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TARGETING AS A SUB-OCCUPATION: DOES THE CAF NEED A 131A?

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TARGETING AS A SUB-OCCUPATION: DOES THE CAF NEED A 131A?

AIM

1. This service paper argues the benefits of creating a targeting sub-occupation, similar to the United State's Army 131A Fire Support Technician within the Canadian Armed Forces (CAF). Developing the CAF targeting enterprise has been identified as a strategic goal within *Strong Secure Engaged*.¹ To achieve this outcome, the CAF requires personnel with the knowledge, training and job experience to become experts in this field. A targeting sub-occupation would support this goal by ensuring that the CAF can efficiently and effectively manage a cadre of targeting subject matter experts. As the Artillery Corps has taken a leading role in the development of the targeting enterprise given its historical experience in applying lethal fires and effects, it has invested substantially in targeting training for both its officers and non-commissioned officers (NCO). Accordingly, this service paper recommends that the parent occupation a targeting sub-occupation rest with the Artillery Corps.

INTRODUCTION

2. Targeting is a relatively new process within the CAF. The first edition of Canadian targeting doctrine, *Canadian Forces Joint Publication (CFJP) 3-9 Targeting*, was only published in 2014.² In this same year, the Canadian Army Command and Staff College delivered the pilot serial for the Joint Tactical Targeting Course.³ Before the development of CAF-delivered training, personnel would complete targeting training with NATO, British or American training

¹ Government of Canada. *Strong Secure Engaged*. (Ottawa: Department of National Defence, 2017), 33.

² Strategic Joint Staff. *Canadian Forces Joint Publication 3-9 Targeting*. First Edition. (Ottawa: Department of National Defence, 2014).

³ Howard Nelson. *An Operational Joint Targeting Course*. (Toronto: Canadian Forces College, 2014), 5.

establishments.⁴ Units nominated candidates for this training based on the immediate need for professional knowledge related to targeting as the targeting methodology within CFJP 3-9 began to be introduced in CAF training courses.

3. Personnel are central to the development of the CAF targeting enterprise.⁵ Increasing the number of personnel assigned to CAF targeting positions has been identified as a priority for FY 2019/2020. Personnel continuity in existing positions is also a concern, and L1 organizations are presently investigating the possibility of converting CAF member positions to public servant positions to address this problem in certain roles.⁶ Lack of continuity poses a significant threat to the development of the CAF targeting enterprise. Each year, new personnel are posted to targeting positions based on the demands of the annual posting cycle. This approach is successful in providing CAF members with a breadth of knowledge and experience. However, the targeting enterprise is not able to retain members with a significant depth of targeting experience. Aside from the obvious operational impacts of not having experienced or qualified personnel posted into targeting positions, this issue significantly challenges the delivery of targeting training. In 2018, the Land Targeting School convened a professional development needs analysis working group. Its analysis determined that over 20 targeting courses would be required to be run annually meet the forecasted annual training demand. This level of training outstrips the current capacity to deliver targeting training.⁷ Further, it calls into question how we could better optimize the way we develop, train and employ CAF targeting personnel.

⁴ H.B.J. Nelson. *An Operational Joint Targeting Course: The Next Step in the CAF Comprehensive Approach*. (Toronto: Canadian Forces College, 2014), 2.

⁵ Government of Canada. *Strong Secure Engaged*. (Ottawa: Department of National Defence, 2017), 13.

⁶ Assistant Deputy Minister (Review Services) *Evaluation of Canadian Armed Forces Operations*. (Ottawa: Department of National Defence, 2017).

⁷ Land Targeting School. "CAF Joint Targeting – Joint Professional Development Needs Analysis Working Group Report," *Canadian Army Command and Staff College*. (Kingston: Department of National Defence, 2018), 13.

4. The CAF Military Employment Structure (MES) describes the governance framework for all occupations within the CAF. Chief Military Personnel may create sub-occupations when there is a “requirement to employ an identified group of personnel with additional, related or complementary job requirements.”⁸ The MES also specifies that sub-occupations “include unique requirements for which it is neither effective nor efficient to train all members of the occupation.”⁹ Changes to the MES require an eight-step process: Problem Definition, Job Analysis, Structure Analysis, Sponsor Decision/Matrix Brief, Implementation Planning, Implementation, Verification, and Validation.¹⁰ This service paper will analyze the requirements for a targeting sub-occupation using steps one to three of this process.

DISCUSSION

5. The first step in determining whether a military employment structure change is warranted is Problem Definition. Common triggers for the initiation of this process include an out of date occupational specification, the introduction of new capabilities or the need for occupation structure revisions. The author reviewed the occupational structure for the Gunner (formerly Artilleryman) specification to determine whether tasks related to the targeting methodology are captured. The Gunner military occupational structure (MOS) master task list mentions the term to “target” on 111 occasions. However, these tasks primarily refer to the traditional field artillery, observation post, and surveillance and target acquisition tasks.¹¹ For example, “Circulate Target Records” refers to a field artillery task that is significantly different than the management of electronic target folders within the CFJP 3-9 deliberate targeting cycle.

⁸ Director Personnel Generation Requirements. *Canadian Armed Forces Military Employment Structure*. (Ottawa: Department of National Defence, 2015), 3-2.

⁹ *ibid.*

¹⁰ *ibid* 5-2, 5-3.

¹¹ Director Personnel Generation Requirements. “Gunner – MOSID 368,” *Canadian Armed Forces Military Employment Structure*. Volume 2. Part 2. (Ottawa: Department of National Defence, 2018)

The Gunner specification does not include tasks such as the application of the collateral damage estimation methodology, which is a critical element in the CAF targeting doctrine, nor joint weaponeering. The Intelligence Operator occupational specification does not mention these tasks either.¹²

6. To guide further development of the CAF targeting enterprise, the key job-related tasks related to targeting must be captured so they can be assigned to personnel. Despite the lack of formal designation of the position, artillery units across Canada's Combined Mechanized Brigade Groups and the 1st Canadian Division Headquarters have already informally created and staffed targeting NCO positions. These NCOs are trained in the CAF targeting process and work in conjunction with G3/J3 targeting officers to manage the targeting cycle within their associated formation. While these positions have only begun to emerge within the past two years, they are expected to grow as targeting activities increase in scope within the CAF. The historical CAF approach to staffing targeting positions has been concentrated around employing senior captains and majors, seldom involving NCOs. This approach is not sustainable, nor desirable, as it draws officers away from other key positions that the Artillery Corps must fill. By including a greater proportion of NCOs in targeting positions, this staffing challenge can be balanced. The benefits of having experienced NCOs in headquarters staffs can also not be understated. This approach would be consistent with the United States Army and Marine Corps, which created a Warrant Officer (WO) specialty occupation, the 131A Fire Support Technician. While other CFC Service Papers have argued that Canada's allies have not created targeting specialist occupations, this

¹² Director Personnel Generation Requirements. "Intelligence Operator – MOSID 99," *Canadian Armed Forces Military Employment Structure*. Volume 2. Part 2. (Ottawa: Department of National Defence, 2017)

assertion is false as 131As are the resident technical experts on targeting processes within their military.¹³

7. 131A WOs in the States Army and United States Marine Corps exist to advise on “all matters relative to the employment of target acquisition assets and the Army’s targeting methodology” from the battalion to the combatant commands. These specialists advise commanders and staff throughout the US military decision-making process (MDMP).¹⁴ While the creation of targeting NCO positions within the CAF has been informal to date, formally endorsing this task for Gunner NCOs benefits the targeting enterprise by ensuring that NCOs with this specialty skillset are appropriately selected, trained, and that their careers are managed effectively. This argument is consistent with the Chief of Defence Staff’s strategic guidance for NCO development in *NCM Corps 2020*. This guidance indicates the requirement for the expansion of NCM roles to include responsibilities that may be undertaken by both NCOs and officers, and the need to integrate NCM and officer teams throughout the CAF.¹⁵

8. The CAF targeting enterprise will continue to grow in the coming years. The Royal Canadian Navy has implemented the Harpoon missile and efforts are underway to conduct operational level targeting exercises with this platform.¹⁶ Further, *Strong Secure Engaged* states that the CAF will invest in a remotely piloted aerial system capable of conducting precision lethal strikes.¹⁷ This technology will greatly enhance the CAF’s capability to conduct targeting at

¹³ Adam James. *Targeting Does not Require a MOSID*. (Toronto: Canadian Forces College, 2017), 7.

¹⁴ U.S. Army Warrant Officer Recruiting. *Warrant Officer Prerequisites and Description 131A Field Artillery Technician*. 2010. Accessed 10 October 2018. <http://www.usarec.army.mil/hq/warrant/prerequ/wo131a.shtml>

¹⁵ Canadian Armed Forces. *NCM Corps 2020*. (Ottawa: Department of National Defence, 2002), A-5.

¹⁶ Royal Canadian Navy. "Royal Canadian Navy Marks First-ever Missile Test against Shore-based Targets." Royal Canadian Navy - News and Operations. 6 July 2018. Accessed October 11, 2018. <http://www.navy-marine.forces.gc.ca/en/news-operations/news-view.page?doc=royal-canadian-navy-marks-first-ever-missile-test-against-shore-based-targets/imr9jrs8>.

¹⁷ Government of Canada. *Strong Secure Engaged*. (Ottawa: Department of National Defence, 2017), 73.

the operational level, at which point the personnel with the correct training and expertise must be available. Accordingly, this skillset must be institutionalized within the CAF employment structure. As noted by the CAF Cyber Task Force, “the status quo of an ‘ad hoc employment structure’ and ‘just-enough-just-in-time training model’ was insufficient to address current and future requirements and unsustainable for personnel management.”¹⁸ While the skill development required to become a Cyber Operator is much more technically challenging than a targeting NCO, this argument also rings true in the targeting world.

9. Just-in-time training does not deliver the expertise one is required to have to participate in targeting on operations. The required knowledge in targeting specific information technology programs such as Joint Targeting Software (JTS), Military Intelligence Database (MIDB), Joint Automated Deep Operations Coordination System (JADOCS), Digital Collateral Damage Estimation Software (DCiDE), and how to create Electronic Target Folders cannot be developed right before they are needed to support operations. Managing targeting information and executing these duties correctly is essential as all target records must be retained to ensure compliance with the CAF strategic targeting directive.¹⁹ Similarly, expertise in understanding and applying rules of engagement, the CAF Strategic Targeting Directive, targeting doctrine and procedures cannot be developed within the constraints of a several week-long course. A separate sub-occupation for this skillset would, therefore, be consistent with MES policy on the creation of sub-occupations when “it is neither effective nor efficient to train all members of the occupation” in a particular speciality skill.²⁰ Therefore, there would be marked advantages to the

¹⁸ Chief of Military Personnel. *Military Employment Structure Implementation Plan for the Cyber Operator Occupation 00378*. (Ottawa: Department of National Defence, 2016), 2.

¹⁹ Strategic Joint Staff. *Canadian Forces Joint Publication 3-9 Targeting*. First Edition. (Ottawa: Department of National Defence, 2014), 3-5.

²⁰ Director Personnel Generation Requirements. *Canadian Armed Forces Military Employment Structure*. (Ottawa: Department of National Defence, 2015), 3-2.

development of institutional targeting expertise if the CAF were to formalize targeting duties as a sub-occupation. A sub-occupation would allow individuals to spend a segment of their career developing this skill set by being employed only in targeting specific roles across the CAF.

10. The second stage of the MES Change Management process is Job Analysis.²¹ Having outlined the problem, the critical work requirements associated with the sub-occupation must be captured. While the CAF is still growing its targeting enterprise, there is scope to identify the specific tasks undertaken by NCOs who currently serve in informal targeting positions. Some of the tasks that could be identified in this stage could include: application of the collateral estimation methodology, advising on weaponeering solutions for munitions-based targets, coordinating information operations, managing CAF and coalition targeting databases, and creating and reviewing electronic target folders. Focus groups and interviews with those currently employed in targeting positions would provide greater detail to ensure that the full range of tasks within the specialty is determined. Consultations with United States Army and Marine Corps WOs in the Fire Support Technician MOS would also be valuable to learn how these organizations allocate targeting tasks.

11. Capturing the work requirements associated targeting NCOs could also allow one to consider other sub-occupation criteria including entry and selection standards, pay group (specialist pay). The Gunner MOS requires members to have completed a Grade 10 education or equivalent before enrolling.²² This level of education may be sufficient for an M777 howitzer detachment member. The skills required to support targeting operations in a formation level

²¹ *ibid*, 5-4.

²² Canadian Armed Forces. "Gunner," *Canadian Armed Forces Recruiting*. 25 May 2018. Accessed 11 Oct 2018. <https://www.canada.ca/en/department-national-defence/services/caf-jobs/career-options/fields-work/combat-specialists/gunner.html>

headquarters, on the other hand, may require a higher level of education, for example, completion of the Algonquin College Defence and Security Certificate or a comparable college or university program. Higher level educational attainment is just one example of how selection criteria could be developed to ensure that NCOs selected for targeting duties can work in this more intellectually challenging environment. Whether or not members of this sub-occupation would warrant specialty pay is another matter requiring analysis. If these NCOs are expected to perform at higher intellectual levels than their peers, there may be a case for offering the sub-occupation specialty pay much like military police and certain technical trades receive. Further, a minimum rank for entry into the sub-occupation would be determined to ensure those selected would have the required leadership and experience required to succeed in such employment. A detailed analysis of the work requirements is recommended to ensure that sub-occupation entry requirements could be created that reflect the professional military education, leadership skills and qualifications required to enter the sub-occupation.

12. The third step of the MES Change Management process is structure analysis. This stage includes developing the MES structure for the jobs within an occupation or sub-occupation. A recent paper published in the Army Press Online Journal proposed a career progression and development model for 131A Fire Support Technicians. This model sees a sequence from employment at the brigade level, to division level to higher levels of operational command.²³ Further, the paper identifies separate career tracks for 131As in Special Forces and cyber operations units. A similar progression model could be created for CAF targeting NCOs. For example, the Sergeant and WO rank level could be associated with brigade level employment.

²³ Crifasil. "The 131A Talent Management Gap: An Example of Re-thinking Promotion & Assignment Structure," *Army Press Online Journal*. Volume 16. Issue 11. (United States: Army University Press, 2016), <http://anyflip.com/ctzm/czdx/basic>

WO and MWO positions could be associated with formation and operational command level employment. Opportunities also exist to embed targeting NCOs within Air Task Forces and Naval Task Groups to provide liaison and targeting advice on joint operations.²⁴ This type of structural model ensures that commanders at each echelon are supported by a targeting NCO with the required level of experience and leadership.

13. The targeting sub-occupation could also provide a career progression model for targeting NCOs that could be paired with required professional military education gateways. Given upcoming changes to the Master Warrant Officer (MWO) to Chief Warrant Officer (CWO) career progression model which will make the CWO rank a separate MOS, this employment option would also provide artillery NCOs with a viable alternative career path to the traditional sergeant major model. Others have raised concerns about the overhead required to manage a separate targeting occupation.²⁵ This matter could be addressed directly if the sub-occupation remains within the occupational authority of the current artillery career management section within Chief Military Personnel.

CONCLUSION

14. Analyzing the viability for the creation of a targeting NCO sub-occupation through the MES Change Management process highlights several critical opportunities to aid the development of the CAF's targeting enterprise. A sub-occupation would first address the effect that the annual posting cycle has on developing targeting expertise by ensuring that members who become proficient in applying the CAF targeting methodology remain employed in such

²⁴ Stephen Maranian and John Robinson. "The Future of the Field Artillery Warrant Officer," Fires Bulletin. 2018. <http://sill-www.army.mil/firesbulletin/archives/2018/mar-apr/articles/The%20future%20of%20the%20FA%20warrant%20officer.pdf>

²⁵ Adam James. *Targeting Does not Require a MOSID*. (Toronto: Canadian Forces College, 2017), 6.

positions. This shift would ensure that CAF organizations can focus on determining what effects to apply, and applying them, rather than having to embark on a learning process each time a targeting opportunity arises. The creation of a sub-occupation would also provide the opportunity to screen and select individuals with the required experience, education and leadership ability to succeed as staff in formation and operational-level headquarters. Lastly, stabilizing the employment of targeting personnel in the CAF has the potential to reduce significantly the burden currently being placed on training institutions to generate staff to be employed in such positions.

RECOMMENDATIONS

15. Before Chief Military Personnel can render a decision regarding the creation of a sub-occupation for targeting NCOs, significant staff work remains within the MES Change Management process. This service paper recommends that the Targeting Capability Implementation Team investigate this matter further in consultation with the Gunner MOS occupational authority within Chief Military Personnel, and the Artillery Corps Director. Whether a sub-occupation is created or not, cooperation between branch advisors, career managers, and the TCIT is required to ensure that qualified personnel are generated to fill the necessary positions within the CAF targeting enterprise. Stability within the system is required to achieve the CAF's strategic goals within *Strong Secure Engaged*. As this service paper has outlined, formalizing targeting employment for artillery NCOs within a targeting sub-occupation would benefit the Artillery Corps and the CAF organizations in which these members serve.

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