

Canadian  
Forces  
College

Collège  
des  
Forces  
Canadiennes



## PROJECT MANAGEMENT: NICHE REQUIREMENT OR ESSENTIAL OFFICER SKILLSET?

Major Tim Caines

### JCSP 45

#### 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, 2019.

### PCEMI 45

#### Étude militaire

##### Avertissement

Les opinions 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, 2019.

CANADIAN FORCES COLLEGE/COLLÈGE DES FORCES CANADIENNES  
JCSP 45/PCEMI 45  
15 OCT 2018

DS545 COMPONENT CAPABILITIES

**PROJECT MANAGEMENT: NICHE REQUIREMENT OR ESSENTIAL OFFICER  
SKILLSET?**

By / Par le Major Tim Caines

*“This paper was written by a candidate attending the Canadian Forces College in fulfillment 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.”*

Word Count: 2,366

*« 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. »*

Nombre de mots : 2,366

## **PROJECT MANAGEMENT: NICHE REQUIREMENT OR ESSENTIAL OFFICER SKILLSET?**

### **AIM**

1. The aim of this service paper is to determine whether the Canadian Armed Forces (CAF) should invest in project management (PM) training as another planning tool for commanders and staff. It will review the Officer Development Period (DP) to determine whether there are deficiencies in PM training. In addition, it will assess if there are areas within the DP model that can be changed, leveraged, or enhanced to include common PM training for all officers.

### **INTRODUCTION**

2. Through *Strong Secure Engaged* (SSE), Canada's new defence policy, the Government of Canada has committed to invest \$49.8 billion over the next twenty years in the Department of National Defence (DND). To assist with the expenditure of these funds, a simplified management and planning process for capital expenditures is being developed and will reform Canada's procurement model to ensure procurement of new equipment and in service support costs are managed efficiently.<sup>1</sup> Although SSE outlines the priorities for DND, it does not address the necessary skills, competencies, training, or responsibilities of respective project managers. Treasury Board Secretariat of Canada defines PM as "the systematic planning, organizing and control of allocated resources to accomplish identified project objectives and outcomes."<sup>2</sup> Capstone government policies on PM and expected program deliverables are defined, however, successful implementation may require an investment in training and personnel. Concerns have been raised in the past regarding the capacity of the Assistant Deputy Minister Material (ADM Mat) to execute the necessary project demands required by the government.<sup>3</sup> With this known capacity deficiency, it may be prudent that the CAF conduct a review of its officer training model to ensure sufficient breath of PM training and experience is available at all levels to assist with SSE implementation.

3. The Common Officer Professional Development (COPD) Program outlines five different levels of DPs for officers. It was developed as a framework for CAF officers to determine the required education, training, and self-development opportunities for career progression.<sup>4</sup> A detailed review of the qualification standard indicates that PM is only addressed starting at DP 3, senior Majors and Lieutenant Colonels (LCol), with no formal requirement at DP 2 for Captains and junior Majors. As part of the performance object conduct strategic planning, officers within DP 3 are expected to assist with the development of the Investment Plan and contribute to Project Complexity and Risk Assessments.<sup>5</sup> The lack of formal or self-directed training within

---

<sup>1</sup>Canada, Department of National Defense, *Strong, Secure, Engaged* (Ottawa: Canada Communications Group, 2017), 44-45.

<sup>2</sup>Canada, Treasury Board Secretariat of Canada, "Policy on Management of Projects," last modified on November 12, 2013, <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18229>.

<sup>3</sup>Canada, Department of National Defence, *Evaluation of Naval Forces*, (Ottawa: Chief of Review Services, 2013), iv/vii.

<sup>4</sup>Canada, Department of National Defence, *Qualification Standard: Common Officer Professional Development (Development Periods 1-5)*, (Kingston: Canadian Defence Academy, 2013), iv.

<sup>5</sup>*Ibid.*, 3-31-3-32/74.

the DP 2 qualification standard for officers is a concern, especially if DND continues to have capacity issues to deliver program activities. This paper will explore the benefits of providing officers, at the tactical and operational levels, with PM training within DP 2.

## DISCUSSION

4. Although the DP model does not identify common PM training for officers, some trades, such as Royal Canadian Electrical Mechanical Engineer (RCEME) Corps recognize the importance of PM training by providing points for promotion boards for project management professional certification and project management competency development (PMCD) training.<sup>6</sup> While the RCEME Corps can be used as an example as to why PM training should be included in the DP model for all CAF trades, it may not be the example to emulate. The RCEME Corps tends to be very PM-focused due to the traditional role that it plays in the Canadian Army's capital acquisition program and the importance it places on project management as part of succession planning.<sup>7</sup> Trade specifications should not preclude officers with applicable training to be project managers. It may be argued that within the Project Management Institute's (PMI) definition of a project as being "a temporary endeavor undertaken to create a unique product, service, or result,"<sup>8</sup> many CAF officers are already responsible for projects such as training within DP 2. These officers may simply lack formal training to improve and expand their PM knowledge.

5. Junior officers within DP 2 are required to complete the Canadian Armed Forces Junior Officer Development (CAFJOD) Program. A review of the training plan for CAFJOD module 7, 'support the institution', indicates a cursory overview of PM, with only a few hours of distributed learning on business planning and material management.<sup>9</sup> CAFJOD is heavily focused on leadership and military ethos, with emphasis placed on accountability and the stewardship of resources.<sup>10</sup> These are similar principles that are echoed in the PMCD framework utilized by ADM (Mat) to assess behavior competency for perspective project managers.<sup>11</sup> With a slight shift of training material, it is very likely that DP 2 officers could receive some formal PM training by aligning CAF leadership doctrine with existing elements of programs such as PMCD.

---

<sup>6</sup>N. P. M. Corriveau, Col. Director, "RCEME Communique No 05/2018 - Updates to the RCEME Scoring Criteria," (National Defense Headquarters Ottawa: file 2184-1000-1 (A/SO RCEME), 16 August 2018), Annex A-1.

<sup>7</sup>N. P. M. Corriveau, Col. Director "RCEME Communique No 06/2018 – The Corps of RCEME Tier 6 Succession Planning," (National Defense Headquarters Ottawa: file 2184-5000-4 (SO RCEME), 05 October 2018), Annex A-1.

<sup>8</sup>"PMI Lexicon of Project Management Terms," Project Management Institute, Accessed October 08, 2018, <https://www.pmi.org/pmbok-guide-standards/lexicon>.

<sup>9</sup>Canada, Department of National Defence, "Training Plan Canadian Armed Forces Junior Officer Development Programme Development Period 2," (Kingston: Canadian Defence Academy, 2013), 4-163 – 4-164/172.

<sup>10</sup>Canada, Department of National Defence, *Duty with Honour*, (Kingston: Canadian Defence Academy, 2009), 14.

<sup>11</sup>Canada, Department of National Defence, A-PD-002-000/AG-000, *Standard for Project Managers Competencies*, (Ottawa: ADM (Mat), 2016), 4-6.

6. Junior officers spend an extended amount of time on individual training to become qualified within their own occupation and to meet the requirements outlined by training initiatives such as CAFJOD. To become a qualified pilot for instance, it could take at least two years to complete training before individuals are posted to an operational squadron.<sup>12</sup> This does not include any additional training related to completion of university degrees, secondary duties, or finishing CAFJOD as part of the DP 2. It can be assumed that commanding officers at the tactical and operational levels will likely not support or pursue the benefits that may exist with PM training. Training and operational priorities will take precedence over time away from units to complete PM training.

7. The view that PM training is not really a requirement at the tactical and even operational level can be traced to CAF leadership doctrine that enforces that management is secondary to command. PM training is attributed to resource management which military commanders attribute to civilians, not military officers. There are many parallels between command and management that include planning, directing and leading, and allocating and managing resources.<sup>13</sup> Although commanders may not support formalized training during DP 2, a 2016 audit of the Royal Canadian Navy's spending program, which had \$1 billion<sup>14</sup> of expenditures, identified common trends. There was no evidence of wrong doing with the management and expenditure of program funds, however, some issues were identified with the lack of financial management training and guidance being provided by the chain of command. Secondly, comptrollers and staff were developing local solutions to address training shortfalls, which led to a recommendation for a centralized training approach.<sup>15</sup> The recommendations do not specify whether PM training could alleviate the shortcomings identified by the audit, but the perceived lack of guidance could be attributed to a lack of PM understanding.

8. Previous discussion in this paper has focused on the lack of PM training at the DP 2 and provided background as to why commanders may not support additional training to officers that are employed at the tactical and operational levels. The course of action to do nothing and continue with the current DP 2 structure, while assuming that senior Majors and LCol's will receive PM training within DP 3, could be an acceptable way forward. The course of action to do nothing however may not align with CAF leadership framework. Specifically, the Canadian public has taken greater interest in the CAF and its failure to manage resources properly could erode public trust in the institution.<sup>16</sup> In order to remain a professional and accountable institution, the CAF should review PM training requirements for all officers to ensure that the necessary management skills are standardized across training.

9. Training models for project management already exists within the CAF. ADM (Mat) employs over 4,500 civilian and military personnel and is responsible for the management of

---

<sup>12</sup>Canada, Department of National Defence, "Pilot Job Description," Last modified April 24, 2018, <https://www.canada.ca/en/department-national-defence/services/caf-jobs/career-options/fields-work/air-ship-crew/pilot.html>.

<sup>13</sup>Canada. Department of National Defence. A-PA-005-000/AP-004, *Leadership in the Canadian Forces: Conceptual Foundations*. (Kingston: Canadian Defence Academy, 2005), 9.

<sup>14</sup>Canada, Department of National Defence, *Audit of Financial Management Controls and Practices of the Royal Canadian Navy*, (Ottawa: Chief of Review Services, 2016), iii/vi.

<sup>15</sup>*Ibid.*, 11/16.

<sup>16</sup>Canada. Department of National Defence. A-PA-005-000/AP-004, *Leadership in the Canadian Forces: Conceptual Foundations*. (Kingston: Canadian Defence Academy, 2005), xv.

over \$5 billion in capital expenditures, overseeing \$25 billion in capital equipment assets.<sup>17</sup> Due to feedback from Treasury Board, ADM (Mat) developed the PMCD program to formalize the professional development of program managers and more importantly ensure projects are consistently managed based on risk and complexity.<sup>18</sup> Despite being responsible for a wide range of programs, not all individuals hired or posted to the organization arrive with prerequisite PM training or experience.

10. The lack of training within the PM framework available to military personnel newly posted to ADM (Mat) can be linked to a lack of emphasis at the DP 2 for PM training. This led ADM (Mat) to develop a project management boot camp that involves a series of PM courses completed consecutively over 16 days. The training includes basic PM training and statement of work drafting in order to prepare individuals to become certified a DND PM level 1.<sup>19</sup> The DND PM level 1 is the most junior level of PM qualifications within PMCD. To become DND PM level 2 or 3 certified requires a significant amount of training and experience acquired over a number of years and aligned more with the DP 3.<sup>20</sup> PMCD level 2 or 3 training requirements would be excessive for DP 2 officers.

11. While financial and human resources cost of PM training courses needed to achieve the minimum training requirements for PMCD level 1 are not included, PMCD does include 16 consecutive training days on a variety of subjects. With training for trades such as pilots already very lengthy, there may not be considerable buy-in from the various elemental services for an extended project training element within DP 2. In addition, it may contain modules such as systems engineering awareness that may not be required for most officers employed outside of ADM (Mat) during their DP 2.<sup>21</sup> Despite these counter arguments, utilizing PMI's definition of a project, DP 2 officers will be responsible for projects. This could include development of complex ranges or the organization of units' professional development opportunities. Providing PM training while leveraging existing tactical and operational activities may encourage chain of command support and assist with providing officers formalized PM experience during DP 2.

12. The PMCD program identifies cost management as an essential attribute for project managers as it "involves the processes required to plan, estimate, budget, manage and control costs in order to meet project objectives within the approved expenditure levels."<sup>22</sup> These skills are identified for project managers, but could be required for officers at both the operational and

---

<sup>17</sup>Canada, Department of National Defence, "Material More than just procurement and acquisition," Accessed October 09, 2018, <http://www.forces.gc.ca/en/news/article.page?doc=materiel-more-than-just-procurement-and-acquisitions/hpcdlng3>.

<sup>18</sup>Canada, Department of National Defence, A-PD-002-000/AG-000, *Standard for Project Managers Competencies*, (Ottawa: ADM (Mat), 2016), i.

<sup>19</sup>Canada, Department of National Defence, "Boot Camps – A fast track to Project Management Expertise," Accessed October 08, 2018, <https://lp-pa.forces.gc.ca/portal/pages/view/1788046/boot-camps-a-fast-track-to-project-management-expertise>.

<sup>20</sup>Canada, Department of National Defence, A-PD-002-000/AG-000, *Standard for Project Managers Competencies*, (Ottawa: ADM (Mat), 2016), 2-3.

<sup>21</sup>Canada, Department of National Defence, "Boot Camps – A fast track to Project Management Expertise," Accessed October 08, 2018, <https://lp-pa.forces.gc.ca/portal/pages/view/1788046/boot-camps-a-fast-track-to-project-management-expertise>.

<sup>22</sup>Canada, Department of National Defence, A-PD-002-000/AG-000, *Standard for Project Managers Competencies*, (Ottawa: ADM (Mat), Apr 2016), 3-9.

tactical level. Planning and management of small and large scale operations are normally undertaken by the Canadian Joint Operational Command (CJOC) with the day-to-day management of budgets divulged to respective operational headquarters. In 2015-2016, the deployed operational budget of CJOC was over \$613.5 million.<sup>23</sup> Within a deployed operation, there may be very limited subject matter experts with specialized training in the area of PM. Utilizing Op UNIFER in Ukraine as a baseline, it should be assumed that the Task Force (TF) Commander will be a DP 3 qualified LCol<sup>24</sup> with some basic PM knowledge and that a finance officer will be embedded within the TF with specialized logistics training for financial management.<sup>25</sup> Based upon the current DP 2 design, key staff elements J3, J4, and J5 responsible for the planning and execution of operational requirements may not have any PM training. This represents a significant risk to commanders who have an obligation for stewardship and accountability of resources. To ensure accountability, risk management, and cost certainty, there may be scope to specify PM training for specific positions at the operational and tactical level, including deployed operations, vice creating a baseline training program for all officers within the DP 2.

13. The CAFJOD DP 2 Program has a resource management module with limited focus on business planning and resource management. Comparing this requirement against the ADM (Mat) “boot camp” training program may provide some synergy for training. Specifically, there is a seven day module for best practices in project management that is offered by a contractor, Global Knowledge.<sup>26</sup> The course is designed specifically for a DND and focuses upon project scope, risk, time, and cost management with the ability to train nearly 1,500 personnel annually.<sup>27</sup> Providing officers with training in risk and cost management during DP 2 should set them up for success as they proceed towards DP 3 for more complex PM challenges. More importantly from a stewardship, accountability, and resource management perspective it should allow commanders to have confidence in their own management practices and those of their staff. It is important to note that the Global Knowledge course is an example of training currently available and offered inside DND. Training within the DP 2 module may or may not require the same depth of material provided by Global Knowledge and could be linked with organizational roles and functions.

---

<sup>23</sup>Canada, Department of National Defence, *Evaluation of Canadian Armed Forces Operations*, (Ottawa: Chief of Review Services, 2017), 36.

<sup>24</sup>Canada, Department of National Defence, “Op UNIFER,” Last modified October 03, 2018, <http://www.forces.gc.ca/en/operations-abroad/op-unifier.page>.

<sup>25</sup>Canada, Department of National Defence, “Logistics Officer Job Description,” Last Modified September 18, 2018, <https://www.canada.ca/en/department-national-defence/services/caf-jobs/career-options/fields-work/administration-support/logistics-officer.html>.

<sup>26</sup>Canada, Department of National Defence, “Boot Camps – A fast track to Project Management Expertise,” Accessed October 08, 2018, <https://lp-pa.forces.gc.ca/portal/pages/view/1788046/boot-camps-a-fast-track-to-project-management-expertise>.

<sup>27</sup>Global Knowledge, “The Department of National Defence Adopts New Training to Propel Project Management Success,” accessed October 08, 2018, <https://www.globalknowledge.com/ca-en/resources/case-studies/the-department-of-national-defence-adopts-new-training-to-propel-project-management-success/>

## CONCLUSION

14. SSE and Treasury Board policies place enormous responsibility on DND to deliver and execute projects on behalf of the Government of Canada. CAF leadership doctrine highlights the requirement for accountability, stewardship, and resource management as being fundamental to maintaining the trust of the Canadian public. The COPD model provides a comprehensive overview of training throughout the career of an officer. Within this framework, PM training really starts at the Major and LCol level as part of the DP 3. Prior to DP 3, PM training is the responsibility of specific trades such as RCEME, with trades such as pilot not having a requirement. With CAFJOD, DP 2, a small element of resource management is available, however, lacks comprehensive depth to provide basic PM skills and knowledge. Yet, commanders are responsible for large quantities of equipment, finances, and personnel and put trust in their staff for this oversight and day-to-day management. Unless an individual pursues PM training as self-development or is fortunate to be posted to and attend boot camp training at ADM (Mat), they lack many of the fundamental PM skills. Due to a training gap in the existing COPD model at the DP 2, commanders are assuming risk with the lack of PM training and knowledge. Skills sets should be introduced to increase professional competency and ensure officers are prepared to manage projects earlier in their career.

## RECOMMENDATIONS

15. The CAF is recommended to conduct the following with regards to PM training:
- a. Review the qualification standard and training plan for the COPD to determine if sufficient PM training is provided across all DP levels;
  - b. Review the CAFJOD Program to determine if additional PM training can be incorporated for officers completing DP 2;
  - c. Review key positions within organizations and units to determine if specific PM training is required; and
  - d. Update CAF leadership doctrine to highlight the importance of PM at all levels of leadership.



## BIBLIOGRAPHY

- Corriveau, N. P. M, Col. Director *RCEME Communique No 06/2018 – The Corps of RCEME Tier 6 Succession Planning*, National Defense Headquarters Ottawa: file 2184-5000-4 (SO RCEME), 05 October 2018.
- Corriveau, N. P. M, Col. Director *RCEME Communique No 05/2018 - Updates to the RCEME Scoring Criteria*, National Defense Headquarters Ottawa: file 2184-1000-1 (A/SO RCEME), 16 August 2018.
- Canada. Department of National Defence. “*Material More than just procurement and acquisition.*” Accessed October 09, 2018. <http://www.forces.gc.ca/en/news/article.page?doc=materiel-more-than-just-procurement-and-acquisitions/hpcdlng3>.
- Canada. Department of National Defence. “*Boot Camps – A fast track to Project Management Expertise.*” Accessed October 08, 2018. <https://lp-pa.forces.gc.ca/portal/pages/view/1788046/boot-camps-a-fast-track-to-project-management-expertise>.
- Canada. Department of National Defence. “*Op UNIFIER.*” Last modified October 03, 2018. <http://www.forces.gc.ca/en/operations-abroad/op-unifier.page>.
- Canada. Department of National Defence. “*Logistics Officer Job Description.*” Last modified September 18, 2018. <https://www.canada.ca/en/department-national-defence/services/caf-jobs/career-options/fields-work/administration-support/logistics-officer.html>.
- Canada. Department of National Defence. “*Pilot- Job Description.*” Last modified April 24, 2018. <https://www.canada.ca/en/department-national-defence/services/caf-jobs/career-options/fields-work/air-ship-crew/pilot.html>.
- Canada. Department of National Defence. *Evaluation of Canadian Armed Forces Operations*. Ottawa: Chief of Review Services, 2017.
- Canada. Department of National Defence. *Strong, Secure, Engaged*. Ottawa: Communications Group, 2017.
- Canada. Department of National Defence. A-PD-002-000/AG-000. *Standard for Project Managers Competencies*. Ottawa: ADM (Mat), 2016.
- Canada. Department of National Defence. *Audit of Financial Management Controls and Practices of the Royal Canadian Navy*. Ottawa: Chief of Review Services, 2016.
- Canada. Department of National Defence. *Qualification Standard: Common Officer Professional Development (Development Periods 1-5)*. Kingston: Canadian Defence Academy, 2013.

Canada, Department of National Defence, *Evaluation of Naval Forces*, Ottawa: Chief of Review Services, 2013.

Canada. Treasury Board Secretariat of Canada. “*Policy on Management of Projects.*” last modified on November 12, 2013. <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=18229>.

Canada. Department of National Defence. *Training Plan Canadian Armed Forces Junior Officer Development Programme Development Period 2*. Kingston: Canadian Defence Academy, 2013.

Canada. Department of National Defence. *Duty with Honour*. Kingston: Canadian Defence Academy, 2009.

Canada. Department of National Defence. A-PA-005-000/AP-004. *Leadership in the Canadian Forces: Conceptual Foundations*. Kingston: Canadian Defence Academy, 2005.

Global Knowledge. “*The Department of National Defence Adopts New Training to Propel Project Management Success.*” Accessed October 08, 2018. <https://www.globalknowledge.com/ca-en/resources/case-studies/the-department-of-national-defence-adopts-new-training-to-propel-project-management-success/>.

PMI Lexicon of Project Management Terms. Project Management Institute. Accessed October 08, 2018. <https://www.pmi.org/pmbok-guide-standards/lexicon>.