

# Canadian Armed Forces Retention: A Wicked Problem?

By

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## Abstract

A strong Canadian Armed Forces (CAF) is beneficial to all Canadians. The CAF provide necessary security for the nation, North America, and internationally. The process of building a suitable and sustainable force to meet their mandate, as set by the Government of Canada, is time-intensive and expensive. This situation underscores the necessity of retaining well-trained personnel to allow the CAF to accomplish their missions, while ensuring the next generation is adequately prepared to carry on and adapt to new government priorities. Currently, maintaining an adequate number of military members is a struggle and research is required to better understand why this is the case.

Rittel and Webber's 'Wicked Problem' theory, in which social policy issues are unsolvable and instead need to be managed indefinitely, provides valuable insight. To demonstrate that the retention problem within the CAF is a wicked problem, a combination of primary and secondary data analysis on the CAF, and a comparative case study were completed. As a wicked problem, the CAF need to recognize that retention is an issue that can only be managed, not solved. While clear similarities exist between the CAF and NZDF, especially around military families, the Canadian provincial system, compared to the New Zealand unitary system, creates additional complications, none of which the CAF can fix. Future research is required to understand the retention issue in Canada, specifically in terms of the potential relationship between military equipment procurement and retention, as was recognized within the NZDF.

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## Dedication

This thesis is dedicated to my family. To my parents, Gordon and Cathy Miller, for encouraging me to follow my dreams. As well as to my husband, Iain, and children, Elizabeth and Stewart, for their patience and understanding.

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## Introduction

Retention has been a significant issue plaguing the Canadian Armed Forces (CAF) since an early retirement package was offered in the 1990s to intentionally downsize the force, and has been an area of study since the early 2000s, as seen in the 2002, 2006, and 2016 Auditor General Reports on the subject.<sup>1</sup> Even after considerable time and expense had been devoted to this issue, there has been little gain in solving the retention problem. To date most work on this topic has been completed by the CAF themselves and other Government of Canada agencies. Very little academic work has specifically focused on this issue, resulting in a lack of theoretical ground work that may help explain the situation and why there has been little improvement.

The retention problem in relation to the CAF can be defined as the unsustainable attrition rate of fully qualified personnel opting to release from the CAF prior to their mandatory retirement age. This creates a gap in operational knowledge and skills required to effectively integrate new recruits into the organization. Thus an unpredictable environment is created for military planners and decision makers, and limits their ability to effectively carry out the mandate assigned to the CAF by the government of the day. The problem results in the CAF being unable to fill all positions, resulting in a strain on both operations as well as the training system.

Social policy problems have attracted a significant amount of scholarly attention. Issues such as climate change, poverty, or crime rates have been dubbed 'wicked

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<sup>1</sup> Canada, Auditor General of Canada, *National Defence – Recruitment and Retention of Military Personnel* (April, 2002); Canada, Auditor General of Canada, *Military Recruiting and Retention* (May, 2006); Canada, Auditor General of Canada, *Canadian Armed Forces Recruitment and Retention – National Defence* (Fall, 2016).



problems'; a theory proposed by Rittel and Webber in 1973. 'Wicked' refers to problem complexity in definitional and solvability terms.<sup>2</sup> The CAF retention issue appears to be a social policy problem as issues ranging from family support, geographical stability, work environment, to pay and benefits are all encompassed within this problem. The reasoning behind members choosing to release from the military early is complex in nature, and has not been solved even after considerable effort.

Rittel and Webber refer repeatedly to the planner within their work. Given the wide variety of subjects and/or governmental departments the planning/decision making process may be different. Given this difference the term, or title of, planner needs to be understood as an individual or group of individuals creating policy suggestions. In many cases higher level entities or individuals holding a leadership position would ultimately be the decision maker. Planners, from the CAF perspective, would mirror the organization's chain of command. Members within this chain of command create policy suggestions, but implementation requires chain of command approval. This could include the Minister of Defence, the Chief of Defence Staff, or the Elemental Commanders, for example.

A strong Canadian Armed Forces (CAF) is beneficial to all Canadians. The CAF provide necessary security for the nation, North America, and internationally. The process of building a suitable force to meet their mandate, as set by the Government of Canada, is time-intensive and expensive. This situation underscores the necessity of retaining enough well-trained personnel to allow the CAF to accomplish their missions, while ensuring the next generation is adequately prepared to carry on.

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<sup>2</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 155-169.

Global security is a pressing issue for most countries, including Canada. The current security environment is one of instability, with heightening tensions with Russia, North Korea, China, the threat of terrorism, civil unrest, as well as the damaging effects of climate change. The current COVID crisis and the United States' changing approach to the international community under the leadership of President Trump only add to the contested security environment.

The current security environment has the CAF dealing with simultaneous missions at home and abroad. For example, domestically the CAF have been supporting long term care centres in Ontario and Quebec, and meeting its search and rescue responsibilities, while remaining on standby to respond to natural disasters, such as flooding and forest fires. The CAF also remains a strong partner with the United States, particularly as a member of North American Aerospace Defence Command (NORAD).

Internationally the CAF are currently participating in a number of missions. Two of the more significant and personnel intensive missions are Operation REASSURANCE and Operation IMPACT. Operation REASSURANCE, is a North Atlantic Treaty Organization (NATO) sanctioned mission aiming to deter Russian aggression and reaffirm NATO's collective defence. On average there are 915 CAF members deployed, making this the largest international mission.<sup>3</sup>

Operation IMPACT aims to improve security and help build regional stability in Iraq, Jordan, and Lebanon. The CAF are acting as part of a global coalition and have

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<sup>3</sup> Government of Canada, "Operation REASSURANCE", consulted 9 June, 2020. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-reassurance.html>

been approved to deploy up to a maximum of 850 CAF personnel.<sup>4</sup> Overall the CAF have more than 2000 military personnel deployed on roughly 20 different missions.<sup>5</sup>

In times of turmoil, the Canadian population expects that they will be protected by the CAF, which need to be ready and able to respond at a moment's notice. For the CAF to be able to do this effectively, the force needs to have a sufficient number of well-trained personnel. Currently, maintaining an adequate number of military members is a struggle<sup>6</sup> and research is required to better understand why this is the case.

The methodology for this study is a combination of primary data analysis, secondary data analysis, and a comparative case study. A thorough evaluation of the data received from the Department of National Defence (DND), the CAF, previous Auditor General Reports, Canadian Defence policies, and newspaper articles provide the foundation for an in-depth historical examination of the CAF's approach to their retention problem. The CAF have conducted surveys on the subject of retention, and this data is utilized to understand the issues raised by CAF members in relation to decisions to leave the military at an early stage in their careers (i.e before the eligible age for mandatory retirement).

The case study consists of identifying and comparing Canadian retention issues with the New Zealand Defence Force (NZDF). Whether a retention problem exists, and if so, how the NZDF approached the situation, are identified and examined.

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<sup>4</sup> Government of Canada, "Operation IMPACT", consulted 9 June, 2020.  
<https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-impact.html>

<sup>5</sup> Government of Canada, "Current operations list", consulted 13 June, 2020.  
<https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/list.html>

<sup>6</sup> Researcher's interpretation of the Auditor General Reports from 2002, 2006, and 2016 on Retention in the Canadian Armed Forces.

New Zealand was selected based on its similarities to Canada. Both are ‘middle powers’ with relatively small combat capable forces. Equally, both are in the shadow of their dominant neighbour; New Zealand by Australia and Canada by the United States. The data used in the case study consists of a combination of journal articles and primary government documents.

The thesis is broken down into four chapters. Chapter One focuses on the on ‘wicked problem’ theory. The core elements of the theory are identified and examined, as well as the recommended approaches to managing ‘wicked’ social policy problems. Chapter Two consists of a historical examination of the CAF’ retention problem, starting from the mid 1990s. It investigates the policies implemented, primarily for the Regular force vice the Reserves, to improve retention, as well as the current DND and CAF retention policy.

Chapter Three is the case study of the NZDF. In particular, it demonstrates that the NZDF has dealt with a retention problem, although currently the problem is being successfully managed. The case also highlights the approaches undertaken by the NZDF to manage the problem, which provides useful insights for Canada. Chapter Four details how and why CAF retention should be understood in terms of ‘wicked’ problem theory. The analysis strongly suggests that the missing and vital first step for DND and the CAF is to recognize the true nature of the retention problem as a ‘wicked’ one. Instead of searching for, or expecting to find a simple, single solution, they need to understand that the best that can be hoped for is to develop the means to manage the problem.

## Chapter I - Wicked Problem Theory

Rittel and Webber, in their 1973 paper *Dilemmas in a General Theory of Planning*, highlight the difficulty surrounding social policy planning. This work has become known as the foundational piece of Wicked Problem theory. In 2013, a conference was held at Berkeley to commemorate the fortieth anniversary of Rittel and Webber's original article.<sup>7</sup> Nearly fifty years later, Rittel and Webber's paper, which introduced the wicked problem, remains the most cited paper published by *Policy Sciences*.<sup>8</sup> As of February 2020, the article has been cited 5,195 times, and 736 times in 2019 alone.<sup>9 10</sup>

Horst Rittel was the primary architect of the wicked problem concept. Rittel was a design-theorist professor at the University of California, Berkeley, and taught the subjects of design and architecture. Rittel's design interests included planning, engineering, and policymaking.<sup>11</sup> Rittel first presented his wicked problem theory at a seminar hosted by West Churchman, a systems theorist, in 1967. He continued to fine tune his ten characteristics of a wicked problem in his teachings, although only slight adjustments were made to the list covered at the seminar in 1967. It was his colleague in the Institute of Urban and Regional Development Department, Melvin M. Webber, who attended the original seminar that coaxed Rittel into publishing his work. The two

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<sup>7</sup> Kate Crowley and Brian W. Head, "The enduring challenge of 'wicked problems': revisiting Rittel and Webber," *Policy Sciences* 50 (2017): 545.

<sup>8</sup>Ibid., 540.

<sup>9</sup> Springer, "Citations," accessed 12 February 2020.

<http://citations.springer.com/item?doi=10.1007/BF01405730>

<sup>10</sup> Citation analysis counts the number of times an author/s has been cited in additional work. This helps verify the impact of the author/s and/or their work.

<sup>11</sup>Kate Crowley and Brian W. Head, "The enduring challenge of 'wicked problems': revisiting Rittel and Webber," *Policy Sciences* 50 (2017): 540.

collaborated together and published *Dilemmas in a General Theory of Planning* in 1973.<sup>12</sup>

This chapter details the core elements of Wicked Problem Theory. It first provides the basic rationale for the theory. It then details the ten characteristics of a wicked problem as outlined by Rittel and Webber in *Dilemmas in a General Theory of Planning*. The chapter concludes with a discussion of the critiques of the theory and how the concept is being used in current areas of research, specifically in the area of environmental policy.

### The Foundation of Wicked Problem Theory

*Dilemmas in a General Theory of Planning* was conceived during an eventful time in American history. The paper illuminates the struggle between rationality as the standard approach to problem solving, and the social complexities of the time. It was, after all, rationality, order, and control that saw NASA successfully deliver a man to the moon. Yet American society was experiencing unprecedented social unrest, mostly focused on inequality.<sup>13</sup>

Rittel and Webber's main focus was to highlight the ineffectiveness of a science-based approach to tackling public policy issues, motivated by the social unrest and protest movements in the United States in the 1960s and 70s. Public policy issues are complex, introducing a variety of goals from an increasingly diverse society.<sup>14</sup> With that comes the diversity of goals and the difficulty of satisfying all of them.

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<sup>12</sup> Ibid., 541.

<sup>13</sup> Ibid., 541.

<sup>14</sup> Ibid., 541.

Rittel and Webber illustrate the phenomenon via the evolution of the professional. In the early days of the industrial age, the professional, or manager, was responsible for resolving definable problems. However, as the relatively simple problems were dealt with, what remains is increasingly complex.<sup>15</sup> This is not to say that simple tameable social problems no longer exist, but rather they are fewer in number. The majority of social policy problems remaining are complex, and even after planners devoted time and energy into trying to solve them, the problems continue.

Rittel and Webber identify these new problems as being at the crossroads of goal-formation, problem-definition, and equity issues. The goal-formation aspect recognizes the optimism within society, or at least the heightened expectations of society. Starting in the 1960s, problems were being tackled with a new focus on desired outcomes and desired conditions. This new approach, in turn, has pushed professionals to ask such questions as "What do the systems do?" rather than "What are they made of?" or more importantly "What should these systems do?"<sup>16</sup> The protesters in the United States during this period were pushing to "restructure the value and goal systems that affect the distribution of social product and shape the directions of national policy."<sup>17</sup> Goal-formation ultimately heightened society's expectations resulting in a push for perfectability.

Problem-definition has its roots in the notion of efficiency. During the industrial age, the goal was efficiency, and entailed an identified task to be completed with as a minimal number of resource inputs as possible. Planning was the process of designing

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<sup>15</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 156.

<sup>16</sup> *Ibid.*, 157.

<sup>17</sup> *Ibid.*, 157.

problem-solutions to meet this goal.<sup>18</sup> More recently, however, efficiency competes with society's desire to do the right thing, or what is collectively perceived as the right thing to do. This introduces the social element into the problem-definition. This element focuses upon the impact of efficiency on the individual, and equity became the goal alongside the bottom line of profitability.

The introduction of the social or rather ethical element, the focus on doing the right thing rather than solely focusing on efficiency, ultimately obscures the problem;

[...]learning to see social processes as the links tying open systems into large and interconnected networks of systems, such that outputs from one become inputs to others. In that structural framework it has become less apparent where problem centers lie, and less apparent *where* and *how* we should intervene even if we do happen to know what aims we seek.<sup>19</sup>

Rittel and Webber argue that with the new problem-solving framework (with equal focus being placed on what ought to be), it has become more difficult to recognize where the problem centres reside, and equally more difficult to determine how and where one should intervene. Professionals now have the hard task of defining a problem, identifying the cause, of which there could be many, and offering viable options that will close the gap between what-is and what-should-be.<sup>20</sup> The ideal planning systems implemented in the past, based on scientific methods, are too restrictive to be useful with the new socially acceptable structural framework that needs to consider the many differing views when addressing a problem.

Rittel and Webber use the example of crime in the streets to illustrate many of their points, and highlight how difficult it is to approach a social policy problem. The

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<sup>18</sup> Ibid., 158.

<sup>19</sup> Ibid., 159.

<sup>20</sup> Ibid., 159.



planner first has to define the problem, and this definition can impact how the planner reaches the solution. In this example, the problem is defined as ‘crime on the streets as the result of a lack of police officers’. From this definition, the cause first to come to mind is the lack of police. However, it does not explain why the crime is occurring. There may be a poverty issue, a drug problem, or a gang problem, just to name a few. If the planner approaches the problem by increasing the number of police officers, it will not satisfy every stakeholder impacted by crime who perceive it in terms of support for education, the economy, or mental health.

Rittel and Webber reason that problems of planning are inherently wicked, especially the case for government-driven social or policy planning issues.

[...]the problems of governmental planning - and especially those of social or policy planning - are ill-defined; and they rely upon elusive political judgement for resolution. (Not “solution.” Social problems are never solved. At best they are only re-solved - over and over again.)<sup>21</sup>

Social policy problems are poorly defined, as there are many stakeholders involved and each will have their own opinion as to how the problem should be defined, and thus rely upon political judgement as to which path should be taken and for guidance in the form of a decision or resolution. Resolutions differ from solutions as these problems cannot be solved but continue to evolve. Rather the best-case scenario, as Rittel and Webber argue, is that the problem can be managed repeatedly.<sup>22</sup> These wicked problems, as outlined by the authors, have ten distinguishing factors; no definitive formulation, no stopping rule, solutions are good-or- bad not true-or-false, no testing options, no ability to learn by trial and error, no way to know all solutions have been identified, every wicked problem is

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<sup>21</sup> Ibid., 160.

<sup>22</sup> Ibid., 160.

essentially unique, every wicked problem can be seen as a symptom of another problem, the explanation of the problem impacts the nature of the problem's resolution, and the planner has no right to be wrong.

### The Ten Characteristics of 'Wicked Problems'

The first characteristic of a wicked problem is that there is no definitive formulation. As Rittel and Webber explain, to be able to describe a wicked problem in the requisite detail, one must first develop an extensive compilation of all possible solutions. All questions asked on the issue can only be answered accurately if there is sound knowledge of the problem and if all the possible resolutions are known.<sup>23</sup> However, each resolution will have an impact that may in turn highlight another issue and so on. The planner or individual facing a wicked problem needs to recognise the cause-effect aspect of a wicked problem, meaning that problems and solutions coevolve.<sup>24</sup>

McCall and Burge help clarify this characteristic in their paper *Untangling wicked problems*.

With tame problems, the information in the problem formulation is not only exhaustive but also authoritative, in the sense of being beyond reasonable dispute. This is not so with wicked problems, which have stakeholders with differing concerns, priorities, value systems, and beliefs.<sup>25</sup>

The introduction of multiple stakeholders, each with their own views and opinions, make defining the problem complicated. Each stakeholder has an opinion as to the cause of the problem and each cause requires different solutions.

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<sup>23</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):161.

<sup>24</sup> Raymond McCall and Janet Burge, "Untangling wicked problem," *Artificial Intelligence for Engineering Design, Analysis and Manufacturing* 30 (2016): 202.

<sup>25</sup> *Ibid.*, 202.

Rittel and Webber used poverty as a way to explain their point. If planners approach poverty as a result of deficiencies in the economy, the solutions created would differ to those created by a stakeholder who believed the cause was linked to education. Yet, if either set of proposed solutions are implemented, they would have an impact on the problem and ultimately change the problem.

The second characteristic of wicked problems is that there is no stopping point. Tame problems, in contrast to wicked problems, have a finite end. Rittel and Webber use the example of a chess game. Once a player declares checkmate, the game/tame problem has been solved. The same is true of math equations. In solving for 'x' once the value is found, the problem is solved.<sup>26</sup>

This is not the case for wicked problems as a planner.<sup>27</sup> Instead for wicked problems, the planner stops not because the problem has been solved, but rather for another reason. For example, the planner may lose patience, run out of resources, run out of time, or declare the situation to be good enough, even though the problem will not have been fully resolved.<sup>28</sup> If considering crime on the streets, the problem would only be solved when a solution is implemented and there is absolutely no crime for an extended period of time.

The third characteristic of wicked problems is that solutions can only be good-or-bad, not true-or-false. When it comes to wicked problems, there can be no right or wrong answer. The solution cannot be evaluated by an outside, objective source and deemed

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<sup>26</sup>Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):162.

<sup>27</sup> *Ibid.*, 162.

<sup>28</sup> *Ibid.*, 162.

correct. Instead the way forward is to offer good solutions, with the goal of improving the situation, rather than doing harm.<sup>29</sup> In Rittel's 1972 paper he explained it as:

We can only say that it is good or bad and this to varying degrees and maybe in different ways for different people; for normally, what is good for A is not at all good for B. This is the fate of all wicked problems: there is no criterion system nor rule which would tell you what is correct or false. I can only say, 'I think it is pretty good even if you say it is not so.'<sup>30</sup>

As highlighted in the first characteristic there are multiple stakeholders involved in wicked problems and each of these stockholders will have their own interpretation of the proposed solution. Compared to a tame problem where the solution can be deemed correct, a wicked problem's solution will be judged using individual interpretation.<sup>31</sup> The age old saying that 'you cannot please everyone' applies to this characteristic. The planner needs to realize this when tackling a wicked problem and set the goal to be making the situation better for as many people (or whatever the problem refers to) as possible.

Drawing our attention back to crime, if a solution was implemented, such as the addition of more police officers, the solution would garner a good or bad opinion from those involved. There would still be crime on the streets so it could not be deemed right or wrong. Rather, if there is less crime reported the public would feel it was a good policy, but if the crime rate increased it would be considered bad.

The fourth characteristic is that no testing options are available. A solution to a wicked problem can create multiple reactions; reactions that can be seen instantly or may

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<sup>29</sup> Ibid., 162.

<sup>30</sup>H. Rittel, "On the Planning Crisis: Systems Analysis of the 'First and Second Generations'," *Bedriftsøkonomen* No. 8 (1972): 392.

<sup>31</sup>Raymond McCall and Janet Burge, "Untangling wicked problem," *Artificial Intelligence for Engineering Design, Analysis and Manufacturing* 30 (2016): 203.

take years to appear. To be able to test a solution properly the repercussions of the action need to be fully played out and it is impossible to know or track all the reactions and know when they have reached the end point.<sup>32</sup> As Rittel and Webber described it:

[...]will generate waves of consequences over an extended -virtually an unbounded - period of time. Moreover, the next day's consequences of the solution may yield utterly undesirable repercussions which outweigh the intended advantages or the advantages accomplished hitherto.<sup>33</sup>

This characteristic again links back to the first with cause-effect relationships. To test a solution for a wicked problem, the planner would need to understand every consequence (effect) of the proposed treatment on everyone/thing affected and be able to know when the "waves of consequences"<sup>34</sup> ceased. To complicate matters further the planner would need to foresee consequences that would stem from consequences. To date this has not been possible.

The fifth characteristic is that there is no ability to learn by trial and error. All solutions implemented to assist with a wicked problem will have a lasting impact. This certainty means the solution cannot be reached through a process of trial and error.<sup>35</sup> Once a solution is introduced, it will have an impact on the problem, either good or bad. There is no option to undo an action and try again, as an impact will have been made, leaving a lasting effect. Additionally, as mentioned previously the introduction of a solution ultimately changes the problem. Rittel in his 1972 paper explains it as:

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<sup>32</sup>Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 163.

<sup>33</sup> Ibid., 163.

<sup>34</sup> Ibid., 163.

<sup>35</sup>Ibid., 163.

[...]a wicked problem cannot be repeated. Each wicked problem is a one-shot operation. You cannot undo what you have done in the first trial; each trial matters and is very consequential [...]<sup>36</sup>

A trial and error approach to a wicked problem can also be considered unethical, as errors may result in negative consequences, such as the impact on human lives or the spending of large sums of taxpayer money.<sup>37</sup> Even so, it still is crucial to learn from each solution, to have a better understanding for future wicked problems. By creating lessons learned, planners will have the closest thing to trial and error wicked problems will allow.

Rittel used designing a factory as his example in 1972. A designer cannot possibly approach the project by building the factory to test for its effectiveness and if not suitable, tear it down and start again, over and over until the design works.<sup>38</sup> In 1973 Rittel and Webber used a freeway as their example. Again the example highlighted that freeways cannot be built, tested, and easily corrected until the freeway is perfect.<sup>39</sup>

The sixth characteristic of a wicked problem is that there is no way to know if all solutions have been identified. There are no set rules or check-lists when it comes to wicked problems. As highlighted in the previous characteristics, there is a cause-effect relationship and the planner would need the entire list of solutions for every consequence.<sup>40</sup>

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<sup>36</sup>H. Rittel, "On the Planning Crisis: Systems Analysis of the 'First and Second Generations'," *Bedriftsøkonomen* No. 8 (1972): 393.

<sup>37</sup>Raymond McCall and Janet Burge, "Untangling wicked problem," *Artificial Intelligence for Engineering Design, Analysis and Manufacturing* 30 (2016): 203-204.

<sup>38</sup>H. Rittel, "On the Planning Crisis: Systems Analysis of the 'First and Second Generations'," *Bedriftsøkonomen* No. 8 (1972): 393.

<sup>39</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 163.

<sup>40</sup>*Ibid.*, 164.

Rather, the way forward relies on judgement; judgement that the planner has exhausted all available solutions, and judgement that the best solutions were implemented. However, there is no guarantee that every possibility was thought of, or that the best solution was put forward. Judgement is unique to the individual, therefore it could be expected that if a different individual were to takeover the planning role, the outcomes would likely change; not necessarily for better or worse, just different.<sup>41</sup>

Rittel and Webber use crime in the streets as a way to illustrate that there is always the possibility of finding new solutions to a wicked problem. The authors posed the question “What should we do to reduce street crime?”<sup>42</sup> They then continued with a list of possible solutions such as disarming the police as they do in the UK, with the idea that even criminals would find it immoral to shoot an unarmed individual, or change criminal laws as a way to redefine the term crime with the example of legalizing marijuana, or shoot all criminals to reduce their numbers, or give away goods to potential thieves as a way of removing the incentive to steal. This list is by no way exhaustive, but highlights the complexity of creating a list of possible solutions to help tackle wicked problems.<sup>43</sup> Equally it highlights the requirement for planners to apply sound judgement when considering which solution to apply.

The seventh characteristic is that every wicked problem is essentially unique. Rittel and Webber argue that "...despite long lists of similarities between a current problem and a previous one, there always might be an additional distinguishing property

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<sup>41</sup>Ibid., 164.

<sup>42</sup>Ibid., 164.

<sup>43</sup> Ibid., 164.

that is of overriding importance.”<sup>44</sup> Although two problems may appear to be the same, one cannot assume this to be the case. Even though one wicked problem may resemble another, the planner needs to be wary of applying similar solutions.<sup>45</sup>

As mentioned previously, wicked problems affect a number of stakeholders. This is key when considering every wicked problem is essentially unique. Even if problems look similar, or are attempting re-solve the same wicked problem, the stakeholders will have changed. Planners can still use lessons learned and previous examples as planning tools, but need to realize the results or consequences may differ.

Rittel and Webber used the building of a subway system as their example. If a city with similar characteristics and conditions to that of San Francisco were to build a subway system Rittel and Webber would advise against duplicating San Francisco’s system. The planners would need to acknowledge the potential differences in commuter habits and/or residential patterns. The stakeholders are different and therefore, the wicked problem is unique.<sup>46</sup>

The eighth characteristic is that every wicked problem can be seen as a symptom of another problem. Rittel and Webber explain that problems are the discrepancies between what is and what ought to be. By trying to right this discrepancy, one must search for the underlying cause. Yet removing the cause of one problem just highlights the problem as merely a symptom of another higher level problem.<sup>47</sup> The problem that is presenting itself may not be the main issue, but rather a piece of a much larger puzzle.

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<sup>44</sup> Ibid., 164.

<sup>45</sup> Ibid., 164-165.

<sup>46</sup> Ibid., 165.

<sup>47</sup> Ibid., 165.



Rittel discussed this characteristic in his 1972 paper and compared solving a wicked problem against treating a disease, "...since nobody should try to cure symptoms you are never sure that you are attacking the problem on the right level, for curing symptoms can make the real disease worse."<sup>48</sup> The planner cannot know whether they are approaching the problem from the right level or merely curing a symptom.

As an example Rittel and Webber referred back to street crime. If trying to tackle this problem the planner would need to realize it is a symptom of a higher level problem. According to the authors, the higher level problems could be general moral decay, permissiveness, deficient opportunity, wealth, poverty, or any other explanation the planner opts to use, which again highlights the importance of the planner's judgement.<sup>49</sup> Whatever the planner chooses will, as explained in the other characteristics, have a cause-effect reaction.

The ninth characteristic of wicked problems is that the explanation of the problem impacts the nature of the problem's resolution. The explanation or way the problem is phrased will lead the planner down a particular path. Again there are no rules, or checklist to determine which path is the right one, or more accurately the better one, to tread.<sup>50</sup> Each individual working on the problem will insert their own interpretation and their corresponding approach to finding a solution.

[...]attitudinal criteria guide the choice. People choose those explanations which are most plausible to them. Somewhat but not much exaggerated, you might say that everybody picks that explanation of a discrepancy which fits his intentions best and which conforms to the action-prospects that are available to him.<sup>51</sup>

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<sup>48</sup>H. Rittel, "On the Planning Crisis: Systems Analysis of the 'First and Second Generations'," *Bedriftsøkonomien* No. 8 (1972): 393.

<sup>49</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):165.

<sup>50</sup> *Ibid.*, 166.

<sup>51</sup> *Ibid.*, 166.

McCall and Burge help clarify the ninth characteristic, noting that

[...]legitimate differences of opinion can exist between reasonable and informed participants in a design project about these causal explanations. From this we can infer that there is no objective way to decide which of the disagreeing parties is right and thus no way to be sure that the designer is right.<sup>52</sup>

And...

[...]design is an error-prone activity wherever questions of causal explanation are involved. Designers should therefore assume that there will be unforeseen consequences of their implemented solutions.<sup>53</sup>

Each stakeholder will interpret the wicked problem based on their perception of the cause, which in turn will impact their view of how the problem should be handled. The designated planner will need to expect that there will be opposition to the implemented solution. Equally, if a new planner were to approach the problem, the interpretation and solution would most likely change.

Rittel and Webber used crime in the streets again to illustrate their point. They highlighted a number of potential reasons why there could be crime in the streets, such as a lack of police officers, or inadequate laws. The main point was that the approach to the problem would depend on the cause that resonates with the planner. If the planner opts to approach the problem from the not enough police officers angle and adds additional police officers to the force it is impossible to test to see if the impact was successful. Looking at the crime numbers for verification would not be adequate as there are a number of other factors at play at the same time as adding the police officers. If the crime rate, as in the number of arrests, increased this could be that the increased number

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<sup>52</sup>Raymond McCall and Janet Burge, "Untangling wicked problem," *Artificial Intelligence for Engineering Design, Analysis and Manufacturing* 30 (2016): 206.

<sup>53</sup>Ibid., 206.

of police officers are successfully making arrests or there could be another reason, such as a turn in the economy and the increased feeling of desperation.<sup>54</sup>

The tenth, and final, characteristic of a wicked problem is that the planner has no right to be wrong. The planner has to recognize, from a moral or ethical standpoint, that their decisions will have aftereffects, good and/or bad. As such, planners will be held liable for the consequences generated from their actions.<sup>55</sup> This characteristic is not unique to wicked problems and would be true for scientific problems as well if there was an error in a crucial calculation. It is not hard to imagine if a bridge were to collapse that the engineers who designed the bridge would be held responsible. Equally, doctors have liability insurance for just this reason. Although Rittel and Webber claim:

[...]the scientific community does not blame its members for postulating hypotheses that are later refuted — so long as the author abides by the rules of the game, of course.<sup>56</sup>

However, when it comes to social policy the number of people who can be affected by a mistake can be significant and very difficult to calculate.

McCall and Burge point out the irony of characteristic ten. All prior characteristics explain why it is impossible to solve a wicked problem, except that the planner has no right to be wrong. As they say “This is really wicked.”<sup>57</sup> Instead the authors suggest the tenth characteristic would be more useful if it were written as:

[w]hile designers must be accountable for the reasonably foreseeable consequences of their design decisions, they should not be held accountable for consequences that they could not reasonably have foreseen.<sup>58</sup>

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<sup>54</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):166.

<sup>55</sup> *Ibid.*, 167.

<sup>56</sup> *Ibid.*, 167.

<sup>57</sup> Raymond McCall and Janet Burge, “Untangling wicked problem,” *Artificial Intelligence for Engineering Design, Analysis and Manufacturing* 30 (2016): 207.

<sup>58</sup> *Ibid.*, 207.

The concept of reasonable would be left to the courts and/or public opinion to determine.

Considering again crime on the streets to illustrate this point, if the planner opted to solve the problem with the addition of police officers and the situation got worse, the planner would be held accountable. It would be difficult to legally charge the planner but it could be expected that they would lose their job. If the planner was associated with a political leader, the court of public opinion may see that that individual is not re-elected.

### Critiques and Recent Work

Rittel and Webber's work is highly regarded. However, there has been some criticism. Archie Bahm, for one, argues the concept of a wicked problem is just an excuse used by policy writers or planners when a problem was not solved. He raises a number of semi-social policy problems that have been solved, such as streets being paved, roads now connect all places, houses shelter nearly everyone, and dreaded diseases have been eradicated.<sup>59</sup> There is no doubt these social problems have shown improvement, but it would be difficult to say they have been solved. Not all roads have been paved and in some areas paving is not viable; one could look to Northern Canada to realize roads do not connect all places. There is still homelessness in the Western world, and there is now a resurgent in diseases that had been eradicated as individuals opt not to vaccinate their children. Yet Bahm uses this to strengthen his critique against wicked problems.

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<sup>59</sup> Archie J. Bahm, "Planners' Failures Generate a Scapegoat," *Policy Sciences* 6 (1975): 103.

Rittel and Webber did not say that all social policy problems were wicked, but rather that the easy problems (for the most part) have been resolved and what remains are predominately wicked. Essentially Bahm is arguing that just because these difficult social problems have not been solved yet does not mean they cannot be solved.<sup>60</sup> This may be true, but that is the case for all theories. A theory is believed to be useful until it is demonstrated otherwise and until difficult social policy problems are solved, Rittel and Webber's theory remains useful.

Bayard L. Catron argues that wicked problems are not unique to social policy issues. In general, he agrees with Rittel and Webber's theory, but thought the divide between social and scientific problems was short sighted. Catron argues that most scientific problems are also wicked, and that some social problems are tame, such as questions regarding etiquette.<sup>61</sup> Catron does not give an example of a wicked science problem, but the fact that there is no cure to cancer may be a useful example.

Catron also believes Rittel and Webber's ten characteristics could have been simplified and divided into three categories: ontological, epistemological, and ethical characteristics. This simplification minimizes the somewhat repetitive nature of the ten characteristics. Yet, this is the 'scientific' way of addressing a problem, and Rittel and Webber's main point was that the scientific way was not working to address the complexities of social policy problems.<sup>62</sup>

Rittel and Webber published their work on wicked problems nearly fifty years ago and to date there are very few critiques. Even with the points raised by Bahm and

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<sup>60</sup> Ibid., 104.

<sup>61</sup> Baynard L. Catron, "On Taming Wicked Problems," *Dialogue* 3, No. 3 (1981): 14.

<sup>62</sup> Ibid., 13-16.

Catron, Rittel and Webber's 'wicked problem' theory has continued to have high standing in social policy literature given the prevalence in recent work and the increasing number of citations. Some of these recent works will be explored further.

Rittel and Webber's 'wicked problem' remains relevant to current academic work and in a growing number of fields of study. Recently, research on the environment has turned to Rittel and Webber's work. Environmental research is a science-based area of study, yet the impact on society and the requirement of political involvement has introduced policy and planning implications to the topic. As Rittel and Webber indicated, complex public policy and planning issues are inherently wicked<sup>63</sup>, and there are still a number of these environmental issues, including climate change, that require both public policy and planning.

Martin Nie, in his article *Drivers of Natural Resource-Based Political Conflict*, published in 2003, introduces the idea that policy problems, that could be considered straightforward, have the potential to turn wicked if it becomes a topic used by political actors as part of a larger or more controversial debate.<sup>64</sup> Nie, who is interested in the conflict linked to carnivore conservation (conserving enough territory to support carnivore animals, such as bears), believes a number of broader issues are manifested under this banner, such as ecosystem management and the use of public lands.<sup>65</sup> Political actors use these broader issues to bring into play cultural values associated with "preservation versus use of resources, recreation-based economies versus extraction-

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<sup>63</sup>Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 160.

<sup>64</sup>Martin Nie, "Drivers of Natural Resource-Based Political Conflict." *Policy Sciences* 36, no. 3/4 (2003): 314. Accessed February 18, 2020. [www.jstor.org/stable/4532604](http://www.jstor.org/stable/4532604).

<sup>65</sup> *Ibid.*, 315.

dependent economies, urban versus rural values, and states'-rights versus federalism'<sup>66</sup> to assist with their political agenda. To further complicate matters, environmental issues have the potential to introduce spiritual and religious aspects to the debate, as, for example, wolves according to the Nez Perce peoples of Idaho are a spiritual totem.<sup>67</sup> Religion and spiritual beliefs, as Nie points out, are wicked due to the deep-core values, beliefs, and human dignity they represent.<sup>68</sup>

The addition of broader issues to what could be a simplistic problem introduces new individuals with corresponding goals and expectations that will only complicate matters making it harder to appease those involved. The above example of land conservation is illustrative. Once a spiritual element is added to the debate, the deliberations become emotional and the chances of an outcome that will appease both sides is unlikely. Unlike 'tame' policy/planning problems, these issues are often extremely controversial, acrimonious, symbolic, intractable, divisive, and expensive.<sup>69</sup> If the stakeholders involved then take the issue to the broader public, as can be seen when politicians get involved, the wickedness intensifies.

van Bueren, Klijn, and Koppenjan's conclusions from their article, *Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective*, provides useful insight into handling wicked problems. They found that interdependent actors, responsible for finding effective policies to manage wicked problems, have a collective action problem.

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<sup>66</sup> Ibid., 315.

<sup>67</sup> Ibid., 316.

<sup>68</sup> Ibid., 316.

<sup>69</sup> Ibid., 307-308.

Even if the actors do acknowledge their interdependency, they find it difficult to engage in joint action. Institutional barriers, cognitive differences, and the dynamics of the interactions themselves can block joint action and the undertaking of necessary network management strategies.<sup>70</sup>

The authors' work also showed that unilateral action typically results in unsatisfactory outcomes. To move issues forward, a great deal of effort needs to be focused on gaining a clear understanding of all contributing actors' perspectives/goals, as well as acknowledging organizational constraints.<sup>71</sup>

van Bueren et. al. highlight the issues linked to cognitive, strategic, and organizational uncertainty in relation to tackling wicked problems. In situations when there are interdependent actors, as is the case with the retention problem in the CAF, they become a collective action problem.<sup>72</sup> In this case, a network-based cooperative approach is required, which in turn adds additional pressure on the stakeholders and their interactions.

van Bueren et. al.'s work ties in with the social context section of Rittel and Webber's foundational work. Societies within the Western world are becoming increasingly diverse, or heterogeneous. Societies are comprised of thousands of minority groups and each of these groups have different goals, visions, and ethics, that influence their approach to a social problem.

As the population becomes increasingly pluralistic, inter-group differences are likely to be reflected as inter-group rivalries of the zero-sum sorts. If they do, the prospects

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<sup>70</sup>Ellen M. Van Bueren, Erik-Hans Klijn, and Joop F. M. Koppenjan, "Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective," *Journal of Public Administration Research and Theory* 13, no.2 (2003): 211.

<sup>71</sup> Ibid., 211.

<sup>72</sup>Ellen M. Van Bueren, Erik-Hans Klijn, and Joop F. M. Koppenjan, "Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective," *Journal of Public Administration Research and Theory* 13, no.2 (2003): Accessed February 20, 2020. <https://www.jstor.org/stable/3525710>



for inventing positive non-zero-sum development strategies would become increasingly difficult.<sup>73</sup>

Also,

[...]diverse values are held by different groups of individuals- that what satisfies one may be abhorrent to another, that what comprises problem-solution for one is problem-generation for another. Under such circumstances, and in the absence of an overriding social theory or an overriding social ethic, there is no gainsaying which group is right and which should have its ends served.<sup>74</sup>

Although this is not a characteristic of a 'wicked problem' it is characteristic of most societies affected by a social policy problem.

## Conclusion

Rittel and Webber's work introduces a way of thinking about complex social problems. By acknowledging retention in the Canadian Armed Forces (CAF) as a wicked problem, the Canadian Armed Forces would need to stop trying to solve the unsolvable retention problem and instead focus on managing the current situation to the best of their ability. Knowing that the problem will change with any policy implementation, it is crucial to re-evaluate on a regular basis and determine if the changes have made a positive impact. Also, many issues that are impacting retention are not within the CAF's jurisdiction. Engaging with those who can implement change and educating them on the issues facing military members and their families is all the CAF can be expected to do. Yet the CAF must clearly communicate to its members what steps are being taken and equally what issues still need work. The next chapter details the historic and current issues facing the CAF.

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<sup>73</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 168.

<sup>74</sup> *Ibid.*, 169.

## Chapter II - The Canadian Armed Forces: The Retention Problem 1992 - Present

The retention problem in relation to the Canadian Armed Forces (CAF) can be defined as the unsustainable attrition rate of fully qualified trades' members choosing to exit the CAF prior to their mandatory retirement age. This problem, in turn, creates an unpredictable environment for military planners limiting their ability to effectively carry out the mandate assigned to the CAF by the government of the day. The Auditor General (A-G) Reports, recent Defence policies, and internal Operation orders highlight the awareness of personnel shortages. Although the A-G Reports made useful recommendations, and the CAF worked and continues to work toward implementing them, there still remains a serious retention issue.

The end of the Cold War led countries in the Western World to reduce the size of their defence forces and Canada was no exception. The current retention issue plaguing the CAF can be traced back to the early 1990s. In 1991, the process of reducing military strength began with a decision to actively accelerate the reduction of the number of personnel.<sup>75</sup> Compensation packages, as part of the Force Reduction Program (FRP), were designed to motivate members, who met specific criteria, to leave the CAF early.

The program was offered from 1992 until 1996, and as of March 1997, the program resulted in roughly 14,000 CAF personnel taking their release.<sup>76</sup> The success of the program allowed the CAF to reach their downsized personnel target ahead of schedule and, importantly for the government, save a lot of money as salaries and

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<sup>75</sup> Canada, National Defence, Director General Audit, *Audit Of Force Reduction Program* (January, 1997): 1.

<sup>76</sup> *Ibid.*, 1-2.

compensation of personnel is the largest tranche of the CAF's budget. However, by 2001 the new lean version of the CAF was struggling to perform the operational requirements dictated by the Canadian Government due to the lack of trained/experienced personnel.

This chapter provides an overview of the CAF's approach to retention since the FRP. The 2002, 2006, and 2016 Auditor General reports are examined and followed by the CAF's current focus. To provide insight, the 2016 Retention Survey, the CAF's response to the 2016 A-G report, the 2017 defence policy, and a number of retention focused Operation Orders are examined.

### Auditor General Reports

The Office of the Auditor General (A-G) carried out a thorough analysis of the personnel issues within the CAF in 2002, 2006, and 2016. These reports provided an in-depth evaluation of the personnel issues facing the CAF. They also offered suggestions for steps forward and for each report the CAF responded with a detailed plan on how to proceed.

The 2002 report was the first examination of the CAF following the retirement incentive offered in 1990s and the findings revealed significant shortages in personnel. Many trades within the CAF were experiencing shortages and the organization as a whole had roughly 3,000 vacancies.<sup>77</sup> The A-G also pointed out that the creation of a retention strategy was problematic at this point, as no data had been collected from members regarding their decisions to leave the forces early. Even with CAF awareness of a personnel problem, no exit surveys had been given to military members who were

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<sup>77</sup> Canada, Auditor General of Canada, *National Defence - Recruitment and Retention of Military Personnel* (April, 2002): 1.

releasing early to better understand the "why" behind their departure.<sup>78</sup> As a response to this critique, the CAF created a Canadian Armed Forces Attrition Information Questionnaire and a formal interview procedure.<sup>79</sup>

The 2002 report also pointed out issues pertaining to work conditions and leadership. According to the A-G, potential factors contributing to members choosing to leave the military were organizational climate and low morale resulting from working conditions and arduous workloads, which stemmed from personnel shortages. Equally, there were frustrations with all levels of leadership — the Government of Canada, DND, CAF, and members' chain of command. These frustrations were linked to the inability to acquire adequate equipment, a failure to address work/life balance, dismal communications, and a general lack of direction with respect to expectations and the future of the organization.<sup>80</sup>

The 2002 A-G report concluded by providing the CAF with three recommendations. The first was to create a military human resources management occupation as a way to create and monitor military and human resource policies/practices. The second recommendation was associated with the requirement to increase personnel numbers within the middle ranks. The report suggested that all options should be considered including recruiting experienced individuals directly into the higher ranks. The last recommendation was to create performance measures to track retention within the CAF.<sup>81</sup>

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<sup>78</sup> Ibid., 13.

<sup>79</sup> Ibid., 14.

<sup>80</sup> Ibid., 14.

<sup>81</sup> Ibid., 17-18.

Between the 2002 and 2006 reports, Prime Minister Paul Martin called for a new defence statement after taking power in 2003. The new policy was intended to guide the military through the changing security environment following the 9/11 attacks and Canada's involvement in the international coalition in Afghanistan. A major transformation of the organization was called for, which included an increase in force size by 5000 members over a span of five years.<sup>82</sup> This increase was intended to help the CAF meet its operational requirements, which at the time, was Afghanistan.

The 2006 report sought to evaluate the progress the CAF had made against the recommendations from its previous report. Overall the A-G found that the CAF had made satisfactory gains, yet there was still much work to do. Specifically the CAF had made satisfactory progress with respect to creating a military human resources management occupation and considering options to increase personnel numbers in the middle ranks, but the A-G was not satisfied with the performance measures as they had yet to be implemented. The military had stopped haemorrhaging members. However, the data indicated there was still a long way to go before the CAF would recover to a sustainable size that could meet its commitments. The shortages were still significant enough to require an operational pause by reducing CAF commitments.<sup>83</sup>

The A-G discovered that the CAF still had 2,400 vacancies to fill at the time of the audit.<sup>84</sup> These vacancies translated into twenty-nine trades being understaffed by ten percent or more and twenty-four trades that had five to ten percent vacancy.<sup>85</sup> DND

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<sup>82</sup> Canada, Auditor General of Canada, *National Defence - Military Recruiting and Retention* (May, 2006): 47.

<sup>83</sup> Ibid., 47-50.

<sup>84</sup> Ibid., 52.

<sup>85</sup> Ibid., 52.

acknowledged the continued shortages and estimated it would take five years to fill all the positions needed to be fully operational.<sup>86</sup>

The A-G also noted that the CAF had experienced high attrition rates at both ends of the spectrum. A large percentage of the military's personnel were approaching the point in their careers where they were eligible for retirement. Approximately 50 percent of the Regular Force had fifteen years or more of service, which meant a significant number would be retiring over the next five to ten years.<sup>87</sup> As such, the attrition rate would be rising in the near future, yet there were fewer members behind those leaving to fill the gap as a function of the 1990s FRP.

The A-G also found that attrition rates were also high among relatively new members. Members undergoing initial training and still in the process of adjusting to military life were prone to release. The audit examined twenty trades to collect data on this trend. Within these trades, over one third of those recruited and trained left after only seven years of service. While the training costs incurred by the military varied depending on the trade, to help offset the financial burden incurred, the A-G noted that the CAF had begun implementing trade-specific terms of service that ranged from three to nine years.<sup>88</sup>

Additionally attrition rates for medical reasons had roughly doubled since 2001 for non-commissioned members (NCM).<sup>89</sup> Medical releases accounted for an average of twenty-four percent of the total attrition for NCMs and ten percent for officers since

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<sup>86</sup> Ibid., 53.

<sup>87</sup> Ibid., 53-54.

<sup>88</sup> Ibid., 65-66.

<sup>89</sup> Ibid., 55.

2001.<sup>90</sup> These rates were not surprising given Canada's involvement in Afghanistan. However, in order for the CAF to become sustainable, the A-G supported the new Defence Policy target of increasing force size by 5,000 to a total of 67,000 members.<sup>91</sup>

The 2006 audit acknowledged that the CAF had made improvements in monitoring data related to attrition and had developed a retention survey.<sup>92</sup> These surveys had been carried out between 2002 and 2004. The results of these surveys indicated that members were leaving the forces for the following reasons: a lack of fairness; uncertainty about the future of the CAF; leadership and bureaucracy concerns, and career concerns.<sup>93</sup>

On the basis of these findings, DND had developed measures that would ideally have a positive impact on retaining members. These measures included quality-of-life initiatives, a new policy to help simplify transfers between the Regular Force and the Reserve, and a review of current career manager practices. Furthermore, the CAF changed its terms of service to help retain members. Originally members would be eligible for a pension once they reached 20 years of service, but the new policy changed the point of eligibility to 25 years of service. As well, the compulsory retirement age was changed from 55 to 60 years of age for some members.<sup>94</sup> Unfortunately, according to the A-G, most of the changes had benefited only the organization and did not focus on improving job satisfaction; a major factor in early release.

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<sup>90</sup> Ibid., 55.

<sup>91</sup> Ibid., 55.

<sup>92</sup> Ibid., 64.

<sup>93</sup> Ibid., 64.

<sup>94</sup> Ibid., 64.

Although there was a span of a decade between the 2006 and 2016 Auditor General reports, the findings were very similar. The CAF were still understaffed and continued to have retention issues. The Department had set a target of 68,000 members to be reached by the 2018-19 fiscal year, but findings from the report exposed this target as unrealistic.<sup>95</sup> The Regular Forces numbers had peaked in 2011 at 67,700 and had steadily declined since. At the time of the 2016 audit, there were 66,400 members.<sup>96</sup>

As found in the 2002 and 2006 Auditor General reports, the CAF continued to have stressed trades; those staffed at less than 90 percent of the target. As of the end of March, 2016, there were twenty-one trades in this situation. Each of these trades faced different challenges ranging from being consistently under-enrolled, high attrition rates, to delays linked to a backlog in the training system.<sup>97</sup> The report recommended the CAF develop a three- to five-year action plan for each of these understaffed trades.

The attrition rates discussed in the 2016 report were similar to those mentioned in the 2002 and 2006 reports. The audit found that 5,487 members left the Regular Force in the 2014-15 fiscal year and another 4,804 the following year. These numbers translated into seven to eight percent of the total number of members and include those members who left unexpectedly and those who reached the mandatory retirement age. The A-G report did not provide a break down of the different release types.<sup>98</sup> These rates also varied among the trades. Nonetheless, in 2015-16, twenty-three trades had attrition rates higher than 10 percent.<sup>99</sup> Additionally, the report found that from 2011 until 2016, the

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<sup>95</sup> Canada, Auditor General Of Canada, *Canadian Armed Forces Recruitment and Retention - National Defence* (Fall, 2016): 4.

<sup>96</sup> *Ibid.*, 4.

<sup>97</sup> *Ibid.*, 10.

<sup>98</sup> *Ibid.*, 21.

<sup>99</sup> *Ibid.*, 21.



number of members leaving the forces far outweighed the new enrolments by as much as 2,400.<sup>100</sup>

The audit also found that the CAF had neither implemented, nor revised the retention plan that was developed in 2009. This plan included 40 projects that aimed to improve retention issues, such as ameliorating geographic instability with less frequent moves and improvements to the training system.<sup>101</sup> The idea was to implement the plan slowly between 2009 and 2011. However, at the time of the audit, some of the projects had moved forward, but the plan had not been fully realized.

To better understand the government's vision for the CAF one must turn to policy. Defence Policies highlight the government's attitudes and intentions for the CAF. As new governments are elected, they typically release Defence White Papers or Policy statements. These documents aid in setting defence requirements.

The last two governments maintained this trend with the release of the Conservative's *Canada First* policy in 2008 and the Liberal's *Strong, Secured, Engaged* policy in 2017. Both policies covered the personnel goals the governments had for the Canadian Armed Forces. The Conservative's *Canada First* policy was written at the height of Canada's mission in Afghanistan but also within months of the global recession. The policy outlined a twenty-year plan to grow the CAF from a Regular Force of roughly 60,000 to one of 70,000.<sup>102</sup>

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<sup>100</sup> Ibid., 21.

<sup>101</sup> Ibid., 21.

<sup>102</sup> Canada, Department of National Defence, *Canada First* (2008): 14.

The *Strong, Secure, Engaged (SSE)* policy made a minimal change in setting a new personnel goal at 71,500.<sup>103</sup> The 2017 policy also highlighted Prime Minister Trudeau's focus on equality and diversity. *Strong, Secure, Engaged* does not limit the personnel goal to only number of members, but also sets targets for women, visible minorities and indigenous representation in the CAF. Retention initiatives raised in *SSE* will be discussed later in this chapter.

### 2016 CAF Retention Survey

As the A-G's 2016 Report was being released, the CAF commissioned a study to better understand the issues facing military members. This resulted in *The 2016 CAF Retention Survey: Descriptive Analysis*, which provided useful information on the motivating factors behind members releasing from the military.<sup>104</sup> Additionally, DND tabled its responses to the A-G's *Report 5* in the spring of 2018, and this document illustrated the steps the CAF had taken with respect to the A-G's recommendations. Of these, Operation GENERATION<sup>105</sup>, a directive from the Chief of Defence Staff (CDS), was somewhat directed at the retention problem, although its main focus was on the recruiting and training phase of a military member's career. In addition, Operation TALENT, a Royal Canadian Air Force (RCAF) operation, and Operation EXPERIENCE, a CDS directive, focused specifically on the retention problem within the Air Force. Also, a telling document for understanding the CAF's approach to retention is the 2017 *Strong,*

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<sup>103</sup> Canada, Department of National Defence, *Strong, Secure, Engaged* (2017): 13.

<sup>104</sup> A stratified random sampling method, based on rank and occupation, was used and the survey was sent to 4,719 members and 1,956 members responded (41.3%).

<sup>105</sup> The designation as an "Operation" highlights the importance placed in the subject by the CAF. Operations are given a chain of command and reporting obligations. It also is a way for the CAF to track financially, all resources and personnel associated with a particular CAF objectives.

*Secure, Engaged Defence Policy*. Although these documents differ in the information they provided, their key message was that the CAF recognized that there is a retention problem and the need to change their current policies to ones that convince CAF personnel to remain.

The CAF, motivated by its continuing retention problem as outlined in the 2002, 2006, and 2016 A-G reports, commissioned a survey of its members focusing specifically on their concerns. Dr Nicholas Bremner and Dr Glen Budgell conducted the research and the report was prepared by Human Resource Systems Group, Ltd. *The 2016 CAF Retention Survey: Descriptive Analysis* was released in April 2017. The report was based on a web-based survey via the Defence Wide Area Network (DWAN)<sup>106</sup> administered between September and December 2016. The final report was based on the responses of 1,956 (41.3%) Regular Force (Reg F) personnel with a representation from all CAF trades.<sup>107</sup>

As outlined in *The 2016 CAF Retention Survey: Descriptive Analysis* introduction, retention of trained personnel is crucial for organizations such as the CAF. With the high cost associated with the training, and, therefore, replacement, of employees and the impact this has on the overall effectiveness of the organization, retaining employees is paramount. Personnel retention is thus a strategic concern for the CAF and one of its priorities.<sup>108</sup> The objective of was to provide a useful guide to improve policies related to retention.

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<sup>106</sup> DWAN is the CAF's specific internet service, that includes email. Each member has their own personal email address on the DWAN. It is secure and cannot be accessed on public computers.

<sup>107</sup> Nicholas Bremner, Ph.D. and Glen Budgell, Ph.D., *The 2016 CAF Retention Survey: Descriptive Analysis* (Ottawa: Human Resource Systems Group, Ltd, 2017), 2-3.

<sup>108</sup> *Ibid.*, 14.

Table 1  
Demographics for the 2016 CAF Retention Survey  
Years of Service

| Demographic      | Sample Number | Sample Percentage |
|------------------|---------------|-------------------|
| Years of Service |               |                   |
| 1 – 4            | 69            | 3.8               |
| 5 – 14           | 604           | 33.2              |
| 15 – 24          | 639           | 35.1              |
| 25+              | 507           | 27.9              |

Table 2  
Demographics for the 2016 CAF Retention Survey  
Age

| Demographic                      | Sample Number | Sample Percentage |
|----------------------------------|---------------|-------------------|
| Age                              |               |                   |
| 16 - 24 years old <sup>109</sup> | 72            | 3.2               |
| 25 - 34 years old                | 683           | 30.5              |
| 35 - 44 years old                | 777           | 34.8              |
| 45+ years old                    | 703           | 31.4              |

The report provides a detailed look into CAF personnel’s opinions at that moment in time. Specifically, it highlights the number of respondent personnel planning to release from the CAF and the top factors leading them to do so. However, it does not

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<sup>109</sup> The poor response rate from the younger age group may be a result of their access to DWAN. While on training or exercise the access is limited. This is also true for members posted outside of Canada.

identify those who have to release based on age or medical reasons. According to the report, 6.7% of Regular Force surveyed members intended to release within the year, 18.6% within three years, and 31.0% within five, whereas 44.7% intended to remain within the CAF until retirement.<sup>110</sup> Unfortunately, the study did not break down those numbers by years served (Table 1), age (Table 2), trade or the time remaining in the members' current contract.<sup>111</sup> From these numbers it is hard to calculate the real implications of the findings on the CAF. The report later states in addition to the 44.7% of Reg F members surveyed who intend to stay until retirement<sup>112</sup>, approximately 37.3% intend to remain in the CAF until the end of their terms of service, and 18.8% intend to leave as soon as another job opportunity arises.<sup>113</sup>

Every CAF member has a term of service contract, and there are three possible contracts. New members sign an Initial Engagement Contract (IEC), with its length dependent on trade and educational requirements. This can be followed by a Continuing Engagement (CE) contract, which typically lasts five years before needing to be renewed or terminated, and/or an Intermediate Engagement (IE) contract that takes the member to 25 years of service. The latter two types of contracts depend on both the member's Chain

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<sup>110</sup> Ibid., 3.

<sup>111</sup> It is possible that these break downs were done and part of a classified document. The data was not available as part of the report available to the public.

<sup>112</sup> The term retirement is not clear. The report later states in addition to the 44.7% of Reg F members surveyed who intend to stay until retirement, approximately 37.3% intend to remain in the CAF until the end of their terms of service, and 18.8% intend to leave as soon as another job opportunity arises. From this differentiation between retirement and the end of ones terms of service, retirement can be defined as the member remaining in the CAF until they reach the mandatory age limit and have served more than 25 years of service.

<sup>113</sup> Ibid., 27.

of Command and the member.<sup>114</sup> Unfortunately, the study does not break down the proportion of 37.3% by type of contract.

For those who indicated they intended to leave the CAF in the near future, their reasons for leaving were broken down into internal and external categories.<sup>115</sup> Participants, but only those who self identified as leaving the CAF in the near future, were asked to specify their top three reasons for leaving in order of importance from a list provided.<sup>116</sup> These reasons were then organized into internal and external categories. The top six internal reasons identified in 72.1% of responses were job dissatisfaction, impact on spouse/partner, dissatisfaction with occupation, impact on children, lack of geographical stability, and dissatisfaction with pay.<sup>117</sup> (Table 3)

The top external reasons cited were a lack of energy or motivation/need for a break or change, eligibility for pension benefits, and family issues (other) (Table 4).<sup>118</sup> Although these internal and external factors provide an overview of the top motivating factors behind members submitting their releases, they lack sufficient detail to be useful in policy creation. For example, what is the difference between job dissatisfaction and dissatisfaction with occupation?

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<sup>114</sup> I gathered knowledge on the different terms of service available to members while I worked at a CAF Orderly Room providing administrative services.

<sup>115</sup> Internal reasons for leaving are those directly linked to military service, while external reasons are those that cannot be directly linked to the CAF, i.e. outside influences, such as the economy, those which the CAF can do very little to address.

<sup>116</sup> Nicholas Bremner, Ph.D. and Glen Budgell, Ph.D., *The 2016 CAF Retention Survey: Descriptive Analysis* (Ottawa: Human Resource Systems Group, Ltd, 2017), 24.

<sup>117</sup> *Ibid.*, 31.

<sup>118</sup> *Ibid.*, 32.

Table 3  
Internal Reasons<sup>119</sup>

| Main Internal Reasons for Leaving the CAF          | Percentage |
|--|------------|
| Job dissatisfaction                                | 17.9       |
| Impact on spouse/partner                           | 13.6       |
| Dissatisfaction with occupation                    | 10.6       |
| Impact of Children                                 | 10.5       |
| Lack of geographical stability                     | 9.9        |
| Dissatisfaction with pay                           | 9.6        |
| Lack of meaningful, satisfying or challenging work | 9.4        |
| Dissatisfaction with promotions                    | 8.6        |
| Dissatisfaction with career management             | 7.2        |
| Dissatisfaction with postings                      | 6.4        |
| Dissatisfaction with deployments                   | 3.8        |
| Operational tempo                                  | 3.3        |
| Dissatisfaction with training and development      | 3.0        |
| Second language issues                             | 2.9        |
| Lack of recognition                                | 2.5        |
| Lack of fairness and equity                        | 2.4        |

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<sup>119</sup> Ibid., 31.

Table 4  
External Reasons

| Main External Reasons for Leaving the CAF               | Percentage |
|---|------------|
| Lack of energy or motivation/need for a break or change | 13.1       |
| Eligible for pension benefits                           | 12.7       |
| Family issues (other)                                   | 2.8        |
| Component transfer to Res F                             | 1.9        |
| Personal health reasons                                 | 1.7        |

In order to provide some clarity and further detail, the report was organized into six categories.<sup>120</sup> The first category, ‘individual characteristics and preferences’, highlighted that members indicated a strong degree of fit between personal values, skills, and abilities with the CAF’s distinct values and culture. Additionally, a good fit was acknowledged between the members’ jobs and their abilities, interests, and skills.<sup>121</sup> Overall, the first category provided positive feedback that, for the most part, the proper individuals are being recruited into the CAF.

In the second category, ‘CAF work and organizational aspects’, areas such as pay/benefits, families, and training were studied. The report indicated room for

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<sup>120</sup> The category selection and break down between internal and external were not explained so it is assumed it was the preference of the authors. Clarity with respect to the proportion of responses were associated with those members who were reaching mandatory retirement would have also been useful.

<sup>121</sup> Ibid., 3.



improvement when it came to specialist pay (for example medical personnel, pilots, lawyers etc.), the post-living differential program (a program that aims to cover off the changing cost of living between locations – for example, personnel working in downtown Toronto at the Canadian Forces College vs. the fighter base in rural Baggotville Quebec), postings, career management, career progression, and second language training.<sup>122</sup>

A moderate amount of satisfaction with respect to family support provided by the CAF was reported.<sup>123</sup> This amount of satisfaction, however, is problematic relative to understanding retention. If members are moderately satisfied with the support they receive for their families, the impact of military life on families still remains one of the main reasons for releasing; a clear conundrum for CAF solutions.

The report also investigated job demands and resources within the CAF. The main issue identified related to workload. Specifically, members acknowledged they occasionally felt overworked. Additionally the awards and recognition program was flagged as needing improvement. However, on the positive side, this category's results indicated that the members surveyed felt there were moderately increased levels of social support from co-workers and supervisors, learning opportunities, and meaningful work.<sup>124</sup>

Leadership was the fourth category studied within the 2016 survey. Results indicated members were generally satisfied with their immediate supervisors and unit leadership. However, at the occupational or branch level, as well as higher organizational leadership level, the members highlighted the need for improvement.<sup>125</sup>

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<sup>122</sup> A second language profile is required for promotion. The level of profile is rank dependent.

<sup>123</sup> Ibid., 3.

<sup>124</sup> Ibid., 3.

<sup>125</sup> Ibid., 4.

Intermediate outcomes, the fifth category, looked at perceived fairness, work-life balance, organizational cynicism<sup>126</sup>, and burnout. This part of the survey revealed that moderate levels of both burnout and cynicism were felt by members. Additionally, members were struggling with work-life balance, and perceptions of distributive fairness (the distribution of outcomes, which could include *inter alia* promotions, postings, awards) were rated low. Procedural fairness (the processes in place to determine the above opportunities) were even lower.<sup>127</sup>

The sixth, and final category, was final outcomes, which examined aspects of job satisfaction and commitment to the CAF. Such topics as engagement and dedication were examined within this category. This section provided two valuable observations. First, Regular Force personnel are only moderately satisfied and engaged with their work. Second, on the positive side from the CAF's perspective, the members felt an emotional bond to the organization.<sup>128</sup> These two observations fall within the CAF's jurisdiction and may provide the organization options to aid in their retention strategy.

From the data, Dr Nicholas Bremner and Dr Glen Budgell made several key conclusions and recommendations. They concluded that the CAF had room to improve second language training, postings, career management, and career progression.<sup>129</sup> These areas can be studied together as they are significantly linked. Second language training and postings are a requirement of career progression, and the career manager acts as an advisor to the member, as well as ensures key positions are filled within the trade and

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<sup>126</sup> Organisational cynicism in this context refers to members feeling the CAF is acting in a self-interested manner and members are left feeling skeptical.

<sup>127</sup> *Ibid.*, 4.

<sup>128</sup> *Ibid.*, 4.

<sup>129</sup> *Ibid.*, 106.

rank level for which they are responsible. Approaching these topics with a holistic view may provide insight into policy changes, which may have a greater positive impact than if each was dealt with separately (.e.g doing language training but then being sent to a unilingual base to work in and solidify the language).

The other conclusions highlighted by the report are related to the day-to-day employment and/or work environment experienced by CAF personnel. Again, the report noted the following areas required improvement: work-life balance; recognition; fairness, and leadership at the branch/occupation and organizational level. Based on these findings, members are experiencing burnout and cynicism towards the organization.<sup>130</sup> With the top internal reason for leaving the CAF, according to the survey, being job dissatisfaction and the top external reason being lack of energy/motivation, improvements in these areas could have a positive impact on retaining members.<sup>131</sup>

*The 2016 CAF Retention Survey: Descriptive Analysis* concluded by making three recommendations. The first was for the CAF to investigate “flexible work arrangements”. While the term was not clearly defined within the report, it discussed allowing personnel to have increased input when it came to postings and as a way to assist with work-life balance.<sup>132</sup> The report proposed that flexible work arrangements, such as telework, could positively impact CAF personnel, although these options were not assessed within the survey. Member recognition is the second recommendation

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<sup>130</sup> Ibid., 106.

<sup>131</sup> Ibid., 30.

<sup>132</sup> Ibid., 107.

made. The report suggested the CAF should evaluate areas where members believe recognition is lacking.<sup>133</sup>

The last recommendation highlights the CAF's need to ensure an effort is placed on procedural fairness. Decisions and policies need to be clear and transparent, as well as clearly explained/communicated once a decision has been made. The report suggested the CAF evaluate its current human resources policies to ensure they are not biased or perceived as biased.<sup>134</sup> For example, the promotion process and selection process for voluntary deployments.

### CAF's Current Focus

In the wake of the 2016 A-G Report, an agreement was made between the House of Commons Standing Committee on Public Accounts and DND that responses would occur by April 30, 2018.<sup>135</sup> DND would provide, in writing, an update on how the organization had responded to, or were in the process of working on, the points raised by the A-G.

The first two A-G recommendations, although not referring directly to retention, might have an impact in future years. Recommendation one looked at increasing the representation of women within the CAF, while recommendation two considered increasing the numbers of visible minority groups and Indigenous Canadians. In both

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<sup>133</sup> Ibid., 107.

<sup>134</sup> Ibid., 107.

<sup>135</sup> Jody Thomas to The Honourable Kevin Sorenson, April 30, 2018.

cases, DND accepted or agreed with the Auditor General's findings and laid out the steps being taken to reach the desired percentages.<sup>136</sup>

The A-G's third recommendation considered the recruiting and training capacity of the CAF. Following a review of the recruiting process, a few incremental changes were made, mainly in the way of additional staff to address short comings.<sup>137</sup> With regard to retention, new recruits and those in the training system, who are able to release from the CAF after their Initial Engagement Contract (IEC), DND noted that there is a need to improve their experience during this phase. Also, decisions affecting them, or frustrations during this phase of a members career could have lasting implications on the member's motivation to continue serving. The CAF took the same approach to training capacity. To prevent a backlog of new recruits waiting for basic training, which must be completed after enrolment, the capacity at the Canadian Forces Leadership and Recruit School was increased.<sup>138</sup>

Although these recommendations and the CAF's responses may have a direct impact on recruiting, they may equally have an impact on retention elsewhere. In the short term, these actions removed 87 Regular Force personnel from other jobs, putting a strain on already understaffed occupations and, as outlined in the 2016 survey results, could trigger additional members to release from the CAF. In the long run, these actions may increase the personnel strength of the CAF once these new recruits are fully trained and working within their designated trades, but for this renewal to happen, the CAF will

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<sup>136</sup> Canadian Armed Forces Recruitment and Retention, House of Commons Standing Committee on Public Accounts: 2-7.

<sup>137</sup> *Ibid.*, 7.

<sup>138</sup> *Ibid.*, 7.

need to focus on retaining these new members throughout the training process, as well as maintaining adequate personnel numbers to handle the ongoing operational tempo.

The fourth A-G recommendation was to improve occupation tracking mechanisms. Specifically, the CAF would look to improve the current three- to five year action plans for each trade to order to track recruitment needs, monitor progress, and be able to adjust accordingly. National Defence also agreed to review their current processes and make improvements as necessary. Operation GENERATION a new initiative of Military Personnel Command, with a mission to increase the diversity of the Canadian Armed Forces and bring further enhancements to the recruiting process thus providing a clearer direction as to how the CAF will proceed vis-à-vis future recruitment.<sup>139</sup>

Historically, the CAF determined its recruiting needs on an annual basis. An Annual Military Occupation Review, a personnel management tool, considered each trade or occupation systematically. Both internal and external issues<sup>140</sup> were identified and using a long-range planning model, the annual intake requirement was calculated. The Review also tracked personnel numbers for each trade and proposed changes to personnel policies and processes as required. The annual review would typically take three months to complete and would commence in November and run until January.<sup>141</sup>

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<sup>139</sup>Ibid., 8.

<sup>140</sup> Internal issues are those that exist within the military, such as number of members reaching the end of their contract (e.g. Initial Engagement, Extended Contract, or Indefinite Period, which takes the member to their mandatory retirement age) or the mandatory retirement age. External issues would be those that exist outside of the military's control, such as the economy or the increased demand in specific civilian industries, as seen in the aviation field, which is a drain on military-trained pilots.

<sup>141</sup> Canadian Armed Forces Recruitment and Retention, House of Commons Standing Committee on Public Accounts: 8.

From the results of the Review, an Intake Plan was formulated and staffed for approval by the Commander of Military Personnel Command. Once approved, it was used by the Canadian Recruiting Group and Director General Military Careers to create their recruiting plans.<sup>142</sup>

Following the release of *Report 5*, National Defence made two changes to the Annual Military Occupation Review process. First, the review takes place earlier in the year, thus allowing recruiting targets to be set by the beginning of the fiscal year, with some flexibility in case any issues arise. Second, the Regular and Reserve Reviews are conducted simultaneously in order to provide for a more detailed picture of available personnel and a clearer understanding of recruiting requirements.<sup>143</sup>

According to the CAF's response to the 2016 report, its long term planning has also improved since the release of *Report 5*. With the use of analytical data provided by the Director General Military Personnel Research and Analysis section, the long-range planning model has become more useful. The model is now able to project the personnel requirements of the CAF five years into the future, aiding in the organization's strategic planning.<sup>144</sup>

Operation GENERATION is a joint CDS and Deputy Minister (DM) directive released in May, 2018. Its designation as an operation indicates its importance to the CAF. As an operation, it has a designated chain of command and the Commander of Military Personnel Command (MILPERSCOM) has been given the responsibility as the

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<sup>142</sup> Ibid., 8.

<sup>143</sup> Ibid., 8-9.

<sup>144</sup> Ibid., 9.

operation's commander. The directive provides the CAF with the framework, plans, and operational guidance for all activities related to the recruitment process.<sup>145</sup>

The CAF has also recognised ongoing demographic changes that impact recruitment. The Canadian population is becoming older, increasingly immigrant, and non-French speaking, as well as highly urbanized. As such, adapting to this changing demographics requires the CAF to re-evaluate its recruiting policies and procedures. The CAF, if they want to successfully recruit new personnel, also needs to sell itself to the public as an employer of choice, and ensure its recruiting centres are easily accessible, both hours and location, to the public.<sup>146</sup>

In response, according to Operation GENERATION, there needs to be a shift in the traditional recruitment approaches, and recruiters need to be trained as good ambassadors for the organization. Recruitment positions in the CAF were typically seen as dead end jobs and an ideal position to send problematic personnel. Additionally, the CAF needs to deal with the recognized issues that compromise its recruiting process. These include internal behaviours, organizational biases, shortcomings in the training system, lack of public understanding, misconceptions surrounding physical and mental health, as well as a lack of advertising and marketing resources.<sup>147</sup>

Operation GENERATION clearly identifies seven strategic objectives for the CAF moving forward. The number of personnel will need to increase by 3500 Regular Force and 1,500 Reserve members to meet the 71,500 and 30,000 respective goals by 2022. In addition, this larger force will need to resemble Canada's population. Given

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<sup>145</sup> LGen C.A. Lamarre, *STANDING OPERATIONS ORDER - OPERATION GENERATION*, (Ottawa, ON): Department of National Defence, 2019: 1-2.

<sup>146</sup> *Ibid.*, 2-3.

<sup>147</sup> *Ibid.*, 4.



this requirement, the Department has accepted the Government of Canada's Employment Equity goals of 25.1% women, 11.8% visible minorities, and 3.5% Indigenous peoples to be achieved by 2026.<sup>148</sup>

The remaining strategic objectives focus on the recruiting system and how they can meet the aforementioned targets. Improvements will be made to the recruiting process that will result in a reduced enrolment time, and steps will be taken to ensure proper recognition is given to experience and skill sets recruits gained outside of the CAF. Also, a military personnel production system will be established to help reduce the wait times between training courses. Lastly, the CAF will modernise their recruiting activities and market themselves as an employer of choice so as to be competitive with other employers.<sup>149</sup>

To achieve the strategic objectives, Operation GENERATION has been broken down into three lines of operation. The first is the Attraction line, which focuses upon attracting potential candidates and getting the CAF's message out to the public. The second line of operation is the Intake line, which deals with the enrolment process. The last line, Production, deals with the training phase of the new recruit, until they reach the operational functional point and can be placed in a unit.<sup>150</sup>

The CAF/DND planned to implement Operation GENERATION over three phases. The first phase, planned to run from September 2018 until the 31st of March 2019, is the Conditions Setting phase. During this period, the CAF would establish the governance structure and engagement schedule via an initial examination, including

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<sup>148</sup> Ibid., 5.

<sup>149</sup> Ibid., 5.

<sup>150</sup> Ibid., 9-10.

gender-based analysis (GBA+). Additionally, as part of this phase, the CAF would design a new recruiting website, develop initial targeting goals, and conduct a management optimization study to improve the way the CAF track untrained military members, as well as review personnel production and reporting processes.<sup>151</sup>

The second, set to run from April 1, 2019 until March 31, 2021, is the Initial Operating Capability phase. This phase focuses upon the implementation of modifications to policy, processes, authorities, and the allocation of resources required to create a successful recruiting system. The final phase, Steady-State Operations, is set to begin on the April 1, 2021 and continues until the organization deems it no longer necessary. This phase will include continuous reassessments and improvements, as needed, to ensure Operation GENERATION remains relevant.<sup>152</sup>

There are a number of initiatives within Operation GENERATION that may also have an impact on retention. One task designated within the Operation is to develop ideal applicant profiles for each CAF occupation, beginning with priority and threshold occupations for those trades understaffed and/or difficult to fill. These ideal applicant profiles are aimed to assist in targeting potential applicants that would have an increased chance of reaching the occupational functional point.<sup>153</sup>

The CAF is also implementing measures to improve the quality of life and quality of service for new recruits. This includes improvements to the overall training system to make it more efficient, which would entail reducing the wait times between military courses. The career management of these members will also become more aligned with

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<sup>151</sup> Ibid., 10.

<sup>152</sup> Ibid., 10.

<sup>153</sup> Ibid., 13.

the system used for members who have become trades' qualified.<sup>154</sup> Additionally, a training accommodation enhancement plan expected in April 2020 is designed to increase the members' quality of life.<sup>155</sup> The CAF is hopeful these changes will reduce the high levels of attrition during the training phase, which is currently at approximately twenty percent.<sup>156</sup>

The fifth recommendation to come out of *Report 5* was for the CAF to improve its ability to attract and ultimately recruit enough qualified applicants for all occupations. In response, the CAF launched an advertising campaign that aimed to highlight the CAF as an employer of choice, as well as raise awareness of the 102 career choices available. Even so, this advertising campaign focused specifically on the hard to recruit occupations. Historical data identifies twenty such occupations, such as naval sonar operators and medical occupations (Table 5). In recent years to help with this effort, the Treasury Board Secretariat approved signing bonuses for medical officers and some technical trades. According to the CAF, the tracking to date has shown positive results and where some trades' quotas have not been met, others have over recruited allowing the CAF to reach their overall recruiting goal.<sup>157</sup>

The sixth and seventh recommendations continue to focus on the recruiting ability of the CAF, also part of Operation GENERATION. The A-G advised the CAF to improve the selection process. Since the report, the CAF worked to improve the selection and training of qualified recruiting staff, as well as to find efficiencies to expedite the

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<sup>154</sup> Ibid., 14-16.

<sup>155</sup> Ibid., 36.

<sup>156</sup> Ibid., Annex D2.

<sup>157</sup> Canadian Armed Forces Recruitment and Retention, House of Commons Standing Committee on Public Accounts: 10-11.

enrolment process. One significant improvement was the ability for applicants to complete their entire application online, which reduces the chances of it getting lost or delayed and allows it to move more quickly through the varying stages. Additionally, the CAF took steps to reduce the impact of security and citizenship background check delays. The CAF, in their response to the A-G’s report, also identified planned changes to the selection, numbers, and training of recruiting staff, as mentioned previously as part of Operation GENERATION.<sup>158</sup>

Table 5  
Current In-Demand Occupations<sup>159</sup>

| In Demand Occupations                 | In Demand Occupations with Signing Bonus             |
|---------------------------------------|--|
| Aerospace Control Operator            | Dental Technician                                    |
| Artillery Officer                     | Cook   |
| Electronic-Optronic Technician (Land) | Medical Officer                                      |
| Financial Services Administrator      | Army Communication and Information System Specialist |
| Human Resources Administrator         | Marine Technician                                    |
| Social Work Officer                   | Naval Combat Information Operator                    |
| Communicator Research Operator        | Naval Communicator                                   |
| Cyber Operator                        | Naval Electronic Sensor Operator                     |
| Meteorological Technician             | Sonar Operator                                       |
| Supply Technician                     |  |
| Vehicle Technician                    |  |
| Marine Systems Engineering Officer    |  |
| Weapons Engineering Technician        |  |

<sup>158</sup> Canadian Armed Forces Recruitment and Retention, House of Commons Standing Committee on Public Accounts: 12-13.

<sup>159</sup>“Careers.” <https://forces.ca/en/careers/> (accessed March 9, 2020)

The seventh recommendation looks to improve the way new CAF members are managed during the training phase of their career. The Basic Training List system used by the CAF was found to lack adequate information on wait times between initial recruitment, basic training, and occupational training. Also, the CAF lacked consistency when it came to customized training and posting plans for each newly recruited member. In response to the A-G, the CAF indicated that it would need to follow the systemic review of the recruiting and training process and would be addressed in Operation GENERATION. In so doing, steps are being taken to create a similar career management system that exists for fully trained personnel for the Basic Training List. The time line for implementing these changes is 2018 – 2020.<sup>160</sup>

The final A-G recommendation is the only one that focuses specifically on retention. The A-G, as a function of significantly varied attrition rates among the different occupations, recommended that the CAF develop, implement, and track retention measures for each of the CAF's occupations. Again the CAF agreed with the recommendation, but stated it would initially take a whole of force approach to retention, paying particularly close attention to the retention of women. The Department indicated they were creating an optimized retention strategy based on feedback from CAF personnel, best practices from both the public and private sectors, as well as from allies, and internal investigations into the causes of attrition. The CAF highlighted they would pay close attention to the issues facing any of the Employment Equity groups.<sup>161</sup>

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<sup>160</sup> Ibid., 14.

<sup>161</sup> Ibid., 16.

The CAF approached their retention strategy development plan in four phases: orientation, strategy design, strategy implementation, and validation. The first phase began in April 2017 and included defining the problem, and then studying the factors, restraints, and resources required to solve it. This phase would culminate in the Commander's Initiating Directive. The second phase, strategy design, was already behind schedule in April 2018 due to the reorganization of Military Personnel Command following the release of *Strong, Secure, Engaged* in 2017. In its response to recommendation eight, the CAF explained it would implement the policy changes listed in *Strong, Secure, Engaged* prior to creating occupation specific retention plans.<sup>162</sup>

The chapter in the 2017 *Strong, Secure, Engaged* Defence Paper that focuses on personnel policy pledges to refocus efforts on the care, services, and support for CAF members. It is believed that this effort will be central to retaining members within the CAF and will be key to meeting their goal of 71,500 Regular Force and 30,000 Reserve Force personnel. The CAF recognized military service as challenging, with the potential for serious physical and/or mental injuries, and prolonged absences from family and friends, which can place strain on both the members, as well as their families. To assist with these challenges, a comprehensive collection of initiatives that cover recruiting, leadership, training, as well as caring for members and those supporting them, are to be implemented.<sup>163</sup>

The recruiting initiatives highlighted in *Strong, Secure, Engaged* became the main directives within Operation GENERATION. The focus on creating a recruiting

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<sup>162</sup> Ibid., 17.

<sup>163</sup> Canada, Department of National Defence, *Strong, Secure, Engaged* (2017): 19.

campaign, shortening the processing time of new applications, and increasing the capacity of the Canadian Armed Forces' Leadership and Recruit school were all mentioned within the 2017 White Paper. Additionally, there was a significant focus on recruiting and retaining women and ethnically diverse groups within the CAF.<sup>164</sup>

Operation HONOUR, the CAF's mission launch August 2015 to eliminate harmful and/or inappropriate sexual behaviour from their ranks, also seeks to create an all-inclusive environment; an environment that accepts all members within the CAF family. This operation aims to spark positive cultural change within the CAF. The four main avenues to achieve this are through understanding, responding to cases, supporting those affected, and preventing said behaviour. While it takes time for cultural change to occur, the CAF has focused significant effort into educating its members and the senior leadership has shown that it expects this behaviour to cease.<sup>165</sup>

*Strong, Secure, Engaged* did give some insight into how the CAF would work to retain current serving members. A Canadian Armed Forces Retention Strategy is to be developed and implemented, but no time line was provided. Additionally, the CAF is to modernise their Honours and Awards system to ensure members are recognised in a timely manner. Support for military families was also acknowledged with some initiatives aiming to help families with geographical instability due to military postings. The CAF also pledges to work with federal, provincial, and private sector partners with the hope of improving services, such as access to healthcare and speeding up administration such as changing drivers' licenses etc..<sup>166</sup>

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<sup>164</sup> Ibid., 22.

<sup>165</sup> Ibid., 28.

<sup>166</sup> Ibid., 22 and 29.

*Strong, Secure, Engaged* acknowledges the importance of all DND members, civilian and military, and pledges to provide them with as safe and healthy work environment that an occupation, which may require unlimited liability, can offer. However, it lacks detail on how it is going to retain the members currently serving and it appears the main focus at the present time is on recruitment and building an ethnically diverse, gender-equal force. Although some of these policy initiatives touch on the issues raised in the 2016 survey, many issues remain untouched.

Operation TALENT, released in April 2019, looks specifically at issues concerning RCAF aviators, who are crucial to both mission success and the training of the next generation of aviators through the transfer of knowledge and expertise garnered through years of service. The loss of these members is putting the organization at risk. “The loss of key experience levels creates a cascading effect that cannot be mitigated by solely increasing intake and training throughput.”<sup>167</sup>

The current level of aviator “trained effective strength”, and the number of fully qualified aviators available for active service places some RCAF capabilities at a moderate to medium risk of being unable to meet operational requirements. The issue is further complicated by the increasing requirement for pilots and mechanics within the Canadian and global aerospace industry, leading to unpredictable departures of trained pilots. The CAF is highly motivated to retain their pilots as the training cost range between \$ three to five million (excluding salaries) depending on aircraft type and takes two years.<sup>168</sup>

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<sup>167</sup> LGen A.D. Meinzinger, RCAF TEAM CAMPAIGN PLAN, INITIATING DIRECTIVE: OPERATION TALENT, (Ottawa, ON): Department of National Defence, 2019: 2 (paragraph 2).

<sup>168</sup> Information gained via a conversation with a military member.



The goal for Operation TALENT is to create and ultimately implement an all encompassing RCAF specific approach to the issues facing aviators and their families. For the RCAF, the term aviator includes all trades that support air operations, not just pilots. Within Operation TALENT the trades specifically mentioned include: pilots, Air Combat Systems Operator, Aerospace Controller, Airborne Electronic Systems Operator, Search and Rescue Technician, Flight engineer, and Air Maintenance.<sup>169</sup> To do so, leadership at all levels is identified as crucial. While most initiatives and their corresponding policy changes will be instigated at the higher leadership level, the Chain of Command at the squadron and unit level are also identified as playing a significant role. Squadron and unit level leadership will have to adapt the initiatives to best meet the demands of their members. In so doing, the RCAF is trying to “move away from a one-size-fits-all approach to an adaptable one; key to which is listening to, and acting on, feedback from the members.”<sup>170</sup>

The RCAF recognizes the importance its leadership team plays in tackling its retention problem. These individuals set the tone for their organization, squadron, or unit, which has a significant impact on their subordinates. If they believe that they are appreciated, then their willingness to continue to serve is likely to rise. Equally, it is also the leadership’s responsibility to recognize the issues facing their members’ families.<sup>171</sup> Two-way communication is recommended as a way to stay current on the issues facing members and their families.

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<sup>169</sup> LGen A.D. Meinzinger, RCAF TEAM CAMPAIGN PLAN, INITIATING DIRECTIVE: OPERATION TALENT, (Ottawa, ON): Department of National Defence, 2019: 2-3.

<sup>170</sup> Ibid., 3 (paragraph 7).

<sup>171</sup> Ibid., 3-4 (paragraph 7 and 8)

The lack of trained and experienced aviators is already being felt. Operation TALENT broke the negative impact down into four key system areas, which are outlined in the Table 6 below.

Table 6  
Retention Impact on RCAF

| Key System | Issues  |
|------------|---|
| Intake     | The CAF recruiting system is unable to meet the “strategic personnel generation objectives.” This is impacting the RCAF’s ability to create a process that will provide stable/predictable personnel numbers.   |
| Training   | The number of aviators available are struggling to meet both operational and training requirements. This is hindering the RCAF’s ability to train and mentor new aviators. The RCAF believes this has been intensified by the current rigid training structure.   |
| Absorbtion | The lack of experienced aviators is hampering the ability of squadrons/units to accept newly trained aviators. Experienced aviators are required to train and mentor new members through the upgrade process. Thus increasing training would only end up with a bottle neck of newly trained aviators.  |
| Employment | <p>Three main elements make up the employment component and are often referred to as retention issues:</p> <ol style="list-style-type: none"> <li>1) Quality of life = impact on spouse/children, relocation, and work-life balance</li> <li>2) Quality of service = job satisfaction, non-trade related work load, and general service requirements (second language, education requirements, career management, leadership expectations, burnout, and recognition)</li> <li>3) Quality of compensation and benefits = monetary remuneration )specialist pay, allowances, and pensions)</li> </ol> |

Table 6. LGen A.D. Meinzinger, Commander RCAF, RCAF TEAM CAMPAIGN PLAN, INITIATING DIRECTIVE: OPERATION TALENT, (Ottawa, ON): Department of National Defence, 2019: 3-4 (paragraph 10).

Under the direction of the Director General Air Readiness, Operation TALENT will be implemented over three phases. Phase one, Stabilize, aims to slow the current

attrition rate with the use of short term initiatives to be introduced within the first year, spring of 2020. The short term initiatives of the Stabilize phase is designed to entice members, who are planning to leave the RCAF in the very near future, to reconsider.

Phase one focuses on a number of key areas. Work-life balance will be examined for areas that can be improved. The RCAF will seek to build a positive identity and culture as a way to foster a sense of belonging among aviators, as well as helping members and their families become more resilient. Additionally, the RCAF will try to identify work trends at different careers points as a way to find options to assist members during demanding phases of their career.<sup>172</sup>

Phase two, Recover, looks to reverse the personnel numbers with “medium term deliverables”<sup>173</sup>, which will be implemented within one to two years. The Recovery phase aims to return the personnel numbers to the level that supports the RCAF's operational and training mandate. Although the initiatives for this phase have not been solidified, there are a number of training related initiatives being worked out. The RCAF is moving to incorporate a public service instructor classification as a way to free up military pilots for other operations, to be expanded overtime to include instructors for all aircrew and air maintenance trades. Along side this effort, the RCAF will conduct a review of its training system, comparing it to Allies' and commercial systems, to see if there are efficiencies that can be incorporated.<sup>174</sup>

The third phase, Grow, is aimed to increase the effective strength of the RCAF to meet the target set by *Strong, Secure, Engaged* and is to be accomplished with the

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<sup>172</sup> Ibid., paragraph 20 (6)b.(1).

<sup>173</sup> Ibid., paragraph 17.

<sup>174</sup> Ibid., paragraph 20 (6) c.

introduction of “longer term deliverables”<sup>175</sup> that ideally will show results after the two year mark. Again the initiatives are not finalised but some ideas are being worked. The RCAF is looking to review the compensation/benefit system to possibly include a skill/experience element, rather than just a rank progression model. Additionally, the RCAF will consider other pilot training options outside of the RCAF.<sup>176</sup>

The Director General Air Readiness is also responsible for the development of the initiatives outlined in the three phases. At the time Operation TALENT was released the initiatives had not been developed. The RCAF is hoping to receive ideas from all rank levels to assist in the development of its retention initiatives. Also a process to track, evaluate, and report effectiveness of the initiatives is to be set in place.<sup>177</sup>

To help support the RCAF, the CDS issued Operation EXPERIENCE in May 2019. The RCAF Commander is unable to task other branches of the CAF so CDS support was essential. Operation EXPERIENCE was focused specifically on the declining number of pilots and all initiatives within the operation were solely for that occupation. It was recognized that other trades are also vulnerable, however support for those trades would be considered in the future.

Operation EXPERIENCE included three task lines involving the Vice Chief of Defence Staff (VCDS), Chief of Military Personnel (CMP), and the Commander of the RCAF. The VCDS had two main tasks. The first was to identify possible OUTCAN<sup>178</sup> pilot positions, as a way to increase training and absorption for RCAF pilots with allied

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<sup>175</sup> Ibid., paragraph 17.

<sup>176</sup> Ibid., paragraph 20. (6) d.

<sup>177</sup> Ibid., paragraph 20 (a).

<sup>178</sup> OUTCAN refers to military jobs based outside of Canada.

nations. This initiative is set to continue for five years.<sup>179</sup> The second task was to work in partnership with the RCAF to create a framework that would give the Commander of the RCAF the ability to approve Class B primary reserve positions for pilots.<sup>180</sup>

CMP was directed to investigate a number of areas with the aim of alleviating stress on the pilot occupation. The first area of focus would affect recently enrolled pilots. CMP was tasked to develop a flexible education plan, to include deferred degree options and increase the time allowed for continuing education requirements<sup>181</sup> from one year to four. Also, once new pilots receive their wings, CMP, in cooperation with VCDS and the RCAF, were tasked to work on a posting plan to ensure these members spend four years at their initial operational tour to gather valuable experience. Additionally, CMP was tasked to assist in a review of the restricted release policy for the pilot trade.<sup>182</sup>

CMP was also assigned with other tasks that would impact all RCAF pilots. Most significantly, CMP would be responsible for conducting two reviews: a pilot occupation review and a pilot pay scale review. Information gained from these reviews is to create future pilot focused policy. Also, CMP was tasked to investigate options to reimburse pilots in non-flying positions for civilian flying costs as a way to maintain their skills.<sup>183</sup>

The RCAF's tasks aligned with those assigned to the VCDS and CMP. As subject matter experts, the RCAF is to work in partnership with the other organizations to aid in the completion of their tasks. Additionally the RCAF was asked to build allied and

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<sup>179</sup>Gen J.H. Vance, CDS INITIATING DIRECTIVE FOR OPERATION EXPERIENCE, (Ottawa, ON): Department of National Defence, 2019: 9.

<sup>180</sup> Ibid., 9.

<sup>181</sup> These requirements are for those who had not achieved their degree.

<sup>182</sup>Gen J.H. Vance, CDS INITIATING DIRECTIVE FOR OPERATION EXPERIENCE, (Ottawa, ON): Department of National Defence, 2019: 10.

<sup>183</sup>Ibid., 9 and 11.

industry partnerships as a way to increase training and employment options. To relieve stress on the pilot trade, the RCAF was also tasked to explore options to use contract instructor pilots within the training system. Assistant Deputy Minister (Material) and Assistant Deputy Minister (Human Resources - Civilian) were also tasked to support the RCAF with the contracting option.<sup>184</sup>

## Conclusion

*The 2016 CAF Retention Survey: Descriptive Analysis*, provides telling information on the motivating factors behind members releasing from the military and is likely to be at the crux of the CAF retention strategy. The CAF acknowledge work needs to be done to retain its current members, as evident in the DND tabled responses to the A-G's 2016 Report. Yet, Operation GENERATION focuses mainly on the recruiting and training phase of a military member's career. *Strong, Secure, Engaged*, as highlighted previously, indicates the CAF's focus on retention but has prioritised diversification and gender equality.

The key message is that the CAF recognises the need for change to its current policies but it is difficult to predict whether the policy changes being implemented will have a positive impact on retaining Regular Force members. To do this the CAF is working to solve its retention problem mainly by focusing on improving efficiency and making improvements to the training bottleneck. However, the retention problem fits the parameters of the social policy theory of 'The Wicked Problem', and therefore the

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<sup>184</sup> Ibid., 11-15.

literature supports the best case scenario the CAF can work towards is problem management.

## Chapter III – Retention and the New Zealand Defence Force

Rittel and Webber highlight within their ten characteristics of a wicked problem that trial and error is not a viable way to approach such problems. By completing case studies on foreign militaries to determine whether or not they are facing the same struggle to retain their trained personnel, additional insight into Canadian military personnel policy may be obtained. This in turn may provide the Canadian Armed Forces (CAF) with the closest equivalent to a trial and error approach. For this to be a true comparison, the case studies must identify militaries that have similar characteristics to the CAF.

The key similarities utilised were that the country needed to be considered a middle power, have a powerful ally on its border, be located in a part of the world known to be peaceful, and have a comparable approach to and/or view of its military. Both the Netherlands and New Zealand meet these requirements. However, given the length restriction of this thesis only one case study could be completed. The availability of primary resources online, academic work with a focus on the NZDF, and the cultural similarities, as both are commonwealth countries, ultimately guided the selection of New Zealand. It would be recommended that a case study of the Netherlands be carried out at a later time.

This chapter explores the personnel policy and retention concerns of the New Zealand Defence Force (NZDF). The chapter begins with a comparison between New Zealand and Canada to verify the relevance of the case study. An in-depth look at the NZDF follows, focusing on the retention of personnel and retention policy decisions. The last section directly examines the issue of military families and its impact on NZDF retention.



## Canada and New Zealand a comparison

From a size perspective the NZDF and Canadian Armed Forces (CAF) are very comparable. New Zealand has 9,354 Regular Force (Reg F) members.<sup>185</sup> When calculated against their population of 4,800,271, 0.19% of New Zealand's population make up their permanent force.<sup>186</sup> Canada, on the surface, has a larger force with 66,572 Reg F members.<sup>187</sup> However, when compared to Canada's population of 37,589,262, only 0.18% of the population serves within the CAF Reg F.<sup>188</sup>

Canada and New Zealand also share geographical similarities. Both countries are located in a relative safe zone with no known adversaries on their borders. The two countries are also situated near allied countries, Australia and the United States, that have stronger military strength. Both Canada and New Zealand have agreements/pacts with their respective allied neighbours that benefit their security.

For example, Canada and the United States have a long history of being close allies and defence partners. In 1940 the Permanent Joint Board on Defence (PJBD) was established to discuss and advise on defence policy issues linked to continental defence and security. The board evolved after 2001 to include Public Safety Canada and the Department of Homeland Security. Canada and the United States co-chair the annual

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<sup>185</sup>New Zealand, New Zealand Defence Force, Minister of Veterans, *Annual Report 2018*. Wellington, New Zealand: 33.

<sup>186</sup>Worldometers, *New Zealand Population*, accessed on 9 December, 2019. <https://www.worldometers.info/world-population/new-zealand-population/>

<sup>187</sup>Canada, Minister of National Defence, *DEPARTMENT OF NATIONAL DEFENCE AND THE CANADIAN ARMED FORCES 2017-18 DEPARTMENTAL RESULTS REPORT*, Ottawa, ON: 60.

<sup>188</sup>Canada, StatCan, *Canada's population estimates: Age and sex, July 1, 2019*, accessed on 9 December, 2019. <https://www150.statcan.gc.ca/n1/daily-quotidien/190930/dq190930a-eng.htm>

meetings and report directly to the Prime Minister of Canada and the President of the United States.<sup>189</sup>

Other key defence forums and agreements have been created to further solidify the defence relationship between the two countries. The Military Cooperation Committee (a sub committee of the PJBD), established in 1946, also convenes twice a year as a way to foster and maintain the strategic military link between Canada and the United States.<sup>190</sup> The North American Aerospace Defence Command (NORAD) became operational in 1957, with the formal agreement signed in 1958. The mission of the bi-national organization is to conduct aerospace warning, aerospace control, and since 2006 maritime warning in the defence of North America.<sup>191</sup>

New Zealand and Australia's defence relationship is not as interconnected as Canada and the United States. The two countries have, however, formalised their defence relationship through the Canberra Pact, ANZUS Treaty, and the more recent Australia - New Zealand Closer Defence Relations policy (CDR). The Canberra Pact was signed in 1944 and recognized Australia and New Zealand's agreement to collaborate on matters of mutual interest. The two countries, under this pact, work cooperatively on international relations, with a specific focus on the Pacific region.<sup>192</sup> As a result of the Canberra Pact the two countries come together for periodic meetings to discuss joint policy.

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<sup>189</sup>National Defence. *The Canada-U.S. Defence Relationship*. <http://www.forces.gc.ca/en/news/article.page?doc=the-canada-u-s-defence-relationship/hob7hd8s> (consulted 27 January 2020).

<sup>190</sup>Ibid.

<sup>191</sup>North American Aerospace Defence Command. *North American Aerospace Defence Command*. <https://www.norad.mil/About-NORAD/> (consulted on 27 January 2020).

<sup>192</sup>The Canberra Times. *Australia-N.Z. Implementing Canberra Pact*. <https://trove.nla.gov.au/newspaper/article/2603123> (consulted 11 May 2020).

The ANZUS treaty was signed by Australia, New Zealand, and the United States in 1951 and put into force on the 29th of April 1952. The signatory countries pledged to “act to meet the common danger”<sup>193</sup>, so an attack against one would be considered an attack against all. The treaty is no longer valid, after New Zealand’s government banned nuclear powered or nuclear-armed ships in the 1980s.<sup>194</sup> Although this treaty is no longer recognized, it does highlight a history of defence partnership between Australia and New Zealand.

More recently the two countries solidified their defence partnership through the Australia - New Zealand Closer Defence Relations. The agreement focuses on security within their region, combined operations, and regional stability. The two countries collaborate on regional capacity building and policy to address security concerns. To be prepared for security threats, the two work diligently on combined operation abilities via command, control, and communication agreements; capability design and selection decisions that take interoperability into account; logistical agreements to improve operational effectiveness for both countries, and interoperability opportunities for their defence members in the way of bilateral training, and exchange positions. The CDR also covers regional stability as both countries agree to support regional requests for assistance.<sup>195</sup>

Like Canada, New Zealand takes a three pillar approach to defence. Their primary concern is for the defence of their country which includes protecting the

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<sup>193</sup> New Zealand. NZ History. *ANZUS treaty comes into force 29 April 1952*. <https://nzhistory.govt.nz/anzus-comes-into-force> (consulted 11 May 2020).

<sup>194</sup> Ibid.

<sup>195</sup> New Zealand Government. *Australia - New Zealand Joint Statement on Closer Defence Relations*. <https://defence.govt.nz/assets/publication/ce26ee3f18/260226-Closer-Defence-Relations-CDR-Statement-9-March-2018.pdf> (consulted 11 May 2020).

communities and citizens of New Zealand, as well as defending national sovereignty. The second pillar is to be a strong partner in the defence of the Asia-Pacific region, specifically the area spanning from the South Pole to the Equator. Lastly, New Zealand contributes to the protection of a rules-based order internationally to improve global peace and security.<sup>196</sup>

Canada and New Zealand share other similarities as well. Both are responsible for the protection of extensive maritime areas/borders. Additionally, both countries seek to be able to conduct missions individually. However, given the size and capabilities, most operations will be conducted alongside allies and other international partners. For that reason it is paramount that both countries maintain the abilities and assets that will enable them to work effectively within alliances and with other international partners. According to New Zealand's *Strategic Defence Policy Statement 2018*, interoperability is the key to being a credible defence partner.<sup>197</sup> The report goes on to identify their closest neighbour and ally, Australia, and the remaining 5 Eyes partners (Canada, United Kingdom, and United States) as being key when considering defence capability acquisitions.<sup>198</sup>

Whilst most Western countries have experienced a relatively peaceful period, there are potential threats that require these countries, Canada and New Zealand included, to remain vigilant. New Zealand clearly outlines these threats within their *Strategic Defence Policy Statement 2018*. The clear and concise explanation of the possible threats

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<sup>196</sup> New Zealand, New Zealand Government, Ministry of Defence, *Strategic Defence Policy Statement 2018*. Wellington, New Zealand: 5-8.

<sup>197</sup> *Ibid.*, 7.

<sup>198</sup> *Ibid.*, 29.

leaves the reader with not only an appreciation for the necessity of the NZDF, and also for the specialisations it will require.

New Zealand is tracking a number of possible threats to global security. These threats include climate change, cyber, space, advanced military technologies, transnational organised crime, terrorism, nuclear proliferation, and migration. Again New Zealand is not the only country tracking these issues. These challenges fall within the second and third pillar of the New Zealand Defence Force, as they do for Canada.<sup>199</sup>

The threats acknowledged within the *Strategic Defence Policy Statement 2018* provide another commonality with Canada. Chapter 4 of *Strong, Secure, Engaged* outlines the same threats that Canada needs to be prepared to face. This similarity highlights the requirement of both countries to have personnel with the same skill set. Both countries need well-trained combat capable personnel, as well as members with highly specialised skills.<sup>200</sup>

For the NZDF to be able to successfully protect their citizens, sovereignty, geographical neighbourhood, and assist in maintaining a rules-based global order requires well-trained personnel. Given the current nature of the threats facing New Zealand, the Defence Statement highlighted the requirement to add additional intelligence personnel, as well as ensuring they have personnel with space expertise to assist in developing their national space policy.<sup>201</sup> The *Strategic Defence Policy Statement 2018* does not evaluate the current attrition or retention rates within the NZDF. Nonetheless, it does

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<sup>199</sup> Ibid., 18.

<sup>200</sup> Canada, Department of National Defence, *Strong, Secure, Engaged* (2017): 49-57.

<sup>201</sup> New Zealand, New Zealand Government, Ministry of Defence, *Strategic Defence Policy Statement 2018*. Wellington, New Zealand: 36 and 38.

acknowledge the competitive market, when it comes to finding individuals with space or cyber expertise.<sup>202</sup>

Canada and New Zealand also share similar governmental systems. Both are Commonwealth countries and are constitutional monarchies with a parliamentary system based upon the British model. Queen Elizabeth II is the head of government for both countries and is represented by a Governor-General. The working parliament in both countries consist of elected members, although New Zealand uses a Mixed Member Proportional voting system compared to Canada's First Past the Post system. The main difference this creates is that New Zealand is unlikely to have a majority government from one political party.<sup>203</sup>

There is one significant political difference between New Zealand and Canada. New Zealand has only two levels of government, central and local. New Zealand, unlike Canada, does not have provincial governments or an upper chamber (the Senate). The central, or federal government (House of Representatives) is responsible for housing, welfare, education, health, justice, immigration, police, energy, road and rail systems, defence, foreign policy, and public finances.<sup>204</sup> The local level of government, similar to the municipality level in Canada, is responsible for such services as water, garbage collection, local public transportation, and libraries. This government system is different compared to Canada and, as will be explained in detail later, beneficial to military families.

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<sup>202</sup> Ibid., 19.

<sup>203</sup> New Zealand Government, *How government works*. <https://www.govt.nz/browse/engaging-with-government/government-in-new-zealand/> (consulted 12 May 2020).

<sup>204</sup> New Zealand Government, *Central Government*. <https://www.newzealandnow.govt.nz/living-in-nz/history-government/central-government> (consulted 12 May 2020).

Canada and New Zealand share many similarities, especially when considering defence. For this reason New Zealand provides a useful case study for retention within the military. However, their differences cannot be overlooked. The difference in levels of government is significant when considering the impact of the military lifestyle on families.

### Retention in the NZDF

The New Zealand Controller and Auditor-General released a report, *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*, in September 2009 that considered military recruitment and managing attrition. The Auditor-General was keen to evaluate the Defence Sustainability Initiative, that was launched by the New Zealand Government in May of 2005. The initiative was designed to improve the military, including both personnel and equipment, as well as the corporate capability of the NZDF over ten years. An additional \$4.4 billion was earmarked for the project.<sup>205</sup>

The Auditor-General's report examined the NZDF's personnel levels based on the critical trades and ranks numbers, which were deemed essential for the success of military operations. An example given within the report was that a shortage of pilots (trade) would result in planes not being able to fly, thus compromising the Air Force's mission or operation. There are 31 critical ranks and trades within the NZDF and the report indicated that, as a result of increasing attrition rates, as a function of deployment rates and higher paying jobs outside of the NZDF, only 10 of the 31 critical trades and ranks saw improvement since the roll out of the new initiative.<sup>206</sup>

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<sup>205</sup> New Zealand. Controller and Auditor-General. *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*. Wellington, New Zealand: 5.

<sup>206</sup> *Ibid.*, 3 and 18.

The Defence Sustainability Initiative was actively trying to increase the number of personnel in all three services of the NZDF. The NZDF acknowledged that it is difficult to recruit trained individuals from the private sector and that in most cases the NZDF needs to provide training.<sup>207</sup> This requirement adds a time, staffing, and financial burden on to the Defence Force. With this investment, retaining their effective personnel, those fully trained and able to carry out missions, is critical.

The Army, Navy, and Air Force set yearly personnel goals for the Initiative's 10 years. The Auditor-General found that for the first three years the Army had exceeded its target. However, the Navy and Air Force fell short. The Army had set a target of 4733 members and as of June 2008 the target had been met and even surpassed. However, the 2009 data also included as a footnote within the report and showed that in that year the Army fell short of its goal by 52 members, which equalled roughly 99% of its goal. The NZDF sighted financial constraints as the reason for not reaching the target. When focusing on the Army's 17 critical trades and ranks<sup>208</sup> over the same time period, it saw an increase in two, no change in four, and a decrease in 11. These calculations were made by comparing the 2008 data against 2004 numbers.<sup>209</sup>

The Air Force had set a target of having a total of 2570 personnel. Again as of June 2008 it had reached 2504; 66 members short of their goal or 97% of the target. The numbers for 2009 were better as they were only 14 personnel short, which equalled roughly 99% of the goal. According to the Auditor-General's report the Air Force fell

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<sup>207</sup> Ibid., 17.

<sup>208</sup> The critical trades and ranks were not listed in the Auditor-General's report and when referencing the New Zealand Defence Force website there are 102 permanent trade options.

<sup>209</sup> New Zealand. Controller and Auditor-General. *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*. Wellington, New Zealand:17-18.



short of their goal in 2008 due to its 10% attrition rate<sup>210</sup>, and financial constraints prevented them from reaching their 2009 goal. The Air Force, between 2004 and 2008, saw an increase in one critical trade and a decrease in four.<sup>211</sup>

The Navy's goal for 2008 was 2103 personnel and 2195 in 2009. It fell short both years by 86 personnel in 2008 and 91 in 2009, but both still achieving 96% of the Navy's target. The 2008 goal was affected by the delay in receiving their new Protector Fleet<sup>212</sup>, which had a negative impact on their attrition rate. 2009's personnel numbers were also hindered by the high attrition rate of 17%<sup>213</sup>, as well as failing to meet predetermined recruiting targets. From a critical trade and rank perspective the Navy increased in three trades and decreased in six trades.<sup>214</sup>

The Auditor-General's report highlights that some attrition is needed to sustain an ideal balance of new and experienced personnel. Within business, an attrition rate of 10% is considered a good employee turnover rate.<sup>215</sup> Yet the caveat is that the 10% leaving should be, for the most case, the under performers. Within the military, a healthy attrition rate provides career progression possibilities for those who have the experience and leadership capabilities to handle new responsibilities. However, if members release at the wrong time or if too many release, this creates problems for the organization.

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<sup>210</sup> Ibid., 19.

<sup>211</sup> Ibid., 17-18.

<sup>212</sup> The A-G's report highlighted that the Protector Fleet included seven new patrol vessels that were supposed to arrive at intervals during the foundations phase. - New Zealand. Controller and Auditor-General. *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*. Wellington, New Zealand: 27.

<sup>213</sup> New Zealand. Controller and Auditor-General. *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*. Wellington, New Zealand: 19.

<sup>214</sup> Ibid., 17-18.

<sup>215</sup> *daily*pay. *What is the Average Employee Retention Rate by Industry?*

<https://www.daily.com/business-resources/employee-retention-rate/> (consulted 17 May 20).

The experience and leadership skills gained within the NZDF make their personnel attractive to the private sector, which tends to offer higher paying jobs. With this rationale the NZDF believed pay was a factor affecting attrition and worked to implement a remuneration strategy in June 2008, which was to be completed by June 2009. The pay increase ranged from 0.5 percent to roughly 15 percent, averaging between 10 to 12 percent. The 2009 data was promising with an overall drop in the attrition rate by three percent, but the worsening national economic situation may have also helped the positive result.<sup>216</sup>

The Auditor-General's report, *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*, examined the first three years of the initiative, 2005 to 2008, to see whether the attrition rates decreased as a result of the remuneration strategy that was implemented. The report found that the 2008 attrition rates within the Army decreased by four percent, but went up by one percent in the Air Force and by four percent in the Navy.<sup>217</sup> The 2009 data was included within a footnote and the attrition rate improvement, as noted above, may have simply reflected the poor economic environment at the time.<sup>218</sup>

The NZDF has continued to track its attrition rates. Figure 1 below illustrates the attrition rates from 2008 until 2015. The highest spike occurred in 2012 when the attrition rate reached 21.3%.

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<sup>216</sup> New Zealand. Controller and Auditor-General. *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*. Wellington, New Zealand: 19.

<sup>217</sup> Ibid., 19.

<sup>218</sup> Ibid., 19.

Figure 1  
NZDF Attrition Rates 2008 - 2015



Figure 1. figure.nz. *Attrition rate for the Regular Force of the New Zealand Defence Force*. <https://figure.nz/chart/Q3ylk8CCIMj4UwF6>

To garner a better understanding of what motivates individuals to stay or release from the military, the Air Force and Navy each commissioned a study on the subject in 2008. The Air Force’s study revealed that the top five reasons for leaving were career development and management, workload and work-life balance, leadership and command, pay and remuneration, and lastly housing and accommodation. The Navy’s top five reasons were workload, stress/ resilience, pay and remuneration, balancing home and family with Navy demands, career opportunities and management, and lastly housing and living environments.<sup>219</sup> The Army did not commission a similar study, but given that issues other than pay were highlighted within the Air Force and Navy’s studies, the Auditor-General recommended the Army would benefit from doing so.<sup>220</sup>

<sup>219</sup> Ibid., 20.

<sup>220</sup> Ibid., 20.

During this same time period, academics were studying retention in the New Zealand Military. In March 2007 John Capon, Oleksandr S. Chernyshenko, and Stephen Stark published their paper *Applicability of Civilian Retention Theory in the New Zealand Military*. The study explored the relationships between recognised determinants of retention within a civilian setting and the intention to remain in the NZDF. It looked at what motivated members to stay rather than the traditional focus of why the member chooses to leave.<sup>221</sup>

From the data collected as part of this study, the authors were able to create a “Personal Choice” military retention model. The key proximal predictors discovered in the study were community involvement, job involvement, organizational commitment, and work satisfaction. Their findings were similar to previous work on civilian retention but with one main exception; work family conflict did not appear to have an impact on job satisfaction as it did in the civilian sector. This may be the case because both the member of the NZDF and their family understand and accept that the job requires long hours and prolonged absences.<sup>222</sup>

Capon, Chernyshenko, and Stark’s paper provides valuable insight for a couple of reasons. The first is that academics would not likely focus on retention within the New Zealand military if there was not a retention problem. This adds support to the notion that retention is not only a problem in Canada. Second, the paper adds a useful perspective when it comes to personnel policy creation. Creating policy that aligns well

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<sup>221</sup> John Capon, Oleksandr S. Chernyshenko, and Stephen Stark, “Applicability of Civilian Retention Theory in the New Zealand Military,” *New Zealand Journal of Psychology* 36, no. 1. (March, 2007): 50-55.

<sup>222</sup> *Ibid.*, 55.

with the key proximal predictors should have a positive impact on retention levels of military personnel.

The NZDF's 2010 White Paper highlights policy initiatives that align with Capon, Chernyshenko, and Stark's work. Historically the NZDF provided most of its personnel with subsidised housing on a base. It was thought that this would help members with postings, while building a sense of community among military members. However, by 2008 these motivators were not as strong and it was believed to be beneficial to have the military personnel and their families live within the community they served. This aligned with the key proximal predictor of community involvement. The NZDF designed a new Universal Accommodation Allowance to help cover the difference between the subsidised military accommodation and the local housing market.<sup>223</sup>

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<sup>223</sup>New Zealand Government. Ministry of Defence. *Defence White Paper 2010*. Wellington, New Zealand: 69-70.

Figure 2  
The 2008 NZDF Remuneration System

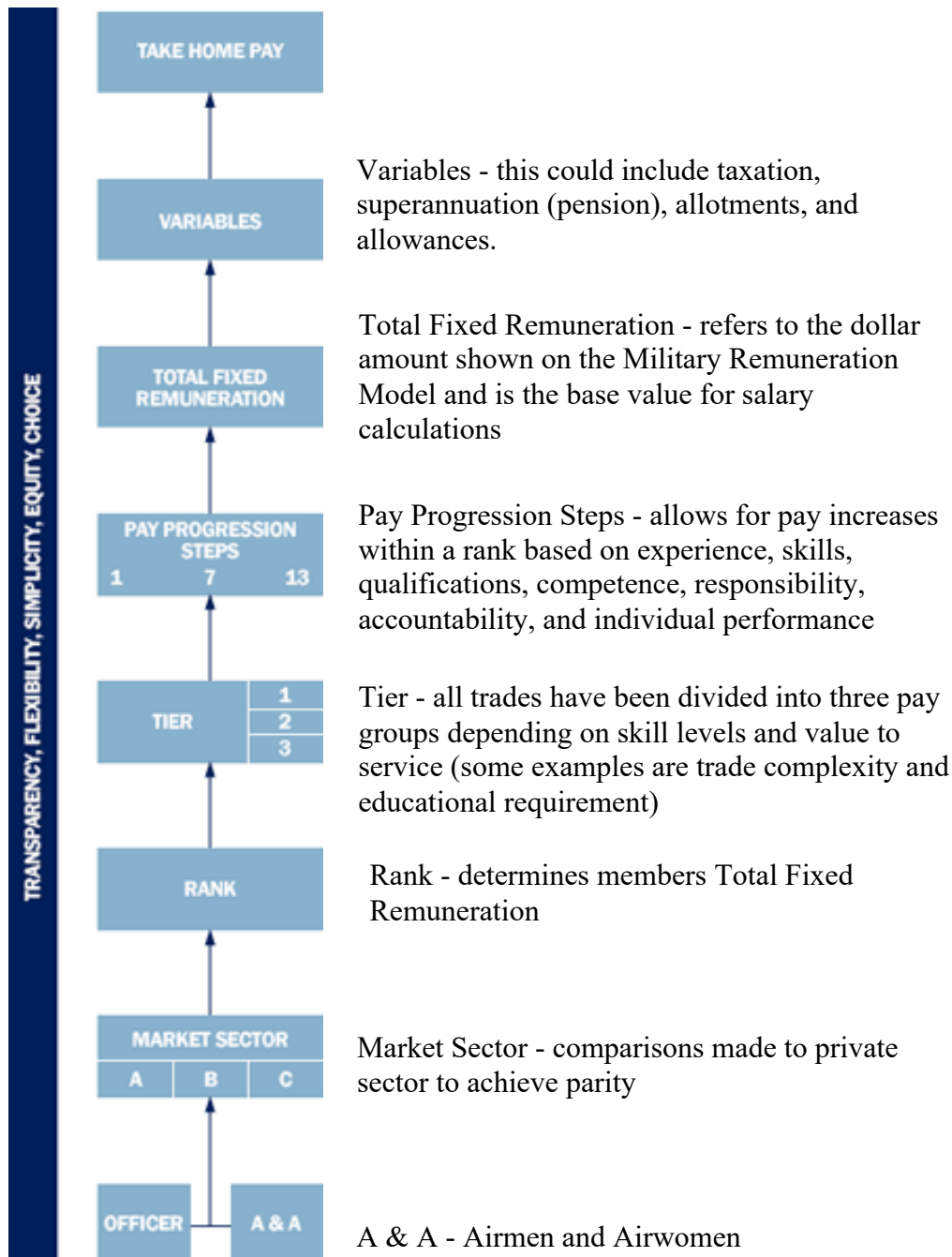


Figure 2. Illustrates the breakdown of the Military Remuneration System implemented in 2008. Image found in AFN91 April/May 08: 7. <http://www.airforce.mil.nz/downloads/pdf/airforce-news/afn91-remuneration.pdf>

The Military Remuneration strategy (Figure 2) was designed as a way to improve retention within the NZDF. The goal was to aid the NZDF with both recruiting, as well

as retaining the right people. The basic concept of the initiative was to better compare the NZDF’s remuneration against that of the wider employment market, as well as implement a regular review process to allow for the flexibility to respond quickly to

Figure 3  
NZDF Remuneration System

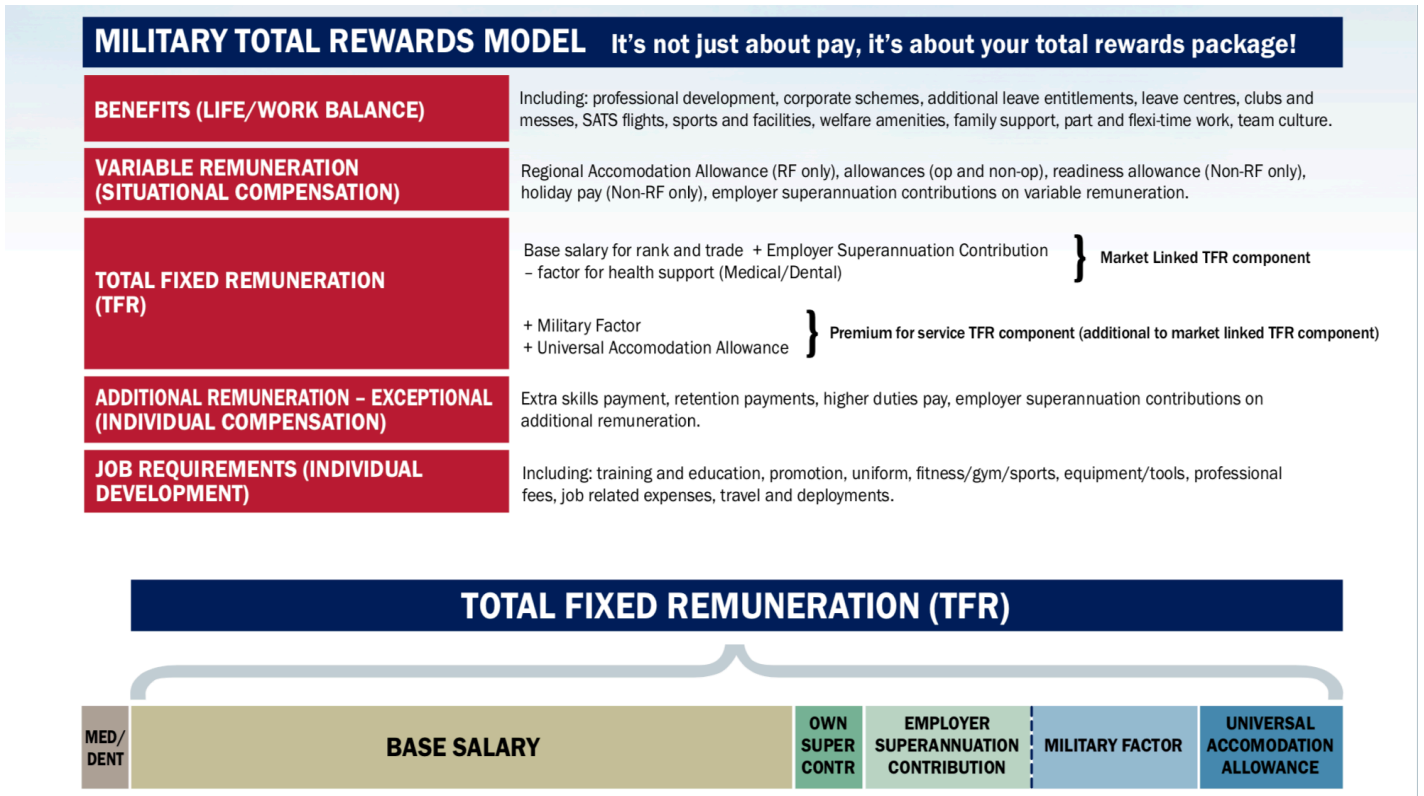


Figure 3. Image taken from:  
GPCAPT Grant Crosland, “Military Remuneration System”, *Air Force News* 91 April/May 08: 6.  
<http://www.airforce.mil.nz/downloads/pdf/airforce-news/afn91web.pdf>

possible retention issues created by market pressures.<sup>224</sup> To compare accurately the NZDF’s remuneration against the wider economy, the trades and branches were

<sup>224</sup>New Zealand, New Zealand Government, New Zealand Defence Force, *Report of the New Zealand Defence Force Te Ope Kaatua o Aotearoa for the year ended 30 June 2008*. Wellington, New Zealand: 27. <http://www.nzdf.mil.nz/downloads/pdf/public-docs/2008/nzdf-annual-report-2008.pdf>

organised into three salary categories, and compared against public and private indices, such as the All Organizations Index, the Private Sector index, and/or the Public Sector Index. The model was additionally broken down into officers and Non-Commissioned Members.<sup>225</sup>

New Zealand released their most recent Defence White Paper in June 2016. Two chapters within this document discuss personnel issues and provide current information on retention within the NZDF. Chapter Six focused specially on building and sustaining a skilled workforce capable of meeting the expectations of the New Zealand Government. Such topics as recruiting, training, and personnel support were covered in this chapter. Chapter Eight looked at organizational change, focusing on the efficient running of the organization, the partnership between the department and the ministry, as well as building industrial partners.<sup>226</sup>

New Zealand's 2016 White Paper shared similarities with Canada's 2017 *Strong, Secure, Engaged*. Both countries stressed the importance of building and maintaining a well-trained force ready to face any operation mandated by their respective governments. Equally both countries are taking steps toward generating a force that represents its population. This includes increasing the number of women, as well as personnel from a variety of ethnic backgrounds, especially indigenous peoples. However, New Zealand did not set definitive targets, by way of percentages, for how many women and visible minorities they needed to deem their effort a success.<sup>227</sup>

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<sup>225</sup> GPCAPT Grant Crosland, "Military Remuneration System", *Air Force News* 91 April/May 08. Accessed 15 January, 2020. <http://www.airforce.mil.nz/downloads/pdf/airforce-news/afn91-remuneration.pdf>

<sup>226</sup>New Zealand. New Zealand Government. Ministry of Defence. *The Defence White Paper 2016*. Wellington, New Zealand: 55-59 and 65-69.

<sup>227</sup> *Ibid.*, 55-56.



Chapter Six of the policy white paper touched on other personnel initiatives, or programs, that are similar to ideas being worked in Canada. New Zealand focused on its advertising campaign recently as a way of attracting potential new members, as well as working to improve support for personnel in the training phase of their career. These same initiatives were outlined in Canada's Operation GENERATION. The NZDF has also taken steps to reduce harassment and bullying within its ranks, as the CAF has with Operation HONOUR. Also, both countries are providing both physical and mental health services to its personnel as required.<sup>228</sup>

Chapter Six of New Zealand's Defence White Paper also references its concerns regarding retention, as well as affordability pressures. The need for new retention initiatives geared toward personnel reaching seven to ten years of service was highlighted. It is at this point when members have reached the return on investment required by the NZDF for their trades or occupation training and are entering a period where the risk of attrition is high. The White Paper attributes the heightened attrition rate during this time in a member's career to their personal life. Most people start their families at this point, which places significant importance on remuneration.<sup>229</sup>

NZDF attrition rates have decreased since peaking in 2012, but the retention initiatives implemented as part of the Defence Sustainability Initiative have come at a high financial cost for the New Zealand Government. Continuing work is needed within the Defence Force with respect to balancing its personnel policies with budgetary confines. Specifically, the NZDF needs to refine its ability to remain flexible enough to recruit and retain an adequately sized workforce, that offers the right skills and

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<sup>228</sup> Ibid., 56-58.

<sup>229</sup> Ibid., 58.

experience to accomplish the tasks set by the New Zealand Government, in response to the ever evolving strategic environment, all while staying within the confines of the budget. The White Paper outlines the next steps as confirming the size and shape of the required workforce, confirming the workforce structure and force generation model, reviewing the personnel accommodation assistance policy, and confirming the long-term remuneration system.<sup>230</sup>

Chapter Eight, Organizational Change, considered ways in which the organization can work more efficiently. One such initiative was force integration, which the NZDF hopes to fully realise by 2035. The Defence Force has successfully operated as a Joint Task Force, so progress has already begun to realise this goal. The integration approach will allow the Defence Force to pool all its capabilities from the individual Services (Army, Navy, and Air Force) to achieve mission success within an operational environment. This ability will assist with the Force's desire to be flexible, while maintaining a smaller force, as duplications of skills within the three services would be eliminated.<sup>231</sup>

Overall changes to the management system have also been implemented. A Chief Operating Officer was appointed to provide civilian support to the management of the NZDF. This position is being credited with instigating reforms, as part of the Savings and Redistribution Programme, that created savings that could be re-directed towards front-line capabilities. Additionally, three new leadership positions were created to focus on the Defence Force's priorities. The Chief of Defence Strategy and Governance is responsible for strategy development, governance, as well as performance monitoring and

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<sup>230</sup> Ibid., 58-59.

<sup>231</sup> Ibid., 65.

improvement. The Chief Joint Defence Services is responsible for the integrated Defence Force functions, which include, but are not limited to logistics, communications and information technology, health, security, and integrating support from both national and global commercial partners. The Chief People Officer is responsible for the strategic approach to recruiting, retaining, and developing both the Defence Force's military and civilian personnel.<sup>232</sup>

Chapter Eight focused on the NZDF's procurement process and the importance of continuing to improve this process. Over the next ten years the Force has significant capabilities that will require replacement. These include the Hercules transport aircraft, the Orion surveillance aircraft, as well as two navy frigates.<sup>233</sup> There are two motivations to do this successfully. The first is the financial impact of procurement failures, and the second is its potential impact on retention, as was experienced by the New Zealand Navy in 2008 with the delay in receiving their new Protector Fleet. As the Auditor-General highlighted in the 2009 report: "Delays in receiving the new Protector Fleet, and resulting attrition, affected the Navy's performance."<sup>234</sup>

The Defence structure within New Zealand differs from Canada's "diarchy"<sup>235</sup>, in that the NZDF and the Ministry are two separate entities. This separation is to allow for the clear division of accountabilities for each of the two chief executives, Secretary of Defence and Chief of Defence, while fostering collaborative activity where and when it

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<sup>232</sup> Ibid., 65-66.

<sup>233</sup> Ibid., 68.

<sup>234</sup> New Zealand. Controller and Auditor-General. *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*. Wellington, New Zealand: 17.

<sup>235</sup> New Zealand. New Zealand Government. Ministry of Defence. *Defence White Paper 2010*. Wellington, New Zealand: 87. [http://www.nzdf.mil.nz/downloads/pdf/public-docs/2010/defence\\_white\\_paper\\_2010.pdf](http://www.nzdf.mil.nz/downloads/pdf/public-docs/2010/defence_white_paper_2010.pdf)

matters. The Ministry is responsible for policy, capability development, and acquisitions. The NZDF is responsible for introduction of capabilities, in-service support, and equipment disposal. The NZDF is also responsible for the recruitment and retention of its personnel under the guidance of the Chief People Officer, who is accountable to the Chief of Defence Force.<sup>236</sup> However, the Ministry has the authority to adjust the division of responsibility if it is required.<sup>237</sup>

Within the lifecycle of a capability, each phase is assigned a project director or manager. Given the push to integrate the three services, joint staffs may need to be created to monitor the capability. Additionally, a ‘capability sponsor’ will be named for all major acquisitions. In most cases this will be one of the Service Chiefs or equivalent. The capability sponsor is responsible to the chief executive and will ensure the requirements of each phase are realised, this includes having the required number of personnel.<sup>238</sup>

The New Zealand Air Force recently had a procurement success with its pilot training capability. For the first time the Capability Management Board, a board co-chaired by the Secretary of Defence and the Chief of Defence consisting of Capability Steering Groups and civilian experts, approved both the capability acquisition as well as support contracts at the same time. This involved international and local industries to cover the aircraft, simulators, and through-life support. The project was completed ahead

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<sup>236</sup>New Zealand. New Zealand Government. Ministry of Defence. *The Defence White Paper 2016*. Wellington, New Zealand: 66.

<sup>237</sup><sup>237</sup>New Zealand. New Zealand Government. Ministry of Defence. *Defence White Paper 2010*. Wellington, New Zealand: 87-88. [http://www.nzdf.mil.nz/downloads/pdf/public-docs/2010/defence\\_white\\_paper\\_2010.pdf](http://www.nzdf.mil.nz/downloads/pdf/public-docs/2010/defence_white_paper_2010.pdf)

<sup>238</sup>*Ibid.*, 87-88.

of schedule and within the approved budget. Although the NZDF sees this as a success, it will continue to refine its procurement capability.<sup>239</sup>

## Military Families

When comparing the Canadian Armed Forces and the New Zealand Defence Force there are many similarities. However, when considering the issue of retention the scope needs to broaden to consider families. One of the main reasons for leaving, consistently raised by CAF members is the impact of the lifestyle on their families. Such issues as children's education, availability of health care, and spousal employment are highlighted.

In this vein, there is one main difference between New Zealand and Canada that has a significant impact on military families. Besides the size of the country, the New Zealand Education system uses a national curriculum, compared to Canada where education is provincial. For NZDF families who move within the country, their children receive a consistent education. They do not need to worry about the impact their move will have on their child's ability to graduate. Additionally, the New Zealand Education system offers an option for NZDF families posted outside of the country. If a child is unable to attend school, for any number of reasons, the Education system offers a correspondence program.<sup>240</sup>

The health care system in New Zealand differs somewhat to the system in Canada. Residents of New Zealand have access to the public health system, which covers the cost of some medical services and heavily subsidises the remaining services.

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<sup>239</sup> New Zealand. New Zealand Government. Ministry of Defence. *The Defence White Paper 2016*. Wellington, New Zealand: 68.

<sup>240</sup> *Education in New Zealand*. Access 21 January, 2021. <https://www.education.govt.nz/our-work/our-role-and-our-people/education-in-nz/State>

However, New Zealand residents do have the option to use private healthcare if they so choose. According to information provided by the New Zealand government, access to doctors is relatively easy, except possibly for those living in small towns or very remote areas. For NZDF families, who have to move regularly, the access to healthcare may be obtainable but the continuity of care would be an issue.<sup>241</sup>



Figure 3  
NZDF Locations

New Zealand Defence Force. *Forces and Locations*. <http://www.nzdf.mil.nz/about-us/forces-and-locations.htm> (consulted 22 May 2020)

Wellington - NZDF HQ  
Trentham - NZDF Command and Staff College  
Joint Forces New Zealand

Royal New Zealand Navy - Devonport Naval Base,  
Auckland

New Zealand Army - Waiouru, Trentham,  
Burnham, Linton, and Papakura

Royal New Zealand Air Force - Auckland, Ohakea,

Spousal employment is an issue raised in Canada. Within Canada many professions require the individual to register with the responsible provincial body. For example, a dental hygienist in Canada is required to be registered with the provincial Dental Hygienist College to legally be able to work. Each time the individual moves to a different province, they have to apply to the new College, which typically has differing policies with respect to qualification, required hours, and professional development. The process can be time consuming, expensive, and frustrating.<sup>242</sup>

<sup>241</sup> New Zealand NOW, *Healthcare*, accessed 22 January, 2020.  
<https://www.newzealandnow.govt.nz/living-in-nz/healthcare>

<sup>242</sup> As a former Dental Hygienist and military spouse I have first hand knowledge of this process.

Many of these same professions within New Zealand, however, are regulated nationally. For example, dental hygienists are regulated by the Dental Council of New Zealand, such that they are qualified to work anywhere in the country.<sup>243</sup> A military move would result in a disruption, but not the added stress of proving their credentials and learning a new system and policies.

There is no denying that frequent moves are a disruption. Having to settle into a new community, find a new doctor and dentist, a new job, and new schools is a stressful process. However, having many services, like education and professional regulatory bodies, managed at the national level in the New Zealand case reduces the strain of moving.

## Conclusion

The NZDF has historically suffered from relatively high attrition rates, which most recently peaked in 2012. This was highlighted in the Controller and Auditor-General's report, *New Zealand Defence Force: Progress with the Defence Sustainability Initiative*, and eluded to in the academic work, *Applicability of Civilian Retention Theory in the New Zealand Military*. The recent 2016 White Paper and 2018 Annual Review both indicate attrition rates are within a healthy range. However, the NZDF's leadership are continuing to place high importance on managing the issue with the hopes of maintaining the current trend.

From the available documents, it appears the NZDF focused on two main areas. The first was creating a fair compensation package for their personnel and the second was

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<sup>243</sup> Dental Council, *Dental hygienists*, accessed 22 January, 2020. <https://www.dcnz.org.nz/i-practise-in-new-zealand/dental-hygienists/>

working to improve its procurement process. These efforts appear to have helped the NZDF reach a healthy attrition rate and may provide a useful example to the CAF. However, when considering the issues facing military families in New Zealand, they seem less complicated than those in Canada. For that reason these initiatives may not have to same level of success in Canada.



## Chapter IV – The ‘Wicked’ Problem of Retention

Rittel and Weber’s monumental work from the 1970s still remains relevant in today’s society. The theory’s versatility is the main reason for its continuing success. Issues ranging from poverty, city planning, to climate change can utilize Rittel and Webber’s theory. The Canadian Armed Forces’ (CAF) retention problem is yet another example of a wicked problem.

This chapter outlines how the CAF’ retention problem meets the criteria to be classified as a Wicked Problem. To do this, its ten characteristics are applied to the CAF retention problem, and to a lesser degree the New Zealand Defence Force (NZDF). The analysis concludes with some basic recommendations and the identification of future research requirements.

### CAF Retention as a Wicked Problem

Rittel and Webber identified ten characteristics as a way of diagnosing a problem as wicked. The first characteristic is no definitive formulation. The problem cannot be fully described or all possible solutions known, and planners need to be cognisant that applied solutions will generate other problems, and attempts to resolve them will coevolve.<sup>244</sup> The retention of military personnel provides a clear example of the lack of definitive formulation.

*Strong, Secure, Engaged*, the 2017 CAF policy, lays out the required number of military personnel. Additionally, the policy sets the acceptable quota for visible

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<sup>244</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):161.

minorities, indigenous peoples, and female members.<sup>245</sup> To reach these goals and to maintain them depends upon a successful recruitment and retention strategy. However, to be successful, all possible problems faced by members or potential members, and their corresponding solutions need to be realized and implemented simultaneously.

Given the vast demographic spread within the CAF organization and the wider military family community, it would be difficult for one policy to work for all. The CAF consists of individuals ranging in age from 18 to 60+, in a variety of differing trades, and in the regular force or the reserves. Some members are married with families, or are empty-nesters as their families have grown, while others are single. Additionally, CAF members come from all over Canada, not to mention the world (newly recognized citizens to Canada joining the CAF), which brings differing perspectives and expectations.

Military families provide an example of the complications that arise when creating a CAF retention policy. If the CAF places focus on military families, as a contributing factor to a member leaving the military early, this attention may have an impact on both members with and without families. The impact would differ for each group, as well as for each individual within the two groups. Families have varying needs, from frequent moves impacting spousal employment and finding family doctors, to families choosing to live apart on Imposed Restriction (IR) to offer their family stability, to those who need to care for elderly parents, to failed marriages with children living great distances from one of their parents, just to name a few.

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<sup>245</sup> Canada. Department of National Defence. "Strong, Secure, Engaged," (Ottawa: Minister of National Defence, 2017): 12-13.

If the CAF can successfully implement policies that improve the quality of life for military families, what becomes of the members who are single, or whose families have left the nest? For these members the retention issue will not be solved. Instead the problem will be different and predicting the new issues would be difficult. Drawing back to the first characteristic, for the CAF to successfully solve its retention problem all issues from every group would need to be identified, along with all the possible solutions. Given the complexity of this group this is deeply problematic.

The second characteristic of a wicked problem is that there is no stopping point, as in there is no finite end to the problem.<sup>246</sup> Given this rationale, as long as Canada has a military, retention will be an issue. Some policies may improve the situation but the concern of having enough members to meet successfully the CAF's mandate will always be a problem, or in the best-case scenario, an issue that needs close management.

The reason for the CAF's existence further complicates the issue and contributes to the continuing presence of the problem. The security environment is full of unknowns so at best the CAF personnel requirement is an educated guess that could be called into question at any time. The attacks against the United States on 9/11 are a good example of this uncertainty. War, or a domestic emergency, such as a natural disaster, can happen at any time and could happen simultaneously, which require the CAF to have enough trained personnel to respond to a number of missions with minimal notice. The CAF need to recruit and retain members to reach the target identified in *Strong, Secure, Engaged* with the knowledge that that target may change at any time. The difficulty predicting the number of personnel required, recruiting the correct number, and retaining

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<sup>246</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):162.

members will consistently be an issue the CAF will need to manage as long as it is an organization.

The third characteristic of a wicked problem is that solutions can only be good-or-bad, not true-or-false. Proposed solutions, if good, can only improve the situation and help manage the problem, whereas bad solutions will make matters worse.<sup>247</sup> Military families can provide a useful example here. The introduction of the Military Family Resource Centre (MFRC) was a good initiative that made a positive impact.<sup>248</sup> Yet, a member's concern for his/her family is still high on the list of reasons why a member leaves the military early.

The inability to properly define the problem results in the inability to have a right or wrong solution. Keeping with military families as an example, if they were the only reason for members to release from the military prematurely, it would still be a problem that was hard to define. Each family has its own goals and challenges within the military environment, such as frequent moves, living away from extended family, the impact on spousal employment, inconsistent education for their children, and the difficulty of finding doctors and specialists. Equally there are different motivating factors among military members and their families to remain within the CAF. Thus one policy or one solution is inadequate and cannot be considered right or wrong. However, a good policy or solution could no doubt improve the situation, but it would not solve the problem for all families, and therefore ultimately setting the problem on a different course.

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<sup>247</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):162.

<sup>248</sup> MFRCs opened in the early 1990s, for example the Winnipeg MFRC opened in 1991. As a military spouse I have used their services and can appreciate their value. Additionally, I have had discussions with other military spouses as well as serving members.

The fourth characteristic is that there are no testing options available. Solutions to a wicked problem, once implemented, have the potential to cause many reactions and these reactions may be instant, or take many years to appear. To be able to test a solution all reactions need to be studied and in the case of a wicked problem it is impossible to know when a solution will stop having an impact.<sup>249</sup> The Canadian Government's Force Reduction Program (FRP), implemented in 1992, illustrates the unexpected repercussions and its lasting effect on policy solutions. The FRP was able to reduce the number of CAF personnel in response to the end of the Cold War, ahead of the original target.<sup>250</sup>

The effects of this program, however, are still apparent twenty-five years later. The program essentially eliminated an entire generation of members and these members, had they remained, would be filling the current command and leadership positions. Their absence is making it difficult to fill these roles with well-rounded experienced members, as well as placing a strain on those who remained, as evident in the struggle to create a work/life balance.<sup>251</sup>

Over the twenty-five years since the policy's release it is impossible to differentiate the impact of that one policy when many other factors may have impacted the situation. Also, even after the last member, who served during that period of time, retires it cannot be assumed the impact will cease. For example, the policy may have changed the culture of the organization resulting in a lasting effect. The FRP is just a single example of why a policy cannot be tested, as it is impossible to know when the

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<sup>249</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973): 163.

<sup>250</sup> Canada, National Defence, Director General Audit, "Audit of Force Reduction Program" (January, 1997): 1.

<sup>251</sup> Nicholas Bremner, Ph.D. and Glen Budgell, Ph.D., *The 2016 CAF Retention Survey: Descriptive Analysis* (Ottawa: Human Resource Systems Group, Ltd, 2017), 3.

solution, or follow on issues have ceased. Each retention related, or any policy within the CAF, for that matter, will have the same unidentifiable end point and are *a priori* untestable.

The fifth characteristic of a wicked problem is that there is no ability to learn by trial and error. Once an option, or solution has been implemented, there will be an impact that ultimately changes the problem. A solution cannot be reached via a trial and error approach as each new approach is dealing with a new version of the problem. This requires a new definition of the problem, the identification of the stakeholders involved, all possible solutions, and all possible consequences.<sup>252</sup> In the case of retaining members in the CAF, the members and their families' lives will be affected and likely the policies will require large sums of government money to implement.

The government and the organization cannot implement new policy with a trial and error approach. A policy cannot be adapted if it is not successful for it will have had an impact on the members of the CAF, their families, the government of the day and their chance of re-election, as well as the Canadian population as a whole. Any policy implemented to retain CAF personnel will have a lasting effect throughout the members' military careers. This is true for both good and bad policy. There is no chance for a do-over. However, studying how others have approached similar wicked problems, the NZDF case study in this scenario, can provide the planner with the closest thing to trial-and-error.

The sixth characteristic of a wicked problem is that there is no way of knowing if all possible solutions have been identified. Given the cause-effect nature of wicked

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<sup>252</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):163.

problems the planner needs to be able to identify all possible solutions to the original problem, as well as to all the follow on consequences that result from the chosen solution.<sup>253</sup> Public servants and military members tasked with creating a retention policy have many issues to consider and the corresponding solutions that could be implemented.

The CAF, when dealing with retention, have to be able to identify all the problems its members are experiencing, identify all the solutions to these problems, and equally recognize the consequences of each proposed solution. To do this, each issue, be it pay related, work/life balance initiatives, or policies to aid military families with geographic relocations will need to be examined from the mindset of every stakeholder involved. With the large number of independent actors involved, the likelihood that possible solutions and/or consequences will be missed increases. Also, to further complicate matters many possible solutions are outside the CAF's jurisdiction, such as creating a federal education system to aid military children with geographic instability.

The seventh characteristic is that every wicked problem is essentially unique. Two problems may appear to be the same, but this cannot be assumed.<sup>254</sup> Military families and the New Zealand case study illustrate this point. When designing policies aiming to support military families, one must be hesitant to lump them into one category even though their issues appear the same. Issues facing Army, Air Force, and Navy families may differ enough that each requires their own solution. The work locations for the three services (rural vs. urban) (Figure 5), the operation tempo (exercises, long deployments, and/or frequent but short deployments), and service culture differ

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<sup>253</sup> Ibid., 164.

<sup>254</sup> Ibid., 164-165.

significantly, not to ignore the intra-service dimension as well. Even at this level, the planner cannot assume all Army, or Air, or Navy families, or their issues are the same.

Figure 5

Military Housing Locations

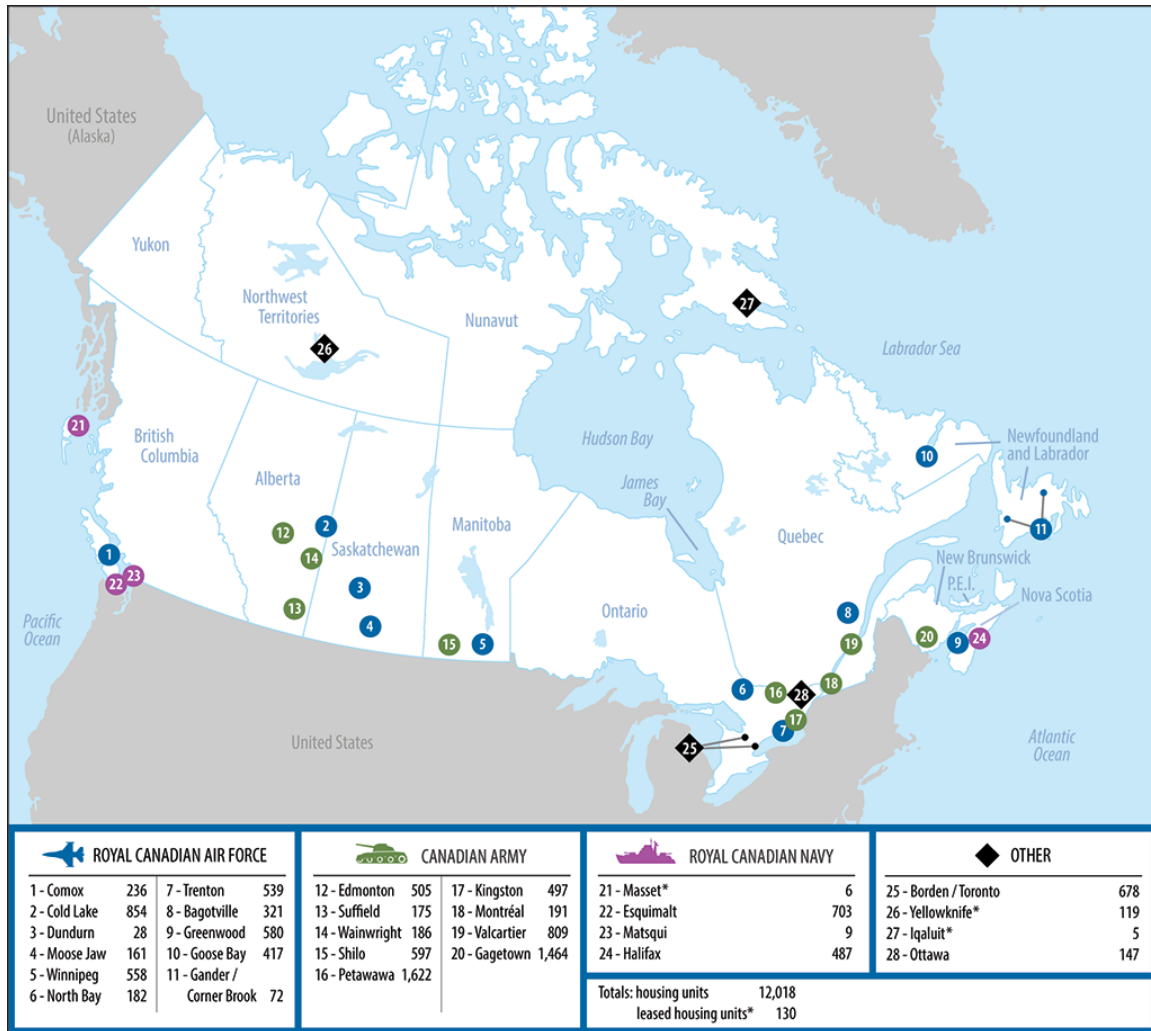


Figure 5. Illustrates the many locations within Canada where military families could reside and is broken down by the three Services. Image from the 2015 Fall Reports of the Auditor General of Canada, Report 5 – Canada Armed Forces Housing<sup>255</sup>

<sup>255</sup> Canada, Auditor General Of Canada, *Canadian Armed Forces Housing* (Fall, 2015) [https://www1.og-bvg.gc.ca/internet/English/parl\\_oag\\_201602\\_05\\_e\\_41062.html#ex2](https://www1.og-bvg.gc.ca/internet/English/parl_oag_201602_05_e_41062.html#ex2)



Completing case studies on other militaries would provide useful insight into military retention problems. Even so, these problems cannot be interpreted as the same. The case study on New Zealand illustrated its military approach to retention and identified the steps taken to manage the problem, but these cannot be expected to have the same impact in Canada, as the two problems will be different. The case study showed the different issues faced by military families in New Zealand compared to those in Canada and the increased complexity this creates for the CAF. Retention, as a problem, will be the same, but the underlying causes will be different.

The eighth characteristic of a wicked problem is that every wicked problem can be symptoms of another problem. Problems, as they present themselves, are just one piece of a larger puzzle.<sup>256</sup> CAF personnel may be leaving the military early due to concerns about their families' welfare. If one identifies the cause to be the concern related to spousal employment, this concern may highlight the greater issue of gender equality, which moves into a vast realm outside of the CAF's jurisdiction; an issue that the CAF has no hope of solving.

Retention within the CAF can also be a symptom of many possible higher level problems, all of which are outside the CAF's control. Some possibilities may include generational approaches to occupations, and the trend of having many different occupations throughout ones working life. Another possibility is the shift from rural living to urban. Many CAF bases or Wings are located in rural locations, which members may find negatively impact their quality of life. Each of these possible higher level problems are unsolvable, and the best the CAF can hope for is to manage them

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<sup>256</sup> Ibid., 165.

adequately enough to have the personnel required to carry out all operational and training missions assigned by the Government of Canada.

The ninth characteristic of a wicked problem is that the explanation of the problem directly impacts the nature of the problem's resolution. The original definition of the problem will ultimately influence how the planner approaches the solution.<sup>257</sup> Defining military retention as a morale issue, or generational issue, or a financial issue will greatly influence which policy changes are considered. All may be relevant, but which one will have the positive effect is another question. Moreover, the military planners working this problem will approach from their individual perspective, based on their career and life experience.<sup>258</sup> The quick turnaround within military leadership positions, which average two years, further complicates the issue as it takes time to create and implement policy. Equally as new members are relocated into planning positions, they may define the problem differently. This may result in no policy changes being implemented, or severe delays leaving the CAF members with the assumption nothing is being done.

The final characteristic of a wicked problem is that the planner has no right to be wrong. Planners will be held responsible for the consequences which resulted from their implemented solutions.<sup>259</sup> The CAF functions as a hierarchical system, which exacerbates the problem. If a policy were to have a negative effect on retention, those involved would be held to account. This result would have career implications if military

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<sup>257</sup> Ibid., 166.

<sup>258</sup> Both military members and civilian DND (Department of National Defence) employees help create policy that goes through both military and government channels for approval. Civilian employees, although not posted like their military counterparts, can change jobs as a way of career advancement.

<sup>259</sup> Horst W.J. Rittel and Melvin M. Webber, "Dilemmas in a General Theory of Planning," *Policy Sciences* 4 No. 2 (1973):167.

personnel are deemed responsible, or the shuffling of the Minister of National Defence, if it is deemed a political mistake. This personal threat may deter some from making changes, which again will lead to the assumption and/or realization the organization is not doing anything, which, in turn, can also affect retention.

The retention problem facing the CAF clearly fits the ten characteristics outlined by Rittel and Webber. Thus the CAF's retention problem can be diagnosed as a wicked problem. This knowledge allows the CAF to realize the problem is not solvable and instead aim to manage it to the best of its abilities. This approach will be difficult as the organization is known for its problem solving mentality. Equally many of the issues pertaining to, or rather the higher level problems, are outside of the CAF's scope of expertise, so the CAF can only acknowledge the issues and aspire to create the best policies possible for as many of its members as it can.

## Conclusions

Recent work on wicked problems raise further complications associated with these problems. An example would be Van Bueren et. al. highlighting the issues linked to cognitive, strategic, and organizational uncertainty in relation to tackling wicked problems. In situations when there are interdependent actors, as is the case with the retention problem in the CAF, there becomes a collective action problem.<sup>260</sup> In this case, a network-based cooperative approach is required, which in turn adds additional pressure on the stakeholders and their interactions.

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<sup>260</sup>Ellen M. Van Bueren, Erik-Hans Klijn, and Joop F. M. Koppenjan, "Dealing with Wicked Problems in Networks: Analyzing an Environmental Debate from a Network Perspective," *Journal of Public Administration Research and Theory* 13, no.2 (2003): Accessed February 20, 2020. <https://www.jstor.org/stable/3525710>

There are a number of stakeholders involved, or who should be involved, when considering retention within the CAF. These include the CAF, CAF members, DND, a number of governmental departments, such as the Treasury Board, and Public Services and Procurement Canada, provincial governments, and military families. To be successful each of these actors would need to be present at the planning table, would need to clearly understand each other's goals, and would need to understand the organizational limitations of the CAF.

Given the number of actors involved in the CAF's retention problem it cannot be expected that the organization's senior leadership and policy professionals could approach this problem without significant consultation. Working groups that include representation from the above mentioned actors, as well as guidance from other outside organizations that are also dealing with the same issues, such as other government departments like the Royal Canadian Mounted Police or Allied militaries, would be a useful resource for the planners.

Adding complicating factors, and finite expectations to the problem increases the pressure on the planners as they attempt to manage the issue. The current push to increase the number of visible minorities, Indigenous peoples, and women within the CAF is creating a heterogeneous military society, which will generate new complications for retention. This is on top of the differences that already exist between Army, Navy, and Air Force, the different ranks (officers and Non-Commissioned Members), differing age demographics, and the differing beliefs/values that arise from the different provinces across Canada. Military families also have a variety of sub-groups as well that need to be considered. These will all have implications when it comes to addressing retention

policies, ultimately complicating matters further if policies are going to try to appease each of these differing groups.

Referring back to van Buerer et al., to plan effectively each group would need to be represented, its goals understood, all while working within the constraints of the organization. This would have many voices at the planning table and as Rittel and Webber explain, there is no social theory that would dictate whose voice is more valuable. In the case of the CAF, the Government of Canada has the ultimate authority, but as van Bueren et al. highlight, unilateral action, in this case taken by the government, is rarely successful. However, even if the collective can agree and the Government of Canada responds effectively, given the nature of social policy problems, the best-case scenario is that the issue is effectively managed.

*Strong, Secure, Engaged* does not limit the personnel goal to only number of members, but also adds targets for women and visible minorities representation within the CAF. This expectation only adds to the complexity of the retention problem, as willing individuals may be turned away if they are not female, indigenous, or a visible minority. Additionally, it may create an unfair environment if the standards are different depending on race and gender.<sup>261</sup> The CAF should be an organization open to visible minorities, Indigenous peoples, and women. However, until retention is successfully managed adding finite expectations may be more detrimental than positive. Having policies in place and communication strategies that clearly welcome all is how the New

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<sup>261</sup> Christie Blatchford, "The Canadian Forces jobs where only women need apply," *National Post*, accessed 19 April, 2019, [https://nationalpost.com/news/canada/the-canadian-forces-jobs-where-only-women-need-apply?utm\\_medium=Social&utm\\_source=Facebook&fbclid=IwAR0kSFW7BUDEFjRcHWz6ldeI6ckPL0euC1RgEkj3HL6-uu8ifSB1IFKc7Wp4#Echobox=1555682676](https://nationalpost.com/news/canada/the-canadian-forces-jobs-where-only-women-need-apply?utm_medium=Social&utm_source=Facebook&fbclid=IwAR0kSFW7BUDEFjRcHWz6ldeI6ckPL0euC1RgEkj3HL6-uu8ifSB1IFKc7Wp4#Echobox=1555682676)

Zealand Defence Force is tackling its goal of diversifying, yet no percentage requirements are set.

Planners may also need to consider that visible minorities, Indigenous Canadians, and/or women may not be attracted to the CAF as an occupation of choice. Although the CAF falls within the Government of Canada framework there are significant differences that cannot be ignored. Serving members of the CAF are the only Government of Canada's employees that can be knowingly placed in harm's way. As stated in the *National Defence Act*, the Governor in Council can place any active military personnel on active service anywhere in or outside of Canada when it is required. This deployment may be required in the response to an emergency, the protection of Canada, supporting the United Nations Charter, NATO, and/or the North American Aerospace Defence Command Agreement. Whatever the reason, whenever a military member is on active service they are agreeing to serve their country with unlimited liability if required.<sup>262</sup> Given this potentially dangerous work environment, it cannot be expected that all individuals, cultures, and/or genders would be attracted to this career equally.

The 2016 Survey of CAF members highlighted the members' perceptions at that point in time. One area examined was perceived fairness, work-life balance, organizational cynicism, and burnout. This part of the survey revealed that moderate levels of both burnout and cynicism were being felt by members. Additionally, members were struggling with work-life balance, and perceptions of distributive fairness (the distribution of outcomes, which include promotions, postings, and awards,) and

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<sup>262</sup> Canada, *National Defence Act*, Revised Statutes of Canada (1985, c. N-5): 27-28.

procedural fairness (the processes in place to determine the above opportunities).<sup>263</sup> The key word here is perception. The CAF, armed with this report, needs to look at the procedures used and verify their fairness, correct any areas where fairness is lacking, and then create a communication strategy for all levels of the force to ensure members are aware of the distributive procedures.

Further still, the CAF should look at the overall Honours and Awards process, and the effort required to nominate a member for the various honours and awards. Given the acknowledged work overload, if the process is preventing supervisors and the chain of command from nominating deserving members there may be a procedural change that can simplify the process. Additionally, the decisions made by the honours and awards committees need to be communicated to those who submitted the original applications, as a way to maintain fairness and at the same time acknowledge their effort.

The 2016 survey also tested members' opinions of the organization's leadership. Results indicated members were generally satisfied with their immediate supervisors and unit leadership. Occupational or branch level, as well as organizational leadership, did not receive the same positive reviews with members highlighting the need for improvement.<sup>264</sup> Improved communication and/or increased interaction with members at all levels may have a positive impact on the impression of higher level leadership. Members interact daily with immediate supervisors and on a regular basis with unit leadership, which provides the opportunity to communicate strategy, as well as listen to issues raised. Higher level leadership need to schedule time to interact with members.

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<sup>263</sup> Nicholas Bremner, Ph.D. and Glen Budgell, Ph.D., *The 2016 CAF Retention Survey: Descriptive Analysis* (Ottawa: Human Resource Systems Group, Ltd, 2017): 4.

<sup>264</sup> *Ibid.*, 4.

This would also allow the opportunity to build trust, as well as share ideas and gain new ones.

The treatment of military families was also studied in the 2016 survey. The results in this area were generally positive. With that said, if members are somewhat satisfied with the support they receive for their families, yet the impact of military life on families still remains one of the main reasons quoted for releasing, what more can the CAF do to rectify this concern? This point alone highlights the wickedness of the problem and shows the CAF cannot solve this aspect of its retention problem.

The NZDF case study illustrated New Zealand's approach to retention. To manage its personnel retention, focus was placed on the remuneration of its personnel and improving its procurement process. In the case of retention within the CAF, if the problem could be solved by increasing remuneration to members and procuring up-to-date equipment, this would significantly increase the CAF's budgetary requirements. This increased spending would result in discussions on the broader issues of political will, public spending, and debate on the use/value of the CAF, which in turn would further complicate the problem adding to the wickedness.

The NZDF case study does provide ideas that need further consideration. John Capon, Oleksandr S. Chernyshenko, and Stephen Stark's paper *Applicability of Civilian Retention Theory in the New Zealand Military* explored the relationships between recognised determinants of retention within a civilian setting and the intention to remain in the NZDF. The authors were able to create a "Personal Choice" military retention model and highlighted the key proximal predictors as; community involvement, job involvement, organizational commitment, and work satisfaction. One key finding was



that work family conflict did not appear to have an impact on job satisfaction as it did in the civilian sector.<sup>265</sup> Applying this research to the CAF's retention problem may provide policy options not yet thought of.

The CAF has a retention problem and this problem is wicked. This knowledge can shape how the CAF approaches its response to this issue. For an organization known as problem solvers, it will have to adjust its thinking to problem management. Policies will need to be well thought out, vetted by as many of the affected groups as possible, with the ultimate aim of improving the situation. Once a policy is introduced the retention problem will need to be re-evaluated, as it will have changed.

Further research is also required to see, if as in the case of New Zealand, military procurement has an impact on personnel retention. A case study on the acquisition of the F-18 replacement might provide this information. By tracking the number of fighter pilot releases relative to the various government announcements on the subject over time, a relationship may be uncovered. If so, it will highlight the requirement for better sound procurement processes and policies relative to retention. But, procurement policies and procedures engage a range of other stakeholders and interests, many beyond DND's ambit, reflecting the wickedness of the retention issue.

As mentioned previously, additional case studies are required. A case study on the Netherlands has the potential to provide other policy options for the CAF to consider. Additionally, it would be beneficial to carry out a case looking internally to Canada. For

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<sup>265</sup> John Capon, Oleksandr S. Chernyshenko, and Stephen Stark, "Applicability of Civilian Retention Theory in the New Zealand Military," *New Zealand Journal of Psychology* 36, no. 1. (March, 2007): 50-55.

example, comparing the retention problem within the CAF against organizations such as the Royal Canadian Mounted Police and/or the Canadian Public Service.

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