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The Future of National Defence Fire Service Within the RCAF

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THE FUTURE OF NATIONAL DEFENCE FIRE SERVICE WITHIN THE RCAF

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THE FUTURE OF NATIONAL DEFENCE FIRE SERVICE WITHIN THE RCAF

INTRODUCTION

The Canadian Armed Forces (CAF) is an institution comprised of numerous trades, some of which are exclusive to the military, but many which are not. Fire Fighter is one such trade that, with the exception of deployments, has no discernable variances from that of their civilian counterparts. It is for this reason the Royal Canadian Air Force (RCAF) Fire Fighter trade should be eliminated as a military trade. As a stressed trade within the CAF, this paper will demonstrate that transforming from RCAF to Department of National Defence (DND) firefighters will provide improved efficacy to fire services to all wings across the institution.

This paper will be divided into three sections. The first will briefly focus on the history of firefighters within the CAF and will demonstrate how the evolution of the trade has systemically removed distinct military operating environments from their area of responsibility, most notably of which has been the removal of RCAF firefighters from our naval ships, and thus has removed any requirement for military specific firefighters.

The second section will focus on how the transition of the trade can be accomplished with little disruption to those currently in the trade and to the RCAF. The final section will analyze the anticipated arguments against this proposal, focusing on the potential impacts to the Construction Engineering trade, and identify how these can be overcome both domestically and overseas.

HISTORY OF MILITARY FIREFIGHTERS

The RCAF fire service has always been centered on a continuous risk management process geared towards prevention and early intervention.¹ Although obscure, documentation dating back as far as the First World War indicates that while all three elements of the CAF considered some aspect of fire services as important, only the RCAF created a military fire service focused on air crash responses and structural firefighting.²

In these early years, the Navy was primarily concerned about fires onboard ship. As such, their focus was to ensure onboard personnel of the “Engineering Branch (Stokers) supported by damage-control personnel” were properly trained to respond to ship born fire related emergencies, whether at sea or in port. For Naval shore establishments, reliance was on local municipalities to respond in case of emergency.³ A separate and trained military entity focused solely on firefighting was not a consideration. This tradition of under-appreciation of the requirements for military firefighters by the Navy has continued and is reflected in their actions of reductions to positions, including the 2014 reduction of five full-time firefighters from the Royal Canadian Navy's only firefighting ship in Halifax Harbour, the Firebird, which was responsible to provide fire protection to the navy's ships at HMC Dockyard in Halifax.⁴

In similar fashion, the Canadian Army (CA) did not give proper consideration to a professional firefighting trade. However, significant emphasis was placed on the importance of

¹ National Defence, OPI: CFFM 2-2, *Fire Protection Program*, (Publication A-GG-005-000/AG-001, 01 June 2015).

² LCol (Ret'd) Lorne MacLean, OMM, CD, *Standing Against Fire: A History of the Fire Service of Canada's Military Forces and Department of National Defence*, (General Store Publishing House, Toronto, 2005), 45.

³ *Ibid*, 27-28.

⁴ Gordon, Rob. “Navy Slashes Fire Service in Halifax Harbour,” (CBC News, posted Jan 29, 2014). <https://www.cbc.ca/news/canada/nova-scotia/navy-slashes-fire-service-in-halifax-harbour-1.2516042>

fire protection and prevention, as demonstrated through the 1916 edition of the ‘Army Fire Manual’⁵ and their training and implementation of fire prevention procedures. This resulted in a false sense of belief that their actions were sufficient enough to warrant no professionally trained firefighters amongst their ranks.⁶ Only the RCAF, with their “development of the British Flying Services in Canada at Camp Borden in 1917” foresaw the need for self-reliant fire protection services, resulting in the first steps being made toward the creation of a military fire service.⁷

As the CAF evolved, so too did RCAF fire services, both in purpose and general structure. Requirements for firefighters grew and declined over the years in relation to each World War, then grew significantly in the 1950s. It was not until the 1990s when the CAF began to drastically reduce their numbers that the trade saw a major reduction in personnel which they have yet to recover from.⁸ As noted in the ‘Review of the Establishment Criteria for Fire Protection Services’ completed by Ajilon Consulting in 2003, the increased number of deployments and incremental taskings taken on by RCAF fire departments, combined with newly mandated fire services (Hazmat, Respiratory Protection Program and Emergency Medical Response Services) and training requirements have made it increasingly difficult for fire departments to maintain the appropriate level of fire protection without directly affecting its personnel.⁹

In the last seven years, the Trained Effective Strength (TES) of RCAF firefighters has gone from 436, with a Preferred Manning Level (PML) of 454 in 2014 to a TES of 389 and PML of 375 in 2019. Projections in 2019 saw further reductions with a TES Attrition rate of

⁵ Canada, “Army Fire Manual for Hutment Camps,” (Ottawa, 1916), referenced in LCol (Ret’d) Lorne MacLean’s *Standing Against Fire*,” (General Store Publishing House, Toronto, 2005), 37.

⁶ MacLean, *Standing Against Fire*. 37.

⁷ Ibid, 45.

⁸ Ibid, 62.

⁹ John Littlewood and Ralph Mackey. *Final Report, Canadian Forces Fire Marshal. Review of the Establishment Criteria for Fire Protection Serves*. (Ajilon Consulting, January 2003), 1.

approximately 12.5% per year until 2024.^{10 11 12 13} While some attrition was planned through replacing firefighters with hull technicians on naval ships, some is a direct result of job dissatisfaction and marketability of skills in the civilian environment.

This section briefly outlined the history of fire services within the military and demonstrated how the RCAF Fire Fighter trade has been declining since the 1990s. The next section will demonstrate the feasibility of transitioning from RCAF to DND firefighters, effectively freeing approximately 400 positions which could potentially be used to reinvigorate capabilities by repurposing the positions into that of other stressed trades.

MAKING THE TRANSFORMATION

While implementation of the Fire Protection Program for the RCAF is the responsibility of commanders at all levels, nothing specifies it must be done through military assets. As noted by Maj Rick Dunning in 2015, “the only difference between military firefighters and DND firefighters is that we get to deploy.”¹⁴ The Canadian Forces Fire Marshall’s (CFFM) Fire Protection Program sets up the framework for both DND and CAF fire halls ensuring policies are “consistent with Treasury Board direction, federal regulations, and national directives.”¹⁵ Defence Administrative Orders and Directives (DAODs) 4007-2 and 4007-3 cover the required standards for emergency aircraft rescue and firefighting (ARFF) operations¹⁶ and emergency fire

¹⁰ D Air Pers Strat 5, Annex P, 4500-7, “Fire Fighter MOSID 00149 AMOR ROD,” (14 February 2014).

¹¹ D Air Pers Strat 5, Annex N, 4500-7, “Fire Fighter MOSID 00149 AMOR FY 2015/16 Record of Discussion,” (26 February 2016).

¹² D Air Pers Strat 5, Annex N, 4500-7, “Fire Fighter MOSID 00149 AMOR FY 2016/17 Record of Discussion,” (30 November 2016).

¹³ D Air Pers Strat 5, Annex N, 5000-4, “Fire Fighter MOSID 00149 AMOR ROD,” (31 January 2019).

¹⁴ Dunning, Maj Rick, “History and Capabilities of CAF Firefighters.” (18 June 2015), Video link at History and Capabilities of CAF Firefighters | Canadian Military Engineers (cmea-agmc.ca)

¹⁵ National Defence, *Fire Protection Program*, 10.

¹⁶ ADM(IE), CFFM, “DAOD 4007-3: Emergency Aircraft Rescue and Fire Fighting Operations”, (Issued 19 Mar 2010, last updated 12 Jan 2020).

operations in respect of DND and CAF infrastructure.¹⁷ It is in keeping with these guidelines that transitioning from RCAF to DND firefighters can easily be done. This section will focus on benefits of continuity to the RCAF which would be realized through such a transition.

The Fire Fighter trade has four main goals: “fire loss-limiting engineering; fire-safety education; enforcement of fire-safety regulations and standards; and firefighting and associated rescue operations.”¹⁸ None are exclusive to military firefighters, and all are similar in nature to the following civilian occupations: Structural Firefighter; Airport Firefighter; Fire Inspector; and Fire Service Instructor.¹⁹ Aside from strategic level positions, military firefighters are primarily employed within the RCAF, the only exception being 3 Canadian Defence Support Group in Edmonton, AB. All other CA and Naval bases utilize DND civilian firefighters, and they are no longer employed on naval ships,²⁰ the main purpose of which was helicopter firefighting and training ship personnel on firefighting equipment and techniques.²¹ If no other CAF element requires their firefighters to be military, why should the RCAF?

Numerous benefits can be realized by converting to an all DND firefighter approach, the most important of which is improved efficiencies and efficacy of fire services being provided. Over the years, reduction of personnel within the trade has had significant impacts on the trade as a whole. Fire halls across the RCAF have been struggling with the requirements of providing mandated services without burning personnel out. As identified by Ajilon Consulting, staffing

¹⁷ ADM(IE), CFFM, “DAOD 4007-2: Emergency Fire Operations in Respect of DND and CAF Infrastructure”, (Issued 29 May 1998, last updated 12 Jan 2020).

¹⁸ MacLean, xxv.

¹⁹ Government of Canada, “Firefighter / Canadian Armed Forces,” (<https://forces.ca/en/career/firefighter/>)

²⁰ Government of Canada. “NAVORD 4008-3, Employment of the MOS 00149 Fire Fighter Trade in Ships (Interim policy),” 01 Jan 2014).

²¹ Paul Dixon, “In the Navy,” (Canadian Firefighter, 14 Sep 2009. <https://www.cdnfirefighter.com/in-the-navy-4396/>).

ratios in fire halls should be 5.45:1 for DND and 6.4:1 for military²² as opposed to the 4.93:1 for DND and 5.3:1 for military noted in the study conducted by National Defence.²³ There have been an increased number of individuals with Medical Employment Limitations (MELs), limiting the number of deployable individuals for overseas and domestic operations and tasks. Oftentimes, fire halls must analyze scheduling options to maximize capabilities ensuring maintenance of airfield category, while balancing individuals' needs.²⁴ It is reasonable to expect a transition to DND firefighters who are not required to deploy or move would result in a more stable work environment and consequentially decrease medical and family issues. Studies at Oxford University suggest that productivity has been shown to increase as much as 13% when individuals are happy,²⁵ and a steady work environment aids in this goal.

The continuity achieved by individuals remaining in the same fire hall for the duration of their career is highly beneficial for the services provided. A significant job consideration for any firefighter revolves around the infrastructure they protect. Developing the knowledge required for every building takes time, and due to the transient nature of the military, RCAF firefighters do not typically get the time required for proficiency before being posted. By contrast, DND firefighters can remain at one fire hall their entire careers which allows time to develop infrastructure proficiency resulting in improved relationships with local Real Property Operations (RP Ops), and can reduce delays in follow-ups to infrastructure deficiencies.

While some may argue that personnel remaining in the same fire hall their entire career could lead to lethargy, dynamic training opportunities can be developed to overcome this. In

²² John Littlewood and Ralph Mackey, *Final Report, Canadian Forces Fire Marshal. Review of the Establishment Criteria for Fire Protection Services*, (Ajilon Consulting, January 2003), 15.

²³ National Defence, OPI: DMP 6, *Establishment Criteria. Technical Services: Fire Protection Services*, (A-AE-219-003/AG-036).

²⁴ Capt E.S.L. Dodd, "Briefing Note: 8 Wing Fire Hall Scheduling Options Analysis," (09 Dec 2020).

²⁵ Clement S. Bellet, Jan-Emmanuel De Neve, and George Ward, "Does Employee Happiness Have an Impact on Productivity?" (last edited 09 Nov 20, Saïd Business School WP 2019), 13.

addition, new individuals with new ideas is not always a positive in an environment where best practices and industry standards are required to properly succeed. In addition, the draw on other military resources required to maintain firefighter qualifications (i.e. airbrakes) could become more predictable and scheduled vice random and reliant on annual posting plots.

Another benefit of continuity is the improved understanding of mutual aid agreements with local municipalities. Having personnel who are intimately familiar with these types of agreements allow fire halls to risk mitigate the requirements associated with providing personnel to respond to incidents off base. Constant rotation of individuals at a fire hall requires time for personnel to fully grasp the Mutual Aid Agreements in order to properly effect their use.

Many new military firefighters join to get trained as a firefighter and not necessarily because they want to be a soldier. It is not the same generation of military members who completed an occupational transfer (OT) from another trade into the Fire Fighter trade. They train to get their red seals, and once achieved, many choose to leave the military for a civilian firefighting job. Although accreditation has historically been a part of the Fire Fighter trade, it is not a requirement in the CAF like it is at a civilian fire hall. Eliminating this can potentially contribute to a reduction in the number of individuals who leave once their red seals are achieved.

In making the move from RCAF to DND firefighters, a number of things must be considered to enable a smooth transition. First, the offer can be made to allow current members to switch to DND or OT into another trade. The process of rolling one's pension over from the CAF to DND is already in place and would be relatively seamless to the individual. As well, there are systems in place (such as the MFRC) who have extended their support to DND

members and their families.²⁶ Secondly, standardized training must be implemented. The Fire Training Academy in Borden must transform to a DND facility to ensure standardization. This was the case in the early 2000s when DND firefighters would train simultaneously alongside military members. However, as reductions in the trade occurred, instructors declined and DND training was outsourced to external companies. One training facility would bridge the gap between any perceived discrepancies between RCAF and DND firefighters.

This section demonstrated the steps which can be taken to transition to DND firefighters supporting all the CAF. Next we will look at some objections to this proposal.

OVERCOMING RESISTANCE

As Connelly and Ouellette have pointed out, attempting transformation in the CAF can be a ‘daunting task’ which can fail without first having a good understanding of the institutional challenges which may hinder it.²⁷ Eliminating the Fire Fighter trade from the military has three main obstacles: 1) the Construction Engineering (CE) Branch has become extremely protective of the trade as they utilize the officer position to rotate junior Lieutenants (Lt) with little to no firefighting experience through the Fire Chief position as a proverbial ‘tick in the box’ for the trade; 2) the Salary Wage Envelope (SWE) would need to increase; and 3) a decision on continuance of Light Urban Search and Rescue (LUSAR) would need to be made. However, this paper will only focus on overcoming resistance from the CE Branch.

Resistance to change is a natural response for most, but it can be overcome with proper planning, oversight, project management, testing and implementation.²⁸ The Fire Fighter trade is

²⁶ Kare-Lee Casselman, *Military Family Resource Centre Guide: Department of National Defence Civilian Firefighter Family Program*, (13 March 2017, Doc Version 1.0).

²⁷ Major Devin Conley and Dr. Eric Ouellet, *The Canadian Forces and Military Transformation. An Elusive Quest for Efficiency*, (The Canadian Army Journal, Vol 14.1, 2012), 71.

²⁸ LCol Michael Rosteck, “Managing Change Within DND,” (from *The Public Management of Defence in Canada*, Chapter 9), 214.

no stranger to change. The trade has already experienced significant changes with the switch of Chief Warrant Officers (CWO) in the role of Fire Chiefs to junior CE Officers at the rank of Lt. While this provides the CE Branch a great opportunity to develop young officers, it does little to benefit the trade. These young officers join to be Engineering Officers, with very few having any interest in the Fire Fighter trade. They are thrust into these position with little to no leadership or fire service experience, remaining for a period of two years before being posted to their next job. It falls to the Deputy Fire Chief (at the rank of Master Warrant Officer (MWO)) to effectively train each new Lt as they rotate through, which is neither effective nor efficient in producing quality leadership in the fire halls. As noted by Fetterly in his article on decreasing military capabilities, “effective management of resources in defence is best achieved under moderate stability.”²⁹ This constant rotation of underqualified Fire Chiefs lacks the stability and continuity necessary for a truly effective organization.

To offset the loss of this position (from the transformation) to the CE Branch, the development of a new qualification is required which would allow individuals to be trained to perform associated fire service functions in a deployed setting. As noted in the Fire Marshal Directive (FMD), The CFFM determines the level of fire services required in a deployed setting, whether domestic or expeditionary. This includes the number of personnel deployed and the qualification level needed.³⁰ Historically for overseas deployments, the CAF has relied heavily on Host Nation (HN) support, contracts, or support from the nation upon whose camp we operate from. The CAF has not deployed firefighters in sufficient numbers and with adequate equipment

²⁹ Fetterly, Ross, *The Sub-Optimal Effect of Decreasing Military Capability – A Canadian Study*, (Canadian Global Affairs Institute, May 2019), 2, *The Sub-Optimal Effect of Decreasing Military Capability – A Canadian Study* - Canadian Global Affairs Institute (cgai.ca)

³⁰ National Defence, *Canadian Forces Fire Marshal Directive FMD 2000 V5*, (Issued June 2005, last updated July 2020), 9, FMD_2000_v5__FORMATTED_DRAFT_REVIEW_saved_changes_CFFM_2_questions_addr.sflb.ashx (mil.ca)

to perform this function on our own, with the exception of Alert, for many years. Currently, RCAF firefighters only perform those duties associated with fire protection (i.e. inspections; preventative measures, etc.) in overseas operations. There is nothing preventing specialty training within Construction Engineering Regiments (CERs) from occurring which would qualify individuals to perform these tasks. Even deployments to Alert could have qualified CER personnel trained on a deployable ARFF vehicle (which can be embedded directly into each CER across the CAF), in a 'just in time' training method which would take approximately two weeks to conduct. Deployable ARFF trucks are the only assets with a crew of four to conduct airfield crash services.³¹ Drawing these numbers from the CER units - who are typically the first in and last out in most deployments, and are meant as deployable units – not only provides additional qualifications to those within the CE trade, but eliminates the requirement to pull firefighters from RCAF fire halls.

³¹ National Defence, *Canadian Forces Fire Marshal Directive FMD 2000 V5*, (Issued June 2005, last updated July 2020), FMD_2000_v5__FORMATTED_DRAFT_REVIEW_saved_changes_CFFM_2_questions_addr.sflb.ashx (mil.ca)

CONCLUSION

Firefighting is a static system that needs continuity to be at its best. As previously noted, the only difference between RCAF and DND firefighters is operational deployments. Both are trained to perform fire prevention, enforcement of regulations and standards, firefighting, crash response and medical support. As demonstrated in this paper, any deployable requirement for the services currently provided by a military firefighter can be performed by trained members of a CER. Making the switch to DND firefighters will provide increased job satisfaction to our members while simultaneously providing the continuity required to improve services to every wing across the RCAF. As noted by Ross Fetterly, “military organizations are proud of their history and traditions, and due to the nature of their business are inherently conservative. Change typically comes slowly to military forces, due to the complexity of modern military operations and the high consequence of error.”³² With the proper change management oversight required to implement this transition, the switch from RCAF to DND firefighters can be accomplished in a relatively seamless manner resulting in great efficiencies and efficacy in operations.

³² Fetterly, Ross, *The Sub-Optimal Effect of Decreasing Military Capability – A Canadian Study*, (Canadian Global Affairs Institute, May 2019), 6, *The Sub-Optimal Effect of Decreasing Military Capability – A Canadian Study - Canadian Global Affairs Institute (cgai.ca)*

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