons, and Best Practices," Atomic Spin, 2017, https://spin.atomicobject.com/2017/08/08/team-rotation-best-practices/.

[12] Gregory C. Hill, "The Effect of Frequent Managerial Turnover on Organizational Performance: A Study of Professional Baseball Managers," The Social Science Journal, 46, no. 3 (2009): 557–70, doi:10.1016/j.soscij.2008.11.001.

[13] J. Edward, Claire S. Kinlaw, and Dennis C. Kinlaw, "Developing Superior Project Teams: A Study of the Characteristics of High Performance in Project Teams.," Paper Presented at PMI® Research Conference 2000: Project Management Research at the Turn of the Millennium (Newtown Square, PA: Project Management Institute, June 24, 2000), https://www.pmi.org/learning/library/characteristics-high-performance-project-teams-8525.

[14] CAF, "Selection Board Scoring Guide - EME Officers - Major," September 2021.

an added risk of confusion from other members of the team about who can properly verify a requirement, and a desire for military members of the project team to feel that they are contributing by using their previous experience to cover these issues. Further, communication styles between military members and civilian employees, whether internal to DND or external, can be difficult. It has long been noted that military veterans, coming from an organization that uses a highly direct, standardized, and up-front style of communication, have had difficulty in adjusting to the more informal and conversational style of discussion held in the business world.[15] Currently project requirements are transmitted from the military PD to the military PM, and then they are 'translated' to be understood and acted on by civilian industry – the risk of translation error occurs too late to remedy. With non-CAF members acting as the PM and in other project roles on the team, that translation is forced to happen internally to DND during the transmission of requirements from the PD to the PM team. This could result in a cleaner and more easily understood requirement going out to industry.

10.   The third point in support of this argument is the mismatch between employment type and required role. Project Management is not a role that requires the services of CAF members. CAF members are recruited, trained, and equipped for operational employment across a wide range of environments and domains. They are required to be operationally deployable, may be required to work irregular hours doing unexpected duties and in harsh environments, and they must maintain a minimum physical fitness level to meet universality of service requirements. As per DAOD 5023-0, "this open-ended nature of military service is one of the features that distinguish it from the civilian notion of employment governed by a contract, which obliges employees to perform only those duties specified in their job description or contract".[16]

11.   These attributes are significantly beyond what is required from individuals in a project management position, whether in the manager role or as any of the team members. While there could be limited amounts of travel and coordination required, these team members are in a domestic office workplace environment, working predictable hours without required physical tasks or risk to themselves. These positions have no hard requirement to be filled by active CAF members given the nature of the employment. CAF members, by the nature of the conditions of their employment, are being under-utilized in project roles and could be more advantageously employed in Force Employment, Force Generation, or Force Development positions that require both their experience and added conditions of employability.

12.   In addition, by the very nature of projects being a "temporary endeavor"[17], the requirement for project staff of any specific background (land equipment, common

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[15] Chrissy Scivicque, "Adapting Military Communication Style to the Business World," Ivy Exec, 2022, https://www.ivyexec.com/career-advice/2017/adapting-military-communication-style-business-world/.

[16] Department of National Defence, "DAOD 5023-0, Universality of Service" (Ottawa: DND Canada, May 19, 2006), https://www.canada.ca/en/department-national-defence/corporate/policies-standards/defence-administrative-orders-directives/5000-series/5023/5023-0-universality-of-service.html.

[17] Project Management Institute, *A Guide to the Project Management Body of Knowledge* (Newtown Square, PA: Project Management Institute, 2013), 417.

soldier systems, major air platform) is going to significantly vary as new projects within the program are approved or closed out. This creates a varying demand signal for employment by trade within the department, which is not easily accommodated by career management models nor easily balanced against CAF positional requirements. Civilian positions, on the other hand, can be surged and reduced in specific expertise areas, and engaged for longer portions (if not the duration) of the projects in question.

13.   Finally, CAF members are already over-burdened by the training and education requirements of their core positions. Any individual moving into a project position is already trained, competent, and experienced in their own technical trade, spanning from Infantry Soldier to Aviation Systems Technician. This includes potentially some secondary education prior to joining, trade specific training and on-the-job training (OJT) through early military employment, and specialization training as one progressed through the ranks. On top of this, all military members are part of the Profession of Arms in Canada and have significant requirements to cultivate and maintain a high level of this professionalism. This is done through a variety of means but largely through internally regulated Professional Military Education (PME) at the unit or sub-unit level, across topics of the Canadian Military Ethos, including ethical principles, military values, professional expectations, and the importance of the trust of the Canadian public in the institution.[18]

14.   In addition to these core competencies, mid-level officers who are most likely to see the highest requirement for increased PM skill sets, training, and education are also those that require many other certifications to remain relevant in their occupation – including but not limited to bilingualism training, currency in military justice processes, currency in financial administration processes (on both public and non-public accounts), currency and updating enterprise software system skills according to role, and maintaining awareness of changes and best practices in their own fields of expertise. Maintenance of other encouraged professional certifications (such as a Professional Engineering licence) are again a further added burden in terms of training time and cost.

15.   With this existing plethora of professional training and certification requirements, adding a complete new set of courseware, experience tracking, and examination stretches the ability of individuals to manage the workload. Further, it doubtlessly reduces the focus and expertise of CAF project managers who are trying to take on an additional career path concurrent to their existing career. While a counterargument has been made that PM training and skillsets can be useful for CAF members across non-PM employment in the Forces[19], the benefit of this does not justify the expense.

[18] Canada Department of National Defence, "The CAF Ethos - Trusted to Serve DRAFT" (Ottawa, ON, n.d.).

[19] Caines, "Project Management: Niche Requirement or Essential Officer Skillset?"

CONCLUSION

16.   This paper concludes that CAF members are not best suited to be employed in project management positions and as such a separate career stream to manage these individuals should not be implemented. Using CAF members in these positions has multiple negative effects on the projects themselves, on the individuals, and on the institution. The high turnover rate of military members as they move in and out of postings creates significant churn that reduces the effectiveness of project teams. Including multiple CAF members in both the requirements and management side of projects potentially hinders clear communication out to civilian industry. Employment requirements of project positions are not well matched to the characteristics of military service so are not making best use of service personnel. Finally, introducing additional training and qualification requirements to personnel who are already heavily engaged in their chosen profession presents both a significant burden on individuals and a delay in their being properly trained for the position.

RECOMMENDATION

17.   Stemming from this analysis this paper makes the following recommendations:

a.   Put preference on filling project positions within ADM(Mat) with DND public servants or contracted employees. Hires should be made specifically tailored to projects that are coming online with regards to complexity level and type of equipment.

b.   Move military positions from project roles within ADM(Mat) to the CAF for roles in which their increased employability can help ease staffing pressures, specifically in Force Generation and Force Employment roles. This aligns characteristics of CAF service more closely with positions that would benefit from those strengths.

c.   Reduce the emphasis on CAF members pursuing PMCD certifications required for skills associated with project employment. This would allow CAF members to remain focused on Profession of Arms PME and core technical skills that directly contribute to completion of their primary function within the forces.

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